APPENDIX TABLE OF CONTENTS

Below is a table of contents for the appendices to Pennsylvania's RTT-ELC application. The table of contents includes the letter for each document as well as the title of the document and the relevant selection criteria. Each of these appendices is referenced in the narrative text, with a rationale for how its inclusion supports the narrative and the location of the document in the Appendix.

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11	B	Early Learning Standards: Infant/Toddler, Pre-Kindergarten, Kindergarten, Grade 1, Grade 2	(A)(1), (C)(1), (C)(4)
250	C	Letters of Support from Legislators and Other Stakeholders	(A)(3), CP6
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Early Learning Outcomes Reporting – Infant, Young Toddler, Older Toddler Framework			
Domain Indicator **(standard)**	**Infant** 0 – 12 months	**Young Toddler** 13 – 24 months	**Older Toddler** 25 – 36 months
Approaches to Learning			
Constructing Knowledge **(15.1)**	Use hand, mouth, eyes in a coordinated manner to explore body, toys and surroundings.	Uses the senses to explore and learn from the environment.	Explores characteristics of objects, activities and environments.
	Shows interest in new activities and experiences.	Shows interest in new activities and experiences.	Tries new activities or experiences with adult encouragement.
	Uses body and senses to engage in solitary play.	Plays near others without interacting with them (parallel play).	Shows interest in what others are doing.
	Seeks comfort in adults when faced with new experiences, environments or people.	Asks simple questions (for example: "What's that?" "Why?") to obtain an adult response.	Asks questions to seek information.
		Explores the environment in close proximity to and in constant sight of familiar adult.	Explores the environment independently but seeks occasional approval from nearby adults.
Organizing, Understanding and Applying Knowledge **(15.2; 15.3)**	Focuses on an activity, object or person for a short-period of time.	Focuses on an activity, object or person for a short-period of time.	Focuses on a task while other things are occurring in the environment.
	Anticipates next step of a routine or familiar activity.	Completes a common task or routine with adult support.	Completes a multi-step task with adult support.
	Uses senses to discover properties of objects.	Discovers characteristics of objects through repeated actions with the object.	Purposefully acts on objects to discover their properties.
	Interacts with a toy or object in more than one way.	Persists in working with materials that are challenging.	Uses trial and error to accomplish a task.
	Imitates new sounds and movements.	Imitates simple actions, gestures or words.	Demonstrates complex imitation skills including imitation of peers.
	Tries a new action with a familiar object.	Uses a single object in different ways.	Uses materials in new ways to accomplish a task.
	Responds to music or voices.	Uses body movements to respond to music and art.	Participates in creative activities (for example: singing, chanting, dancing, painting).
Learning Through Experience **(15.4)**	Notifies adults of need for comfort or help through cries or body movements.	Responds (positively or negatively) to limitations set by an adult.	Shows basic understanding of limits and rules.

	Uses comfort of familiar routines or activities to explore new things.	Seeks out familiar adult when frightened or unhappy.	Seeks help in difficult situations.
	Shows comfort in routines, objects or experiences that mirror home experiences.	Repeats difficult tasks/activities many times to achieve mastery.	Shows confidence and pleasure in the completion of a task or activity.
		Prefers routines and activities that mirror home experiences.	Relays home experiences to teacher and school experiences to parent/guardian.
Cognitive Thinking and General Knowledge			
Mathematical Thinking and Expression **(2.1 – 2.9)**	Explores or experiments with objects to begin to understand basic number concepts.	Begins to imitate rote counting, using some number names.	Participates in experiences related to numbers and counting (for example: songs, finder plays, reading number books).
	Explore relationships between objects during play (for example: stacks and un-stacks sequenced objects).	Uses basic mathematical terms (for example: more, same, big, little).	Rote counts to five.
	Responds to adults' use of basic mathematical vocabulary (for example: responses to "Do you want more?" or "Do you want down?"	Identify basic differences and similarities of objects.	Begins to identify numerals.
		Participates in activities that have a cause and effect.	Sorts objects by shape.
			Practices one-to-one correspondence (for example: setting out snack, matching objects)
			Identifies groups of objects as having "more" or "less"
			With adult assistance, orders objects by size, length or height.
			Experiments with objects to solve a problem (for example: stacking rings, shape sorters, simple puzzles).
			Identifies characteristics for comparison (for example: color,

			size, basic shape).
			Follows directions related to directionality (for example: move sideways, stretch hands up and down).
Scientific Thinking **(3.1 – 4.8)**	Expresses a sense of wonder about the natural world.	Shows interest in and responds to plants, animals and people in the environment.	Identifies the physical properties of living and non-living things.
	Shows interest and curiosity in people.	Explores characteristics of living and non-living things.	Notices plants and animals growing and changing.
	Engages in exploration of various objects.	Uses the five senses as tools with which to observe and describe.	Uses five senses as tools with which to observe, classify and describe.
		Names some common animals.	Describes the result when two or more substances are combined.
		Recognizes the source of familiar sounds in the environment (for example: says "dog" when hears barking, looks at phone when it rings).	Identifies and imitates familiar sounds.
			Repeat an action to cause a known reaction.
			Identifies the characteristics of weather.
Health, Wellness and Physical Development			
Health and Safety Practices **(10.1 – 10.3)**	Participates in and anticipates next step of a basic hygiene practice.	Attempts basic hygiene practices or completes them with adult support.	Attempts hygiene routines independently (for example: washing hands, toileting, brushing teeth).
	Points to touches basic body parts when named by an adult.	Points to basic body parts when asked.	Points to own body parts when asked including more complex body parts (for example: elbow, ankle).
	Responds to basic safety directions given by familiar adult (for example: looks to adult when adult says "no").	Follows basic safety directions when asked.	Uses basic safety practices.
Physical Activity: Gross Motor	Exhibits control of head and back.	Moves with increasing	Moves with coordination.

Coordination **(10.4)**		coordination.	
	Controls movements of arms and legs.	Controls and coordinates body movements.	Controls, coordinates and combines body movements (neck, limbs).
	Exhibits strength and balance in stationary body movements.	Exhibits balance when moving from place to place.	Exhibits balance when moving from place to place.
			Demonstrates increasing endurance when performing gross motor activities.
Concepts, Principles and Strategies of Movement: Fine Motor **(10.5)**	Uses hands to accomplish actions.	Holds an object in one hand and manipulates it with the other.	Adjusts grasp to manipulate tools and objects.
	Transfers objects from hand to hand.	Picks up more than one object in the same hand.	Builds simple structures using small blocks.
	Uses pincher grasp to pick up objects.	Writes or draws using writing tools with limited coordination.	Manipulates small objects (for example smaller puzzle pieces, beads, pegs, lacing string).
		Uses simple utensils for eating.	Writes or draws using writing tools demonstrating refined skill.
			Holds book with one hand while turning pages with the other.
Language and Literacy Development			
Literacy Development **(1.1 – 1.5)**	Demonstrates a beginning interest in pictures and books that have color, pattern and contrast.	Shows a preference for favorite books or pages.	Independently seeks books to explore.
	Attends to pictures in a book during lap-reading with an adult.	Answers simple questions about a story.	Identifies some letters in own name.
	Gazes, babbles, pats and points at books or photos.	Attends to a picture or section of a book when reading with an adult.	Recognizes symbols and logos in the environment.
		Demonstrates beginning book handling skills.	Asks and answers questions about a story.
			Relates story to personal experiences when asked.
			Identifies simple parts of a story (for example: an event, a character).
			Holds book in two hands with cover facing self and turns pages one at a time.

			Tells a story about a picture.
			Finishes a familiar story when adult pauses.
			Notices details in an illustration or picture.
			Uses scribble marks to represent words.
			Uses a variety of writing tools.
Language Development **(1.6 – 1.7)**	Babbles, making word like sounds.	Uses approximately 50 words in everyday speech.	Uses approximately 300 words in every day speech.
	Uses a few simple words.	Responds to adults' requests showing understanding of what is being asked.	Uses descriptive phrases (for example: big dog, pretty shirt).
	Responds to adult verbalization that indicates understanding of what is being said.	Uses 1-2 words to communicate.	Follows 2-step directions.
	Communicates with gestures, sounds or baby talk.	Uses verbal or non-verbal language to have needs met.	Shares experiences using simple 2-3 word combinations with age-appropriate grammatical structure.
			Speaks clearly enough to be understood by familiar adults.
Social and Emotional Development			
Self-Concept (Identity) **(25.1)**	Notices self in mirror.	Shows preference for specific toys or objects.	Uses words that mean self when speaking (for example: Me do it or I can).
	Expresses feelings (for example: cries, smiles, coos, laughs).	Uses body to express emotions (for example: stomps feet, claps hands, pouts).	Expresses own ideas, interests and feelings through words and actions.
	Accepts new toys or objects with interest.	Asks for similar activities to be repeated.	Approaches new experiences with interest.
Self-Regulation **(25.2)**	Self-soothes while being talked to, held or rocked.	Manages frustration with adult support.	Demonstrates a beginning understanding of own behavior.
	Shows pleasure in familiar surroundings.	Demonstrates or seeks comfort in daily routines, activities and adults.	Finds comfort in rituals and routines.
	Use cause and effect to test impact of self on objects or people.	Tests adult authority and limits by resisting adults' attempts to place boundaries.	Follows simple safety and classroom rules with teacher direction.
Pro-Social Relationships with	Responds to familiar adults' efforts	Uses gestures and simple words to	Asks for comfort from familiar

Adults **(25.3)**	to soothe and comfort.	express need to familiar adults for physical comfort.	adults when distressed.
	Cries or shows pleasure or discomfort when familiar adults come and go.	Demonstrates fear or anxiety toward unfamiliar people.	Show interest in unfamiliar adults.
	Shows affection for familiar adults.	Watches adults for their response to actions.	Seeks reassurance from familiar adults when trying new things.
Pro-Social Relationships with Peers **(25.4)**	Notices and pays attention to other children.	Plays alongside another for brief periods.	Engages in play activities with others after watching.
	Observes others who are expressing a need or discomfort.	Engages in empathy and compassion in some situations (for example: soothes a child in distress, grabs a toy from another but hands it back when child becomes distressed, gives hugs).	Participates in short group activities.
	Participates in simple back and forth play and interaction with peers.	Shares materials or takes turns occasionally with adult support.	Recognizes and names others' feelings.
			Begins to resolve conflicts with peers with adult assistance

Early Learning Outcomes Reporting – Pre-Kindergarten Framework	
Domain Indicator **(standard)**	**Preschool** 37 months – K entry
Approaches to Learning	
Constructing Knowledge	Shows interest in a growing range of topics, ideas and tasks.
	Uses play to construct knowledge, plan and meet goals, and negotiate interactions with others.
	Shows interest and interacts with others about their work or actions.
	Asks questions for clarification & to seek meaningful information.
Organizing and Understanding Knowledge	Works towards completing task despite interruptions or classroom disruptions.
	Independently breaks simple tasks into steps & completes them one at a time.
	Tries different ways to complete a task.
Applying Knowledge	Uses materials and objects to represent other objects.
	Produces and explains the purpose for a new creation.
	Uses music, art or stories to express ideas and feelings.
Learning Through Experience	Understands how behavior may impact others' response to action.
	Understands who or where to go to for help when needed.
	Attempts problem solving activities to achieve a positive outcome.
	Relates home or outside learned knowledge to school experiences.
Cognitive Thinking and General Knowledge: Mathematical Thinking	
Numbers and Operations	Represents a number of objects with a written numeral 0 - 10.
	Names numerals up to 10.
	Counts up to 20.
	Demonstrates one-to-one correspondence when counting up to 10 objects.
	Compares values of whole numbers up to 10.
Algebraic Concepts	Represents and explains the results of adding sets of objects up to and including six, using math vocabulary.
	Represents and explains the results of subtracting sets of objects up to and including six, using math vocabulary.
Geometry	Identifies shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (solid).
	Describes objects in the environment using names of shapes.
	Describes the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to.
	Identifies and describes shapes.
	Models shapes in the world by building shapes from components and drawing shapes.
	Uses simple shapes to compose larger shapes.
Measurement, Data and	Describes and compares measurable attributes of length and weights of everyday objects.

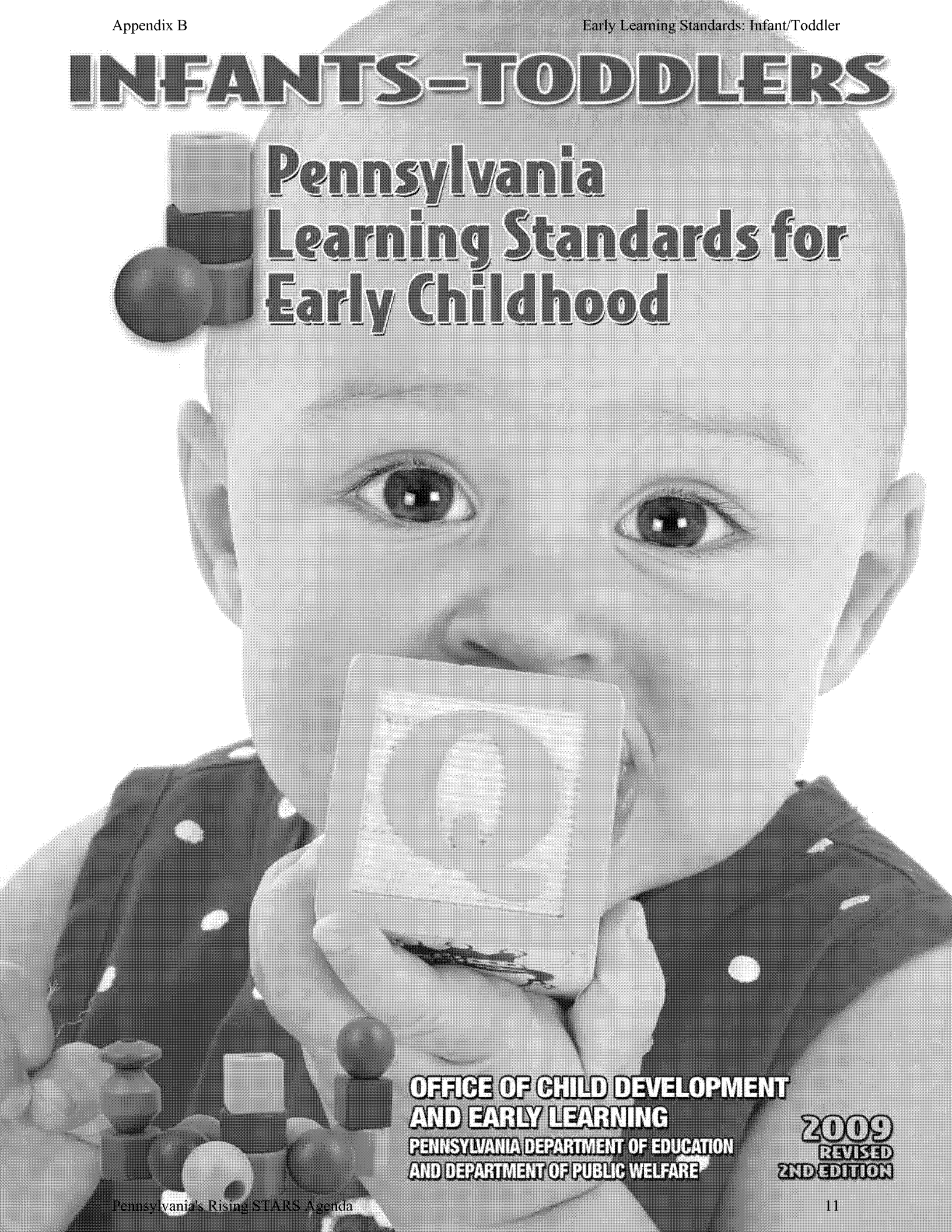
Probability	Compares two objects with a measureable attribute in common to see which object has "more of"/ "less of" the attribute and describe the difference.
	Classifies up to 10 objects using one attribute into categories.
Cognitive Thinking and General Knowledge: Scientific Thinking	
Biological Sciences	Names basic parts of living things.
	Recognizes the difference between living and non-living things.
	Identifies basic needs of plants and animals.
	Recognizes that plants and animals grow and change.
	Matches offspring to parents.
Physical Sciences	Notices change in matter.
	Sorts and describes objects according to size, shape, color and texture.
	Explores and describes motion of toys and objects.
Environment and Ecology	Identifies how weather affects daily life.
	Identifies season that corresponds with observable conditions.
	Identifies a variety of uses for water.
	Identifies simple strategies to protect the environment (for example: recycling, reducing use).
Science as Inquiry	Participates in simple investigations to answer a question or to test a prediction.
	Asks questions about objects, organisms and events.
	Uses the five senses and simple equipment to gather data.
Health, Wellness and Physical Development	
Health and Safety Practices	Identifies fundamental practices for good health (for example: eat well, get rest, exercise, regular dental and doctor visits).
	Practices basic hygiene routines with adult reminders.
	Identifies and locates body parts.
	Identifies and follows basic safety rules.
	Identifies the consequences of unsafe behaviors.
Physical Activity: Gross Motor Coordination	Demonstrates the coordination of body movements in active play.
	Combines large motor movements with the use of equipment.
	Moves and stops with control.
	Exhibits balance.
Concepts, Principles and Strategies of Movement: Fine Motor	Coordinates eye and hand movements to perform a task.
	Uses hands, fingers and wrists to manipulate objects.
	Uses writing and drawing implements with correct grip.
Language and Literacy Development	
Foundational Skills	Differentiates between numbers and letters and letters and words.
	Identifies familiar words and environmental print.
	Associates some letters with their names and sounds.

	Recognizes and names some upper and lower case letters of the alphabet.
	Recognizes rhyming words.
	Counts syllables in spoken words.
	Isolates and pronounces initial sounds.
	Practices appropriate book handling skills.
Reading, Analyzing and Interpreting Text and Literature	Makes connections between information in a text or story and personal experiences.
	Identifies parts of a book (for example: title page, front cover, back cover, author and illustrator) and parts of a text (for example: beginning, end, details).
	Answers questions about unfamiliar words read aloud from a text or story.
	Answers questions to connect illustrations to the written word.
	Answers questions about a text to retell key details.
	Uses new vocabulary and phrases acquired in conversations and being read to.
	Retells a familiar story with picture support.
	Describes pictures in books using details.
	Answers questions to compare and contrast the adventures and experiences of characters in familiar stories.
Writing	Draws/dictates about one specific topic.
	Generates ideas to convey information.
	Makes logical connections between drawing and dictation.
	Establishes "who" and "what" the narrative will be about.
	Demonstrates age appropriate writing skills.
	Recounts a single event and tells about the events in the order in which they occurred.
Speaking and Listening	Participates in collaborative conversations with peers and adults in small and larger gropus.
	Answers questions about key details in a text read aloud or information presented orally or through other media.
	Responds to what a speaker says in order to follow directions, seek help, or gather information.
	Uses simple sentences, speaking clearly enough to be understood by most audiences.
	Demonstrates command of the conventions of standard English when speaking based on pre-kindergarten level and content.
Social and Emotional Development	
Self-Awareness and Self-Management	Acknowledges socially accepted ways to express emotion.
	Recognizes and labels basic feelings.
	Demonstrates awareness of self and one's own preferences.
	Begins to understand consequences of own behavior.
Establishing and Maintaining Relationships	Identifies problem and discusses possible solutions.
	Identifies similarities and difference between self and others.
	Engages in reciprocal conversations with others (adults and peers).

	Asks for and accepts offers of help when needed or appropriate.
	Plays cooperatively with a few peers for a sustained period of time.
Decision Making and Responsible Behavior	Recognizes there are socially acceptable ways to behave in different places.
	Cooperates in both large and small group activities that are facilitated by adults.
	Actively engages in assisting others when appropriate.

INFANTS–TODDLERS

Pennsylvania Learning Standards for Early Childhood



OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

PENNSYLVANIA DEPARTMENT OF EDUCATION AND DEPARTMENT OF PUBLIC WELFARE

2009 REVISED 2ND EDITION

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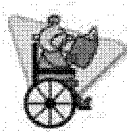

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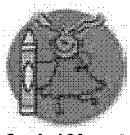

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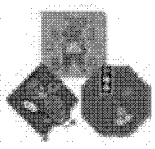

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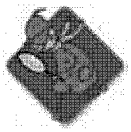

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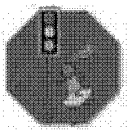

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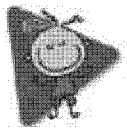

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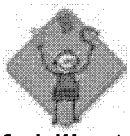

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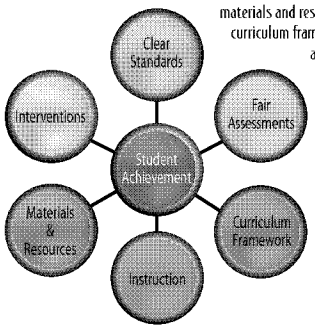
INTRODUCTION

Children are born with an incredible capacity and desire to learn. Over 30 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential, then, that students' first school experiences are robust ones, steeped in expectations that develop critical thinking and problem solving skills, a deep understanding about themselves in a social society and age appropriate content.

Teachers' instructional practices must embed the domains of development: cognitive, social-emotional, language, and physical within the foundations or approaches to learning that enable children to explore, understand and reach beyond the "here and now" to challenge themselves and to experiment and transform information into meaningful content and skills.

Teachers of very young children have the awesome task of providing rich information and experiences that build skills and understanding in the context of every day routines *and* within intentionally-designed play opportunities that capture children's interests, wonder and curiosity so they want to know more. Pennsylvania's learning standards join hand-in-hand with the learning environment; the responsive relationships that have been built with children, families and the community; the age, cultural and linguistically-appropriate curriculum; and the practices being used to assess children, classrooms and programs to create the best possible experiences for learning success.

The Department of Education and the Office of Child Development and Early Learning utilize a Standards Aligned System (SAS) that links the elements of instruction, materials and resources, curriculum framework, fair assessment and interventions, and learning standards to children's engagement in learning and their school success.



1. MATERIALS AND RESOURCES

Every early learning classroom, whether it is in a home atmosphere or center-based setting, must be a comfortable, safe and nurturing environment where children can play with blocks, manipulatives, art materials, and dramatic play items to enhance skill development. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by teachers who intentionally design activities that engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others an how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.

School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed classrooms demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive and language learning.

Classroom assessment instruments that help providers assess the arrangement of indoor and outdoor space, the provision of materials and activities, and their development of class schedules are useful in assuring best practice implementation and alignment to Pennsylvania's Learning Standards for early childhood.

2. INSTRUCTION

Instruction in the early years often looks different than in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery and in experimentation and interaction with materials, their peers and nurturing adults.

Teachers help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. A limited amount of direct teaching combined with child-initiated play produce optimal conditions for young children's education. Teachers become facilitators or guides of learning who interact with children throughout the school day. They ask open-ended questions that encourage children to think about what comes next or want to know more and they support children's creativity, problem solving, intuition and inventiveness (approaches to learning) by challenging and encouraging them. Teachers design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities and culture.

3. CURRICULUM FRAMEWORK

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, vocabulary, concepts and competencies that further define the learning standards.

4. FAIR ASSESSMENTS

Teachers must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing in the classroom allow teachers to make adaptations or adjustments in the individualized learning plans for every child.

Early childhood professionals observe and assess children in their classroom setting using the materials that are found in their school environment. Blocks that children count or stack, for example, provide the information teachers need to understand children's math or fine motor skills. Outdoor play or recess allows the adult to observe children's gross motor skills or the social interactions with peers.

Teachers must use the information they have documented during observation, along with information from the parent, to identify goals and next steps for children's learning through play.

5. CLEAR STANDARDS

Learning Standards provide the framework for learning. They provide the foundational information for what children should know and be able to do. Pennsylvania's learning standards build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, gradually getting more difficult as it extends through high school.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Keystone STARS, PA Pre-K Counts, ABG, HSSAP all use similar sets of standards that provide guidance on program operation that exhibits best practices.

6. INTERVENTIONS

When teachers are observant and assess children's abilities, interests and achievement using the standards as a guide, interventions become part of the teachers' everyday practice. Revising activities, adjusting lesson plans and accommodating children's individual differences becomes matter-of-fact and the norm. Successful strategies that allow children to master skills at his or hew own pace provide benefits for all children as they interact with others of varying abilities and cultures.

Early Childhood Special Education

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experiences alongside their typically developing peers. Teachers may need to adapt or modify the classroom environment, teacher interactions and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards does not need to be specific to an age, grade or specific functional level, but instead provide the breadth of information from which to create goals and experiences for children that will help them reach their highest potential while capturing their interests and building on what they already know. Teachers must emphasize and celebrate all children's accomplishments and focus on what all children can do.

English Language Learners

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. The skills needed for young English language learners to become proficient in English are fully embedded in the Pennsylvania's Standards for Early Childhood.

EARLY CHILDHOOD CONNECTIONS

High quality early learning programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early learning programs, school districts and grades within districts create strong partnerships for success.

1. CONNECTIONS TO CHILDREN

Relationships are the key to successful connections between a teacher and the students. Teachers must take time to know every child, to understand the way in which they learn best, to identify the special talents and skills each child possesses and the interests that excite them to learn more. Adults who work with young children must be students themselves as they learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning and experiences into new achievements and acquisition of knowledge.

2. CONNECTIONS TO FAMILIES

Parents of young children have much to offer in the learning process. When a partnership is formed between teacher (or school) and the family, the connection between home and school has been strengthened, assuring that children receive consistent messages about learning and skill development. Parents should be given opportunities to learn about their children's day at school, to provide input into the information they want children to learn and master, and to understand what they can do at home to enhance the school experience. Frequent informal conversations, invitations to participate in classroom life and voluntary take-home activities that relate to school experiences help to build the partnership.

At-home resources for parents such as *Kindergarten, Here I Come*, *Kindergarten, Here I Am* or *Learning is Everywhere* provide both teachers and families with tools to connect at home and school learning and to share age appropriate expectations and activities that support that connection.

Families' ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Staff must embrace all children's heritages and provide activities, materials and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others'. Staff in high quality early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

3. CONNECTIONS WITH OTHER EARLY LEARNING PROGRAMS

Children and families often have other needs and priorities in addition to participation in high quality early childhood learning programs. Families may need to coordinate their early learning program services with child care, health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their early intervention provider assure linkages that support children's school readiness and ongoing success.

4. CONNECTIONS FOR LEARNING

Young children make learning connections through play. Providers that allow children time to explore and discover, both inside and outside, have optimized children's capacity to internalize and generalize content by making their own connections to prior-learned knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play.

Adults must also use literature connections in all domains. Literature supports both content and social and cultural learning. It is a foundation for curriculum integration.

LEARNING STANDARDS TASK FORCE

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Public Welfare as part of Governor Rendell's commitment to early childhood education. The Office of Child Development and Early Learning, established in 2006 to administer both Departments' early childhood programs, has overseen revisions to the standards.

Each set of Standards has been formulated with help and guidance from practitioners who represent early childhood programs and advocacy groups, higher education, and policy analysts and researchers. Support for the development of the Standards was provided through the national Build Initiative, a multi-state partnership that helps states construct a coordinated system of programs and policies that respond to the needs of all young children.

THE LEARNING STANDARDS CONTINUUM

Within all of Pennsylvania's Early Childhood Standards, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social-emotional development, language and literacy development, physical or motor development, creative expression and the cognitive areas of mathematics, science and social studies. The Standards within each Key Learning Area provide the information that children should be able to know and/or do when they

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leave the age level or grade. The Standards are also organized by Standard Statements that specify specific skills. New, in 2009, strands further define the standards by organizing the information into focus areas. The strands become the connections to the Academic Standards for grades 3-12. They, too, use these strands to organize the content that all children in Pennsylvania should be able to know and do.

PENNSYLVANIA'S EARLY CHILDHOOD CONTINUUM OF STANDARDS

Infant-toddler, Pre-kindergarten and Kindergarten standards are connected through the Continuum of Learning and further linked to the 3rd grade academic standards. Using the strands as the organizer, professionals are able to look across ages and grades to understand how children's development emerges. Some skills will not emerge in a noticeable way until a child is older. These standards statements will be identified on the continuum as "emerging". For example, concepts about money are not ones that infant teachers need to develop. They show in the social studies standards for infants as "emerging". Strands that are missing numerically are skills that do not need attention during the Early Childhood Education years.

Teachers who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.

LEARNING STANDARDS FOR EARLY CHILDHOOD DO:

- Inform teachers and administrators about curriculum and assessment and guide the selection of program materials and the design of instruction
- Inform parents of age-appropriate expectations for children
- Provide a common framework for community-based work on curriculum and transitions

THE LEARNING STANDARDS FOR EARLY CHILDHOOD ARE NOT USED:

- As a specific curriculum or to mandate specific teaching practices and materials
- To prohibit children from moving from one grade or age level to another
- To assess the competence of children or teachers

AGE GROUPINGS IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

INFANT-TODDLER LEARNING STANDARDS

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months – 27 months) and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 – 27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an infant-toddler continuum with the content within one strand presented together on one page. Practitioners can look across each age level to determine the skills that best match their children's current development, identifying additional standard statements, examples and supportive practices to scaffold children's learning.

When strands include "Emerging" under infant or young toddler, these concepts are beginning to emerge but are expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

LEARNING STANDARDS FOR PRE-KINDERGARTEN

Teachers will find the skills that pre-kindergarteners (ages three and four) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency in many of them. Classroom environments, materials and activities that are developed for this age will be appropriate for both three and four year olds; expectations for mastery will be different.

LEARNING STANDARDS FOR KINDERGARTEN

Students who complete kindergarten should demonstrate mastery of many of the skills within the Kindergarten Standards. This document is designed for full day kindergarten classrooms. Half day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-directed instruction should be predominant with language and literacy and math infused through the day in addition to their special focus learning times. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills and their creative expression within the course of a kindergarten day.

THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT

CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS

Key Learning Area: The domains of learning that assure child's holistic development.

Big Idea: Describes the primary information that children should acquire across all age levels.

Standard: Organizes the content within Key Learning Areas into smaller specific topics.

STANDARD 9.1a: PRODUCTION, PERFORMANCE AND EXHIBITION: MUSIC AND MOVEMENT

BIG IDEA: Music can be used to express and initiate aesthetic and physical responses

ESSENTIAL QUESTIONS: How do I respond to music through my expressions? How do I respond to music by moving my body?

Essential Questions: Linked to the Big Ideas and provide the questions that support children's inquiry.

Numbering: Links to 3rd Grade Academic Standards. See below for further description.

Strand: Areas of learning within each Standard that organize the information. These strands are similar from birth through grade 12.

9.1a.1 AESTHETIC RESPONSE

INFANT	YOUNGER TODDLER	OLDER TODDLER
STANDARD STATEMENT • Respond to music	**STANDARD STATEMENT** • Show pleasure and excitement when exposed to music	**STANDARD STATEMENT** • Sing songs in recognizable ways • Demonstrate increased coordination in response to rhythms
EXEMPLARS (EXAMPLES) **The learner will:** • Turn head when hearing loud and/or soft tones • Calm when gently sung to or when hearing soft music • Shake noisemakers or rhythm instruments	**EXEMPLARS (EXAMPLES)** **The learner will:** • Respond to familiar songs. • Recognize different tones	**EXEMPLARS (EXAMPLES)** **The learner will:** • Learn words to simple songs • Participate in group singing activities for short periods of time • Attempt to imitate dance movements
SUPPORTIVE PRACTICES **The adult will:** • Sing, hum, and chant to infants. • Provide soothing music, birds singing, water babbling • Include movement to music in daily routine • Hold infants and rock or move to music • Use different types of music	**SUPPORTIVE PRACTICES** **The adult will:** • Provide musical experiences in a variety of ways such as, singing, musical toys, recorded music • Introduce new songs regularly and repeat old favorites often • Expose young toddlers to a variety of types of music, such as lullabies, classical children's songs, classical, jazz, folk music, from a variety of cultures, language and backgrounds • Encourage young toddlers' interest and participation in musical activities	**SUPPORTIVE PRACTICES** **The adult will:** • Provide ample opportunities to sing and learn songs • Provide opportunities to select songs and song games for the group • Encourage use of rhythm instruments with songs or during play • Encourage toddlers to dance to music • Provide opportunities to mimic movement sequences

Standard Statement: The specific indicators that provide the skills for children to learn and master. In the younger years when a skill is still emerging, this area will be identified as "emerging". In some strands, there will be several standard statements; in others, there will be just one.

Examples: Or competencies identify ways children may demonstrate mastery or skill development.

Supportive Practices: Define strategies and materials professionals can use to help children learn or progress.

GUIDING PRINCIPLES

1. All who care for and educate infants and toddlers, whether in formal or informal early learning settings, have a significant impact on children's future successes.

2. Healthy attachment relationships are critical for successful early learning during the infant and toddler years and provide the essential foundation on which all subsequent learning occurs.

3. All infants and toddlers can learn and deserve suitably high expectations that are age, individually, and culturally appropriate.

   **Footnote: Young children with disabilities will meet standards consistent with their individualized family service plan (IFSPs) goals developed by IFSP teams in accordance with the federal Individuals with Disabilities Education Improvement Act (IDEIA), 22 PA. CODE Chapter 14, and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990).

4. Infants and toddlers learn best through meaningful play, concrete sensory interactions and intentional activities, experiences, and active exploration of their environment as well as through interactions with adults in the context of routine care.

5. The multiple learning environments for infants and toddlers should stimulate and engage their curiosity of the world around them and meet their needs in all domains so children are and feel healthy, safe, secure and nurtured.

6. Language and early literacy development must be supported and integrated throughout all aspects of formal and informal early childhood care and education programs for infants and toddlers.

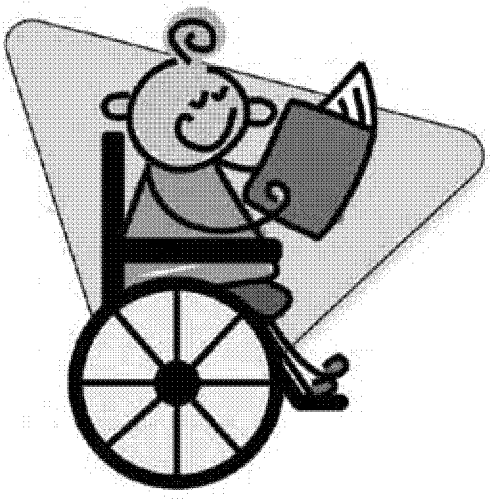
7. Infants' and toddlers' learning, development, and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development specific to infants and toddlers; are intentional in their relationships; and work with families to increase knowledge and support of child development.

8. Early childhood care and education programs must address the individual needs of all infants and toddlers (e.g. with special needs, from diverse cultural backgrounds, from all socio-economic groups, etc.) and respect their families.

9. Early childhood care and education programs are defined by a set of comprehensive standards that maximize an infant's or toddler's growth and development across all domains and that recognize that the domains are dynamically inter-related, especially during the infant and toddler years.

10. Effective support for infant/toddler development requires a system of research-based assessment that documents infants' and toddlers' growth and development in relationship to a refined set of standards and is used to inform practice.

11. Infants' and toddlers' learning is enhanced when families, early learning environments/settings, and communities work together to provide continuity of high quality care.



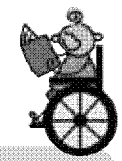
APPROACHES TO LEARNING THROUGH PLAY

CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help students feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment, and enhancing their curiosity and knowledge about the world in which they live.

FAMILY RELATIONSHIPS

There is no greater gift for children's successful endeavors in school then for schools to create a strong relationship between home and school. The connections that teachers and schools form with parents and guardians, especially in the early childhood years, provide the link for learning and assures that children, teachers and families work together to support children's growth and development and skill mastery. Families can be invited to participate in many ways – volunteerism, donations of time, resources and materials, shared decision-making about children's educational goals, support and referrals – but the key is a reciprocal relationship that invites parent input about a child's school performance and information about the values and home culture, while sharing details of the child's school routine and perceived successes and challenges in the classroom. Parents who perceive themselves as an integral member of the learning team are more likely to provide ongoing support and encouragement for children's learning that will carry them through high school.



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STANDARD 15.1: CONSTRUCTING KNOWLEDGE

BIG IDEA: Children actively construct knowledge through routines, play, practice and language. They observe others and their environment, use their senses to manipulate objects and materials and develop their own individualized approach to learning.

ESSENTIAL QUESTIONS: How do I find out about things? What information do I need to learn new things? What do I learn when I am playing?

15.1.1 CURIOSITY AND INITIATIVE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Use the mouth as a primary means of exploring and learning from the environment • Use hand, mouth, eyes in a coordinated manner to explore body, toys and surroundings • Manipulate in order to explore them	**STANDARD STATEMENT** • Show an interest in various environmental stimuli • Use the senses to explore and learn from the environment • Ask questions to obtain adult response	**STANDARD STATEMENT** • Explore characteristics of objects, activities and environments • Show interest in what others are doing • Utilize non-verbal prompts to seek information • Ask questions to seek information
EXEMPLARS (EXAMPLES) **The learner will:** • Put objects such as books and blocks in mouth to learn about them • Show interest in own body parts by playing with his/her feet or watching own hands • Reach for a mobile that is moving with the breeze • Transfer items from hand to hand to investigate the feel or appearance	**EXEMPLARS (EXAMPLES)** **The learner will:** • Point to objects or people • Move towards a new object or activity that interests him/her • Show enthusiasm for an activity or toy • Stop playing when a bell or siren goes off • "Study" a specific object or toy to learn about it by touching, mouthing, shaking to listen, etc • Ask simple questions such as, "what's that?" or "why?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Become engrossed in how a tape recorder (or other mechanical toys) works, pushing buttons to stop and start it, turning it over and over, etc • Show interest in new activities or materials in the environment by watching others or engaging on own • Approach others at play and ask what they're doing or attempt to join in • Make independent play choices • Ask adults questions about a book, "Why is he crying?"
SUPPORTIVE PRACTICES **The adult will:** • Put colorful toys or objects around the room to capture children's interest • When appropriate, use music or other sensory activities • Show children how specific objects or toys work • Describe what you are doing, "I am taping your diaper so it doesn't come off." • Provide safe areas where infants can explore safely	**SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of activities and materials for exploration • Name objects when children point to them • Provide safe areas and opportunities for children to explore and experiment • Encourage children to figure out how things work or do things, "I wonder what will happen if you put this block here." • Answer children's "Why" questions	**SUPPORTIVE PRACTICES** **The adult will:** • Provide time for children to thoroughly explore or become involved in specific activities or materials • Provide a variety of familiar and unfamiliar objects and experiences • Vary materials to capture children's interest • Allow children time during the day to make independent choices about play • Ask how specific objects or materials are the same or different from another familiar toy • Ask open-ended questions about books, objects, and activities

15.1.2 RISK TAKING

STANDARD STATEMENT • Explore in the comfort of a familiar surrounding or adult • Seek comfort in adults when faced with novel stimuli	**STANDARD STATEMENT** • Explore the environment in close proximity to and in constant sight of caregiver • Show interest in new activities and experiences	**STANDARD STATEMENT** • Explore the environment independently but seek occasional approval from near-by adults • Try new activities or experiences with adult encouragement
EXEMPLARS (EXAMPLES) **The learner will:** • Reach or approach a new object or toy with interest • Engage in play routines with adult • Engage with an unfamiliar adult to complete routine activity while a familiar adult is near	**EXEMPLARS (EXAMPLES)** **The learner will:** • Try to take walking steps to reach a familiar adult • Reach for or ask to play with a new toy or object after introduced by adult • Approach an unfamiliar adult to show his/her new shoes • Slowly try a new food after smelling it and looking at its characteristics	**EXEMPLARS (EXAMPLES)** **The learner will:** • Turn and look to adult for approval when approaching a new adult • Bring new objects or materials back to adult to investigate • Observe adult completing a new task, then try it • Avoid participating in unsafe behavior and state consequences, such as "touch hot stove, hurt"
SUPPORTIVE PRACTICES **The adult will:** • Design classroom environment for safe exploration and interaction with materials • Stay near children but encourage them to separate and seek out toys or objects • Introduce new adults in the comfort of familiar adults and environments • Avoid sudden changes to routine or adults	**SUPPORTIVE PRACTICES** **The adult will:** • Continue to observe children who leave the security of an adult in case support, encouragement and praise are needed for his/her independent efforts • Introduce new experiences and people slowly, mixed in with familiar activities • Offer new experiences multiple times before determining children's interest • Announce changes in routines or schedules and give children time to adjust, sympathizing with their demonstrated distress where necessary, "I know we usually hang our coats in the cubby, but today we need to put them here – we won't lose them."	**SUPPORTIVE PRACTICES** **The adult will:** • Recognize children's individual temperaments and be prepared to support their attempts to try or learn new things accordingly • Provide many opportunities for children to become familiar with new ideas, people or materials • Introduce new concepts before asking children to participate

15.1.3 STAGES OF PLAY

STANDARD STATEMENT • Use body and senses to engage in solitary play	**STANDARD STATEMENT** • Play near others without interacting with them • Imitate adult actions through play scenarios	**STANDARD STATEMENT** • Interact with other children during play • Use materials to represent everyday objects during play • Engage in some simple play sequences based on an understanding of everyday events
EXEMPLARS (EXAMPLES) **The learner will:** • Feel, chew, suck, and look at objects of varying textures and surface types • Inch along or crawl to reach an object • Pull self up to standing	**EXEMPLARS (EXAMPLES)** **The learner will:** • Build with blocks alongside another block-builder, occasionally taking the other's blocks for own structure • Color on paper with crayons while seated next to another child who is coloring or painting • Feed a doll with a bottle • Place phone to ear and pretend to listen	**EXEMPLARS (EXAMPLES)** **The learner will:** • Join others at the water table, first watching and later joining in • Build a truck with small blocks and say, "I made a truck" • Use a stick to represent a stethoscope • Act out a store scenario by going to a pretend store, purchasing food items, paying for them

CONTINUED...

STANDARD 15.1: CONSTRUCTING KNOWLEDGE continued

15.1.3 STAGES OF PLAY

INFANT	YOUNG TODDLER	OLDER TODDLER
SUPPORTIVE PRACTICES **The adult will:** • Provide opportunities for infants to explore the environment by giving them space to crawl, stand and move around • Offer toys and objects with different textures and surfaces for infants to explore • Allow infants to mouth, shake, and manipulate a variety of objects and toys	**SUPPORTIVE PRACTICES** **The adult will:** • Join in children's play and ask questions that extend their thinking about the play activity • Explain what is occurring while playing alongside a child • Ask questions about the children's actions, encouraging them to think about what comes next • Provide activities that encourage interactive play with others	**SUPPORTIVE PRACTICES** **The adult will:** • Participate in children's play, explaining what is happening and asking questions about what might come next • Provide choices for play • Provide materials and opportunities for children to play or work together to accomplish a task, with adult attention and support

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION

BIG IDEA: Children learn to organize complex information and thoughts into small steps and goals. They develop plans for completing tasks by establishing goals and carrying out plans to meet those goals.
ESSENTIAL QUESTIONS: How do I understand the steps of a task? How do I decide how to approach a task?

15.2.1 ATTENTIONGAGEMENT, AND PERSISTENCE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Focus on people around him/her • Attend to adult during reciprocal interaction • Make repeated attempts to engage an adult to meet needs • Try to make things happen	**STANDARD STATEMENT** • Interact with people, objects or activities for short periods of time • Repeat enjoyable activities • Complete short, simple task with adult support • Focus on a task to reach a goal	**STANDARD STATEMENT** • Engage with peers in play for an extended time • Focus on an activity or toy while other things are occurring in the environment • Cooperate with others to complete a task or goal • Focus on a complex activity with adult encouragement
EXEMPLARS (EXAMPLES) **The learner will:** • Gaze with interest at adult or child who is nearby • Engage in back and forth interaction with adult such as adult says "ga ga, baby responds, adult repeats, baby responds • Cry, shout or move body to get adult's attention • Smile when adult is talking or interacting with them • Bat a mobile to make it move	**EXEMPLARS (EXAMPLES)** **The learner will:** • Read a book with an adult from start to finish, showing interest in pictures and story, pointing to objects and turning the pages • Put together the same puzzle over and over • Choose the block corner every day during free play • Help to set the table for meal time with an adult • Focus on putting on a doll's dress for a long period of time	**EXEMPLARS (EXAMPLES)** **The learner will:** • Play with others in the housekeeping area through an entire scenario • Stay focused on putting together a puzzle while others are playing house or giggling in the music area • Work with others to move a chair from one table to another • Try a task or activity several times despite setbacks until mastered • Try a new, challenging task such as buttoning a shirt or spreading jelly on bread with adult support
SUPPORTIVE PRACTICES **The adult will:** • Organize environment and schedule to allow children to interact with objects or work on an activity for as long as they are interested • Offer help and respond to requests for help consistently and promptly • Seek to learn the type of help that is needed by watching and listening • Provide increasingly challenging tasks for children to investigate and master, offering support when appropriate	**SUPPORTIVE PRACTICES** **The adult will:** • Give children ample time to fully engage in a task or activity • Encourage children to repeat similar activities to gain mastery • Use similar activities to introduce new ideas • Be sensitive to children's needs and interest to attach to specific toys or activities by offering them repeatedly • Rotate toys and materials frequently, leaving many familiar objects while introducing some new ones	**SUPPORTIVE PRACTICES** **The adult will:** • Encourage children to work together to accomplish a task • Praise and acknowledge a child's persistence to complete a goal • Provide spaces within the environment that allow for children's need for quiet or concentration • Support children's attempts to master a task by offering support and encouragement to try the next step • Provide ample time in the daily schedule for children to focus on and complete simple tasks • Provide challenging but achievable activities and tasks that build on previous knowledge while introducing new ideas

15.2.2 TASK ANALYSIS

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Use senses to discover properties of objects • Anticipate next step of a routine or activity	**STANDARD STATEMENT** • Discover characteristics of objects or materials through repeated actions with the toy • Know the sequence of certain tasks • Perform a behavior even when the consequences are known • Complete a common task or routine with adult support	**STANDARD STATEMENT** • Purposefully act on objects to discover their properties • Identify the sequence of a routine such as "first we wash hands, then we have lunch" • Complete tasks in the teacher-taught sequence for adult approval • Complete a multi-step task with adult support
EXEMPLARS (EXAMPLES) **The learner will:** • Explore objects with eyes, ears, mouth, hands and feet • Lift legs for clean diaper placement during diaper changing or hold out hand for washing following diaper change	**EXEMPLARS (EXAMPLES)** **The learner will:** • Find that shapes will fit into specific holes in the shape sorter after many tries • Show anticipation of the steps of feeding – when put into high chair or asked to sit at table, the child knows that meal time is occurring and can wait a short time for food • Watch for adult's reaction while pouring milk on table • Walk indoors, take off coat and hang it up in cubby, with adult's ongoing review of steps and encouragement	**EXEMPLARS (EXAMPLES)** **The learner will:** • Think ahead about how to interact with an object to achieve an outcome • Know that specific activities occur in order on the daily schedule, such as breakfast comes after morning meeting • Think ahead about the way to complete a task or activity and act on it, such as acquiring a crayon to complete a desired picture for Dad • Hold the water pitcher the way the teacher has demonstrated while pouring • Describe the sequential steps of basic routines and activities
SUPPORTIVE PRACTICES **The adult will:** • Develop a system for toy sanitation that allows children to safely manipulate objects in various ways • Provide experiences using small steps that are achievable, acknowledging accomplishments of each step • Identify the steps to a task as it is being performed, such as "I'm warming the milk; I'm pouring the milk into the bottle; I'm checking to make sure the temperature is just perfect..."	**SUPPORTIVE PRACTICES** **The adult will:** • Cooperate with children's repeated action on materials and describe the outcome • Provide materials multiple times and ways for children to learn the properties • Describe the steps of a task while performing the actions • Ask what should happen next – "I've got the spoons and plates, what should I do with them?" • Break down complex tasks into simple, achievable activities	**SUPPORTIVE PRACTICES** **The adult will:** • Display a daily schedule and refer to it during the morning meeting • Remind children what happens next throughout the day • Demonstrate successful strategies for task completion, giving children time to explore their own ideas or solutions • Ask questions such as "What will I need to stir the pudding? • Use simple charts and graphs that describe the steps of a recipe or activity • Make simple books or charts that describe the way in which a task was completed

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION continued

15.2.3 REASONING AND PROBLEM SOLVING

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Interact with a toy or object in more than one way • Repeat actions that have an interesting response • Play with a variety of objects to determine similar and different outcomes • Look for objects that are out of view	**STANDARD STATEMENT** • Observe others' actions with materials to learn strategies for interaction • Imitate others' actions to determine if they work for them • Persist in working with materials that are challenging in order to master them • Solve simple problems independently, such as climbing on a chair to get an out-of-reach object	**STANDARD STATEMENT** • Observe, imitate and remember previous information about an object or situation • Seek help to accomplish something that is challenging • Follow a teacher's suggestion to complete a difficult task • Use trial and error to accomplish a task • Change approach to reach a goal when the first try is unsuccessful
EXEMPLARS (EXAMPLES) **The learner will:** • Shake, beat, mouth and turn over a rattle to learn about how the toy works • Push the button on a pop-up toy to watch what happens • Shake a rattle, then shake a ball to determine if they have similar responses • Crawl under a table to find a dropped spoon	**EXEMPLARS (EXAMPLES)** **The learner will:** • Watch another child building with blocks and imitate the action • Use a spoon to make a small hole in the sand rather than a shovel • Place cups that are of graduated sizes on top of each other until they stack without falling • Move a chair out of the way to reach a ball	**EXEMPLARS (EXAMPLES)** **The learner will:** • Remember creations that others have made previously and try to reproduce them • Ask for an adult's help to zip coat after several failed independent tries • Place a board on top of several blocks to make a steeper ramp after teacher suggestion • Fit a puzzle piece into a puzzle board by turning it several ways until it fits
SUPPORTIVE PRACTICES **The adult will:** • Identify children's actions that help solve a problem such as "You squeezed that toy to make it squeak" • Provide toys that produce response to an action • Ask questions or make statements such as "I wonder if this ball rolls as fast as this one" • Read simple books where characters are engaged in problem solving 	**SUPPORTIVE PRACTICES** **The adult will:** • Ask questions about how to solve a problem such as "How do you think we could reach that ball?" • Read books that demonstrate characters solving problems and then identify problem and solution with the children • Provide materials or activities with more than one way to interact or complete and acknowledge all solutions • Praise children's independent thinking and solution of simple problems	**SUPPORTIVE PRACTICES** **The adult will:** • Remind children of previous interactions or observations about the toy or material, "Remember how Jeannie fit that puzzle piece in here last time?" • Ask "what if" questions or "I wonder" statements • Give children time to discover their own solutions, providing guidance when appropriate • Read books and discuss the outcomes where characters solve problems

STANDARD 15.3: APPLYING KNOWLEDGE

BIG IDEA: Children extend their understanding when they think creatively about new ideas in the context of past experiences and knowledge.
ESSENTIAL QUESTIONS: How do I relate new information to things I already know? How do I use what I already know to learn new things? How do I finish a task?

15.3.1 CREATIVITY, FLEXIBILITY AND INVENTION

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Imitate new sounds and movements • Respond to music or voices by comforting or showing pleasure • Try a new action with a familiar object	**STANDARD STATEMENT** • Imitate simple actions, gestures, and words • Use body movements to respond to music and art • Use a single object in different ways • Discover unique solutions to basic problems	**STANDARD STATEMENT** • Demonstrate complex imitation skills including imitation of peers • Engage in creative movement activities such as singing and chanting, dancing or painting • Use an object in a non-conforming manner • Use materials in new ways to accomplish a task • Show creativity in approaching and accomplishing tasks
EXEMPLARS (EXAMPLES) **The learner will:** • Repeat an animal sound (meow) after hearing an adult make it during a story or song • Kick legs and feet to music • Bounce to lively songs • Remain quiet during naptime to soft-playing music • Make a barking sound while holding a stuffed dog	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use a toy lawn mower to cut the grass • Attempt to make the motions to Itsy Bitsy Spider • Use a pot to make music, put it on head for a hat, or as a way to collect and dump small objects • Climb on chair to obtain an out-of-reach object	**EXEMPLARS (EXAMPLES)** **The learner will:** • Imitate peers' actions or words when playing • Clap hands quickly to fast song and sway slowly to a slower-paced song • Put a blanket on a doll to represent a dress • Bang blocks together to make a musical instrument • Experiment with tape to discover how to fasten two items together
SUPPORTIVE PRACTICES **The adult will:** • Carefully pronounce words and provide time for children to repeat them back to you • Play different types of music and model body movements or response • Offer new materials for children to investigate • Model a new use for a familiar object such as clapping blocks together	**SUPPORTIVE PRACTICES** **The adult will:** • Offer new sounds during songs or stories and encourage children to repeat them, such as asking children to repeat the chug sound while reading the Little Engine that Could • Describe alternate uses for familiar objects, such as "I wonder if this small blanket could act as a shawl." • Describe alternate solutions for a challenge, such as "We're out of green markers, but I bet this green crayon will work too"	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials and objects that can be used in more than one way • Encourage children to use materials that represent other things during play, such as a block to represent a car • Include a variety of materials that encourage creativity in many learning areas including dramatic play, art, blocks, music, books

STANDARD 15.4: LEARNING THROUGH EXPERIENCE

BIG IDEA: Each child's biological make-up, family, history and learning style provide the important context in which learning is constructed.
ESSENTIAL QUESTIONS: How do my home experiences help me learn? How do I learn how to cope with difficult situations?

15.4.1 HOME-SCHOOL IDENTITY

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Show comfort in routines or experiences that mirror home experiences	**STANDARD STATEMENT** • Prefer routines and activities that mirror home routines • Separate school and home experiences • Imitate mannerisms or behaviors of family	**STANDARD STATEMENT** • Relay home experiences with teacher and school experiences to parent or guardian • Recognize specific activities that are home or school functions
EXEMPLARS (EXAMPLES) **The learner will:** • Soothe when caregiver uses familiar materials or processes during diapering, nap preparation or feeding • Show recognition of phrases or descriptions about activities • Display comfort about family arrival and departure process	**EXEMPLARS (EXAMPLES)** **The learner will:** • Identify things that can be done at school but not at home such as "I can serve my own food here, but mommy does it at home" • Show pleasure when parent arrives at school and joy to see teacher during school arrival • Use familiar phrases or behaviors from home during work or play • Notice that other children sometimes do things differently	**EXEMPLARS (EXAMPLES)** **The learner will:** • Share information about an event or activity that occurred at home the night before • Tell parent about the field trip or visitor that came to school • Tell another that he/she is doing something wrong when it varies from his familiar routine • Engage in play that reflects home culture
SUPPORTIVE PRACTICES **The adult will:** • Become familiar with families' routines and incorporate into classroom routines • Learn and use family phrases or descriptions for routines • Learn parents' chosen strategies to support English Language Learners within the classroom • Accept the family as the ultimate decision maker about services and supports for child • Use an ongoing system for sharing and obtaining information about child's home and school behavior and events • Invite family members to visit whenever possible • Provide ample time for families to separate from child at beginning of the day	**SUPPORTIVE PRACTICES** **The adult will:** • Share school accomplishments and goals with family members and talk about at-home support activities • Accept the family as the ultimate decision maker about services and supports for child • Invite family members to participate in school or classroom events • Acknowledge that families need routines and time for separation and arrival • Accept and encourage children's individuality in the way they approach or accept experiences • Accommodate parent requests for ways to support English Language Learners within the classroom	**SUPPORTIVE PRACTICES** **The adult will:** • Read books about a variety of families and family situations • Modify communication strategies to reflect needs of families • Accept the family as the ultimate decision maker about services and supports for child • Invite family members to participate in school or classroom events • Accept and encourage children's individuality in the way they approach or accept experiences • Accommodate parent requests for ways to support English Language Learners within the classroom

15.4.2 RESILIENCE

STANDARD STATEMENT • Use comfort of familiar routines and activities to explore new ideas or routines • Notify adults of need for comfort or help through cries or body movements	**STANDARD STATEMENT** • Repeat difficult tasks or activities many times to achieve mastery • Repeat familiar activity to gain comfort and confidence • Seek out adult when frightened or unhappy • Respond to limitations set by adult	**STANDARD STATEMENT** • Show confidence and pleasure in the completion of a task or activity • Seek help in difficult situations • Show basic understanding of limits and rules • Manage basic impulses appropriately
EXEMPLARS (EXAMPLES) **The learner will:** • Try new food during regular feeding time • Cry to tell adult that diaper changing or feeding is needed • Soothe after adult responds to expressed need	**EXEMPLARS (EXAMPLES)** **The learner will:** • Complete a familiar puzzle over and over to gain confidence • Dump and fill the same truck multiple times, then add new materials to dump or try to dump materials from a different truck • Cry or approach a familiar adult for help when needed • Attempt to master putting on socks by trying over and over until they're on feet • Respond (positively or negatively) to adults' rules or behavior limitations	**EXEMPLARS (EXAMPLES)** **The learner will:** • Show a teacher or another child a completed project with pride • Ask for help to complete a difficult task • Attempt a teacher-suggested alternate solution to accomplish a task • Follow basic rules most of the time with reminders • Behave appropriately at transitions and during child-child interactions
SUPPORTIVE PRACTICES **The adult will:** • Develop and maintain routines consistently • Introduce new materials or activities slowly within the comfort of familiar routines or people • Respond quickly to cries for help or attention • Offer new foods or objects multiple times to allow baby time to adjust and become familiar	**SUPPORTIVE PRACTICES** **The adult will:** • Break tasks into small steps that children can feel successful completing • Read books that demonstrate children's approaches and responses to challenging behaviors • Maintain consistent routines, allowing for occasional flexibility as needed • Enforce rules consistently using gentle reminders and redirection • Promote self esteem by praising accomplishments and helping children to identify their own strengths	**SUPPORTIVE PRACTICES** **The adult will:** • Provide acknowledgement and praise for efforts to complete difficult tasks • Read and discuss books that demonstrate children's responses to challenging behaviors • Engage children in conversations about how they might handle difficult situations • Remind children of the classroom rules and enforce them consistently • Role model appropriate ways to approach a challenging situation • Promote self esteem by praising accomplishments and helping children to identify their own strengths

15.4.3 CULTURE

STANDARD STATEMENT • Demonstrate comfort in routines, objects and materials that reflect home experiences	**STANDARD STATEMENT** • Show awareness that others have attachments to different objects, people or routines	**STANDARD STATEMENT** • Demonstrate expectations and attitudes about others based on primary relationships • Seek to learn about others' differences

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STANDARD 15.4: LEARNING THROUGH EXPERIENCE continued

15.4.3 CULTURE

EXEMPLARS (EXAMPLES) **The learner will:** • Quiet or show comfort when shown or provided with a favorite toy from home such as blanket or stuffed bear • Cooperate with adult for diaper-changing or hand-washing that is done similarly to home routine • Respond to familiar family phrases when used at school such as "time to go night-night"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Tell another child "your Mom is here" • Bring a favorite toy to a child who is unhappy • Point out that a child in a book looks like one in the classroom • Show comfort in familiar words, phrases or routines that reflect the child's culture	**EXEMPLARS (EXAMPLES)** **The learner will:** • Seek recognition about own unique characteristics • Ask questions about why a child wears different clothing or talks differently • Ask questions about a different custom after hearing about it in a book • Request to sing a specific ethnic song or read a book about a specific culture
SUPPORTIVE PRACTICES **The adult will:** • Know home child-rearing practices and incorporate in school routines • Assure children interact with adults from same culture or who are familiar with cultural norms • Use or learn words from child's home language to incorporate into daily interactions • Allow children's home toys or familiar objects like blankets to be part of the school environment • Use foods, music, books, posters, and other materials that represent the cultures of the families within the program	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials and activities that reflect the cultures represented in the classroom, including spoken language • Show sensitivity to children's celebrations by including activities and experiences that reflect children's home culture • Use culturally-sensitive words and phrases to describe people or places • Answer children's questions about others' differences matter-of-factly • Invite families to share their personal and cultural experiences in the program or classroom	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials and activities that reflect the cultures represented in the classroom, including spoken language • Show sensitivity to children's celebrations by limiting or including activities and experiences to those that reflect children's home culture • Use culturally-sensitive words and phrases to describe people or places • Answer children's questions about others' differences matter-of-factly • Invite families to share their personal and cultural experiences in the program or classroom

APPROACHES TO LEARNING THROUGH PLAY GLOSSARY

Associative Play – A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction or a definite goal; children may imitate others in a group but each child acts independently

Attention – An ability to focus; take all stimuli in environment and focus the mind on one thing

Competence – The ability to perform a task, action, or function successfully

Cooperative Play – Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, arts, customs and behaviors

Curiosity – A desire to learn or know about something; an inquisitiveness

Engagement – Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work

Initiative – A readiness and ability to be eager to lead an action

Invention – An act of devising, creating or producing using imagination (art, music)

Parallel Play – A developmental stage of social development; an activity in which children play with toys like those the children around them are using, but child is absorbed in his/her own activity; usually play beside rather than with one another

Persistence – The steady continuance of an action in spite of obstacles or difficulties

Pretend Play – Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas

Resilience – The ability to cope with and bounce back from all types of challenges. A person thrives, matures and increases competence by drawing on biological, psychological and environmental resources

Solitary Play – A form of play among a group of children within the same room or area in which each child engages in an independent activity using toys that are different from the toys of others; shows no interest in joining in or interfering with the play of others

Task Analysis – A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success

Temperament – The combination of mental, physical, and emotional traits of a person; natural predisposition

CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS

Creative thinking and expression is an important component of children's early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities and knowledge. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children's growing competence as creative problem solvers and provides insight about the world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

DIVERSITY AND CULTURE

Today's early childhood classrooms include an increasingly diverse group of children, families and teachers who represent many cultures, values and lifestyles. Providers have a unique opportunity to create welcoming environments that emphasize respect for diversity and support families' cultural and linguistic differences. Teachers must help assure the preservation of the child's home language while supporting their second language acquisition. Programs that create experiences and opportunities that honor all children's home cultures and values by developing creative strategies for including and expanding the home to school connection and provide children with varied ways to demonstrate their learning and understanding are assuring all children's success in school.

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STANDARD 9.1a: PRODUCTION AND PERFORMANCE: MUSIC AND MOVEMENT

BIG IDEA: Music can be used to express and initiate aesthetic and physical responses.
ESSENTIAL QUESTIONS: How do I make music? How do I express myself during music and movement activities?

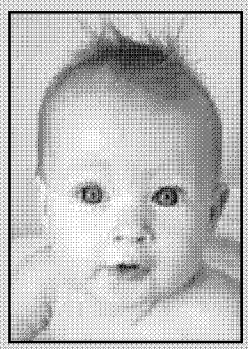
9.1a.1 AESTHETIC RESPONSE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Respond to music	**STANDARD STATEMENT** • Show pleasure and excitement when exposed to music	**STANDARD STATEMENT** • Sing songs in recognizable ways • Demonstrate increased coordination in response to rhythms
EXEMPLARS (EXAMPLES) **The learner will:** • Turn head when hearing loud and/or soft tones • Calm when gently sung to or when hearing soft music • React to music with the entire body by moving arms, kicking feet, and/or rocking. • Touch a mobile to play music • Shake noisemakers or rhythm instruments	**EXEMPLARS (EXAMPLES)** **The learner will:** • Respond to familiar songs • Recognize different tunes • Join in singing the refrains of favorites songs • Move, dance, clap, or sway to music (movements may not match rhythm)	**EXEMPLARS (EXAMPLES)** **The learner will:** • Learn words to simple songs • Participate in group singing activities for short periods of time • Play simple instruments, such as drums or bells with increasing coordination • Move to music with more awareness of the rhythm • Attempt to imitate dance movements
SUPPORTIVE PRACTICES **The adult will:** • Sing, hum, and chant to infants • Provide soothing music, such as birds singing or water babbling • Include movement to music in daily routine • Hold infants and rock or move to music • Play different types of music • Provide sound-making toys and musical instruments that infants can use independently	**SUPPORTIVE PRACTICES** **The adult will:** • Provide musical experiences in a variety of ways, such as singing, moving and dancing, musical toys or recorded music • Introduce new songs regularly and repeat old favorites often • Expose children to a variety of types of music, such as lullabies, classical, jazz or folk music that reflect a variety of cultures, languages and backgrounds • Encourage young toddlers' interest and participation in musical activities • Model active responses to music	**SUPPORTIVE PRACTICES** **The adult will:** • Provide ample opportunities to sing and learn songs • Ask children to select songs and song games • Encourage use of rhythm instruments with songs or during play • Include opportunities for dancing through the day • Provide opportunities to mimic movement sequences

9.1a.2 EXPLORATION

EMERGING

Tell me, I forget.
Show me, I remember.
Involve me, I understand.
—Ancient Chinese Proverb

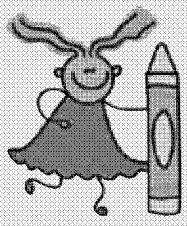


	STANDARD STATEMENT • Show interest in singing, moving and dancing using body in creative ways • Use props or tools, such as scarves, instruments, or wands to accompany music	**STANDARD STATEMENT** • Use instruments to create rhythm and sound • Move body to different sounds or rhythms
	EXEMPLARS (EXAMPLES) **The learner will:** • Wave scarves in the air in response to music • Move body to music, such as swaying or shaking, depending on the beat • Attempt to sing a familiar melodic pattern • Create sounds with various materials and tools, such as banging blocks or wood sticks together	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use instruments more purposefully to produce specific rhythms and musical sounds. • Experiment with a variety of sound-making objects • Sing songs with made-up words or endings • Play music with different rhythms or beats • Provide a music center within the environment for children's independent access
	SUPPORTIVE PRACTICES **The adult will:** • Clap, tap or move body with the rhythm of music • Provide instruments for exploration • Model use of instruments by using along with familiar songs or recordings • Set up a music area with sound-making toys and instruments that can be used independently	**SUPPORTIVE PRACTICES** **The adult will:** • Clap, tap or move body with the rhythm of music • Provide instruments for exploration • Model use of instruments by using along with familiar songs or recordings • Provide beans, rice or other objects that can be used to make new sounds

STANDARD 9.1b: PRODUCTION, PERFORMANCE AND EXHIBITION: DRAMATIC AND PERFORMANCE PLAY

BIG IDEA: Dramatic and performance play is a way to act out reality and fantasy and to solve problems.
ESSENTIAL QUESTION: Can I use dramatic play to understand the world?

9.1b.1 DRAMATIC EXPRESSION

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	**STANDARD STATEMENT** • Use object for intended purpose during play • Act out real behaviors during play	**STANDARD STATEMENT** • Use object in a nonconforming manner during play • Identify real or make believe • Begin to explore new situations through dramatic play
	EXEMPLARS (EXAMPLES) **The learner will:** • Use a cup to make tea or a fry pan to cook eggs • Act out familiar scenarios, such as cooking breakfast or comforting a baby	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use a block to represent a car or a piece of paper to represent a ticket • Use toys to act out scenes, such as checking a heart rate with a block as a stethoscope • Act out experiences that are new or unknown like going to the dentist • Pretend to be another person or animal
	SUPPORTIVE PRACTICES **The adult will:** • Provide toys that represent real objects in a child's life in all areas of the classroom • Encourage children to discuss their play • Join in children's play, asking questions to extend their play or thinking related to the play	**SUPPORTIVE PRACTICES** **The adult will:** • Encourage imagination and pretending by suggesting "move like a tiger through the jungle" • Provide materials to encourage dramatic play both indoors and outdoors

9.1b.2 PERFORMANCE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **A child is a candle to be lit not a cup to be filled.** —Bevery Galyean	**STANDARD STATEMENT** • Respond to audience's appreciation of actions	**STANDARD STATEMENT** • Imitate and repeat voice inflections and facial expression to entertain others • Seek an audience for one's actions
	EXEMPLARS (EXAMPLES) **The learner will:** • Repeat behaviors when praised • Associate actions that produce applause and laughter from adults	**EXEMPLARS (EXAMPLES)** **The learner will:** • Act out stories with help of the adult • Imitate familiar phrases or ideas from stories • Ask others to watch a performance
	SUPPORTIVE PRACTICES **The adult will:** • Praise children when demonstrating imitative play • Laugh or applaud to show appreciation for actions	**SUPPORTIVE PRACTICES** **The adult will:** • Provide examples of character voice inflections and facial expressions during read-aloud • Provide simple stories with limited characters and encourage recreating parts • Watch performances and respond with comments, laughter and applause

STANDARD 9.1c: PRODUCTION, PERFORMANCE AND EXHIBITION: VISUAL ARTS

BIG IDEA: Visual arts allow individual expression of interests, abilities and knowledge.
ESSENTIAL QUESTIONS: Can I create products using basic materials? Can I make works that represent real objects? Can I tell others about my product?

9.1c.1 REPRESENTATION

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Explore art tools and materials	**STANDARD STATEMENT** • Scribble or draw to create images	**STANDARD STATEMENT** • Create age appropriate representations of real objects and concepts in artwork
EXEMPLARS (EXAMPLES) **The learner will:** • Grasp pencil or crayon in hand, moving it from hand to hand • Make marks on paper	**EXEMPLARS (EXAMPLES)** **The learner will:** • Attempt to create basic shapes • Attempt to draw self	**EXEMPLARS (EXAMPLES)** **The learner will:** • Make paintings, drawings and play dough forms into shapes, giving them names, such as "I made a snowman." • Draw simple pictures to represent something
SUPPORTIVE PRACTICES **The adult will:** • Provide safe materials and opportunities for child to scribble and draw with adult supervision • Post completed products for children and adults to view	**SUPPORTIVE PRACTICES** **The adult will:** • Provide safe materials for children to use during free play or centers • Ask children to describe their work • Post children's art work	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials for children to draw, paint and sculpt • Ask children to describe and name their work • Post children's art work

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STANDARD 9.1c: PRODUCTION, PERFORMANCE AND EXHIBITION: VISUAL ARTS continued

9.1c.2 CONSTRUCTION

EMERGING

STANDARD STATEMENT
- Use basic art materials to create an age appropriate product

EXEMPLARS (EXAMPLES)
The learner will:
- Use a variety of drawing tools such as crayon, markers and paints
- Demonstrate increasing control when using crayons, pencils and paint brushes
- Create projects using a variety or textures and materials

SUPPORTIVE PRACTICES
The adult will:
- Provide several colors of markers, crayons and paints for use
- Encourage creative expression and exploration of materials and tools
- Expose young toddlers to books that provide examples of textures, shapes and colors
- Provide experiences through play for children to use age appropriate art materials without expectations for a finished product

STANDARD STATEMENT
- Use a variety of tools and materials to create new products

EXEMPLARS (EXAMPLES)
The learner will:
- Use materials in non-traditional ways to create new paintings, drawings and sculptures
- Punch, pat, roll squish and flatten play dough using hands or tools
- More frequent use of art tools such as plastic safety scissors, sidewalk chalk, stampers, rubbing plates, markers
- Try one medium many times in many ways

SUPPORTIVE PRACTICES
The adult will:
- Allow older toddlers to use art materials in their own way
- Provide age appropriate materials for children to use
- Adapt the environment to promote participation, engagement, and learn using a variety of textures
- Provide materials that can be easily adapted for independent use
- Make materials easily accessible to encourage use

9.1c.3 PERSONAL CONNECTIONS

EMERGING

If a child is not learning the way you are teaching, then you must teach in a way the child learns.
—Rita Dunn

STANDARD STATEMENT
- Identify objects in own art products

EXEMPLARS (EXAMPLES)
The learner will:
- Explain his/her painting, drawing or sculpture when asked

SUPPORTIVE PRACTICES
The adult will:
- Ask about parts of a child's work
- Make suggestions about what the child could create
- Display work at eye level

STANDARD STATEMENT
- Tell about own art products

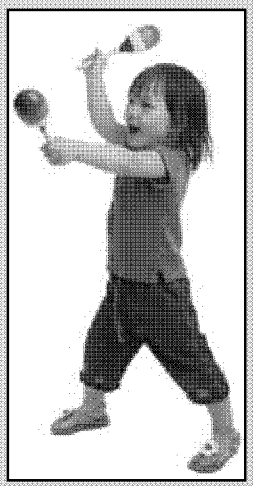
EXEMPLARS (EXAMPLES)
The learner will:
- Explain paintings, drawings and sculpture to others
- Make personal connections to art

SUPPORTIVE PRACTICES
The adult will:
- Ask child to explain their work
- Display work at eye level
- Make suggestions about what the child could create

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXT OF WORKS IN THE ARTS

BIG IDEA: Every culture has its own art forms.
ESSENTIAL QUESTION: How do I explore a variety of instruments and materials?

9.2.1 PATTERNS AND THEMES

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	**EMERGING** **Music gives to the child powers that cannot otherwise come to fruition.** —Carl Orff	**STANDARD STATEMENT** • Use materials and instruments from other cultures to create a product **EXEMPLARS (EXAMPLES)** **The learner will:** • Explore sounds made by different instruments such as maracas, gongs or rain sticks • Listen to and dance to music with different styles, beats and rhythms • Show interest in different styles of drawing and painting, such as the use of water color or finger paint • Use different types of art materials and notice the different characteristics they produce, such as water color versus marker **SUPPORTIVE PRACTICES** **The adult will:** • Incorporate singing, story telling, dancing and visual arts into daily experiences • Play a variety of music and introduce varied musical instruments for children's use • Offer unique materials for use in creating art projects, such as lace, yarn, or wooden beads • Display posters, pictures and other materials that reflect different cultures • Read books that include illustrations and stories from other cultures and environments

STANDARD 9.3: CRITICAL RESPONSE TO WORKS IN THE ARTS

BIG IDEA: People use characteristics of art to make choices about the types they prefer.
ESSENTIAL QUESTION: How do I show interest in others' works?

9.3.1 CRITICAL RESPONSE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Gaze at paintings, pictures or photographs with interest • Show pleasure when listening to music or viewing pictures	**STANDARD STATEMENT** • Show interest in others' work or products	**STANDARD STATEMENT** • Comment on characteristics of others' work
EXEMPLARS (EXAMPLES) **The learner will:** • Look at a picture, painting or photo • Use facial expressions such as smiling and frowning • Attend to different types of music	**EXEMPLARS (EXAMPLES)** **The learner will:** • Stop and intentionally look at pictures displayed • Identify colors in pictures • Participate in group singing experiences • Watch others dance and imitate actions	**EXEMPLARS (EXAMPLES)** **The learner will:** • Point to and name items in pictures • Compare others' work to own, "You used blue and I used green." • Notice the way others are dancing or moving to music
SUPPORTIVE PRACTICES **The adult will:** • Hang mobiles in visual line • Hang pictures and photos in visual line • Name, describe and point to items in pictures • Play varied types of music	**SUPPORTIVE PRACTICES** **The adult will:** • Display children's and professionals' art work at child's eye level • Talk about things you notice in art work • Ask children to identify colors in displayed work	**SUPPORTIVE PRACTICES** **The adult will:** • Display children's and professionals art work at child's eye level • Talk about things you notice in art work

9.3.2 IDENTIFICATION

STANDARD STATEMENT • Recognize and point to familiar objects or persons in photos or books	**STANDARD STATEMENT** • Identify basic art forms by name	**STANDARD STATEMENT** • Differentiate art forms
EXEMPLARS (EXAMPLES) **The learner will:** • Point to self in photograph or mirror • Show interest in family photo, pointing or touching family members to indicate recognition	**EXEMPLARS (EXAMPLES)** **The learner will:** • Identify "I'm dancing" or "Let's paint"	**EXEMPLARS (EXAMPLES)** **The learner will:** • State, "I'm dancing" or "I'm painting" • Indicate understanding of the specific tools needed to perform a specific type of art, such as "I need crayons to make a picture"
SUPPORTIVE PRACTICES **The adult will:** • Display family photos, art or objects in classroom • Ask family to share art that can be viewed with children • Describe objects pictured in books • Label objects in room	**SUPPORTIVE PRACTICES** **The adult will:** • Use correct terms to describe what children are doing • Confirm children's statements about their actions, "Yes, you are dancing"	**SUPPORTIVE PRACTICES** **The adult will:** • Identify children's actions while they are participating, "We're shaking and dancing" • Ask open-ended questions to help children identify the tools they need to complete a product, such as "I wonder what I would need to make a picture of this doll?"

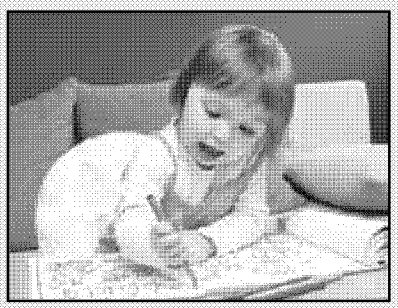
STANDARD 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS

BIG IDEA: Artists create works as a form of self-expression and to share thoughts and ideas.
ESSENTIAL QUESTIONS: Can I respond to art forms or materials? Do I prefer certain art forms or materials? Do I request certain art forms or materials?

9.4.1 EMOTIONAL RESPONSE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Respond to various art forms	**STANDARD STATEMENT** • Choose art activities during free play	**STANDARD STATEMENT** • Ask for specific songs or materials during art play • Respond to specific pictures in a story
EXEMPLARS (EXAMPLES) **The learner will:** • Sway to a beat or smile at a picture • Move body in response to others' dancing or movements	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use crayons and markers to make pictures • Sing to songs • Dance to music • Play with rhythm instruments	**EXEMPLARS (EXAMPLES)** **The learner will:** • Request favorite songs • Ask for crayons, markers or scissors to use during free play • Ask for music to dance • Look at pictures or photos in books or magazines
SUPPORTIVE PRACTICES **The adult will:** • Play soothing music, birds singing, water babbling • Use rocking and swaying motion when holding infant • Indicate pleasure when looking at pictures	**SUPPORTIVE PRACTICES** **The adult will:** • Expose children to art materials, sounds and movements that others use or make • Encourage exploration of all art forms • Play music throughout the day	**SUPPORTIVE PRACTICES** **The adult will:** • Sing and play music daily • Provide a variety of art materials for children to use during free play • Display books with photos or pictures throughout the learning areas • Include play dough or other materials that children can manipulate • Talk about how specific pictures make us feel

Every child has hidden away somewhere in his noble capacities which may be quickened and developed if we go about it in the right way.
—Helen Keller



CREATIVE THINKING AND EXPRESSION GLOSSARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce

Aesthetic Response – A philosophical reply to works in the arts

Artistic Choices – Selections made by artists in order to convey meaning

Arts Resource – An outside community asset (performances, exhibitions, performers, artists)

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form

Community – A group of people who share a common social, historical, regional or cultural heritage

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, customs, arts and behaviors

Elements – Core components that support the principles of the arts

Genre – A type or category (music – opera, oratorio; theater – tragedy, comedy; dance – modern, ballet; visual arts– pastoral, scenes of everyday life)

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment

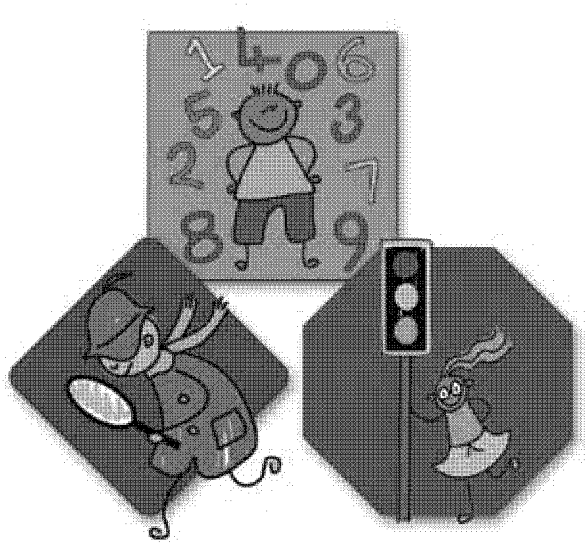
Multimedia – The combined use of media, such as movies, cd-roms, television, radio, print and the internet for entertainment and publicity

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists.

Style – A distinctive or characteristic manner of expression

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts

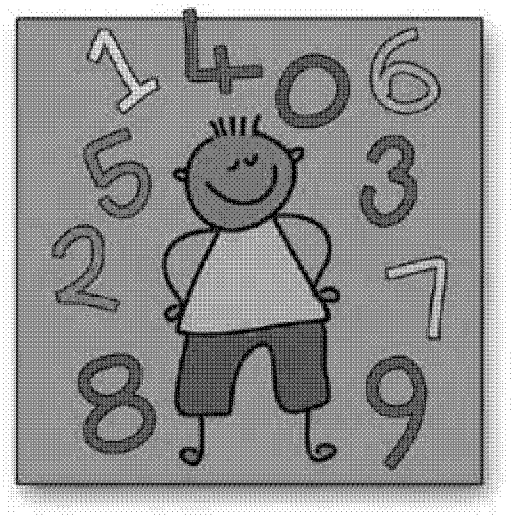
Timbre – A unique quality of sound



Learning and development is typically divided into learning domains: Physical, Intellectual or Cognitive, Social-Emotional, and Language and Literacy. Cognitive learning refers to the brain's functions that develop thinking, learning, awareness, judgment and information processing. In early childhood, Pennsylvania's Cognitive Domain includes the standards for the Key Learning Areas of Mathematics, Science and Social Studies. While each Key Learning Area contains content-specific information, children learn this information best when activities and materials are integrated together. A science experience that uses graphing (math) and cooperative small group work (social studies) combines thinking and processing to enhance and expand problem solving and critical thinking. Units of study that incorporate all the domains of learning into connected activities and projects scaffold learning and build new understandings and connections.

COGNITIVE THINKING & GENERAL KNOWLEDGE

- MATHEMATICAL THINKING AND EXPRESSION: EXPLORING, PROCESSING AND PROBLEM SOLVING
- SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY
- SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES



MATHEMATICAL THINKING AND EXPRESSION

EXPLORING, PROCESSING AND PROBLEM SOLVING

Mathematical learning in the early years relies on children's opportunities to describe and explore the relationship of objects and materials. Children's knowledge and understanding of mathematics is built through active manipulation where children use their senses to build concept knowledge in the areas of numbers and operations, patterns, algebra, geometry, measurement, and comparison. When children truly understand the fundamentals and have mastered the basic mathematical skills they will have the capacity and confidence to excel at learning more advanced mathematics. Teachers facilitate mathematical learning when they encourage children to problem solve, reason, communicate, connect and represent. When engaged in manipulative mathematical activities, children better understand the world around them, begin to use number concepts to communicate their own thoughts and ideas which means they are beginning to think and reason.

USE OF MANIPULATIVES IN EARLY LEARNING SETTINGS

Small toys or objects may be one of the most important teaching tools for early childhood classrooms. Teddy bear counters, pegs or small blocks support children's learning in math and science as a means of learning complex concepts. As children combine, sort, count or describe the characteristics of these small objects, they are using active, hands-on strategies for problem solving, exploration and experimentation and scaffolding previous knowledge and interactions to learn new information. In addition, children are learning motor control, patterns and concrete ways to understand abstract ideas. All classrooms should provide ample opportunities for children's independent access to manipulatives throughout the daily routine.

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STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

BIG IDEA: Learners' knowledge and understanding of mathematics is built through their active manipulation in the areas of numbers and operations. The number system is a way to organize, represent and compare numbers.

ESSENTIAL QUESTIONS: How do I use numbers every day? Why do I need to be able to count objects? How can I record what I count?

2.1.1 COUNT AND COMPARE NUMBERS

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Construct number sense	**STANDARD STATEMENT** • Attempt rote counting • Use basic math terms • Begin to imitate rote counting using some names of numbers	**STANDARD STATEMENT** • Rote count to five • Identify some numerals • Identify characteristics for comparison (size, color, shape)
EXEMPLARS (EXAMPLES) **The learner will:** • Explore or experiment with objects to begin to understand basic number concepts, such as jangling a ring of plastic keys or pushing numbered buttons on a musical bus • Repeatedly beat on a drum, tap on a tambourine or play another musical instrument • Attempt to snap and lock plastic shape beads • Stack sequenced objects on top of each other	**EXEMPLARS (EXAMPLES)** **The learner will:** • Imitate rote counting using some names and numbers • Practice naming objects • Practice sorting and organizing objects by common mathematical characteristics, such as circles and squares or big and little • Ask for more of something	**EXEMPLARS (EXAMPLES)** **The learner will:** • Engage in experiences related to numbers and counting e.g. songs, fingerplays, reading number books • Repeat and recite number poems, songs and chants • Attach names to numbers • Practice one to one correspondence (setting out snack, counting children in classroom, matching objects)
SUPPORTIVE PRACTICES **The adult will:** • Provide plenty of sound-makers e.g. wrist bells, pots and pans, wooden spoons and rhythm and beat • Talk with children and describe what they are doing ("Shake, shake, you made your own music) • Describe comparisons during playful interactions • Count for children as they pound on musical instruments or push buttons • Describe objects by characteristics, such as the red bead or the round ball • Use numeric words during routine interactions, such as "Do you want more milk?"	**SUPPORTIVE PRACTICES** **The adult will:** • Count objects in children's environment • Rote count with young learners daily • Engage children in exploration supporting imaginative play • Play and manipulate different materials • Provide numeral and number materials in environment	**SUPPORTIVE PRACTICES** **The adult will:** • Demonstrate, explain and engage child in counting and numeral exploration • Expose children to number books, stories, poems, songs and chants • Provide materials that can be counted and compared • Pair objects during daily activities (one plate for one child) • Count objects in environment "outloud" in home language

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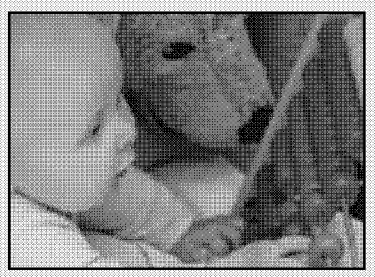
STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS continued

2.1.2 REPRESENT NUMBERS IN EQUIVALENT FORMS

EMERGING



STANDARD STATEMENT
- Identify symbols for familiar objects

EXEMPLARS (EXAMPLES)
The learner will:
- Recognize symbols represent concept, such as McDonald's sign, Pizza Hut sign, Stop sign, symbols used in classroom centers
- Play with toy telephones

SUPPORTIVE PRACTICES
The adult will:
- Provide a safe and stimulating environment for children to explore and discover
- Provide symbols in classroom and review frequently (washing hands, listening station, shelf pictures, center symbols)
- Play games that use objects as symbols

STANDARD STATEMENT
- Indicate number of objects

EXEMPLARS (EXAMPLES)
The learner will:
- Recognize some quantities (2 blocks)
- Hold up three fingers (how old are you?)

SUPPORTIVE PRACTICES
The adult will:
- Model using math and writing numerals in daily activities
- Provide numeral activities in learning centers
- Practice holding up number of fingers or showing a given number of objects in

2.1.3 CONCEPTS OF NUMBERS AND RELATIONSHIPS

STANDARD STATEMENT
- Explore relationships between objects during play

EXEMPLARS (EXAMPLES)
The learner will:
- Stack and unstack nesting blocks
- Pull out and play with kitchen pots and pans
- Play pat a cake with adult

SUPPORTIVE PRACTICES
The adult will:
- Provide experiences with materials that demonstrate the relationships of objects, such as stacking cubes or simple puzzles
- Play games that encourage object permanence such as peek a boo

STANDARD STATEMENT
- Identify basic differences and similarities of objects

EXEMPLARS (EXAMPLES)
The learner will:
- Use simple vocabulary to describe who has more, such as "you have two, I only have one"
- Hold finger up to show how many or how old he/she is
- Recognize different shapes of objects
- Notice that two children are wearing striped shirts

SUPPORTIVE PRACTICES
The adult will:
- Pair objects during activities, such as one child gets one snack cup
- Pose questions that involve simple mathematical problems, such as "Who has more?"
- Ask children how many objects they have
- Demonstrate how to sort objects by common characteristics, such as gathering all the round ones in this pile and all the square ones in another

STANDARD STATEMENT
- Show that numbers represent quantity
- Identify groups of more or less

EXEMPLARS (EXAMPLES)
The learner will:
- Recognize who has more pretzels than another
- Notice there are more red squares than blue ones
- Use beginning counting skills to count objects

SUPPORTIVE PRACTICES
The adult will:
- Pose challenging questions such as "Do we have enough cookies? Who has more? Do we have too many...?"
- Use numerical concepts in everyday routines, such as count children, snack, objects in groups, clock time, calendar dates
- Provide math related materials in learning areas, such as stacking toys, foam numbers, cubes, number puzzles, counting books

STANDARD 2.2: COMPUTATION AND ESTIMATION

BIG IDEA: Students link concepts and procedures as they develop and use computational techniques, including estimation and mental arithmetic to seek reasonable answers.
ESSENTIAL QUESTIONS: How do I build knowledge through problem solving?

2.2.2 COMPUTATION

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	**STANDARD STATEMENT** • Sort manipulatives into sets • Compare objects by properties, such as size, shape, or weight	**STANDARD STATEMENT** • Place manipulatives into sets according to adult request • Order objects by size, height, or length, with adult assistance
	EXEMPLARS (EXAMPLES) **The learner will:** • Try to push Pop-It beads together • Attempt to pull toys or objects apart • Pull out and group all the bears from a pile of animal counters • Put the cups, napkins and spoons in separate piles • Compare everyday objects, such as the size of children's shoes to discover who has the biggest or smallest feet	**EXEMPLARS (EXAMPLES)** **The learner will:** • Engage in play with objects having similar attributes • Group counters, blocks
	SUPPORTIVE PRACTICES **The adult will:** • Count and group objects in child's environment • Use a variety of objects for learners to manipulate • Help children notice the differences in objects' characteristics and show them how to sort them by a common characteristic • Sing finger plays that include animals adding on, such as Three Little Monkeys • Count during book readings • Provide multiple toys that have incremental sizes for stacking and sorting	**SUPPORTIVE PRACTICES** **The adult will:** • Talk about simple math equations that are relevant to daily life such as, "How many jars of jam are left?" • Engage students in finger plays, using concrete items that connect students in mathematical operations of addition and subtraction of items (5 little ducks). • Provide many objects and opportunities for comparing and contrasting objects

Mathematics is an embodiment of the harmony of the universe.
—Followers of Pythagoras

CONTINUED...

STANDARD 2.2: COMPUTATION AND ESTIMATION continued

2.2.4 NUMERICAL ESTIMATION

EMERGING

Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood.

—Fred Rogers

STANDARD STATEMENT
- Select an object that is perceived to be the biggest, heaviest, smallest (right or wrong)

EXEMPLARS (EXAMPLES)
The learner will:
- Choose from a group of objects the one that is heaviest, biggest, smallest when asked by adult

SUPPORTIVE PRACTICES
The adult will:
- Provide a variety of objects of varying sizes and colors
- Ask questions about size, weight, color
- Praise and encourage responses

STANDARD STATEMENT
- Guess which container holds more

EXEMPLARS (EXAMPLES)
The learner will:
- Make guesses about bucket/cup; crayon box/tubs; teacher mugs/child cup

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities and materials for comparison and estimation
- Count with learners
- Verbalize "I think ... will hold..."
- Ask simple probing questions to promote thinking

STANDARD 2.3: MEASUREMENT AND ESTIMATION

BIG IDEA: Learners will identify attributes, units or systems of measurement and apply a variety of tools to explore the distance, weight, length, height, time and temperature of objects.
ESSENTIAL QUESTIONS: What do I understand about the measurement? How can I group objects according to common properties? What can I discover about quantities of objects?

2.3.1 CONCEPT EASUREMENT

INFANT	YOUNG TODDLER	OLDER TODDLER
	STANDARD STATEMENT • Begin to predict daily routines • Order a few objects by size with assistance	**STANDARD STATEMENT** • Measure amounts of sand and water using non-linear measures • Identify daily routines and changes in routine • Compare sizes of objects
EMERGING	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use size words, such as many, big and little appropriately • Fill and empty containers (with sand, water and other objects) • Select between 2 items which is predicted to be heaviest • Arrange a set of objects into tall, taller, tallest **SUPPORTIVE PRACTICES** **The adult will:** • Pose questions to children about what happens next • Maintain daily routines • Provide opportunities for exploration of objects of various sizes and weights • Provide picture books/board books with mathematical concepts • Read the Three Bears or the Three Billy Goats Gruff	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use containers in sand and water tables • Verbalize and/or move bodies to classroom area where next activity will occur • Follow routine when cleaning up by practicing categorizing, matching and sorting • Attempt to categorize quantities of objects by looking at size, such as 2 grapefruits are more than 4 oranges **SUPPORTIVE PRACTICES** **The adult will:** • Describe the size, volume ,weight and length of people, toys and objects • Provide opportunities to develop an understanding of volume • Encourage learners to put materials away by matching shelf pictures • Engage in matching one to one to introduce the concept of number conservation versus size of object; repeated practice is needed • Include different sizes of objects for filling and dumping • Act out stories with sequence, such as The Three Bears

2.3.2 UNITS AND TOOLS OF MEASUREMENT

EMERGING

Imagination is more important than knowledge.

—Albert Einstein

STANDARD STATEMENT
- Identify tools that are used for measurement
- Explore similar objects to determine size

EXEMPLARS (EXAMPLES)
The learner will:
- Explore pegboard holes with fingers and then look for something to fit in holes
- Explore measuring tools
- Play with puzzles up to 6 pieces
- Practice describing the size, volume, weight and length of people, toys and objects
- Attempt to follow directions to games that require moving different distances or locations, such as hop 2 times towards me or take 1 step backward
- Measure children with growth charts and talk about how they've grown

SUPPORTIVE PRACTICES
The adult will:
- Provide objects for learners to describe, weigh and measure
- Provide toys that will allow children to explore and discover what fits together
- Engage learners in measurement activities
- Engage learners in gross motor activities involving distances, locations, heights
- Provide encouragement and praise for accomplishments

STANDARD STATEMENT
- Measure objects with adult assistance
- Begin to use nonstandard tools to measure familiar objects

EXEMPLARS (EXAMPLES)
The learner will:
- Engage in measuring objects in classroom environment with standard and nonstandard tools
- Use ruler to measure objects such as shoes or paper
- Use hand to determine size of objects

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for measuring objects in classroom
- Model how to measure using standard and nonstandard tools
- Post children's growth charts
- Put measuring tools throughout the classroom that support children's independent exploration, such as scales, rulers or tape measures

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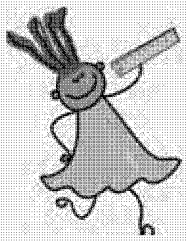
STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

BIG IDEA: Learners use inductive and deductive reasoning. Learners make, check and verify predictions and demonstrate the process of mathematics by making connections and using reasoning to solve problems.
ESSENTIAL QUESTIONS: Why do I think my estimation is appropriate? How do I decide what connections there are between objects? How do I make an "educated guess"?

2.4.1 REASONING

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Interact with environmental objects to understand them	**STANDARD STATEMENT** • Participate in activities that have a cause and effect	**STANDARD STATEMENT** • Experiment with objects to solve a problem
EXEMPLARS (EXAMPLES) **The learner will:** • Use senses and body to search the environment • Pick up one toy, examine its characteristics, and put it aside to pick up another • Repeat an action with an object until it gets a desired effect, such as squeezing a stuffed animal until it squeaks	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use objects and materials in multiple ways to understand how they work, such as roll, throw, squeeze or kick a ball • Experiment with blocks to make a tower without falling • Manipulate a piece of a puzzle until it fits into the puzzle frame, with teacher assistance	**EXEMPLARS (EXAMPLES)** **The learner will:** • Fit shapes into a shape board, matching the sequential growth in the size of the opening • Identify the specific stacking ring to go on the tower first, second or last • Give each child one crayon, going back to the basket or box to get more if needed
SUPPORTIVE PRACTICES **The adult will:** • Demonstrate and provide opportunities for children to manipulate objects • Provide children with objects in a variety of shapes, colors and sizes in which to interact 	**SUPPORTIVE PRACTICES** **The adult will:** • Allow children opportunities to perform an action repeatedly, even if it requires repeated response by the teacher • Provide children with the questions or information to consider the weight or size of an object when stacking or sequencing	**SUPPORTIVE PRACTICES** **The adult will:** • Talk about alternative solutions for basic problems, such as "How could we make sure everyone has one ball of play dough?" • Provide materials that require thinking and strategizing for using them • Ask open-ended questions that stimulate thinking and reasoning

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

BIG IDEA: Learners solve and interpret result in various ways. They identify the problem and explore solutions to achieve an end result.
ESSENTIAL QUESTIONS: How do I apply a variety of concepts, processes and skills to solve problems? How do I present mathematical ideas using words, symbols visual display or technology

2.5.1 PROBLEM SOLVING

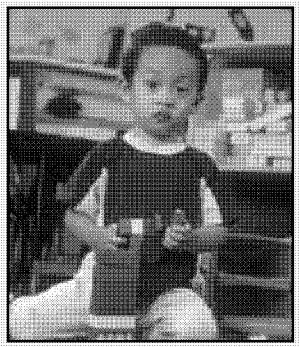
INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Begin to problem solve	**STANDARD STATEMENT** • Attempt to problem solve with objects by stacking, nesting, and piling	**STANDARD STATEMENT** • Practice problem solving through exploration of new and familiar materials • Experiment with new uses for familiar objects • Find objects that have been hidden in nearby locations
EXEMPLARS (EXAMPLES) **The learner will:** • Move rattle from one hand to another to make noise • Use mouth and hands to learn about object proportions • Gesture to adult for a second cookie or cracker	**EXEMPLARS (EXAMPLES)** **The learner will:** • Practice organizing objects to stack, nest or pile • Sort by shape or color when asked, such as "Can you find a brown bear? Can you find a red circle?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Explore materials in learning centers • Practice problem solving using prior knowledge with adult assistance • Practice answering questions from adult • Hunt for objects
SUPPORTIVE PRACTICES **The adult will:** • Ask questions • Provide time to manipulate objects **Success is won by the person who does today what others are thinking of doing tomorrow.** —Rose L. Korotkin	**SUPPORTIVE PRACTICES** **The adult will:** • Use open ended questions – What if...? What do you think...? How could you...?	**SUPPORTIVE PRACTICES** **The adult will:** • Explore mathematical concepts in books; converse with young learner while solving problems • Investigate a plan to solve a problem with the assistance of the young learner • Encourage dramatic play with props that promote problem solving • Ask open ended questions to promote thinking • Engage child in exploration and experimentation, supporting imaginative play • Demonstrate, explain and engage child in activities that show how objects not seen can still exist

STANDARD 2.6: STATISTICS AND DATA ANALYSIS

BIG IDEA: Learners collect, represent and analyze data to answer questions, solve problems and make predictions.
ESSENTIAL QUESTIONS: How do I collect data? How do I explore and display data?

2.6.2 ORGANIZATION AND DISPLAY OF DATA

EMERGING



STANDARD STATEMENT
- Participate in sorting objects

EXEMPLARS (EXAMPLES)
The learner will:
- Begin to sort objects by size or shape (pegs, beads, blocks, counting bears) with teacher support

SUPPORTIVE PRACTICES
The adult will:
- Provide children with objects of various sizes and shapes
- Play sorting games with children
- Incorporate sorting and classifying activities in daily routine

STANDARD STATEMENT
- Organize and display objects by attributes with assistance

EXEMPLARS (EXAMPLES)
The learner will:
- Sort objects by preference, color, size, shape, or gender with assistance
- Complete a simple graph with adult assistance (hair color, lunch preference)

SUPPORTIVE PRACTICES
The adult will:
- Use mathematical words that describe attributes such as size, shape, color. "You made a big pile of blue blocks."
- Provide opportunities to sort learners by height, birthday month, eye color
- Provide opportunities for conversation about groups

2.6.3 NUMERICAL SUMMARIES

EMERGING

EMERGING

Education is a social process...
Education is growth...
Education is not preparation for life; education is life itself.
—John Dewey

STANDARD STATEMENT
- Begin to point to data on simple bar graph

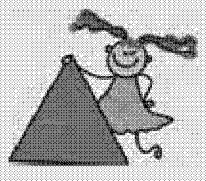
EXEMPLARS (EXAMPLES)
The learner will:
- Answer questions about a class-created graph, such as "Are there more children with blue or brown eyes?"

SUPPORTIVE PRACTICES
The adult will:
- Make graphs frequently to demonstrate how information or data can be classified
- Talk about the outcomes of experiments or data compilation, such as "How many shoes did we have when we put them all together?"

STANDARD 2.9: GEOMETRY

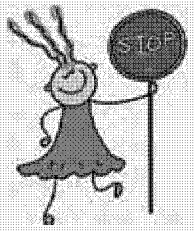
BIG IDEA: Children use basic shapes and spatial reasoning to learn about themselves in relation to the environment.
ESSENTIAL QUESTIONS: What makes shapes different from each other? What shapes can we see in our world? How do shapes fit together and come apart?

2.9.1 DEFINITIONS, PROPERTIES AND RELATIONS

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	**STANDARD STATEMENT** • Explore the ways that shapes and objects fit together • Notice similarities and differences in the shape of objects	**STANDARD STATEMENT** • Recognize basic shapes in the environment • Sort objects by shape
	EXEMPLARS (EXAMPLES) **The learner will:** • Put together simple puzzles with assistance • Stack and build with various block sizes and shapes • Manipulate soft, foam or hard shapes • Put together snap beads, magnetic blocks or other objects that fit together and are taken part with adult assistance	**EXEMPLARS (EXAMPLES)** **The learner will:** • Put together pop beads, snap beads or magnetic blocks • Complete simple puzzles • Manipulate shape toys, such as shape puzzles or shape sorters • Notice that circles and squares are different from each other • Sort objects by shape
	SUPPORTIVE PRACTICES **The adult will:** • Offer puzzles, shape sorters and shape blocks that can be put together and taken apart • Describe objects by shape and name • Demonstrate how shapes are similar and different	**SUPPORTIVE PRACTICES** **The adult will:** • Offer toys and objects that can to be put together and taken apart • Provide a variety of blocks of different shapes, such as wood, foam, or cardboard • Identify shapes and their characteristics in the environment, such as "Look at the round ball" • Sort circles and squares from a pile of shapes

CONTINUED...

STANDARD 2.9: GEOMETRY continued

2.9.3 COORDINATE GEOMETRY		
EMERGING	**STANDARD STATEMENT** • Move body in different directions, such as up, down, around or under	**STANDARD STATEMENT** • Imitate basic directionality with adults and peers • Follow basic directions
	**EXEMPLARS (EXAMPLES)** **The learner will:** • Play movement games during the daily routine • Identify direction while children are moving, such as "Let's look under the table for the spoon" • Play hide and seek games by hiding toys and describing where they are hidden, using directionality terms, such as "Look on top of the shelf" • Provide large muscle toys that encourage climbing and crawling	**EXEMPLARS (EXAMPLES)** **The learner will:** • Move objects in space as directed, such as up, down, behind, under or inside • Follow directions related to directionality, such as move sideways, stretch hands up and down • Climb up and down and crawl in and out of large motor equipment
	SUPPORTIVE PRACTICES **The adult will:** • Provide opportunities for movement of body during the daily routine • Model the movements • Provide music for young learners to move bodies	**SUPPORTIVE PRACTICES** **The adult will:** • Provide experiences that use the concepts of up, down, around, inside, in front of, behind, outside • Provide activities that require learners to follow basic directions • Create simple obstacle courses where children crawl into or climb over • Play simple relay races where children can follow directions, such as hop or run

MATHEMATICAL THINKING AND EXPRESSION GLOSSARY

Addends – Numbers used in mathematical operation of addition

Algebraic Expression – A group of numbers, symbols and variables that express a single series of operations

Angle – A geometric figure consisting of two rays with a common endpoint

Ascending Order – A listing in which numbers or terms are organized in creasing value

Bar Graph – A graph in which horizontal or vertical bars represent data

Concrete Objects – Physical objects used to represent mathematical situations

Counting On – Given two sets of objects in which to find the sum, learner counts one set and then counts on from the first set to the second set (3 apples in one set; 1 apple in other set- learner says 1-2-3 and then 4; there are 4 in all)

Data – Information gathered by observation, questioning or measurement, usually expressed with numbers

Descending - An order in which numbers or terms are organized in decreasing value

Estimate – A close rather than exact answer

Fractional Part – Part of a whole or part of a group that is less than a whole

Function – A rule that describes the commonalities between two patterns

Graph – A pictorial device that shows a relationship between variables or sets of data

Manipulatives – A wide variety of physical materials, objects, and supplies that students use to foster mathematics

Non Standard Measurement - A measure that is not determined by the use of standard units (paper clips, blocks)

Numerical Operations – Place, value, number sense, counting, correspondence, comparison, ordering numbers, addition/subtraction (joining/separating sets)

Number Sense – Involves the understanding of numbers and their quantities

Ordinal Number – A whole number that names the position of an object in a sequence

Pattern – A set or sequence of shapes or numbers that are repeated in a predictable manner

Pictograph – A graph that uses pictures or symbols to represent data

Place value – The value of the position of a digit in a numeral

Predictions – Use of base information to produce an approximation of change or result

Probability – The measure the likelihood of an event occurring

Reflection – A transformation creating a mirror image of a figure on the opposite side of a line

Seriation - Arranging objects in order by size or position in space 9arrange in a series of pattern)

Spatial Sense - Involves building and manipulating mental representations of two and three dimensional

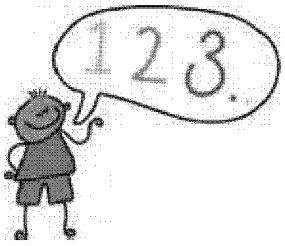
Standard Measurement – A measure determined by the use of standard unit such as, inches, feet, pounds, cups, pints, gallons

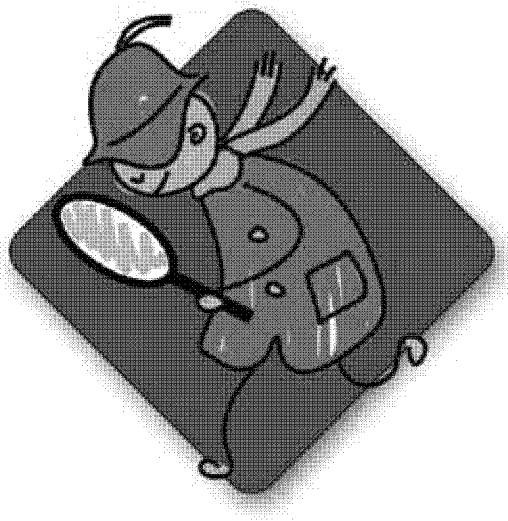
Symbol – A sign used to represent something

Symmetry – An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place

Trigonometry - Relationship between the sides and angles of triangles

Whole numbers – The set of numbers consisting of the counting numbers and zero





SCIENTIFIC THINKING AND TECHNOLOGY

EXPLORING, INQUIRY AND DISCOVERY

All young children are naturally curious about their environment and the world around them and learn best when allowed to actively explore using their senses. These experiences provide the foundation for abstract and scientific thought. Students, who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support discovery about the natural world and the scientific process. For the young learner scientific concepts can be incorporated throughout the key areas of early learning; for example, children use pretend play to explore and manipulate materials, creative arts to express their ideas, and literacy and language arts to research answers to questions.

ASSESSMENT

Child assessment is an integral component of early childhood programs. When combined with observation, curriculum development and appropriate teaching practices, assessment provides the foundation for understanding children's growth and development. Ongoing and frequent reviews of children's accomplishments and progress enable teachers to learn how children change over time and provide information for developing responsive and appropriate instruction. Teachers use authentic assessment when they combine observation, portfolio collection, and parent report with research-based, standards-aligned curriculum-embedded instruments to obtain a clear picture of a child's interests, abilities and areas for focus.

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STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON LIVING ORGANISMS

BIG IDEA: There are a variety of living and non-living things.

ESSENTIAL QUESTIONS: Can I use my senses to learn more about the world around me? Can I identify differences in plants and animals? Do I notice changes in plants and animals?

3.1a.1 COMMON CHARACTERISTICS OF LIFE

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Express a sense of wonder about the natural world • Show interest and curiosity in people	**STANDARD STATEMENT** • Differentiate between animal and plant • Show interest in and respond to plants, animals and other people in the environment • Explore the characteristics of living things	**STANDARD STATEMENT** • Identify the physical properties of some living and non-living things
EXEMPLARS (EXAMPLES) **The learner will:** • Reach for objects • Put objects in mouth to discover its properties • Roll objects in hands • Reach for people • Touch and grasp face, glasses, jewelry of adult holding infant	**EXEMPLARS (EXAMPLES)** **The learner will:** • Reach for a caregiver • Grab a flower • Point and squeal at dog • Pick up an earthworm • Try to catch ants	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use tools, such as a magnifying glass, to observe and describe objects • Identify the external characteristics of living things, such as the size, shape and color of leaves or insects • Identify the external characteristics of non-living things, such as rocks or toy cars
SUPPORTIVE PRACTICES **The adult will:** • Provide materials and toys for infants to explore and discover • Engage with infant while holding	**SUPPORTIVE PRACTICES** **The adult will:** • Provide indoor and outdoor experiences that include safe interaction with animals, plants and other people • Include plants and, when possible, pets in the classroom • Read books about animals and their characteristics	**SUPPORTIVE PRACTICES** **The adult will:** • Provide tools and materials for children to investigate at a science area such as hand lenses and magnifying glasses • Discuss characteristics of plants and animals and encourage children to draw pictures • Display groups of objects that can be sorted into living and non-living

3.1a.3 LIFE CYCLES

EMERGING **The whole of science is nothing more than a refinement of everyday thinking.** —Albert Einstein	EMERGING	**STANDARD STATEMENT** • Notice plants and animals growing and changing **EXEMPLARS (EXAMPLES)** **The learner will:** • State observable changes in plants and animals from day to day • Wonder what the bud will become • Wonder what will change on the tadpole next) **SUPPORTIVE PRACTICES** **The adult will:** • Plant seeds and keep in a place where children can observe daily • Point out changes to plants and animals when outside • Observe changes to classroom pet

STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON LIVING ORGANISMS continued

3.1a.5 FORM AND FUNCTION

STANDARD STATEMENT • Explore body parts of self and others	**STANDARD STATEMENT** • Identify own body parts when asked	**STANDARD STATEMENT** • Identify similarities and differences in body parts of animals and humans
EXEMPLARS (EXAMPLES) **The learner will:** • Use hands to discover own body • Use hands to explore eyes, ears, nose, mouth and hair of others	**EXEMPLARS (EXAMPLES)** **The learner will:** • Point to legs, head, arms, hands feet when asked • Play simple body part games, such as "Where is Thumbkin?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Note the differences between the body parts of humans and animals, such as birds have wings and humans do not • Talk about the body parts that animals and humans have in common, such as dogs and babies both have legs • Note that animals (cows) use tails to swat at insects
SUPPORTIVE PRACTICES **The adult will:** • Name body parts when playing or diapering • Recite simple rhymes or games that include body parts, such as "This Little Piggy"	**SUPPORTIVE PRACTICES** **The adult will:** • Name body parts when playing and diapering • Provide dolls and toys for children to identify body parts • Include songs, finger plays and games that include body parts	**SUPPORTIVE PRACTICES** **The adult will:** • Discuss similarities and differences between animals and humans • Ask children to move like animals, such as slither like a snake or fly like a bird • Provide dolls and stuffed animals where children can notice their characteristics • Display pictures and books that describe animals and their characteristics

3.1a.9 SCIENCE AS INQUIRY

STANDARD STATEMENT • Place object in mouth to discover its characteristics	**STANDARD STATEMENT** • Use the five senses as tools with which to observe and describe	**STANDARD STATEMENT** • Use the five senses as tools with which to observe, classify and describe
EXEMPLARS (EXAMPLES) **The learner will:** • Place objects in mouth • Watch peers and adult activity • Roll, hold, shake, move toys • Turn head toward noise	**EXEMPLARS (EXAMPLES)** **The learner will:** • Say "loud" after hearing loud noise • Wrinkle nose and stick out tongue after tasting something new • Run hands through sand, beans, rice • Try to make a toy move	**EXEMPLARS (EXAMPLES)** **The learner will:** • Place all the green leaves together • Say "hot" when seeing a steaming dish of food • Pretend to answer a toy phone when the telephone rings • Try to identify objects using sense of smell • Squish mud through fingers and notice how it feels
SUPPORTIVE PRACTICES **The adult will:** • Provide materials and toys for infants to explore and discover • Engage with infant while holding	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials and experiences for children to explore and investigate using all their senses • Include songs, finger plays and games that include body parts	**SUPPORTIVE PRACTICES** **The adult will:** • Encourage children to use words to describe their observations during play • Model vocabulary that includes senses such as "I hear" or "It tastes" • Provide many materials and opportunities for children to explore using all their senses

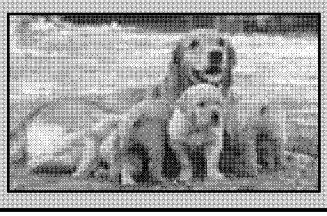
STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS

BIG IDEA: There are a variety of living and non-living things.
ESSENTIAL QUESTIONS: Do I recognize important people in my life? Can I tell the difference between adult and baby animals? Can I match adults with their babies?

3.1b.1 HEREDITY

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Recognize self and family members	**STANDARD STATEMENT** • Distinguish between adult and baby animals • Name some common animals and their babies	**STANDARD STATEMENT** • Identify adults and their offspring • Notice similarities and differences between adult animals and their offspring
EXEMPLARS (EXAMPLES) **The learner will:** • Look at self in mirror • Look for family member when caregiver says, "Here's Mommy!" • Direct gaze to named person when asked, "Where's your brother?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Point to adult or baby animals in pictures when asked • Identify the names of family members in pictures • Name a dog or cat when seen outside on a walk • Tell that a cow says, "moo" • Match a cat and kitten or a dog and puppy	**EXEMPLARS (EXAMPLES)** **The learner will:** • Recognize a puppy from a dog by the size or characteristics • Match animal picture cards, such as kitten to cat, calf to cow, baby to parent
SUPPORTIVE PRACTICES **The adult will:** • Provide mirror at eye level for infant to look into • Talk with infant while looking into mirror • Identify family members by name when they are present • Display family pictures and talk about who is in the picture and what they're doing	**SUPPORTIVE PRACTICES** **The adult will:** • Provide pictures of adult and baby animals • Use appropriate terms when identifying animals • Provide literature connections	**SUPPORTIVE PRACTICES** **The adult will:** • Provide pictures of adult and baby animals • Use appropriate terms when identifying animals • Provide literature connections

3.1b.2 REPRODUCTION

EMERGING 	**EMERGING**	**STANDARD STATEMENT** • Observe that dogs have puppies and cats have kittens **EXEMPLARS (EXAMPLES)** **The learner will:** • Match babies to parent such as puppy with dog or kitten with cat **SUPPORTIVE PRACTICES** **The adult will:** • Ask children to tell which animals belong together • Ask children whether a lamb is a baby cow or a cub is a baby fish

STANDARD 3.1c: BIOLOGICAL SCIENCES: EVOLUTION

BIG IDEA: There are a variety of living and non-living things.
ESSENTIAL QUESTIONS: Can I tell what kind of clothing I need for the weather? Do I recognize changes in my environment?

3.1c.2 ADAPTATION

INFANT

EMERGING

YOUNG TODDLER

EMERGING

OLDER TODDLER

STANDARD STATEMENT
- Notice changes that occur in animals to adapt to seasonal changes
- Discuss changes humans make to accommodate weather changes

EXEMPLARS (EXAMPLES)
The learner will:
- Identify whether she/he should wear a winter coat or shorts
- Tell kinds of clothing worn when it rains or snows
- Talk about the growth of fur on animals to keep them warm
- Watch squirrels gather acorns or birds using a bird feeder

SUPPORTIVE PRACTICES
The adult will:
- Read simple books about hibernation or migration
- Take a walk to observe animals' preparation for winter, such as squirrels gathering acorns

STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY

BIG IDEA: Physical properties help us to understand the world.
ESSENTIAL QUESTION: Do I interact with a variety of materials?

3.2a.1 PROPERTIES OF MA

INFANT

STANDARD STATEMENT
- Explore the characteristics of objects

EXEMPLARS (EXAMPLES)
The learner will:
- Pat or hit a toy that squeaks
- Visually explore a toy in hand
- Explore the different textures of objects, such as hard or soft and wet or dry

SUPPORTIVE PRACTICES
The adult will:
- Provide toys that squeak or make noise when used
- Use facial expressions to show pleasure and happiness when talking with an infant
- Provide materials of different textures to explore
- Talk about the way objects or materials feel, such as "This is really hard" or "Now your bottom is nice and dry"

YOUNG TODDLER

STANDARD STATEMENT
- Engage with objects to learn about their characteristics
- Use tools to learn about the characteristics of objects and materials

EXEMPLARS (EXAMPLES)
The learner will:
- Use a stick to investigate a worm
- Shake a rhythm instrument to hear its sound
- Use a fork to put a crumb to the nose
- Try mixing red and blue paint with a brush
- Notice the texture and feel of different objects and materials

SUPPORTIVE PRACTICES
The adult will:
- Provide new materials and instruments for children to explore, such as different textures of fabrics or a new vehicle in the block area
- Encourage children to use the sand or water table to pour or scoop
- Include a variety of tools throughout the environment for children to use in their play

OLDER TODDLER

STANDARD STATEMENT
- Identify differences in the properties of some objects or materials

EXEMPLARS (EXAMPLES)
The learner will:
- Make something out of paper, cardboard or other materials that can be used for a purpose
- Assemble, take apart and reassemble items like linking blocks, puzzles, erector sets or block constructions

SUPPORTIVE PRACTICES
The adult will:
- Provide various materials and recyclable materials for children to create new objects
- Provide old flashlights, typewriters, mechanical toys for children to discover how the parts interact

3.2a.4 REACTIONS

INFANT

EMERGING

It is not what is poured into the student, but what is planted, that counts.
—Eugene P. Bertin

YOUNG TODDLER

STANDARD STATEMENT
- Combine materials to make a new substance

EXEMPLARS (EXAMPLES)
The learner will:
- Mix water and sand together
- Mix paint colors
- Combine different types of blocks to create a structure

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for children to mix water and sand or soil
- Include simple cooking experiences where children can observe the changes, such as mixing water into jello

OLDER TODDLER

STANDARD STATEMENT
- Describe the result when two or more substances are combined

EXEMPLARS (EXAMPLES)
The learner will:
- Notice that soil and water combined make mud
- Tell that mixing 2 paint colors make a different colors, even if colors aren't identified
- Use a variety of art materials to make a collage

SUPPORTIVE PRACTICES
The adult will:
- Conduct simple experiments where children can observe changes, such as adding oil to water or food coloring to milk
- Include simple cooking projects that allow children to stir together ingredients, with adult guidance
- Provide water and soil or sand in the sand/water table for children to combine
- Encourage creative use of multiple materials for children's constructions

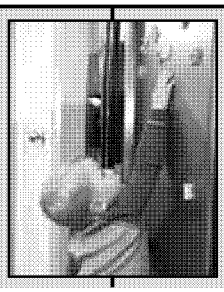
STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS

BIG IDEA: Physical properties help us to understand the world.
ESSENTIAL QUESTIONS: Can I move and manipulate toys? Do I identify familiar sounds and voices? Can I participate in an action/reaction sequence?

3.1b.1 FORCE AND MOTION OF PARTICLES AND RIGID BODIES

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	**STANDARD STATEMENT** • Recognize she/he can move objects **EXEMPLARS (EXAMPLES)** **The learner will:** • Use push or pull toys, such as pretend vacuum cleaners or pull toys with strings • Use feet to push a wheeled toy around the play yard • Manipulate pop-up toys, such as jack in the boxes, and notice how the clown appears after moving the crank • Move small cars or trucks around during block play **SUPPORTIVE PRACTICES** **The adult will:** • Include push and pull toys for outside play • Encourage children to use string toys or inside push toys • Demonstrate how pop-up or other toys that change with movement work and include in play areas	**STANDARD STATEMENT** • Use complex motion to play with toys **EXEMPLARS (EXAMPLES)** **The learner will:** • Push buttons on pop-up toys • Roll cars up and down ramp • Include tricycles or other self-propelled toys in outside play environment **SUPPORTIVE PRACTICES** **The adult will:** • Provide toys that require pushing buttons, turning handles, winding or rolling • Provide toys that can be combined for play such as wheeled cars and ramps

3.2b.4 ELECTRICAL AND MAGNETIC ENERGY

EMERGING	 EMERGING	**STANDARD STATEMENT** • Explore magnets **EXEMPLARS (EXAMPLES)** **The learner will:** • Play with magnets and magnetic items • Use magnetic letters /numbers on cookie sheet or refrigerator **SUPPORTIVE PRACTICES** **The adult will:** • Provide magnets, magnetic items and magnetic letters or numbers for children to explore

3.2b.5 NATURE OF WAVES AND SOUND

STANDARD STATEMENT • Notice familiar and unfamiliar sounds in the environment **EXEMPLARS (EXAMPLES)** **The learner will:** • Startle to unfamiliar sounds, such as a vacuum cleaner or siren • Comfort to familiar sounds, such as parent's voice **SUPPORTIVE PRACTICES** **The adult will:** • Identify sounds, such as "There's the dog barking again" • Comfort children when they are alarmed by sounds	**STANDARD STATEMENT** • Identify familiar sounds in the environment • Imitate sounds **EXEMPLARS (EXAMPLES)** **The learner will:** • Say "dog" when she/he hears a dog barking • Look at telephone when it rings • Say "meow" after hearing a cat • Repeat a sound sequence, such as "ei-ei-o" • Imitate the school's doorbell after it rings **SUPPORTIVE PRACTICES** **The adult will:** • Use sounds and give children time to repeat them • Talk about animals and their sounds and encourage children to practice the sound • Identify sounds or alarms that occur within the school day, "There's the doorbell again" or "That fire engine has a really loud siren"	**STANDARD STATEMENT** • Categorize and imitate familiar sounds **EXEMPLARS (EXAMPLES)** **The learner will:** • Listen to an audio tape of sounds and guess what the sounds are • Use and imitate sounds when playing with cars, animals or other toys **SUPPORTIVE PRACTICES** **The adult will:** • Create an audio tape of familiar sounds for children to identify • Discuss the sounds that vehicles make or that wild animals make

3.2b.6 UNIFYING THEMES

STANDARD STATEMENT • Initiate an action/reaction sequence without intent **EXEMPLARS (EXAMPLES)** **The learner will:** • Watch a ball roll that has been bumped • Bat a mobile and watch it move **SUPPORTIVE PRACTICES** **The adult will:** • Recognize what the child has made happen and verbalize it, "You made the ball roll!" **The larger the island of knowledge, the longer the shoreline of wonder.** —Ralph Waldo Emerson	**STANDARD STATEMENT** • Discover a reaction to an action **EXEMPLARS (EXAMPLES)** **The learner will:** • Complete an action such as rolling a truck down a slide over and over after discovering what happens **SUPPORTIVE PRACTICES** **The adult will:** • Talk about what is happening when the child discovers a new reaction	**STANDARD STATEMENT** • Repeat an action to cause a known reaction **EXEMPLARS (EXAMPLES)** **The learner will:** • Pour water on the water wheel to make it spin • Roll cars down a ramp to make them go faster **SUPPORTIVE PRACTICES** **The adult will:** • Ask children to explain how they know what to do and the effects of the action

STANDARD 3.3a: EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES

BIG IDEA: Interactions occur on Earth and in space.
ESSENTIAL QUESTIONS: Can I identify different types of Earth? Do I engage in water play? Do I know what I need to wear for the weather?

3.3a.2 EARTH'S RESOURCES AND MATERIALS

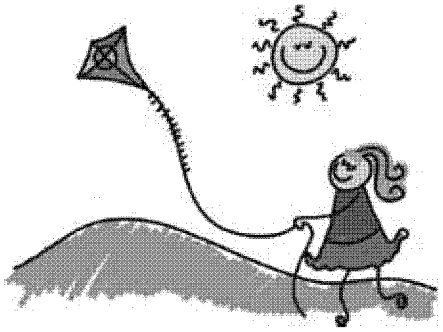
INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **Set children up for success. Assume all children in your classroom are gifted on the first day of school and they will be... each in his or her own way.**	**STANDARD STATEMENT** • Explore rocks, sand and soil using senses **EXEMPLARS (EXAMPLES)** **The learner will:** • Use hands, eyes and mouth to explore sand and dirt • Pick up stones and pebbles and notice their characteristics, with careful teacher guidance **SUPPORTIVE PRACTICES** **The adult will:** • Encourage children to dig in sand and soil • Carefully supervise children's interaction with soil and stones for safety, assuring they stay out of their mouths	**STANDARD STATEMENT** • Identify different types of earth **EXEMPLARS (EXAMPLES)** **The learner will:** • Point to rocks, soil and sand when asked • Sift dirt through a sieve to find rocks **SUPPORTIVE PRACTICES** **The adult will:** • Ask children to identify different types of earth when playing

3.3a.4 WATER

STANDARD STATEMENT • Engage in water play in the bathtub or during hand washing **EXEMPLARS (EXAMPLES)** **The learner will:** • Splash water with hands • Look surprised when water splashes face **SUPPORTIVE PRACTICES** **The adult will:** • Supervise water play at sink • Allow children to splash water with hands	**STANDARD STATEMENT** • Engage in water play activities in the sink or water table **EXEMPLARS (EXAMPLES)** **The learner will:** • Pour and attempt to fill containers at water table • Splash hands in water **SUPPORTIVE PRACTICES** **The adult will:** • Provide water play materials that encourage pouring and filling, such as sieves, pitchers and cups • Introduce children to hand-washing, allowing them to wet their own hands • With supervision, provide opportunities for children to splash water with their hands	**STANDARD STATEMENT** • Observe and explore water in liquid state **EXEMPLARS (EXAMPLES)** **The learner will:** • Float and sink objects at the water table • Use water to make the water wheel spin • Squirt water through a baster or a pump **SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of toys for exploration at the water table • Rotate toys regularly • Introduce simple water experiments, such as sink and float

3.3a.5 WEATHER AND CLIMATE

EMERGING	**STANDARD STATEMENT** • Observe weather conditions **EXEMPLARS (EXAMPLES)** **The learner will:** • Look outside when she/he hears thunder • Say "snow" when it begins to snow **SUPPORTIVE PRACTICES** **The adult will:** • Discuss the kinds of clothing that are needed for specific weather conditions	**STANDARD STATEMENT** • Identify types of clothing needed for current weather conditions • Identify the characteristics of weather change **EXEMPLARS (EXAMPLES)** **The learner will:** • See snow and get boots and mittens to go outside • Notice the temperature gets colder during the winter months • Talk about the changes in animal behavior when it is cold or hot, such as many dogs like to get wet to stay cool in the summer or some birds fly away to warmer locations **SUPPORTIVE PRACTICES** **The adult will:** • Use a thermometer to show measurement of temperature • Read books about animals' preparation for the winter • With children, sort different kinds of clothing for the weather • Name the seasons and their characteristics, displaying related pictures and books



STANDARD 3.3b: EARTH AND SPACE SCIENCES: ORIGIN AND EVOLUTION OF THE UNIVERSE

BIG IDEA: Interactions occur on Earth and in space.
ESSENTIAL QUESTION: Can I identify features in space?

3.3b.1 COMPOSITION AND STRUCTURE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	**STANDARD STATEMENT** • Differentiate between night and day • Name sky, sun, cloud, star, moon	**STANDARD STATEMENT** • Identify the sky's different characteristics during night and day • Notice differences in cloud patterns
	EXEMPLARS (EXAMPLES) **The learner will:** • Notice that the sun is bright • State that clouds are in the sky • Tell that the moon and stars appear during the night time	**EXEMPLARS (EXAMPLES)** **The learner will:** • Note that stars only come out during the nighttime • Observe that the moon and sun are both round or circles • Tell about the sky turning dark to indicate nighttime and light during the day
	SUPPORTIVE PRACTICES **The adult will:** • Talk about the sky's conditions and changes, such as, "It's raining today, the sky was really dark" • Read books about the moon and sun • Point out the sun and clouds during a walk • Sing songs and finger plays about the sky, such as "Twinkle Twinkle Little Star"	**SUPPORTIVE PRACTICES** **The adult will:** • Display pictures of night and day and talk about the characteristics • Show pictures of the sun, earth, and moon and help children identify how they are the same or different • Take walks to look for the sun or clouds • Talk about the different shapes and colors of clouds

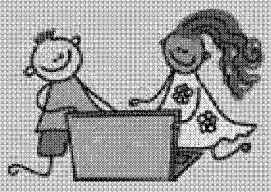
STANDARD 3.4e: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTIONS: THE DESIGN WORLD

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTION: Do I interact and engage with toy vehicles? Do I explore medical equipment? Can I use a computer and other technology with teacher assistance?

3.4e.1 MEDICAL TECHNOLOGIE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	**STANDARD STATEMENT** • Explore medical equipment and materials	**STANDARD STATEMENT** • Associate medical equipment with the people who keep us healthy
	EXEMPLARS (EXAMPLES) **The learner will:** • Play with real or model medical equipment such as a stethoscope and blood pressure cuff in the dramatic play area	**EXEMPLARS (EXAMPLES)** **The learner will:** • Identify that health care workers use specific medical tools to keep us healthy • Recognize the use and purpose of specific medical tools, such as a thermometer takes temperature or a stethoscope measures the heart
	SUPPORTIVE PRACTICES **The adult will:** • Provide a variety of toys or real medical equipment that children can explore safely	**SUPPORTIVE PRACTICES** **The adult will:** • Describe that a doctor or nurse will use a thermometer to check temperature • Imitate basic health functions, such as stepping on a scale to be weighed or having blood pressure taken

3.4e.4 INFORMATION AND COMMUNICATION TECHNOLOGIES

EMERGING 	EMERGING	**STANDARD STATEMENT** • Explore communication technology equipment such as a pretend cell phone or telephone • Use a computer with teacher direction
		EXEMPLARS (EXAMPLES) **The learner will:** • Use a pretend phone in the dramatic play area • Use a teacher-initiated program on the computer
		SUPPORTIVE PRACTICES **The adult will:** • Provide toy phones or deactivated cell phones for children to explore • Install developmentally appropriate computer programs that children can use with minimal keyboard or mouse use

3.4e.5 TRANSPORTATION TECHNOLOGIES

EMERGING	**STANDARD STATEMENT** • Explore transportation vehicles such as truck, car, bus, train	**STANDARD STATEMENT** • Identify types and uses of transportation
	EXEMPLARS (EXAMPLES) **The learner will:** • Seek out toy trucks or cars during play to move around floor • Hold pretend keys and pretend to make vehicles turn on	**EXEMPLARS (EXAMPLES)** **The learner will:** • Name bus, car, train, airplane, bus and how they are used
	SUPPORTIVE PRACTICES **The adult will:** • Provide a variety of wheeled toy vehicles for children to explore	**SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of transportation toys in the block and dramatic play areas for children to use during play

CONTINUED...

STANDARD 3.4e: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTIONS: THE DESIGN WORLD continued

3.4e.7 CONSTRUCTION TECHNOLOGIES

EMERGING

Reason can answer questions, but imagination has to ask them.
—Ralph Gerard

STANDARD STATEMENT
- Explore simple construction tools and vehicles

EXEMPLARS (EXAMPLES)
The learner will:
- Stack blocks to make a house or school
- Use play hammers and accompanying materials to hammer or pound, such as a pounding bench
- Wear a hard hat while playing in the dramatic play area

SUPPORTIVE PRACTICES
The adult will:
- Provide play hammers and screwdrivers for children to explore
- Include different types of vehicles in the block area, such as dump and cement trucks or bulldozers
- Take a walk to observe a construction site, talking about the different workers or equipment

STANDARD STATEMENT
- Use construction tools and vehicles to represent real life structures and events

EXEMPLARS (EXAMPLES)
The learner will:
- Combine a variety of blocks and say "I made a house!"
- Use play hammers, screwdrivers and measuring tapes during pretend play
- Stack blocks in the back of a dump truck to transport them
- Explain why a construction worker might need a hard hat or safety goggles

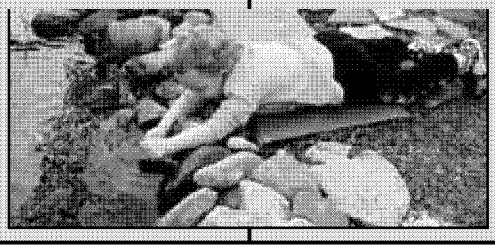
SUPPORTIVE PRACTICES
The adult will:
- Provide a variety of block types for play, such as wood, cardboard and foam
- Identify different kinds of construction vehicles that are seen on a walk and describe each one's purpose
- Set up a construction zone with play hammers, screwdrivers, safety goggles and hard hats
- Take pictures of children's block structures and post them.
- Display pictures of construction sites, workers and equipment

STANDARD 4.3: ENVIRONMENT AND ECOLOGY

BIG IDEA: We are impacted and have impact on our environment.
ESSENTIAL QUESTION: Can I put trash in the right place? Can I engage and name farm animals and structures? Can I name where I live?

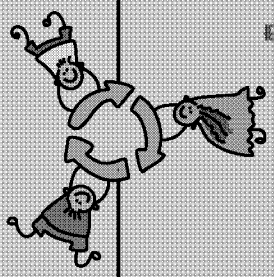
4.1 WATERSHEDS ID WETLANDS

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	EMERGING	**STANDARD STATEMENT** - Recognize differences in types of water - Identify some animals that live in water **EXEMPLARS (EXAMPLES)** **The learner will:** - Notice the size difference between a puddle and an ocean in pictures - Discuss that fish live in water - Talk about the different uses for water, such as swimming or boating **SUPPORTIVE PRACTICES** **The adult will:** - Provide different kinds of water animals for sorting, use in the water table, or dramatic play - Talk about why fish, sharks or whales need to live in water - Talk about the sizes of different bodies of water, such as lake or ocean, and help children identify the differences - Name bodies of water and describe their characteristics



4.3 ENVIRONMENTAL HEALTH

EMERGING	EMERGING	**STANDARD STATEMENT** - Identify and use appropriate trash receptacles **EXEMPLARS (EXAMPLES)** **The learner will:** - Place trash in trash can - Tell someone else where the trash should go **SUPPORTIVE PRACTICES** **The adult will:** - Encourage and support children to place trash in trash cans - Explain why we use trash cans



4.4 AGRICULTURE AND SOCIETY

EMERGING

STANDARD STATEMENT
- Manipulate farm animals and structures during play

EXEMPLARS (EXAMPLES)
The learner will:
- Interact and engage with toys representing farm animals and barns and silos during play

SUPPORTIVE PRACTICES
The adult will:
- Provide farm toys for children to use
- Read books about farms and farmers
- Use the correct names to describe animals and farm structures

STANDARD STATEMENT
- Identify basic farm animals and structures

EXEMPLARS (EXAMPLES)
The learner will:
- Name some farm animals when playing with toys
- Name the barn and fences

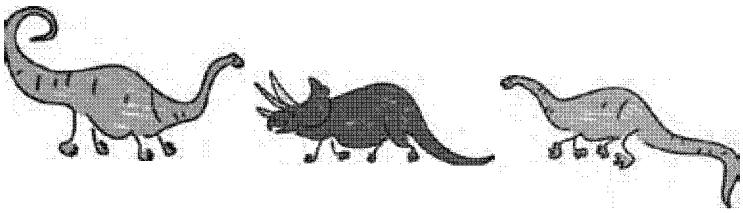
SUPPORTIVE PRACTICES
The adult will:
- Provide farm toys for children to use
- Read books about farms and farmers
- Use the correct names to describe animals and farm structures

CONTINUED...

STANDARD 4.3: ENVIRONMENT AND ECOLOGY continued

4.7 THREATENED, ENDANGERED AND EXTINCT SPECIES

EMERGING	EMERGING	
		STANDARD STATEMENT • Describe that some animals are no longer alive **EXEMPLARS (EXAMPLES)** **The learner will:** • State that there aren't any dinosaurs living today • Talk about what animals need to stay alive, such as food and water **SUPPORTIVE PRACTICES** **The adult will:** • Provide dinosaur toys for children to use • Read books about dinosaurs • Use the correct names to describe dinosaurs



4.8 HUMANS AND THE ENVIRONMENT

EMERGING	EMERGING	
To look at the world from a new perspective is to discover a world of new possibilities. —Stanislav Grof		**STANDARD STATEMENT** • Name the type of housing in which she/he lives **EXEMPLARS (EXAMPLES)** **The learner will:** • Identify whether she/he lives in a house, an apartment, a mobile home or other type of shelter with adult questioning and assistance **SUPPORTIVE PRACTICES** **The adult will:** • Ask child about the type of home in which she/he lives • Provide examples of shelters for child to select from • Read books about types of shelter

SCIENCE AND TECHNOLOGY GLOSSARY

Construction Technology – The ways that humans build structures on sites

Fact – Information that has been objectively verified

Hypothesis – An assertion subject to verification or proof as a premise from which a conclusion is drawn

Information Technology – The technical means that humans create to store and transmit information

Inquiry – A systematic process for using knowledge and skills to acquire and apply new knowledge

Law – Summarizing statement of observed experimental facts that has been tested many times and is generally accepted as true

Manufacturing Technology – The ways that humans produce goods and products

Model – A description, analogy or a representation of something that helps us understand it better (e.g., a physical model, a conceptual model, a mathematical model)

Patterns – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form

Science – Search for understanding the natural world using inquiry and experimentation

System – A group of related objects that work together to achieve a desired result

Transportation Systems – A group of related parts that function together to perform a major task in any form of transportation

Transportation Technology – The physical ways humans move materials, goods and people

Tool – Any device used to extend human capability including computer-based tools

ENVIRONMENT AND ECOLOGY GLOSSARY

Ecosystem – A community of living organisms and their interrelated physical and chemical environment

Endangered species – A species that is in danger of extinction throughout all or a significant portion of its range

Environment – The total of the surroundings (air, water, soil, vegetation, people, wildlife) influencing each living being's existence, including physical, biological and all other factors; the surroundings of a plant or animal, including other plants or animals, climate and location

Extinction – The complete elimination of a species from the earth

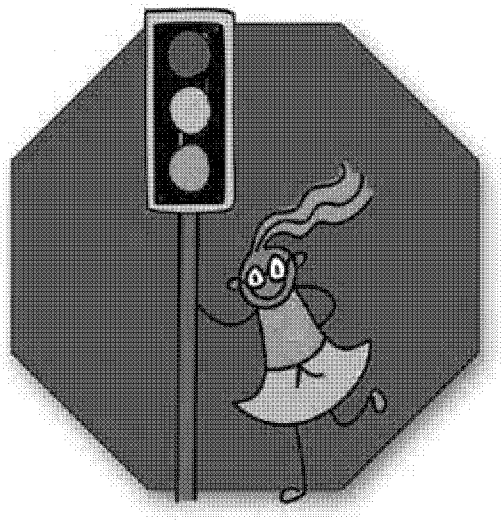
Nonrenewable resources – Substances (e.g., oil, gas, coal, copper, gold) that, once used, cannot be replaced in this geological age

Recycling – Collecting and reprocessing a resource or product to make into new products

Regulation – A rule or order issued by an executive authority or regulatory agency of a government and having the force of law

Renewable – A naturally occurring raw material or form of energy that will be replenished through natural ecological cycles or sound management practices (e.g., the sun, wind, water, trees)

Wetlands – Lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes)



SOCIAL STUDIES THINKING

CONNECTING TO COMMUNITIES

The foundation of social studies, economics, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand this scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

PLAY, PLAY AND PLAY SOME MORE!

The best way to support children's learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information in order to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children who learn together in the dramatic play or block areas how to cooperate in order to figure out how many blocks can be added to a structure before it falls have stronger social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children's thinking and problem solving.

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STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

BIG IDEA: Good citizens follow rules to keep them safe.
ESSENTIAL QUESTION: How can I show that I can follow rules?

5.1.1 SOURCES, PURPOSE AND FUNCTIONS OF LAW

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Learn acceptable and unacceptable behavior	**STANDARD STATEMENT** • Understand one word rules such as "no" or "stop"	**STANDARD STATEMENT** • Follow rules with teacher support
EXEMPLARS (EXAMPLES) **The learner will:** • Stop a behavior and look at the speaker when told "no" • Look at adult questioningly before attempting behavior again	**EXEMPLARS (EXAMPLES)** **The learner will:** • Stop behavior when told no or stop • Indicate that behavior should not be done by saying "no no"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Put toys away at clean up time • Keep toys in a specific location • Participate in word and game songs such as Ring Around the Rosey • Join the group for circle time • Get in line to go to another location
SUPPORTIVE PRACTICES **The adult will:** • Model acceptable behavior • Provide other alternatives for inappropriate action • Use re-direction • Design the room environment for safe and independent exploration	**SUPPORTIVE PRACTICES** **The adult will:** • Use the word no or stop to keep children from harm • Provide other alternatives for the inappropriate action	**SUPPORTIVE PRACTICES** **The adult will:** • Provide models and positive reinforcement when assisting with clean up • Invite and encourage children to participate in circle time or other group activities such as group games and songs such as The Farmer in the Dell • Encourage children to line up when moving out of the classroom

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

BIG IDEA: Citizenship involves responsibility to myself and others.
ESSENTIAL QUESTION: How do I understand my role as a family member? How do I attempt to solve conflicts?

5.2.1 CIVIC RIGHTS, RESPONSIBILITIES AND DUTIES

INFANT

EMERGING

YOUNG TODDLER

EMERGING

OLDER TODDLER

STANDARD STATEMENT
- Identify self as a member of a family
- Identify other family members

EXEMPLARS (EXAMPLES)
The learner will:
- Talk about others in the family
- Identify himself in relationship to others in the family such as brother, sister, son, daughter
- Talk about things the family does together
- Nurture a baby doll
- Adopt different family roles in play

SUPPORTIVE PRACTICES
The adult will:
- Display pictures of families
- Provide props and costumes for family members in dramatic play area
- Talk about people in families
- Read books about families that include a variety of family structures
- Find out about and discuss at-home events and activities
- Talk about the roles of specific family members, such as grandma takes care of the baby at night

5.2.2 SOURCES AND RESOLUTION OF CONFLICT

EMERGING

Profound curiosity happens when children are young.
—I.I. Rabi, Nobel Laureate Physicist

STANDARD STATEMENT
- Express emotion related to a problem or conflict

EXEMPLARS (EXAMPLES)
The learner will:
- Cry or use inappropriate action to express frustration or unmet need, such as grab a desired toy from another
- Seek help from adult to resolve conflicts
- Attempt to share with another when asked by adult

SUPPORTIVE PRACTICES
The adult will:
- Intervene when needed to help children resolve conflict by giving them the words or actions to use
- Model the use of words to express a need
- Describe the appropriate responses to problems or conflicts, such as "Ask Bobby if you'd like to use the truck"

STANDARD STATEMENT
- Think about a problem and figure out a solution

EXEMPLARS (EXAMPLES)
The learner will:
- Call for help from an adult when another child takes a toy
- Announce that they want to make a surprise for a parent and go to the easel to make a picture
- Ask for help moving blocks to create a roadway for a vehicle
- Put play dough cake on a plate and take it to the housekeeping area to put in the oven

SUPPORTIVE PRACTICES
The adult will:
- Provide suggestions for dealing with another child
- Encourage children to think about challenges and to solve them independently
- Ask children why they decided to act in a certain way

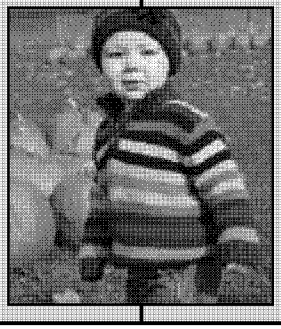
STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENTS

BIG IDEA: Money and resources impact our lives.
ESSENTIAL QUESTION: Can I identify where some food products originate?

6.2.5 CHANGES IN SUPPLY AND DEMAND

INFANT

EMERGING



YOUNG TODDLER

EMERGING

OLDER TODDLER

STANDARD STATEMENT
- Recognize that food products found in the grocery store originate from other places

EXEMPLARS (EXAMPLES)
The learner will:
- Identify that milk comes from cows and eggs come from chickens
- State that apples grow on trees and pumpkins grow on vines

SUPPORTIVE PRACTICES
The adult will:
- Talk about different crops or products and where they originate, such as milk from a cow on a farm or bananas from trees that only grow where it's warm
- Read books about the process of shipping products to the grocery store
- Provide play food items in the dramatic play area
- Cultivate a school garden where children could plant bean seeds

STANDARD 6.3: SCARCITY AND CHOICE

BIG IDEA: There is a difference between wants and needs and how we acquire items.
ESSENTIAL QUESTION: Can I indicate that I need more?

6.3.1 SCARCITY AND LIMITED RESOURCES

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **Nothing happens unless first a dream.** —Carl Sandburg	EMERGING	**STANDARD STATEMENT** • Notice when there are expended materials or supplies and ask for more **EXEMPLARS (EXAMPLES)** **The learner will:** • Ask for more snack or more toys when wanted • Use hands to indicate more • Notice when the markers are dried up and ask for new ones **SUPPORTIVE PRACTICES** **The adult will:** • Praise children's verbal requests for more • Give explanations when there are no more materials to provide, such as "There are no more cookies for today" • Acknowledge children's disappointment when materials can't be replenished • Offer substitutes when there are no more materials

STANDARD 6.5: WORK AND EARNINGS

BIG IDEA: People work to earn money.
ESSENTIAL QUESTION: Can I state that mommy or daddy has to go to work? Can I relate work to getting money?

6.5.1 FACTORS INFLUENCES

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	EMERGING	**STANDARD STATEMENT** • Identify that adults go to work to earn money • Describe how money is needed to purchase materials **EXEMPLARS (EXAMPLES)** **The learner will:** • Play act purchasing materials or goods in the dramatic center • Ask parent to buy them a specific toy • Describe that parent is going to work to earn money **SUPPORTIVE PRACTICES** **The adult will:** • Provide pretend money in dramatic play area • Include props from adult work places in the play area • Talk about the work places that parents go to after they drop off children • Read books about different types of work

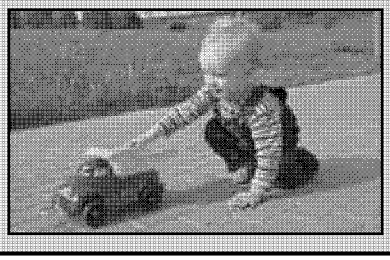
6.5.3 TYPES OF BUSINESSES

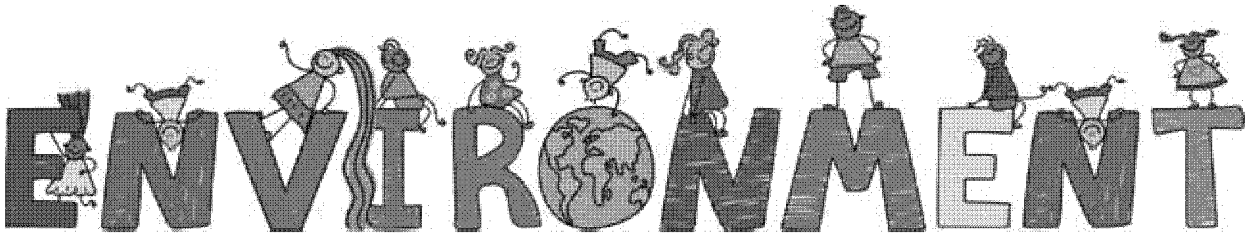
INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **The object of education is to prepare the young to educate themselves throughout their lives.** —Robert Maynard Hutchins	EMERGING	**STANDARD STATEMENT** • Identify that businesses provide goods or services **EXEMPLARS (EXAMPLES)** **The learner will:** • Talk about getting hair cut at the barber or beauty salon • Describe going to the doctor to get a shot • Play act scenarios that relate to specific businesses, such as going to the pet store to get pet food **SUPPORTIVE PRACTICES** **The adult will:** • Engage children in discussions about where they go to get specific products • Include a variety of workplace props in the dramatic play area • Read books about workers and their jobs • Point out different businesses during walks

STANDARD 7.1: BASIC GEOGRAPHIC LITERACY

BIG IDEA: Each individual is a member of a larger community.
ESSENTIAL QUESTION: How do I use or create a simple map? Can I describe basic features of places I've visited?

7.1.1 GEOGRAPHIC TOOLS

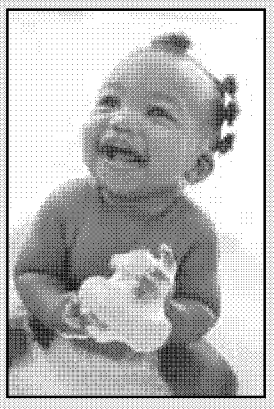
INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	EMERGING	**STANDARD STATEMENT** • Follow a pathway or roadway on a large car mat **EXEMPLARS (EXAMPLES)** **The learner will:** • Use cars and other vehicles to follow a roadway on a mat • Indicate stopping at certain businesses on mat **SUPPORTIVE PRACTICES** **The adult will:** • Provide large car mat with roadways, buildings and grass indicated for play • Engage in play with children and discuss a pretend "tip" using the mat locations



STANDARD 7.2: PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: Every location can be described by its physical characteristics.
ESSENTIAL QUESTION: Can I talk about locations in my home?

7.2.1 PHYSICAL CHARACTERISTICS

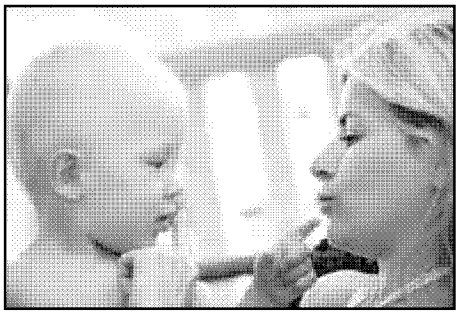
INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	EMERGING	**STANDARD STATEMENT** • Identify the characteristics of one's home • Describe the locations of important areas within the home **EXEMPLARS (EXAMPLES)** **The learner will:** • Talk about the different rooms in the home • Talk about what happens in different rooms such as "I take my bath in the bathroom, I sleep in the bedroom, I eat breakfast in the kitchen" • Identify the room in which certain items might be found such as the TV in the living room, refrigerator in the kitchen • Describe information about the place she/he lives, such as door color or if more than one family lives within (apartment) **SUPPORTIVE PRACTICES** **The adult will:** • Point out where things are located at school • Ask silly questions like, "Would you find the stove in the garage?" • Encourage children to draw their homes and the rooms within, identifying what is drawn • Post pictures about different houses and places to live

STANDARD 7.3: HUMAN CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: Everyone needs to appreciate differences and respect each other.
ESSENTIAL QUESTION: Can I show that I know my hair and eye color? Can I draw pictures using colors that represent me?

7.3.1 HUMAN CHARACTERISTICS

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING I found that I could say things with color and shapes that I had no words for. —Georgia O'Keefe	EMERGING	**STANDARD STATEMENT** • Begin to recognize own physical characteristics and those of others **EXEMPLARS (EXAMPLES)** **The learner will:** • Indicate own color of hair, color of eyes and that of friends • Use colors to represent hair and eye color in drawings • Recognize boys and girls • Notice two eyes, one nose, two ears • Ask about words Chinese or Spanish speaking classmates might use **SUPPORTIVE PRACTICES** **The adult will:** • Discuss similarities and differences in dress, customs, tools and transportation as seen in books, pictures • Provide skin tone crayons and markers for children to use • Talk about similarities and differences that are represented by children

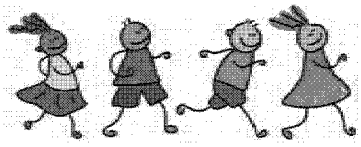


STANDARD 7.4: INTERACTIONS BETWEEN PEOPLE AND THE ENVIRONMENT

BIG IDEA: People and the environment affect each other.
ESSENTIAL QUESTION: Can I describe the environment outside? How do I show that I know what is around me?

7.4.1 IMPACT OF PHYSICAL SYSTEMS ON PEOPLE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING In this classroom you will find sunshine – we radiate the goodness of the earth, Rainbows – we are different Flowers – we are blossoming Children – we are the future. —Sheila Simyak	EMERGING	**STANDARD STATEMENT** • Recognize characteristics of their environment **EXEMPLARS (EXAMPLES)** **The learner will:** • Notice and point out objects, posters, pictures and people in the classroom or school • Notice and comment on the weather • Help to pick up paper and throw in the trash can • Wipe off tables after snack **SUPPORTIVE PRACTICES** **The adult will:** • Take children for walks around the neighborhood, pointing out signs and landmarks • Provide opportunities for children to explore their environment, indoors and outdoors • Talk daily about the weather • Ask children to assist in helping to clean up



STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

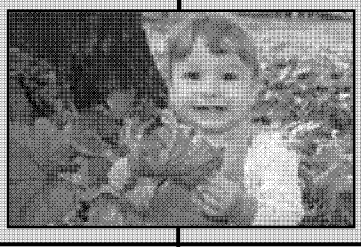
BIG IDEA: Past and present experiences and ideas help us make sense of the world..

ESSENTIAL QUESTION: Do I state that I want something now? Can I tell when important things happen during my day?

8.1.1 CONTINUITY AND CHANGE OVER TIME

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **The highest function of education is to bring about an integrated individual who is capable of dealing with life as a whole.** —Khrishnamurti	**STANDARD STATEMENT** • Respond to changes in routines or schedule **EXEMPLARS (EXAMPLES)** **The learner will:** • Remind adult that a specific activity is next • Refuse to clean up or transition if unready • Ask "When is storytime?" **SUPPORTIVE PRACTICES** **The adult will:** • Respond to children's questions about routines • Display picture schedule in the classroom so children can become familiar with the sequence of the day • Consistently follow the sequence of events within a daily schedule, avoiding change as much as possible • Use words such as "remember" or "next" when describing the daily schedule; "remember, after we eat, it's time for outside play"	**STANDARD STATEMENT** • State periods of day when events occur **EXEMPLARS (EXAMPLES)** **The learner will:** • Tell when things occur, such as going to bed at night or eating breakfast in the morning • Repeat the classroom daily schedule with adult assistance • Show ability to wait for upcoming event, such as snack will come after reading **SUPPORTIVE PRACTICES** **The adult will:** • Talk about the part of the day when things are happening such as "This morning we will....., This afternoon we will..." • Ask children to tell you when daily events occur using morning, afternoon, night • Post and describe the daily schedule, following it consistently • Read books and talk about what might happen next • Use vocabulary, such as today, tomorrow or yesterday

8.1.2 HISTORICAL COMPREHENSION AND INTERPRETATION

EMERGING 	EMERGING	**STANDARD STATEMENT** • Recognize changes in objects such as plants or trees over time **EXEMPLARS (EXAMPLES)** **The learner will:** • Notice that a plant is blooming • Notice new items in the classroom • Talk about changes that happen to trees in the winter **SUPPORTIVE PRACTICES** **The adult will:** • Provide pictures that show changes over time • Include blooming plants in the classroom • Observe a tree near the classroom that changes with the seasons

SOCIAL STUDIES THINKING GLOSSARY

CIVICS AND GOVERNMENT

Authority – Right to control or direct the actions of others, legitimized by law, morality, custom or consent

Citizen – Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government

Community – A group of people who share a common social, historical, regional or cultural heritage

Conflict Resolution – The process of attempting to solve a dispute or conflict

Country – The acceptable political boundaries or borders recognized throughout the world

Decision-making Process – An organized approach to making choices

Government – Institutions and procedures through which a territory and its people are ruled

Leadership – State or condition of one who guides or governs

State – A commonwealth; a nation; a civil power

ECONOMICS

Community Helpers – Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firemen, policemen, trash collectors, animal control officers

Competition – The rivalry among people and/or business firms for resources and/or consumers

Consumer – One who buys or rents goods or services and uses them

Cost – What is given up when a choice is made; monetary and/or non monetary

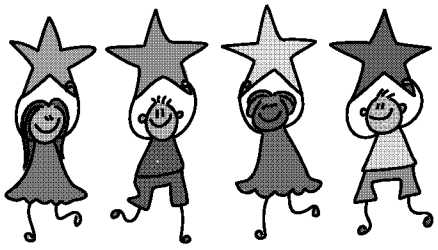
Demand – The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various prices during a specific time period

Goods – Objects that can satisfy people's wants

Household – The group of people living together under one roof; a group of individuals whose economic decision- making is interrelated

Money – A medium of exchange

Natural Resource – Anything found in nature that can be used to produce a product (e.g., land, water, coal)



Price – The amount people pay in exchange for a particular good or service

Producer – One who makes goods or services

Profit – Total revenue minus total costs

Services – Actions that are valued by others

Supply – The different quantities of a resource, good or service that potential sellers are willing and able to sell at various prices during a specific time period

Wants – Desires that can be satisfied by consuming goods, services or leisure activities

GEOGRAPHY

Climate – Long-term patterns and trends in weather elements and atmospheric conditions

Environment – Everything in and on Earth's surface and its atmosphere within which organisms, communities, or objects exist.

Geographic Tools – Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs)

Place – An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas

Resource – An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value

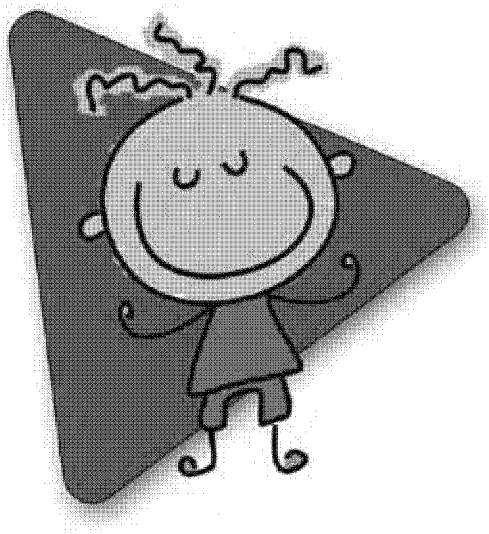
HISTORY

Conflict – The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

Culture – The beliefs, customs, practices, and social behavior of a particular nation or people

Document – A formal piece of writing that provides information or acts as a record of events or arrangements

Media Sources – Various forms of mass communication such as television, radio, magazines, newspapers and internet



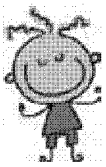
HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

LEARNING ABOUT MY BODY

Children's future health and well-being are directly related to the development and strengthening of their gross and fine motor muscles. Children must have opportunities to experience active indoor and outdoor play in which they can use their bodies to explore the environment while acquiring muscle control, balance, coordination, strength , eye-hand coordination and other related skills. Health and safety activities must be integrated throughout the day as teachers model healthy and safe practices and promote healthy lifestyles for children.

GET UP AND MOVE!

Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children's healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in outdoor play, weather permitting. Including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain good healthy choices and habits influence children's ongoing development and school success.



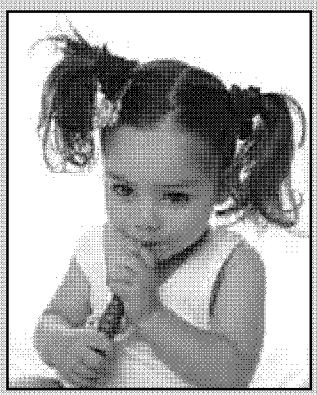
Standard		Page
10.1-3:	Healthy and Safe Practices	69
10.4:	Physical Activity: Gross Motor Coordination	72
10.5:	Concepts, Principles and Strategies of Movement: Fine Motor Coordination	74

STANDARD 10.1-3: HEALTH AND SAFE PRACTICES

THIS STANDARD HAS BEEN COMBINED BUT IS ALIGNED TO THE GRADES 3-12 STANDARDS 10.1 AND 10.3.

BIG IDEA: Children need to be able to make healthy choices physically and nutritionally. Children's ability to learn is dependent on healthy habits including good nutrition, physical activity and safe practices. Teachers need to model, demonstrate, instruct, and provide opportunities on ways to make good decisions about their health, wellness, and physical development.
ESSENTIAL QUESTION: Can I begin to locate body parts? Can I practice health and safety routines? Can I make food choices?

10.1-3.1 FUNDAMENTALS OF GOOD HEALTH

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING 	**STANDARD STATEMENT** • Attempt or complete basic hygiene practices with adult support • Recognize basic health care workers in books, pictures or photographs	**STANDARD STATEMENT** • Attempt hygiene routines independently • Name people who keep us healthy
	EXEMPLARS (EXAMPLES) **The learner will:** • Use tissue to wipe nose • Wash hands with adult help • Attempt to pull up pants • Point to doctor in story and say, "doctor"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Wash hands with assistance, attempt independent toileting, begin to brush teeth with assistance, use tissues to wipe nose • Identify doctor and nurse in pictures or when playing
	SUPPORTIVE PRACTICES **The adult will:** • Provide opportunities in daily schedule to practice hygiene routines (washing hands, tooth brushing, flossing teeth) • Create opportunities to explore healthy practices through play (doll/toy washing) • Give child time to accomplish hygiene routines independently before stepping in to assist • Describe health care workers and how they keep us healthy • Talk about the importance of healthy and safe practices, such as "Apples taste so good and they help build our muscles so we can run and play"	**SUPPORTIVE PRACTICES** **The adult will:** • Provide opportunities in the daily schedule to practice hygiene routines, such as tooth brushing, teeth flossing or handwriting • Provide props in learning centers to explore hygiene practices through play, such as washing dishes, doing laundry or cooking • Provide books and games focusing on good hygiene • Discuss doctors, nurses and dentists • Provide pictures, puppets and puzzles depicting health care worker

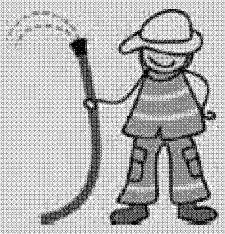
CONTINUED...

STANDARD 10.1–3: HEALTH AND SAFE PRACTICES continued

10.1–3.2 BODY AWARENESS

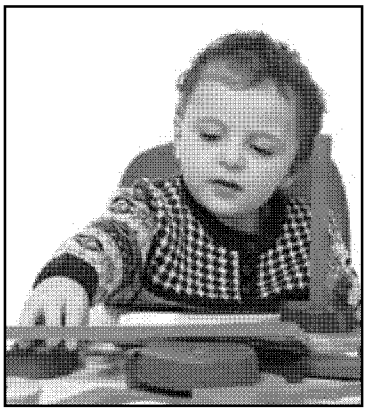
EMERGING		
STANDARD STATEMENT • Point or touch basic body parts when named by adult	**STANDARD STATEMENT** • Find basic body parts when asked • Name basic body parts	**STANDARD STATEMENT** • Move basic body parts when asked • Identify additional body parts
EXEMPLARS (EXAMPLES) **The learner will:** • Touch or move fingers, hands, toes, feet and head when asked where those body parts are located	**EXEMPLARS (EXAMPLES)** **The learner will:** • Point to fingers, toes, hands, feet, head and tummy when asked to locate on own body • Point to fingers, toes, hands, feet, head or tummy when asked to locate on doll or in picture • Can tell adult, "nose" or "mouth" when asked, "What's this?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Follow basic directions in a movement song, such as shake your feet or wiggle your arms • Point to additional body parts such as elbow, ankle • Participate in finger plays where children move fingers or hands, such as "Where is Thumbkin?"
SUPPORTIVE PRACTICES **The adult will:** • Move and name fingers, hands, toes, feet and head when changing diaper or washing hands	**SUPPORTIVE PRACTICES** **The adult will:** • Point out fingers and hands during fingerplays and songs with motions • Identify fingers, hands, toes and feet when chancing diaper or washing hands • Tickle tummy and call it by name • Play body part naming games such as Hokey Pokey • Ask child to identify body parts on dolls during play • Play body awareness games such as This Little Piggy	**SUPPORTIVE PRACTICES** **The adult will:** • Point out fingers and hands during fingerplays and songs with motions • Move fingers, hands, toes and feet when changing diaper or washing hands • Tickle tummy and call it by name • Play Simon Says or Follow the Leader game indicating body parts such as "Bend your elbow"

10.1–3.3 SAFE PRACTICES

EMERGING		
	**STANDARD STATEMENT** • Cooperate with basic safety practices	**STANDARD STATEMENT** • Use basic safety practices • Name people who keep us safe
	EXEMPLARS (EXAMPLES) **The learner will:** • Pick up toys when asked • Hold adult hand when crossing street • Try to follow basic safety directions when given	**EXEMPLARS (EXAMPLES)** **The learner will:** • Manage own behavior with guidance • Follow basic safety directions • Seek support when trying something new or meeting new people • Identify fire fighters and police officers through play or in picture
	SUPPORTIVE PRACTICES **The adult will:** • Provide verbal guidance and physical support, such as "nice touches" or "walk" • Give clear directions about playing and working in a safe way • Hold hand when crossing street • Model and practice putting away toys, such as providing labels to identify where toys belong	**SUPPORTIVE PRACTICES** **The adult will:** • Review and reinforce safety rules for classroom and playground • Provide community workers props for dramatic play, such as boots, fire fighter hats and hoses • Engage children in cleaning up and putting away toys and belongings, using labels on shelves to help identify where they belong • Read and discuss books about safety workers and safe practices

10.1–3.4 NUTRITION

EMERGING	EMERGING	
I know of no other manner of dealing with great tasks, then as play. —Albert Schweitzer		**STANDARD STATEMENT** • Select from healthy food choices
		EXEMPLARS (EXAMPLES) **The learner will:** • Try new foods • Choose between food options • Show preferences
		SUPPORTIVE PRACTICES **The adult will:** • Model healthy eating while sitting with child at the table • Provide a choice of two or more nutritional foods • Allow toddlers to choose options



STANDARD 10.4: PHYSICAL ACTIVITY: GROSS MOTOR COORDINATION

BIG IDEA: Children gain control over their bodies and body movements through active experiences and exploration.
ESSENTIAL QUESTIONS: Can I regularly demonstrate a variety of large motor movements? Can I show coordination of muscles as I engage in play?

10.4.1 CONTROL AND COORDINATION

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Develop control of head and back, progressing to arms and legs	**STANDARD STATEMENT** • Control and coordinate movement of arms, legs and neck	**STANDARD STATEMENT** • Combine and coordinate arm and leg movements when engaged in activity
EXEMPLARS (EXAMPLES) **The learner will:** • Use body to move, such as creep and crawl • Roll from tummy to back and vice versa • Stand and move, using furniture as support • Take walking steps, with adult assistance • Roll a ball while sitting	**EXEMPLARS (EXAMPLES)** **The learner will:** • Walk with increasing coordination and balance • Throw a toy, ball or stuffed animal in a forward motion • Kick ball short distances • Begin to run, awkwardly • Climb or crawl in and out of things • Stretch, kick, lift and extend arms and legs • Move push or pull toys around the environment	**EXEMPLARS (EXAMPLES)** **The learner will:** • Attempt to throw an object using an underhand toss • Attempt to catch a ball that is thrown before it hits the ground • Straddle a riding toy like a Kiddie car and use feet to make it move • Run with increasing speed and skill • Attempt to jump, using two feet • Climb a short ladder with assistance • Crawl through a small tunnel
SUPPORTIVE PRACTICES **The adult will:** • Provide ample tummy time for young infants to develop head and neck • Use colorful socks to encourage exploration of feet • Provide safe environment where infants can crawl and creep safely • Provide time for children to sit in high chairs or strollers, taking care to monitor the length of time they are seated in any one location • Move infants' limbs while diapering • Monitor furniture for safe and sharp edges and design • Call to children from a short distance to encourage them to crawl or take walking steps • Provide support while children are learning to walk, such as furniture they can hang on or your hands	**SUPPORTIVE PRACTICES** **The adult will:** • Locate toys for child to discover when standing or seated • Provide plenty of outside time for children to practice large muscle control activities • Provide balls or bean bags for throwing and catching practice • Engage children in running practice • Provide simple wheel toys for children to push or pull • Offer opportunities for climbing	**SUPPORTIVE PRACTICES** **The adult will:** • Provide balls and beanbags with targets such as baskets for children to practice throwing • Use large balls to practice catching with toddlers • Provide daily outdoor play as weather permits • Include low swings and climbers as part of outdoor play equipment • Provide riding toys and basic bikes for children to ride, push or pull • Set up safe and simple obstacle courses or opportunities for children to crawl through tunnels or climb over soft equipment • Introduce simple relay races, asking children to run or hop or fly like birds

10.4.2 BALANCE AND STRENGTH

STANDARD STATEMENT • Exhibit strength and balance in stationary body movements	**STANDARD STATEMENT** • Exhibit balance and strength when moving from place to place	**STANDARD STATEMENT** • Demonstrate strength and stamina when performing gross motor activities • Engage in active play with a goal in mind
EXEMPLARS (EXAMPLES) **The learner will:** • Hold self in sitting position for short time • Move arms and legs forcefully when lying down or seated • Stand with support	**EXEMPLARS (EXAMPLES)** **The learner will:** • Pull to standing using table or chair • Walk with one foot in front of the other • Use steps with adult assistance • Bend or squat to pick up an object from the floor and return to standing without support • Climb from the floor onto the sofa or other low furniture • Run or hop to music • Move arms and legs to show excitement	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use two feet per step method to walk up and down stairs • Jump with both feet leaving the ground at the same time • Balance on one foot with assistance of furniture or adult hand • Stand for a brief time on tip toes • Join in games such as Follow the Leader or Ring Around the Rosy • Climb on a chair or step stool to reach an object • Climb a small jungle gym • Kick at a large ball that is stationary or rolled toward toddler
SUPPORTIVE PRACTICES **The adult will:** • Use "Boppy" pillows to help support child • Hold hands against the soles of infants' feet to provide a base • Hang toys where infants can swat them using arms and hands • Hold infant under arms or around waist when practicing standing	**SUPPORTIVE PRACTICES** **The adult will:** • Provide stable furniture for young children to pull up on. Cover corners of tables and other sharp edges • Hold child's hands while trying to walk • Provide support for children on small sets of stairs (2-3) • Provide mats at different levels for children to practice walking up and down with assistance • Play music for young toddler that encourages movement of limbs • Have young toddlers imitate up and down movements to music • Provide close supervision as young toddlers explore their environment	**SUPPORTIVE PRACTICES** **The adult will:** • Provide opportunities for toddlers to practice climbing up and down stairs with assistance • Encourage jumping up as high as possible • Place lines on the floor for children to jump on • Model how to stand on one foot • Model how to stand on tip toes • Play movement songs like The Grand Old Duke of York that require toddlers to get on tiptoes • Play movement games with simple up, down or other movements • Provide leveled mats or short ladders for children to practice climbing • Provide supervision as children climb ladders and jungle gyms • Provide a variety of balls for kicking • Provide daily outdoor play as weather permits

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

BIG IDEA: Fine motor practice helps children develop eye-hand coordination, strength and controlled use of tools.
ESSENTIAL QUESTIONS: How do I use my hands to develop self-help skills? How do I develop eye-hand coordination? How well do I control my fine muscle movements?

10.5.1 STRENGTH, COORDINATION AND MUSCLE CONTROL

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Use hands to accomplish actions	**STANDARD STATEMENT** • Twist the wrist to turn hands • Hold an object in one hand and manipulate it with the other hand	**STANDARD STATEMENT** • Twist the wrist to accomplish a task • Refine grasp to manipulate tools and objects
EXEMPLARS (EXAMPLES) **The learner will:** • Briefly hold or shake a rattle placed in the hand • Scoop up objects as if wearing a mitten • Pick up and drop toy or food over the edge of high chair tray • Pick up small objects, such as cheerios, banana slices or small toys • Hold object in one hand while reaching for another • Transfer objects from hand to hand • Use pincer grasp to pick up objects	**EXEMPLARS (EXAMPLES)** **The learner will:** • Manipulate door knobs, wind up toys, twist tops, and screw lids. • Wind a music box • Pick up more than one object in the same hand • Hold objects without dropping • Spin the blades of a toy helicopter • Brush a doll's hair • Connect beads, trains or blocks together • Imitate motions of basic finger plays	**EXEMPLARS (EXAMPLES)** **The learner will:** • Attempt to snap, Velcro or button clothing • Fold blankets or paper without accuracy • Roll and play with play dough • String large beads, using one hand to slide the bead on while the other holds the string • Pound objects with intent and precision • Complete simple puzzles • Hold pencil or crayon • Perform motions of simple finger plays • Use thumb and forefinger to put pegs in holes with accuracy
SUPPORTIVE PRACTICES **The adult will:** • Ensure objects are larger than 1.5 inches in diameter. If the object fits inside a toilet paper tube, the object is not safe for infants • Provide a variety of rattles and objects • Provide a variety of size appropriate objects to pick up	**SUPPORTIVE PRACTICES** **The adult will:** • Provide materials that require different hand and finger movements for toddlers to manipulate • Provide safely sized objects for children to sort and gather • Model how to hold an object such as a doll while feeding or brushing the hair of the doll • Use fingerplays on a daily basis • Provide linking objects for children to connect	**SUPPORTIVE PRACTICES** **The adult will:** • Provide dolls or doll forms with snaps, Velcro and buttons • Provide a variety of art materials • Provide toddlers with large beads with shoelaces or lacing cards • Provide playdough, rolling pins, and cookie cutters • Provide materials that require different hand and finger movements for toddlers to manipulate • Provide pegs, pegboards, and wooden hammers • Use fingerplays daily • Provide puzzles with assorted pieces

10.5.2 EYE/HAND COORDINATION

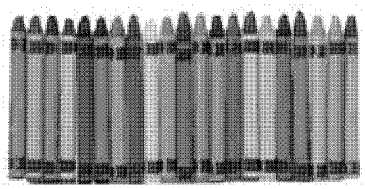
STANDARD STATEMENT • Pick up food and put it in mouth	**STANDARD STATEMENT** • Stack toys and blocks • Place objects into containers	**STANDARD STATEMENT** • Build simple structures using small blocks • Manipulate the pieces of a puzzle • Write or draw on paper using crayon or pencil • Hold book with one hand while turning pages with the other
EXEMPLARS (EXAMPLES) **The learner will:** • Pick up small pieces of fruit from tray and put in mouth • Manipulate toys or objects to place in range of vision • Attempt to turn pages of a board book using thumb and fingertips	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use nesting toys and place one inside another • Stack 2-4 blocks or objects • Drop wooden or plastic beads or shapes into a container	**EXEMPLARS (EXAMPLES)** **The learner will:** • Put together duplos or stack small blocks into a tower • Pour sand or water from one container to another • Draw a simple picture • Move a puzzle piece until it fits in a correct location
SUPPORTIVE PRACTICES **The adult will:** • Cut food into finger size pieces • Prompt infant to turn the page while readings	**SUPPORTIVE PRACTICES** **The adult will:** • Provide blocks for children to stack • Provide an assortment of different sized plastic containers for stacking/nesting toys • Provide wooden or plastic beads and shapes with containers for collecting and dumping • Provide children with board books • Model turning pages • Ask children to point to items on pages	**SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of blocks for stacking • Include a variety of puzzles and other toys that require controlled hand movements to fit them together • Provide books for children's independent use • Offer art materials for children to draw, paint or write

CONTINUED...

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

10.5.3 USE OF TOOLS

STANDARD STATEMENT • Manipulate basic utensils	**STANDARD STATEMENT** • Use writing or drawing tools with limited coordination • Use spoon and fork for eating	**STANDARD STATEMENT** • Use writing or drawing tools demonstrating refined skill • Use basic household or classroom tools
EXEMPLARS (EXAMPLES) **The learner will:** • Hold spoon by handle and bang on high chair or pots • Attempt to use utensil to feed self • Hold crayon and make marks on paper	**EXEMPLARS (EXAMPLES)** **The learner will:** • Hold a large crayon in a fisted hand and use the tip to make marks on paper • Place a spoon into the mouth right side up so that food usually does not spill	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use pencil or crayon to make recognizable shapes, lines or dots • Paint on paper using a fat paint brush • Manipulate a spoon or fork so that food does not usually spill • Use safety scissors to make simple snips or cuts • Use age appropriate hammer to pound • Wipe table with cloth after eating • Roll play dough to make a ball or snake
SUPPORTIVE PRACTICES **The adult will:** • Provide pots, pans and spoons for play • Provide utensils for feeding • Provide large, chunky crayons and paper while child is seated	**SUPPORTIVE PRACTICES** **The adult will:** • Provide young toddlers with age-appropriate writing utensils, such as chunky crayons or large pencils • Provide child-sized eating utensils	**SUPPORTIVE PRACTICES** **The adult will:** • Provide toddlers with age-appropriate writing instruments, such as chunky crayons, pencils or washable markers • Provide basic tools to use with play dough, such as rolling pin or plastic cookie cutter shapes • Engage children in clean-up activities where they can use a cloth or sponge to wipe up a spill or clean the table • Offer age appropriate tools such as hammers for pounding or screwdrivers • Introduce scissors, providing adult supervision and guidance for their use



HEALTH, WELLNESS & PHYSICAL DEVELOPMENT GLOSSARY

Agility - A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy

Balance - A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving

Coordination - A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately

Developmental Differences - Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners' developmental status will affect their ability to learn or improve

Developmentally Appropriate - Motor skill development and change that occur in an orderly, sequential fashion and are age and experience related

Directions - Forward, backward, left, right, up, down

Flexibility - A health-related component of physical fitness that relates to the range of motion available at a joint

Food Guide Pyramid - A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America

Health - A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity

Health Education - Planned, sequential K-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health

Locomotor Movement - Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop

Motor Skills - Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (e.g., tennis serve, shooting a basketball)

Movement Skills - Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities

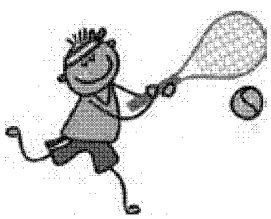
Nonlocomotor Movement - Movements that do not produce physical displacement of the body

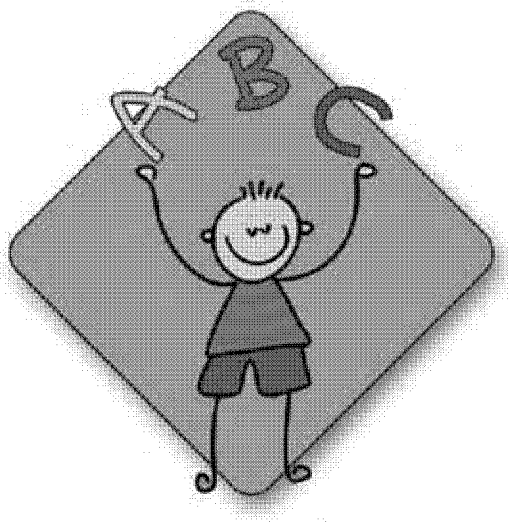
Physical Activity - Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure

Physical Education - Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life

Physical Fitness - A set of attributes that people have or achieve and that relate to their ability to perform physical activity. Generally accepted to consist of health-related fitness and skill-related fitness

Safety Education - Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury





LANGUAGE AND LITERACY DEVELOPMENT

EARLY LITERACY FOUNDATIONS; READING, WRITING, SPEAKING AND LISTENING

Communication occurs in many different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming stories and songs and engaging in word play activities.

INCLUSIVE CLASSROOMS

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying classroom experiences alongside their typically developing peers. Teachers, specialists, and families must work together to understand all children's unique needs while adapting teaching strategies, materials and/or environment to assure that every child can learn and develop to his/her highest potential. Adults must celebrate all children's accomplishments and appreciate what children can learn and do.

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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

BIG IDEA: Communication occurs in many different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes

ESSENTIAL QUESTION: Can I find a text when asked? Can I name some letters in my name? How do I increase my speaking vocabulary? Can I respond to show I understand? Can I participate in fluency activities?

1.1.1 PURPOSES FOR READING

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Demonstrate a beginning interest in pictures and books that have color, pattern and contrast	**STANDARD STATEMENT** • Show a preference for favorite books or pages • Demonstrate beginning book-handling skills	**STANDARD STATEMENT** • Independently seek books to read during free play • Point to pictures or objects in books when asked
EXEMPLARS (EXAMPLES) **The learner will:** • Gaze, babble, pat and point at books or photos • Attend to pictures in a book during lap-reading with an adult	**EXEMPLARS (EXAMPLES)** **The learner will:** • Choose favorite book from collection of books • Point to or frequently turn to favorite parts of a book • Search for specific picture in book when asked • Request adult to read	**EXEMPLARS (EXAMPLES)** **The learner will:** • Choose favorite books from collection of books • Answer simple questions related to specific pages in book • Find his favorite cereal by the picture on the box • Use the stop sign in play with his cars and block building • Try to put toys away in correctly labeled bins or shelves
SUPPORTIVE PRACTICES **The adult will:** • Provide a variety of cloth and sturdy cardboard books for exploration • Engage children in lap-reading daily, showing and describing the pictures 	**SUPPORTIVE PRACTICES** **The adult will:** • Provide sturdy books for children to use independently through the daily routine • Ask questions about the pictures when reading with a child • Read quality books to children independently or in small groups • Model book reading	**SUPPORTIVE PRACTICES** **The adult will:** • Talk about some of the signs adults need to know when driving or playing • Label the places where toys belong with simple signs that also have pictures cut from catalogues • Read to children at least once a day • Talk to children about story plots or characteristics • Ask children questions about the story and pictures within

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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

1.1.2 WORD RECOGNITION SKILLS

EMERGING

**Through the picture I see reality.
Through the word, I understand it.**
—Sven Lidman

EMERGING

STANDARD STATEMENT
- Identify some letters in own name
- Recognize symbols and logos in the environment

EXEMPLARS (EXAMPLES)
The learner will:
- Name some of the letters in own name
- Recognize the school's logo or name or the logo from a familiar restaurant
- Pretend to read aloud to others and self

SUPPORTIVE PRACTICES
The adult will:
- Read books daily
- Use new vocabulary and ask questions to extend understanding of words
- Name letters when using them

1.1.3 VOCABULARY DEVELOPMENT

STANDARD STATEMENT
- Communicate with gestures, sounds or baby talk
- Use a few simple words to indicate family members or familiar objects
- Babble, making word-like sounds

EXEMPLARS (EXAMPLES)
The learner will:
- Look at or move toward named person or object
- Repeat sounds initiated by adult
- Name mama, dada

SUPPORTIVE PRACTICES
The adult will:
- Name objects when reading with child, introducing new words and objects
- Listen and respond to children's babble and attempts to say words
- Respond to infant's gestures and nonverbal signals

STANDARD STATEMENT
- Begin to speak in 2-word sentences lacking sentence structure
- Use a subject and verb
- Ask questions about a story that is being read
- Understand about 200 words and use about 50 in everyday speech

EXEMPLARS (EXAMPLES)
The learner will:
- Use short phrases such as "mommy go"
- Ask an adult about the bear in a story or about a new building that is being constructed while on a walk
- Name an object while playing with it, such as "block"

SUPPORTIVE PRACTICES
The adult will:
- Label objects and people
- Pause before ending a phrase in a song or story to allow child to say the next word
- Use words and gestures that correspond, such as moving the arms up high while saying "so big"
- Name new objects or events, repeating often to help children acquire the word or phrase

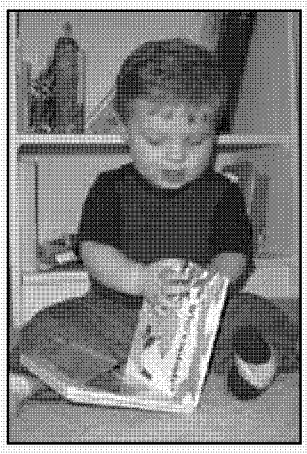
STANDARD STATEMENT
- Use simple sentences with appropriate grammatical structure
- Understand as many as 900 words and use about 300 in everyday speech
- Carry on a conversation
- Speak in understandable words
- Use some personal pronouns

EXEMPLARS (EXAMPLES)
The learner will:
- Describe characteristics of objects or materials, such as "This feels soft"
- Use prepositions, such as "the money is inside the purse"
- Use identifiable words to describe pictures
- Refer to self and surroundings by name
- Repeat new words

SUPPORTIVE PRACTICES
The adult will:
- Discuss words and meanings of words in daily use
- Use descriptive language
- Introduce new words on a regular basis
- Engage in conversation with each learner
- Name objects and describe actions in books

1.1.4 COMPREHENSION AND INTERPRETATION

EMERGING



STANDARD STATEMENT
- Attend to a picture or section of a book when reading with an adult
- Answer simple questions about a story

EXEMPLARS (EXAMPLES)
The learner will:
- Point to picture in a book when asked by adult
- Answer a question about a book, such as "What is the little girl wearing?"

SUPPORTIVE PRACTICES
The adult will:
- Ask simple questions about obvious detail
- Describe pictures to the young learner when you read
- Respond to a learner who demonstrates interest in a book by reading aloud
- Describe actions when sharing books
- Read same book repeatedly, pointing out pictures, characters and action
- Repeat simple rhymes, songs and finger plays with adult support
- Choose or sort simple books that capture children's interests

STANDARD STATEMENT
- Respond to questions about a story
- Enact action word when asked
- Identify characters in story
- Make real-world connections between pictures and environment
- Relate story to personal experiences when asked

EXEMPLARS (EXAMPLES)
The learner will:
- Respond to action in a story, such as jump when characters jump
- Name some of the characters in the story
- Ask and answer questions about the story such as who, where, what, why
- Share how the story is similar to own life experiences

SUPPORTIVE PRACTICES
The adult will:
- Read at least once every day
- Ask questions related to stories, such as content and illustrations or "What comes next?"
- Sequence story events
- Engage learners in recreating familiar stories and tales
- Assist learners in making connections in stories
- Read same story repeatedly, checking for comprehension by asking questions

STANDARD 1.2: READING CRITICALLY IN ALL CONTENT AREAS

BIG IDEA: Children understand and respond to a wide variety of text.
ESSENTIAL QUESTION: Can I identify some characters and events in a story? Can I hold a book correctly? Can I guess what will happen next?

1.2.1 TEXT ANALYSIS AND EVALUATION

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **Our greatest natural resource is our children.** —Walt Disney	**STANDARD STATEMENT** • Select a favorite book to read **EXEMPLARS (EXAMPLES)** **The learner will:** • Ask adult to read a favorite book • Look at favorites repeatedly • Comment on specific events or characters from a book • Point to specific character or object in a story • Respond to what might happen next **SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of sturdy books for exploration • Ask child to identify characters or objects in books • Talk about what happened before or after a page an event	**STANDARD STATEMENT** • Identify a book by its cover • Identify main character • Recall an event from a story • Make an "I like" statement about a favorite book or story **EXEMPLARS (EXAMPLES)** **The learner will:** • Recognize and select a book by its cover or title • Name main character in the story • Name one event in a story • Talk about what the story is about **SUPPORTIVE PRACTICES** **The adult will:** • Ask questions about the book, such as "Why did Billy pick the apple?" • Point out letters or sounds within a story

1.2.2 TEXT ORGANIZATION

EMERGING	**STANDARD STATEMENT** • Show interest in books or photos **EXEMPLARS (EXAMPLES)** **The learner will:** • Hold a book in hands • Mouth books **SUPPORTIVE PRACTICES** **The adult will:** • Model book handling • Help child hold book while reading • Use book handling terms while reading, such as "Let's see what's inside" or "Look at the cover of this book"	**STANDARD STATEMENT** • Demonstrate book handling skills **EXEMPLARS (EXAMPLES)** **The learner will:** • Hold book in two hands and turn pages, one at a time • Pick up a book and turn it until the child faces the cover **SUPPORTIVE PRACTICES** **The adult will:** • Model appropriate book handling skills • Introduce books to children, talking about cover, author or the character • Give children the opportunity to turn pages, one at a time • Orient books, talking about how print goes from left to right, reading from top to bottom

STANDARD 1.3: READING, ANALYZING, AND INTERPRETING LITERATURE: FICTION AND NON-FICTION

BIG IDEA: Children understand and respond to works of literature.
ESSENTIAL QUESTION: Can I recognize familiar characters?

1.3.3 LITERARY ELEMENTS

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	EMERGING	**STANDARD STATEMENT** • Recognize pictures of familiar characters in book **EXEMPLARS (EXAMPLES)** **The learner will:** • Name characters **SUPPORTIVE PRACTICES** **The adult will:** • Talk about illustrations • Ask open ended questions about illustrations

STANDARD 1.4: TYPES OF WRITING

BIG IDEA: Children write for different purposes and audiences.
ESSENTIAL QUESTION: Can I tell a story?

1.4.1 NARRATIVE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **Every child is gifted; some just open their packagesat different times.** —Bob Livingston	EMERGING	**STANDARD STATEMENT** • Tell a story about a picture • Describe how something works **EXEMPLARS (EXAMPLES)** **The learner will:** • Tell a make–believe story • Describe the shapes in a drawn picture, such as "This is the dog and here's her doghouse" • Finish a familiar story when adult pauses • Use descriptive phrases, such as "big dog" or "pretty shirt" **SUPPORTIVE PRACTICES** **The adult will:** • Relate stories that have real and make believe events • Ask questions about what is happening in a story • Ask children to describe their paintings or drawings

STANDARD 1.5 QUALITY OF WRITING

BIG IDEA: Children write for different purposes and audiences.
ESSENTIAL QUESTION: Can I talk about pictures? How do I practice pre-writing skills?

1.5.2 CONTENT

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING	EMERGING	**STANDARD STATEMENT** • Notice details in an illustration or picture **EXEMPLARS (EXAMPLES)** **The learner will:** • Describe the details about a picture in a book, such as "He's running to get that ball" • Find name on printed material or cards • Make marks on paper to reproduce name • Use scribble marks to represent a description of a drawing **SUPPORTIVE PRACTICES** **The adult will:** • Talk about the meaning of pictures in a book, such as "What do you think this picture is telling us about Jimmy?" • Post each child's written name throughout the classroom • Point out environmental print in writing

1.5.6 CONVENTION

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **I cannot teach anything, I can only make them think.** —Socrates	EMERGING	**STANDARD STATEMENT** • Choose from a variety of writing tools and surfaces during play • Engage in tactile experiences creating letters and other forms **EXEMPLARS (EXAMPLES)** **The learner will:** • Select markers, crayons, paints, chalk, pencils to draw and write • Trace or create letters and other shapes using tactile materials such as sand, sandpaper, glue, foam and playdoh **SUPPORTIVE PRACTICES** **The adult will:** • Provide a variety of materials for writing • Model conventional writing

STANDARD 1.6: SPEAKING AND LISTENING

BIG IDEA: Children communicate in many different ways to acquire wants and needs, to share their ideas, and listen to others
ESSENTIAL QUESTION: How do I use speaking and listening skills in everyday life?

1.6.1 LISTENING SKILLS

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Respond to adult verbalizations that indicate understanding of what is being said • Respond to repeated words or phrases • Connect voice to specific person • Follow simple direction	**STANDARD STATEMENT** • Focus attention on speaker and attempt to imitate speech • Respond to adults' requests showing understanding of what is being asked • Follow a one-step simple direction • Understand descriptions of activities or events	**STANDARD STATEMENT** • Demonstrate understanding of position words • Demonstrate understanding the sequence of time and events • Follow 2-step directions
EXEMPLARS (EXAMPLES) **The learner will:** • Turn head, look at the face and eyes when an adult speaks or show expression • Respond to "bye-bye" or "naptime" • Look at phone when it rings • Look at family member or caregiver and smile • Point to a picture when asked • Play pat-a-cake	**EXEMPLARS (EXAMPLES)** **The learner will:** • Listen and imitate words • Point to the cat in a book when you say, "Where is the cat?" • Answer a simple question with a nod of head • Go to wash hands when caregiver says, "Get ready for lunch" • Find a toy when asked to retrieve it	**EXEMPLARS (EXAMPLES)** **The learner will:** • Move arm or leg up, down, or over head • Respond with understanding when adult says "we'll go outside after we eat" • Follow the request to "pick up the crayon and put it in the bowl" • Remember the events in a book previously read and notice if a section is omitted on a second-read
SUPPORTIVE PRACTICES **The adult will:** • Talk to infant throughout the day describing actions and new sounds or experiences • Use words or phrases over and over to increase language learning • Engage baby in social games, such as Pat A Cake or This Little Piggy • Respond to baby's babbles	**SUPPORTIVE PRACTICES** **The adult will:** • Ask open-ended questions • Ask simple questions that offer children a choice • Name objects and actions, introducing new words often • Praise the learner when directions are followed	**SUPPORTIVE PRACTICES** **The adult will:** • Read and re-read books to enhance understanding and vocabulary development • Provide opportunities to re-tell stories or parts of a story • Ask questions about books or stories

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STANDARD 1.6: SPEAKING AND LISTENING continued

1.6.2 SPEAKING SKILLS

STANDARD STATEMENT • Babble and begin to use single words	**STANDARD STATEMENT** • Use 1-2 words to communicate	**STANDARD STATEMENT** • Share experiences using simple 2-3 word combinations • Speak to be understood by a familiar adult • Participate in group rhymes and songs using a few words • Ask "why" questions repeatedly
EXEMPLARS (EXAMPLES) **The learner will:** • Use voice to express happiness or unhappiness • Babble using strings of consonant sounds and sounds and rhythms of his native language • Actively imitate the sounds of speech	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use simple words to indicate wants or needs such as "juice" • Use simple gestures • Use inflection when babbling or speaking • Use exclamation, such as "Oh Oh" when dropping something	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use words to express ideas and respond to others • Use pronouns more frequently • Use appropriate volume and words for a familiar adult to understand • Use some words in group recitation or singing • Begin to use the "Where", "What" and "Why" question forms
SUPPORTIVE PRACTICES **The adult will:** • Follow infant's lead and use his sounds in real words, phrases and sentences • Speak to infant in native language	**SUPPORTIVE PRACTICES** **The adult will:** • Change pitch, tone and inflections hen talking, singing or reading • Support toddlers' attempts at speech • Respond to nonverbal communication by using descriptive words	**SUPPORTIVE PRACTICES** **The adult will:** • Model appropriate grammar • Ask open ended questions • Praise and encourage efforts • Model appropriate speaking voice • Repeat learners' words

1.6.3 DISCUSSION

EMERGING	**STANDARD STATE]MENT** • Communicate using consistent sounds, words and gestures	**STANDARD STATEMENT** • Enjoy conversing with others • Ask "why" as a way to continue conversation
	EXEMPLARS (EXAMPLES) **The learner will:** • Try to say basketball by stringing together "ba-kih-ba" when prompted • Use single words such as no and by appropriately • Start to put words together in phrases such as, " ma-, bye bye" • Shake his/her head yes when asked "Are you ready to go outside?"	**EXEMPLARS (EXAMPLES)** **The learner will:** • Talk to another child about what happened at home the night before • Talk with a friend about something that interests them at the art table • Talk to stuffed animals or dolls • Ask questions that prolong a conversation • Show enjoyment when chatting with another
	SUPPORTIVE PRACTICES **The adult will:** • Speak to young learner in clear adult language avoiding most baby talk • Get down on the floor or at eye level when conversing • Repeat and extend words and phrases used by young learner	**SUPPORTIVE PRACTICES** **The adult will:** • Engage children in conversation about feelings, past or future activities or classroom routines and events • Provide opportunities for children to interact and converse with each other • Ask open-ended questions that encourage discussion

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

BIG IDEA: Communication occurs in many different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes.
ESSENTIAL QUESTION: How do I communicate using wants and needs?

1.7.1 FORMAL AND INFORMAL LANGUAGE

INFANT	YOUNG TODDLER	OLDER TODDLER
EMERGING **Attitude is one of a teacher's greatest tools in the classroom. If you're enthusiastic, your children will be too.**	**STANDARD STATEMENT** • Use verbal and nonverbal language to have needs met	**STANDARD STATEMENT** • Use verbal and nonverbal language to communicate needs and wants • Repeat words heard in a foreign language
	EXEMPLARS (EXAMPLES) **The learner will:** • Use some words, crying, shouting or gestures to have needs met such as a drink, a blanket or to be held	**EXEMPLARS (EXAMPLES)** **The learner will:** • Use verbal and nonverbal language to communicate needs and wants • Repeat words heard in a foreign language
	SUPPORTIVE PRACTICES **The adult will:** • Support learners by using words to describe the object or need they are asking to have filled	**SUPPORTIVE PRACTICES** **The adult will:** • Provide words when children are unsure • Expose learners to languages other than native language • Encourage and support efforts to communicate in other languages

STANDARD 1.8: RESEARCH

BIG IDEA: Children gather information from a variety of sources to answer research questions
ESSENTIAL QUESTION: What can I learn from the resources in my environment?

1.8.1 INQUIRY-BASED PROCESS

EMERGING	**EMERGING**	**STANDARD STATEMENT** • Ask about a new toy or object in the classroom, such as "How does that work?" • Use the senses to investigate objects
		EXEMPLARS (EXAMPLES) **The learner will:** • Ask about a new toy or object in the classroom, such as "How does that work" • Shake or bang a new toy to find out how it works
		SUPPORTIVE PRACTICES **The adult will:** • Introduce new materials into the classroom • Model researching an answer to a question by looking in a book, such as "Let's see if we can find the answer in this book about cats"

LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY

Alliteration – The repetition of initial consonant sounds in neighboring words

Antonym – A word that is the opposite of another word

Characterization – The method an author uses to reveal characters and their various personalities

Compare – Place together characters, situations or ideas to show common or differing features in literary selections.

Context Clues – Information from the reading that identifies a word or group of words

Concepts of Print – Print goes left to right; one to one match with voice to print, concept of first and last; concept of letter, word, sentence, space, letter order in words is important; different punctuations have meaning

Conventions of Language – Mechanics, usage and sentence completeness

Decoding – Analyzing text in order to identify and understand individual reading

Echo Reading – Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line

Emergent Literacy – One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy

Expressive Language – Being able to convey messages using words

Evaluate – Examine and judge carefully

Fine Motor – Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay, pinching clothespins

Fluency – The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading

Genre – A category used to classify literary works, usually by form, technique or content (e.g., prose, poetry)

Guided Reading – Teachers work with students at their instructional level to guide them in using context, visual and structural cues

Homophone – One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode)

Language Experience – Reading own writing; teacher takes dictation from students or students do own writing. Use student's own words as reading material; an effective way to encourage self-expression and build awareness of the connections between oral and written language

Learning Styles – Visual (learn through seeing) needs to see the teacher's body language and facial expression to fully understand the content of the lesson

- Auditory (learn through listening) learns through lectures, discussion and listening and needs to talk things through
- Tactile/kinesthetic (learn through moving and touching) learns best through a hands-on approach actively exploring the physical world around them

Literary/Story Elements – The essential techniques used in literature (characterization, setting, plot, theme, problem, solution)

Literary Devices – Tools used by the author to enliven and provide voice to the writing (e.g., dialogue, alliteration)

Multiple Intelligences – Howard Gardner's theory of intelligences

- Visual -spatial (ability to perceive the visual)
- Verbal-linguistic (ability to use words and language)
- Logical/mathematical (ability to use reason, logic and numbers)
- Bodily/kinesthetic (ability to control body movements and handle objects skillfully)
- Musical/rhythmic (ability to produce/appreciate music, sound, rhythm)
- Interpersonal (ability to relate and understand others; other people's feelings)
- Intrapersonal (ability to self-reflect and be aware of one's inner state of being; self awareness)
- Naturalist (ability to recognize, categorize and draw upon certain features of the environment)

Narrative – A story, actual or fictional, expressed orally or in writing

Onset – A sound in word that comes before the vowel

Phonemic Awareness – Ability to hear and identify parts of spoken language and auditorily divide into phonemes

Phoneme – A sound unit of speech

Phonics – A way of teaching reading that stresses sound symbol relationship; refers to the relationship between the letters and letter sounds of a language

Phonological Awareness – A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables and onsets and rimes

Picture Walk – A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story

Point of view – The way in which an author reveals characters, events and ideas in telling a story; the vantage point from which the story is told

Print Awareness – Ability to understand how print works

Reading Awareness – Uses the language of literacy, such as top, bottom, same, different

- Identifies the beginning, middle, and end of a story, with the main idea coming first and details added later
- Demonstrates awareness that language can be written down and read later
- Differentiates between pictures and words
- Shows curiosity about environmental print
- Differentiates between pictures and words

Reading critically – Reading in which a questioning attitude, logical analysis and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria

Receptive Language – Being able to receive and give meaning to message/words heard

Research – A systematic inquiry into a subject or problem in order to discover, verify or revise relevant facts or principles having to do with that subject or problem

Rime – The part of a syllable that contains vowel and all that follows

Shared Reading – Teacher guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading or fill the gap reading)

Shared Writing – Teacher and learner work together to compose a message or story

Tone – The attitude of the author toward the audience and characters (serious or humorous)

Voice – The fluency, rhythm and liveliness in writing that make it unique to the writer

PARTNERSHIPS FOR LEARNING

FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES

The school experience consists of much more than the academic content that teachers share with students every day. School success is also dependent on children's ability to learn, their interest in learning, and the connections between schools, community agencies and families that enable the child to learn in a way that supports his or her own learning style, needs and home experience. The partnership, links and connections that begin in the early childhood years between teachers and administrators and families, along with the other agencies in which a child or family interacts are critical to providing a holistic and seamless approach to children's learning. Schools and families should work together to share information about individualized learning plans and goals; assure positive transition to and from the current school setting; and identify and refer family members to other community agencies when appropriate.

WONDER AND DELIGHT!

Young children are curious, and from birth, they naturally seek out problems or questions to solve. They use their senses to explore materials and the environment and the search for answers to perceived problems or situations is motivational, holding their attention and creating their enthusiasm for learning. When classrooms or learning environments are structured to promote this curiosity or a sense of wonder and delight, they use instructional strategies that are based on inquiry. Inquiry is the active searching for knowledge and understanding of a specific idea and occurs most successfully when adults' intentionally create activities and experiences that allow children to use previously learned knowledge to understand new information. The adults' role during this active exploration is to scaffold children's thinking by asking "open-ended" questions that encourage problem solving and support children's imagination and story-telling. Open-ended questions or statements such as, "I wonder why that's painted blue" or "If you were Sally, what would you have done?" allow children to express their thoughts, think creatively and problem solve. They are a more successful choice to encourage learning and critical thinking than closed questions, such as "What color did you choose?" or "Did Sally make a good choice?" that typically result in short answers that don't ask or provide good insight into children's thinking.

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STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

BIG IDEA: The relationship between the family and school personnel is a critical foundation to children's success in school.

ESSENTIAL QUESTION: How do schools understand families' home lives, their values, and attitudes towards learning? How do schools incorporate family preferences and interests into the life of the classroom? How do schools assure that families are familiar with and accepting of school values, attitudes and philosophies?

20.1.1 INFORMATION EXCHANGE

STANDARD STATEMENT

- Offer an on –site enrollment meeting where the family can meet school personnel and observe the classroom where the child will be attending
- Share family and school routines and any needed accommodations
- Provide and regularly review a Parent Handbook that outlines program expectations and operating details
- Offer parent-teacher school events that provide updates and give families opportunities to participate in school life
- Identify home culture, language, routines, and how they might impact a child's adjustment to school
- Discuss schedules, events or past experiences that may impact a child's school experience
- Share instructional philosophies that help families understand the school structure

THE FAMILY AND SCHOOL TOGETHER

- Participate in introductory enrollment meetings that enable both family and school representatives to share values, attitudes, philosophies about learning along with unique details and needs of the child and family
- Provide a classroom tour for child and family where they can meet the teacher and play for a while
- Discuss family's needs for drop-off and pick-up, food allergies, napping procedures, potential language barriers or infant feeding schedules
- Hold a "Back to School" or Open House night
- Talk about a recent event such as a divorce or death, which may be impacting a child's behavior at school and discuss ways to inform the family about school adjustment
- Discuss child guidance and management strategies so both family and school understand the similarities and differences in approach
- Talk about previous group experiences and child's reaction – what might be expected on the first few days
- Ask questions to learn about the child's temperament
- Ask child to bring to school pictures of family members, home environment or other important home elements that might make the adjustment to a new school easier
- Support family's apprehensions during the first few weeks of school by calling them on the first day to describe child's adjustment or by inviting the family to stay with the child for increasingly shorter periods of time prior to drop off
- Formulate a survey or questionnaire that can be done orally or in writing to learn about family attitudes and philosophy on child rearing, learning, reading
- Talk about the classroom structure and how children learn through play
- Learn about who the child considers 'family' and how the family defines itself, including extended family members if relevant

20.1.2 HOME TO SCHOOL CONNECTIONS

STANDARD STATEMENT

- Identify family practices and traditions that should be included within the classroom
- Work with families to identify books, songs, and finger plays, dances, foods, toys that should be included in the classroom or school environment; ask for donations
- Learn about the family and home setting and incorporate into the school experience, asking for updates and new information regularly
- Invite family members into the classroom to discuss cultural information with the children, to participate in classroom life, or to identify community locations or businesses that can be visited
- Work with families to determine child's best classroom placement including when to transition from one to the next, personality types

THE FAMILY AND SCHOOL TOGETHER

- Identify ways to assure the child's positive and comforting entry into a new classroom setting, such as a picture in the cubby, a stuffed animal or blanket
- Encourage volunteers and program participation from cultural groups in the community such as foster grandparents or other multigenerational connections
- Determine if child may eat traditionally served foods, celebrate holidays
- Use family or culturally specific phrases or words to describe activities or materials
- Ask about family members, calling them by name, such as how is the newborn, how grandpa is doing after return home from hospital
- Add culturally-specific materials and experiences into the schedule and environment such as adding a wok to the cooking area, or counting in both English and Spanish during morning message
- Invite a family member to teach a class, a culturally – specific song or to provide the words to the song
- Display family pictures inside and outside the classroom
- Seek out community volunteers to share information about specific events or activities that are meaningful to children
- Invite family members to participate in classroom events, whenever possible
- Serve familiar cultural foods and introduce new traditional foods periodically – such as rigatoni with cheese or bagels and cream cheese
- Encourage children to show pride in family-specific beliefs or practices by showing interest and describing them to the class

20.1.3 SCHOOL TO HOME CONNECTIONS

STANDARD STATEMENT

- Assure that family communications are done in culturally-sensitive ways that accommodate family literacy levels, culture barriers
- Regularly send home information about the child's growth and progress and adjustment to the school setting
- Discuss the program and classroom operational procedures such as absences, snow delays, payment and learn if there are potential challenges for families, making accommodations as appropriate
- Make available voluntary "at home" activities that families can complete with child, being sensitive to family structure and culture
- Create an "open-classroom" policy where family members can visit or volunteer in the classroom or school
- Where appropriate, complete home visit with family
- Support families' efforts to build the child-child or family-family connection

THE FAMILY AND SCHOOL TOGETHER

- Create videos, picture books and written schedules that depict the classroom daily routine and send home to families as requested
- Ask family members to identify successful accomplishments the child may have completed at home during the week and acknowledge them in school
- Provide connections between school and school activities such "We are learning about caterpillars and read The Very Hungry Caterpillar. Here's green paper and scissors for you to make a caterpillar at home"
- Take a picture of a child at school, such as sitting with a completed block structure or wiping the table after lunch, and send home to family or email it to family member, "Look what Tamika did today!"
- Disseminate newsletters that highlight key events in the life of the program and the classroom; identify key songs, books and recipes, and clarify a key program expectation
- Post the daily schedule in the parent information area for families to become familiar with the sequence of the day
- Regularly update classroom or program message boards to keep information current and fresh
- Create a classroom web page and provide family members with the link – include a bulletin board or question and answer section that is checked by classroom staff regularly
- Provide opportunities for families to meet each other and connect based on commonalities, such as "Miles' family lives in your neighborhood too" or "Sandy's mom just found out she's going to have a new baby also", being respectful of confidentiality

STANDARD 20.2: FAMILY ENGAGEMENT

BIG IDEA: Children's motivation to learn and succeed in school is impacted by family support and involvement in the life of the program.
ESSENTIAL QUESTION: How do families and schools work together to make decisions about the program? What kinds of school events and activities encourage family participation? How do we assure that information exchange is reciprocal?

20.2.1 SHARED GOVERNANCE OR DECISION-MAKING

STANDARD STATEMENT	THE FAMILY AND SCHOOL TOGETHER
• Implement a family-school annual review of program operation • Develop and update annually a Parent Manual that details operational procedures • Establish conflict resolution policies that identify procedures for complaints or suggestions • Post regulations, program requirements, in strategic locations within the school so family members can review it regularly • Offer training to Advisory or Board on shared governance	• Invite family feedback from classroom observations and share summary of results • Invite family members to participate in oral interviews about the program experience • Create a Parent Handbook committee which includes staff, families and community members who annually review information and suggest updates as needed • Develop a joint family-school committee that investigates new state, federal or local initiatives that may impact the school's operation and recommends next steps • Identify a procedure which includes family members and staff to consider complaints and make recommendations for improvement • Disseminate parent surveys or interviews to all or a percentage of the clientele which provides feedback about general program operation or about newly instituted policies • Inform families of ways to share concerns or worries about school policy and develop a review process to handle issues • Design a Governing Board or Advisory Committee whose members represent families, community agencies and school personnel • Involve the families in program goal-development and strategic planning

20.2.2 SPECIAL EVENTS AND ACTIVITIES

STANDARD STATEMENT	THE FAMILY AND SCHOOL TOGETHER
• Learn families' interest and capacity for participation in specific events such as a holiday party, graduation event • Offer family education events such as parenting classes, sign language, health and safety, etc that reflect families' interests and needs • Incorporate unique cultural events or beliefs into classroom life	• Inform families about community cultural events that may be occurring at specific times of the year and determine if/how the event could be expanded into the classroom • Ask a family to share information about a specific event, such as Chinese New Year, and help you design a related activity • Within classrooms or programs, come to consensus about how holiday celebrations or birthdays should occur at school • Create a family resource area that contains books, toys, informational pamphlets, etc that families can access • Design parent education events that families can do together after work, such as Parents as Teachers workshops, or ways to transition children into kindergarten • Offer parent nights or events at mutually-agreed upon times, including meals or babysitting when appropriate • Seek feedback from families to design field trips or big classroom events that may be of particular interest to the children • Ask families if they'd like to volunteer materials or information about specific cultural events • Increase awareness by finding locations in the community that will allow children's work to be displayed , such as a library or town hall

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

BIG IDEA: Early childhood programs must work closely with families to support children's development and learning, both at school and at home.
ESSENTIAL QUESTION: How do families and school work together to identify children's skills, interests and long-term and short-term goals for learning? How do I understand families' at-home learning attitudes and strategies? How do I provide individualized and meaningful at-home learning connections to the school experience?

20.3.1 SCREENING AND ASSESSMENT

STANDARD STATEMENT	THE FAMILY AND SCHOOL TOGETHER
• Identify screening, assessment and referral processes that include family's involvement • Utilize screening and assessment instruments that are aligned with the early learning standards • Assure that children are screened for health, mental health, dental, social-emotional, and cognitive development and the results are shared with families • Be familiar with community agencies that provide additional screenings or assessments upon referral • Provide information on child development and parenting that identifies age-appropriate skill development • Conduct age appropriate baseline and ongoing authentic assessments to identify strengths and areas of focus for future learning and development that are culturally-sensitive, delivered in the language requested by the family and whenever possible, incorporate family feedback • Utilize multiple sources of evidence to understand individual children's growth and development, including parent report, observations, standardized checklists	• Assure families' understanding of the purpose of screening and prepare them for the process, including their input and shared-decisions about referrals when appropriate • Share initial results of screening and assessment with the family in a way that enables family adults to understand the child's strengths and areas for focus • Work with family to explain screening and assessment results and identify how they align with home experiences and observations • Work together to identify referral agencies where needed and support families' contact with them • Be sensitive to some families' reluctance to act on potential referral or additional evaluation recommendations, periodically re-assessing and discussing until action is taken, if needed • Collect and share portfolio items with families, asking for at-home contributions as well, that show children's growth and development of specific skills • Provide information on child development that is written in easy-to-understand language

20.3.2 GOAL DEVELOPMENT

STANDARD STATEMENT	THE FAMILY AND SCHOOL TOGETHER
• Use assessment results to lay the framework for understanding individual children's strengths and areas of need • Share with parents information about each child, including stages of development, interests and assessed skill levels, identifying those that are on track and those that could use additional attention • Meet periodically to discuss previously determined goals, identify any strengths or improvements and make new decisions about learning goals and activities • Periodically assess the learning environment and provide activities for age, linguistic and cultural appropriateness and modify if needed	• At the family-school meeting, both family and teaching adult share information about the child's interests and skills to facilitate joint planning of activities and goals • Teaching adult shows family the continuum of learning development in the Key Areas of Learning and together they identify where the child falls on the continuum, next steps and whether it should be a specific area of instructional focus • Family and teacher agree on key skills or attitudes for focus and accommodate each other's interests when appropriate. For example, the family changes math goal expectation from "counting to 100" to "counting to 20," based on learning standards or the teacher adds a math skill since it is important to family even though it wasn't identified in the assessment • Teaching staff and family talk about ways each goal could be supported at home, identifying basic at-home routines that can be used to "teach", such as counting steps or sorting socks, and the types of intentional instruction that will occur at school • Classroom personnel praise family interest and participation, helping them to see that they are the young child's primary teacher • Participate in development and review of child's IFSP or IEP, working with the parent and intervention program to formulate appropriate expectations

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STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING continued

20.3.3 ONGOING PROGRESS REVIEW

STANDARD STATEMENT

- Classroom adults and families should work as a team to review children's goals and progress regularly and to develop new strategies that promote children's successful growth and development
- Classroom staff and families should participate in a minimum of two face to face conferences to discuss children's developmental progress and other pertinent updates
- Offer informal opportunities for family members to converse with classroom adults as needed about children's progress
- Schools should offer a wide variety of materials and ideas that link home and school learning environments, offer information on child development and parenting and support parents' interest and participation in the child's learning process

THE FAMILY AND SCHOOL TOGETHER

- Send home a brief note that identifies growth towards skill mastery such as, "Mary counted to 10 today during circle time!" Read comment to child so he/she feels excited about sharing the note with the family adults
- Schedule a fall and spring conference date, identifying with the family where the conference should occur either home or school, and accommodating families' unique schedules
- Offer notes to families (or other culturally appropriate communication strategies) that help families understand what's occurring in the classroom and how it could link to home, such as "We're going to work on gross motor skills this week with relay races, outside play, and a trip to the park. Take them to the park this week and watch how their skills have grown"
- Identify potential areas of concern for shared focus, "I noticed Sammy was trying really hard to hop on one foot, but was getting frustrated. Have you seen him do that at home? You may want to play some jumping and hopping games like we're doing at school"
- Develop strategies for sharing children's accomplishments. Ask family members to send samples of children's at-home work to school and post or send home classroom samples that help families notice progress
- Remind children how much they're grown, "Remember when you had trouble making the S in your name? Now, look at your name. You've got the S T and E. Way to go!"
- Identify the skills being learned in each activity, helping families to understand the role of play and active learning in the instructional process

20.3.4 COMMUNITY SUPPORTS

STANDARD STATEMENT

- Identify and understand the services that are provided within the community and identify contacts within each to facilitate collaborative work
- Develop ongoing information-sharing processes with other agencies who work with families
- Create information-sharing processes with other educational or youth activity programs such as the local fitness center, or library
- Develop and honor confidentiality policies regarding information exchange
- Utilize community agency's suggestions to enhance classroom experiences for all children

THE FAMILY AND SCHOOL TOGETHER

- Tell families about special gym classes or music workshops when children show a specific interest or need in those areas, collecting and making available brochures
- Invite a gym instructor into the classroom regularly to help children develop coordination or balance
- Ask the local librarian to provide books and reading activities during an evening parent meeting
- Invite school district personnel to review kindergarten registration and attendance policies with out-going preschool families
- Work with Early Intervention to assure referrals have been received and child will get evaluations or services as needed
- Incorporate specialists' ideas such as a speech therapist or behavioral therapist into the classroom practice to support all children, including the child with a special need
- Assure confidentiality statements and release of information approvals have been signed prior to information being shared

STANDARD 20.4: TRANSITION

BIG IDEA: **Schools and families must work together to coordinate information exchange from one setting to another that will assure children's seamless learning experiences.**
ESSENTIAL QUESTION: **How do I create a seamless transition into and out of the program? What resources and materials do I make available for families to assure at-home learning links with school learning?**

20.4.1 PROGRAM ENTRY

STANDARD STATEMENT

- Create processes and procedures for welcoming incoming families through enrollment meetings, sharing of expectations and values, parent handbooks and discussion of sensitive issues that may impact school success
- Identify welcome strategies that excite children and families about their upcoming, new experience
- Establish processes for communicating with sending schools or new classrooms, creating opportunities for information sharing
- Develop strategies for communicating with community agencies with which incoming families have been involved for information exchange as well as parent interest in continuing

THE FAMILY AND SCHOOL TOGETHER

- Provide incoming family forms to complete prior to the enrollment visit so they can gather the needed information
- Welcome incoming family by holding an enrollment meeting that reviews the daily schedule, program and classroom expectations, values and philosophies as well as pre-enrollment requirements such as physical, first tuition payment
- Prior to the child's attendance, learn about the child's interests and display toys or activities that may be especially appealing, display books about the first day of school, post pictures from home, and create activities that will capture the child's interests
- Develop a process for assessing children's readiness to move from one age group to another that includes parent feedback
- Create orientation books or manuals for both children and adults -- "what to expect when you come to school"
- Invite family to visit at least once prior to the first full day, giving children time to meet the new teacher and play in the classroom; pair up a child who has been in program for a while with a new child
- With parent permission, communicate with sending school about child's past experiences, review screening and assessment results and other information that will support the child and family's move from one school to another
- Wherever possible, use some of the sending school's routines or materials, such as singing the clean-up song or displaying home-made books with pictures of sending school, to ease child's transition into the new situation
- Develop on-going classroom communication between both schools, such as encouraging children to write letters or draw pictures about their new experience and send to the sending school or create "pen pals" between sending and receiving schools
- What about something addressing moving children between age groupings – what info should be provided to parents?

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STANDARD 20.4: TRANSITION continued

20.4.2 PROGRAM EXIT

STANDARD STATEMENT

- Develop policies and procedures for transferring information about child's program participation to the next school location
- Help family understand the expectations and schedules of the receiving school, mapping out strategies for success whenever possible
- Work with receiving school to facilitate pen pals, visits, or other activities where the children can become familiar with the new school and stay in touch with the old school
- Set up information-sharing processes with receiving school to discuss child's goals, progress, interests

THE FAMILY AND SCHOOL TOGETHER

- Meet with receiving schools to identify commonalities between the schools' approaches and convey them to families so they will have some comfort with similar routines and activities
- Establish information-exchange processes between sending and receiving school that provide opportunities for teachers to share successful strategies for learning that will support the transition
- Provide the receiving school with materials or activities that can be used to offer familiarity and comfort during the transition, such as a "treasure hunt" activity or set of questions to answer in the new school or picture books of the sending school
- Display materials from the receiving school that children will recognize when they transition such as a picture book of the new school, classrooms and teachers; talk with children about what to expect
- Send child to new school with a portfolio of completed work – either to keep at home or to share with the school
- Arrange a time to visit child at new school or to call and talk with family after they have left the sending school atmosphere

20.4.3 COMMUNITY CONNECTIONS

STANDARD STATEMENT

- Identify and include child's participation in other schools or programs on information that is sent to receiving school –in transition
- Develop relationship with local Early Intervention agencies, birth to three and three to five, and create process for information and referral exchange
- Participate in the county Community Engagement Group and other community-collaborative agencies that advocate for early childhood locally and statewide early
- Assure the program's representation at county or community days
- Produce regularly-updated program brochures or promotional materials and distribute throughout the community
- Arrange for information-sharing sessions with local school districts to develop shared expectations for entry and exit into the programs
- Offer early childhood professional development to other community agencies
- Invite community agencies to provide special seminars or workshops for families

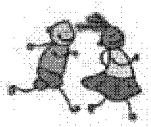
THE FAMILY AND SCHOOL TOGETHER

- Develop a transition form that assures transfer of information from sending to receiving school
- Schedule meetings with Early Intervention providers, local Head Start agency, etc. to introduce your school and to discuss collaboration
- Invite local librarian to visit the school to present a story hour. Invite family members
- Hold a registration day where families can register children for kindergarten at your familiar location
- Use field trips to introduce children to nearby agencies and resources that may be tapped or invite community agency representatives to visit the school and read to children or work on activities with small groups
- Meet with local school district to review their strategies for use of the learning standards in their instruction and develop common grounds
- Post a display shelf of community agencies' brochures for family access or feature a community agency in the monthly newsletter
- Disseminate state resources such as Kindergarten, Here I Come, Kindergarten, Here I Am and Learning is Everywhere
- Participate in community events that allow school to stay updated on state and local events or create a booth/display for county events
- Join online state list serves to stay current (not everyone might know what these are, thus the clarification)
- Host joint meetings of schools, district, community agencies, etc. to network and talk about community needs
- Offer PQAS standards-based training to other community providers
- Disseminate agency newsletter to community agencies

SOCIAL AND EMOTIONAL DEVELOPMENT

LEARNING ABOUT MYSELF AND OTHERS

All children need early childhood programs that nurture emotional security, positive self concept and respect for others. Children's social and emotional development is strengthened when they have classroom experiences that promote a sense of identity and belonging within an accepting and responsive environment. Teachers support children's self identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self control and interpersonal problem solving, and by encouraging positive approaches to learning and interacting with others.



TEMPERAMENT

Every human being has a unique way of looking and interacting with the world known as temperament. Some of us are reserved or shy; others are outgoing and make friends easily. Some of us enjoy learning new things and others are wary about trying new things or dealing with new situations. These temperament traits influence the way in which a child learns, interacts with others, and expresses himself. Adults need to adapt their teaching practices to match the individualized needs of children and consider how their own temperament affects the way in which important relationships with children are developed and maintained.

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ZS.3. Pro-Social Relationships with Adults	103
ZS.4. Pro-Social Relationships with Peers	105

STANDARD 25.1: SELF CONCEPT (IDENTITY)

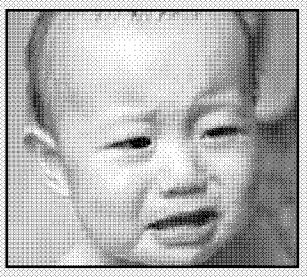
BIG IDEA: Children see themselves as valuable and worthwhile individuals in their homes, classrooms and communities.
ESSENTIAL QUESTIONS: How do I know what my preferences are? How do I develop a positive feeling about myself? How do I grow confident in myself and my abilities?

25.1.1 SELF-AWARENESS

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Cry or show pleasure or discontent when familiar adults come and go • Recognize self and in mirror	**STANDARD STATEMENT** • Show preference for specific toys or objects • Show displeasure when unable to exert influence on events • Make simple choices • Demonstrate fear or anxiety to strangers or unfamiliar people • Show or express fear or dislike of previously accepted things or activities	**STANDARD STATEMENT** • Use words that mean self when speaking, such as "Me do it" or "I can" • Display possessiveness or jealousy towards others • Enjoy opportunities to try new activities or materials • Demonstrate strong preferences for people, toys and activities
EXEMPLARS (EXAMPLES) **The learner will:** • Wave arms or kick to acknowledge a familiar person • Cry when she/he hears a door bang or loud children • Repeats a sound or gesture that creates an effect • Smile when held to mirror • Cry when a familiar person moves away	**EXEMPLARS (EXAMPLES)** **The learner will:** • Take a toy from a teacher's hand • Show preference for primary caregivers • Protest when does not want to do something, such as arches back when doesn't want to sit in chair • Recognize that adults respond to cues • Look to caregiver for recognition when completing a task • Explore environment, at first in close contact with caregiver and then farther away, as toddler matures • Resist ending an activity in which involved • Choose between the red or blue crayon when asked	**EXEMPLARS (EXAMPLES)** **The learner will:** • Cling to adult's leg or hand when a new person approaches • Keep an eye on a stranger while continuing to play with toy • Refuse to allow an adult to help even though they cannot complete the task on their own • Push another child away to sit on an adult's lap • Show interest in new materials that are available in a learning center • Respond to requests for action such as claps for a song • Experiment with own abilities by trying new activities and testing limits
SUPPORTIVE PRACTICES **The adult will:** • Comfort children when hearing loud noises • Arrange environment to assure children have quiet spaces and times • Hold child to mirror calling him/her by name, describing body parts	**SUPPORTIVE PRACTICES** **The adult will:** • Play with child, making eye contact, talking and gesturing • Watch for and support child's nonverbal cues that indicate his/her preferences • Narrate what child sees, hears, and does • Acknowledge children's resistance to adult intervention or interference • Assure consistency of care by assigning the same caregiver or teacher every day • Continue to offer familiar experiences even when the child chooses not to play with it	**SUPPORTIVE PRACTICES** **The adult will:** • Comfort fearful children during new experiences, giving them time to acclimate • Give children time to adjust to new adults in the room • Gradually introduce a new teacher to a classroom before a familiar adult leaves • Hold or touch a child while paying attention to another one, acknowledging each one's need for attention • Label children's possessions and cubby with their names and/or symbols

25.1.2 UNDERSTAND EMOTIONS

STANDARD STATEMENT • Use facial expressions to indicate emotions • Express feelings through crying, smiling, laughing or cooing	**STANDARD STATEMENT** • Show joy, pleasure and excitement when new things are learned • Demonstrate a beginning sense of humor when interacting with others • Use body to demonstrate emotions	**STANDARD STATEMENT** • Express own ideas, interests and feelings through words or actions • Act appropriately when others are happy, sad, angry or afraid
EXEMPLARS (EXAMPLES) **The learner will:** • Smile or laugh at games like peek-a-boo • Appear to relax or stop crying when comforted, or when spoken to softly or patted gently • Turn face away from a new food she/he dislikes	**EXEMPLARS (EXAMPLES)** **The learner will:** • Clap when happy or pout when sad • Imitate others' emotional actions such as waving arms like mom when excited • Stomp feet to show anger or frustration	**EXEMPLARS (EXAMPLES)** **The learner will:** • Occasionally express feelings by exhibiting a tantrum when she/he is very frustrated or angry • Comfort a doll who "got a shot" in the dramatic play area • Approach a crying child to attempt to comfort him/her • Use pretend play as a way to practice feelings • Begin to control impulses, such as restrain from stepping on book or hitting another child when angry
SUPPORTIVE PRACTICES **The adult will:** • Describe feelings while holding or talking to child, "oh, you're so sad..." • Acknowledge likes and dislikes without forcing children to try new things • Cuddle or physically nurture infant in ways appropriate to their specific need or provide calming materials, such as stuffed animal or blanket • Play with baby, smiling and cooing, waiting for him/her to respond in a similar fashion • Model controlling own emotions or impulses	**SUPPORTIVE PRACTICES** **The adult will:** • Use feeling words to label emotions that children are experiencing • Remain with young learner during stressful situations to assist him/her in regulating emotions • Be accepting of child's expressing of emotions • Allow children to express both positive and negative feelings • Smile and laugh when appropriate during interactions • Name own emotions when interacting with toddler	**SUPPORTIVE PRACTICES** **The adult will:** • Use words to describe actions and feelings • Provide dolls, stuffed animals and props for children to practice expressing emotions or feelings • Model appropriate expression of feelings • Honor children's feelings by acknowledging them even when they may not be appropriate, such as, "I know you are really angry because you want that puzzle. You can have it just as soon as Johnny's finish playing with it"



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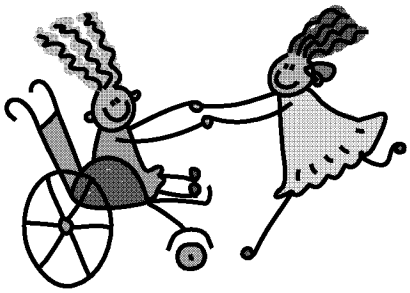
STANDARD 25.1: SELF CONCEPT (IDENTITY) continued

25.1.3 COMPETENCE

STANDARD STATEMENT • Show interest in objects or people around him • Accept new toys or objects with interest • Express interest in activities or objects by reaching	**STANDARD STATEMENT** • Show pleasure at own actions • Attach to one specific toy • Ask for similar activities to be repeated over and over	**STANDARD STATEMENT** • Demonstrate joy of own completed projects to adults • Show preference for one or two toys • Approach new experiences with interest
EXEMPLARS (EXAMPLES) **The learner will:** • Reach for new objects when held in front of him/her • Turn to look at new voices • Be attentive to happenings that are occurring around him/her	**EXEMPLARS (EXAMPLES)** **The learner will:** • Explore the environment around him/her with interest • Clap or smile at one's own accomplishments • Say "more" to try something over and over	**EXEMPLARS (EXAMPLES)** **The learner will:** • Bring a book to adults to "tell" them she/he wants to read • Pull on an adult's hand to show him/her a completed project • Try something over and over for mastery • Choose the same or similar toys every day for a while, then abandon them for something else
SUPPORTIVE PRACTICES **The adult will:** • Introduce new objects and activities slowly, giving children time to thing about and explore the new things • Hold baby up to look at interesting pictures and objects, giving him/her time to reach out and respond • Praise accomplishments	**SUPPORTIVE PRACTICES** **The adult will:** • Be expressive with praise by clapping or saying "You did it!" • Allow child to carry around a toy that has special meaning • Read the same book over and over allowing time for children to say the words or point to the pictures they like • Offer favorite activities often	**SUPPORTIVE PRACTICES** **The adult will:** • Offer interesting activities and objects and give time for exploration • Display objects and pictures of different types of families and cultures • Praise efforts to try new things • Give children time to practice an activity or skill over and over



STANDARD: 25.2 SELF REGULATION

BIG IDEA: Children will express feelings, thoughts and needs appropriately to adults and peers.
ESSENTIAL QUESTION: How do I learn to express my feelings appropriately? How do I learn to manage my feelings? How do I develop healthy strategies to manage my behavior?

25.2.1 EMOTIONAL REGULATION

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Self-soothe by calming as being talked to, held, or rocked • Show pleasure in familiar surroundings • Withdraw when over-stimulated	**STANDARD STATEMENT** • Demonstrate or seek comfort in daily routines, activities and adults • Manage frustration with adult support • Display intense emotions such as anger outbursts or temper tantrums • Demonstrate an individualized response to environmental surroundings	**STANDARD STATEMENT** • Find comfort in rituals and routines • Attempt to please adults • Demonstrate a beginning understanding of own behavior • Show a strong sense of self as a powerful doer by demonstrating pride in accomplishments • Use social conventions such as please and thank you
EXEMPLARS (EXAMPLES) **The learner will:** • Suck finger or thumb when upset or hungry • Mold or nestle into an adult's body when held • Stop crying when picked up by a familiar adult • Turn away from adult when tired of playing games such as peek-a-boo	**EXEMPLARS (EXAMPLES)** **The learner will:** • Say "no no" when near a hot stove or scissors • Cries for another cracker but stops after being given one • Stomps foot and cries after being told it's time to stop playing • Hold hands to ears when the classroom noise level is too loud	**EXEMPLARS (EXAMPLES)** **The learner will:** • Cry or reach for adult comfort when she/he hears a fire alarm or thunder • Say "No" or "Me do it " when adult tries to help • Tell a teacher, "Look at me" when accomplishing something new
SUPPORTIVE PRACTICES **The adult will:** • Hold infants when they are upset • Pick up crying children promptly using soothing voices and motions • Assure there are familiar toys and materials in the environment • Recognize children's cues for over stimulation and stop games or interactions	**SUPPORTIVE PRACTICES** **The adult will:** • Give warnings and choices to allow child's input in decision-making • Give children time to express emotion and ignore outbursts whenever possible • Provide quiet and private classroom spaces for individuals or small groups of children • Provide materials that encourage creative expression of feelings such as paint, play-dough and water table • Describe children's feelings and acknowledge both positive and negative ones • Nurture a toddler with kind words and hugs	**SUPPORTIVE PRACTICES** **The adult will:** • Learn the situations that make individual children uncomfortable or cause distress and seek to minimize them • Offer comfort to children in times of need! • Allow time for child to complete tasks on his/her own • Ask if child will accept help, "May I help you tie your shoe?" and be prepared to allow child additional time to attempt to complete on own • Praise children's accomplishments • Provide quiet and private classroom spaces for individuals or small groups of children • Provide materials that encourage creative expression of feelings, such as paint, play dough and the water table

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STANDARD: 25.2 SELF REGULATION continued

25.2.2 BEHAVIORAL REGULATION

STANDARD STATEMENT • Develop a regular schedule for eating and sleeping • Show preferences for foods or activities • Amuse self for brief periods of time • Use cause and effect to test impact of self on objects or things	**STANDARD STATEMENT** • Attempt to perform self care activities independent of adult help • Express preferences for particular foods, books, toys or people • Interest or amuse self independently • Test adult authority and limits by resisting adults' attempts to place boundaries regarding safety of self and others • Respond appropriately when an adult identifies an unsafe practice	**STANDARD STATEMENT** • Acquire self-toileting and feeding skills • Show awareness of own abilities and interests • Demonstrate autonomy by saying "No" but will submit and/or cooperate • Show understanding of simple rules but will frequently break those rules to test boundaries • Adjust to changes in routine • Follow simple safety and classroom rules with teacher direction
EXEMPLARS (EXAMPLES) **The learner will:** • Indicate a need for nap or meal at the same time every day through irritability or crankiness • Turn head away or purse lips to indicate dislike of a food • Show interest in a particular toy or book by reaching for it when it is offered • Repeatedly drop a spoon from the high chair • Push button on toy to get a result	**EXEMPLARS (EXAMPLES)** **The learner will:** • Try to put on socks or pants or to brush own teeth • Insist she/he can do something without adult support ("me do it") • Resist trying new foods or experiences • Use a toy or stay with an activity for a few minutes at a time • Throw an object or hit another child to test adult reaction • Pile blocks in a truck and then empty them, over and over • Resist clean up or transitions to new activities • Dump toys during play and replace them with adult help	**EXEMPLARS (EXAMPLES)** **The learner will:** • Wash and dry his/her own hands • Try to wipe up a spill • Express pleasure in own accomplishments by clapping hands or stating, "I did it!" • Say "no" when asked to go to lunch, even as he /she sits down to eat • Clean up toys with adult help • Accept a substitute toy or object when first choice is not available
SUPPORTIVE PRACTICES **The adult will:** • Offer a new food several times, allowing for child to refuse it after a few bites to determine likes or dislikes • Read the same book over and over when requested • Provide the same toys and materials often • Allow child to hold or carry a familiar stuffed animal or toy around during the day • Find toys that capture child's interest and encourage exploration staying silently nearby • Provide toys and materials that require an action to get a result (shapes into shape holder, pop-up toys)	**SUPPORTIVE PRACTICES** **The adult will:** • Give more than one warning before a transition to a new activity • Provide time to attempt new tasks that may or may not be accomplished on own, such as putting on own jacket or eat using a spoon • Capture child's interest to help with tasks like clean up by making them fun, such as "let's see how many blocks we can put away in 2 minutes!" • Vary play activities and keep organized activities short, ending them when interest wanes • Introduce new experiences slowly and more than once • Alternate new experiences with familiar ones to offer comfort and reliability • Respond to children's inappropriate behaviors consistently and calmly by positively helping them to learn alternate ways to behave	**SUPPORTIVE PRACTICES** **The adult will:** • Allow time for children to wash hands or self-feed as part of the daily routine • Encourage children to try new experiences, but be understanding if they show reluctance or refusal, offering them more than once • Compassionately acknowledge a child's reluctance to transition from one activity to another, "You are really having fun with those blocks. They'll be here for you to use after lunch." OR "You want to keep playing with that toy. Where can we put it so you can find it next time you come to the house area?" OR "You are having such fun. Do you need 2 more minutes before clean-up?" • Express pleasure and identify child's feelings upon completion of a task, "You did it! You must feel so proud!" • Consistently and compassionately enforce classrooms rules, explaining consequences as a teaching tool. "Hitting other children hurts. When you feel angry, use words to tell her."

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

BIG IDEA: Children develop healthy relationships through positive adult and peer interactions.
ESSENTIAL QUESTION: How do I communicate my needs and wants to adults? How do I learn to trust adults? How do I learn to separate from my parents/guardians and other familiar adults?

25.3.1 TRUST

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Respond to familiar adults' efforts to soothe and comfort • Respond and attend to adults' interactions	**STANDARD STATEMENT** • Use gestures and simple words to express need to familiar adults for physical comfort • Begin to verbally respond to adults' questions • Respond to adults' interactions by smiling and imitating actions	**STANDARD STATEMENT** • Ask for comfort from familiar adults when distressed • Demonstrate comfort in playing when familiar adult is nearby but not in the immediate area • Show interest in unfamiliar adults
EXEMPLARS (EXAMPLES) **The learner will:** • Accept physical comfort and respond to cuddling • Maintain eye contact during feeding and interaction with adult • Respond to adult's happiness with smiles • Repeat adult actions, such as cooing when an adult coos	**EXEMPLARS (EXAMPLES)** **The learner will:** • Seek out attention from familiar adults • Enjoy being held, read to, and talked to by at least one adult • Display pleasure when interacting with a parent or familiar adult • Enjoy being center of attention and perform to acquire or maintain adult attention	**EXEMPLARS (EXAMPLES)** **The learner will:** • Show preference for one adult at a time while potentially ignoring another adult • Explore environment on own but want an adult close • Cling or cry when parent or familiar adult says "good-bye" and leaves • Show preference for familiar adult and rely on their presence to try new things • Act independently but seek adult approval • Show caution around unfamiliar adults
SUPPORTIVE PRACTICES **The adult will:** • Talk to, smile at, and allow infants time to respond • Engage child in back and forth communications, such as making sounds and waiting for them to repeat the sound or smiling and waiting for the to smile back • Recognize facial expressions and cues and respond appropriately • Hold infants close to the body and allow them to snuggle close	**SUPPORTIVE PRACTICES** **The adult will:** • Respond immediately, consistently and appropriately to toddlers' need for comfort • Respond to requests for attention by smiling, laughing or talking • Interact with children during play, following their lead • Engage young toddlers to play simple back and forth games, such as rolling a ball back and forth • Assure children have consistent care from a primary caregiver	**SUPPORTIVE PRACTICES** **The adult will:** • Provide a primary caregiver and avoid changes in primary attachment figures • Pick up, hold or comfort children when they are distressed or injured • Play Peek a Boo and other games that allow children to practice coming and going away • Encourage family members to establish a good-bye routine that is consistently followed • Prepare children for adult absences from caregiving whenever possible

CONTINUED...

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS continued

25.3.2 ATTACHMENT

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Show affection for parents and other familiar adults • Seek to be near familiar adults for attention and comfort	**STANDARD STATEMENT** • Show an emotional connection to particular adults • Demonstrate increasing ability to separate from familiar adults without distress • Watch adults for their response to actions • Display apprehension when an unfamiliar adult comes near	**STANDARD STATEMENT** • Show affection to familiar adults • Imitate familiar people's actions or words • Repeat phrases or intonations of familiar adults • Seek reassurance from familiar adults when trying new things
EXEMPLARS (EXAMPLES) **The learner will:** • Communicate a desire for closeness or physical contact with adults • Stop fussing when needs are met by adult • Fuss or cry to gain attention of adult • Smile at familiar adult • Display recognition of primary caregivers when seeing them or hearing them • Show increased motor activity or motion when interacting with a familiar adult	**EXEMPLARS (EXAMPLES)** **The learner will:** • Seek out attention from familiar adults • Enjoy being held, read to, and talked to by at least one adult • Display pleasure when interacting with a parent or familiar adult • Enjoy being center of attention; will perform to maintain adult attention	**EXEMPLARS (EXAMPLES)** **The learner will:** • Explore environment on own but want an adult close • Cling or cry when parent or familiar adult says "goodbye" and leaves • Show preference for familiar adult and caution around new or unfamiliar adults • Rely on familiar adult's presence to try new things • Start to act independently but still seek adult approval • Pretend to read like the teacher • Use a phrase they hear Mom or Day use often
SUPPORTIVE PRACTICES **The adult will:** • Assign a primary caregiver to interact with infants; avoid changes in primary attachment figures • Touch or pick up infants in the presence of unfamiliar adults to reassure them that they are safe • Respond appropriately to infant's need for presence of familiar adult • Give infants individualized attention during personal care routines	**SUPPORTIVE PRACTICES** **The adult will:** • Allow young toddlers freedom to explore while being nearby to keep them safe • Provide a primary caregiver to interact with young toddlers and avoid changes in primary attachment figures • Pick up or comfort child when they are distressed or injured • Allow young toddlers to play Peek a Boo and other games	**SUPPORTIVE PRACTICES** **The adult will:** • Provide a primary caregiver and avoid changes in primary attachment figures • Pick up or comfort child when distressed or injured • Allow older toddlers to play Peek a Boo and other games that allow children to practice coming and going • Recognize an older toddler's need for independence but provide support using eye contact and body proximity

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

BIG IDEA: Children develop healthy relationships through positive adult and peer interactions
ESSENTIAL QUESTION: How do I communicate my needs and wants to peers? How do I make friends? How do I act appropriately in a group setting?

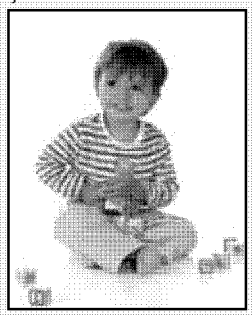
25.4.1 SOCIAL IDENTITY

INFANT	YOUNG TODDLER	OLDER TODDLER
STANDARD STATEMENT • Notice and pay attention to other children • Repeat actions that elicit social responses from others • Participate in simple back and forth play and interaction with peers	**STANDARD STATEMENT** • Watch others play and imitate some of their actions • Demonstrate possessiveness of toys or materials • Play alongside another for brief periods • Share materials or take turns occasionally with adult support	**STANDARD STATEMENT** • Engage in play activities with others after watching • Participate in short group activities • Engage in play in a specific area after noticing a preferred peer is playing there • Acquire specific friendships but need adult support to sustain them • Begin to resolve conflicts with peers with adult guidance
EXEMPLARS (EXAMPLES) **The learner will:** • Look in the direction of a nearby child • Exchange looks with another child who is nearby • Wiggle or kick when she/he hears another child's voice • Touch another's eyes, mouth or hair • Laugh at the silly antics of an older child • Recognize and respond differently to older children	**EXEMPLARS (EXAMPLES)** **The learner will:** • Hold onto a book or crayon when another shows interest • Watch a child rocking a doll baby and attempt to do the same with a different doll baby or attempt to grab the other child's doll baby to rock • When asked by adult, occasionally share a toy	**EXEMPLARS (EXAMPLES)** **The learner will:** • Play alongside others in the block area, talking together but making separate buildings • Pick up a doll baby and cuddle after watching others play "house" • Watch a friend at the art easel, then request to paint • Need help when self and another both want the same toy • Participate in group singing activities or Hokey Pokey/circle game
SUPPORTIVE PRACTICES **The adult will:** • Place children nearby others so they can watch and interact • Engage the baby in activities where they observe, then repeat an action • Shake a rattle, then wait for the baby to shake a similar rattle	**SUPPORTIVE PRACTICES** **The adult will:** • Provide adult supervision in areas where more than one child is playing, describing their actions and engaging them in play • Provide multiple copies of the same book or doll for children to use • Play alongside toddlers demonstrating how to share or interact with others • Describe activities or occasions when sharing or turn taking is needed and model those actions	**SUPPORTIVE PRACTICES** **The adult will:** • Provide multiples of the same or similar toys or objects • Provide opportunities for children to play together or alongside each other • Suggest that pairs or triplets of children read together or use play dough together • Give children the words they need to resolve conflicts related to sharing or waiting one's turn • Understand children's temperament and give slow-to-warm children time to watch before play • Engage child in conversations about preferences and abilities by asking who or what questions, such as "which one do you like better?" or "how far do you think you can throw that ball?" • Provide opportunities for child to pursue hi/sher preferred activities

CONTINUED...

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS continued

25.4.2 RESPECT AND EMPATHY

STANDARD STATEMENT • Observe others who are expressing a need or discomfort	**STANDARD STATEMENT** • Attempt to soothe another who is distressed • Engage in empathy and compassion in some situations • Demonstrate fairness when interacting with others interlaced	**STANDARD STATEMENT** • Recognize and name others' feelings • Demonstrate compassion for others with adult support • Begin to respond to others' preferences with adult help
EXEMPLARS (EXAMPLES) **The learner will:** • Touch or pat another child • Begin to cry or show distress when another child is crying	**EXEMPLARS (EXAMPLES)** **The learner will:** • Pat another child on the back who and say, "it's okay" • Grab a toy from another and then hand it back when it causes distress • Hand another child a toy when she/he notices him/her looking at it • Hug a child • Tell or indicate to a teacher that another child appears to be distressed • Attempt to comfort another child or adult • Push in front of another child to take a turn, then comfort him/her while waiting	**EXEMPLARS (EXAMPLES)** **The learner will:** • Thank a peer who has helped them reach a toy from a high shelf • Help a child put all the pegs back in the basket • Begin to play with different children when asked by an adult • Respond to requests from adults • Show concern when a friend falls off a tricycle • Hold hands with the child next to her during circle time • Hug or put arm around another child while reading together in the library • Hand a friend her favorite blanket while preparing for nap
SUPPORTIVE PRACTICES **The adult will:** • Describe other child's discomfort and assure that it will be okay • Encourage gentle touches and model them 	**SUPPORTIVE PRACTICES** **The adult will:** • Encourage children to comfort another child • Model different techniques to give comfort and support, labeling your actions while you do them • Praise children's attempts to help others • Label others' feelings • Read books that model compassion and empathy	**SUPPORTIVE PRACTICES** **The adult will:** • Label others' feelings when mediating arguments or conflicts • Model compassion when a child shows distress, "I am so sorry your toy broke" • Praise children's attempts to help others • Encourage children to ask others for help, "Ask Susie if she can reach that for you" • Provide opportunities for children to talk and play together • Read books that model compassion and empathy

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CASEL: Collaborative for Academic, Social and Emotional Learning: www.casel.org

James Comer School Development Program www.schooldevelopmentprogram.org/

Rutgers University Social Emotional Learning Law www.rci.rutgers.edu/~melias/

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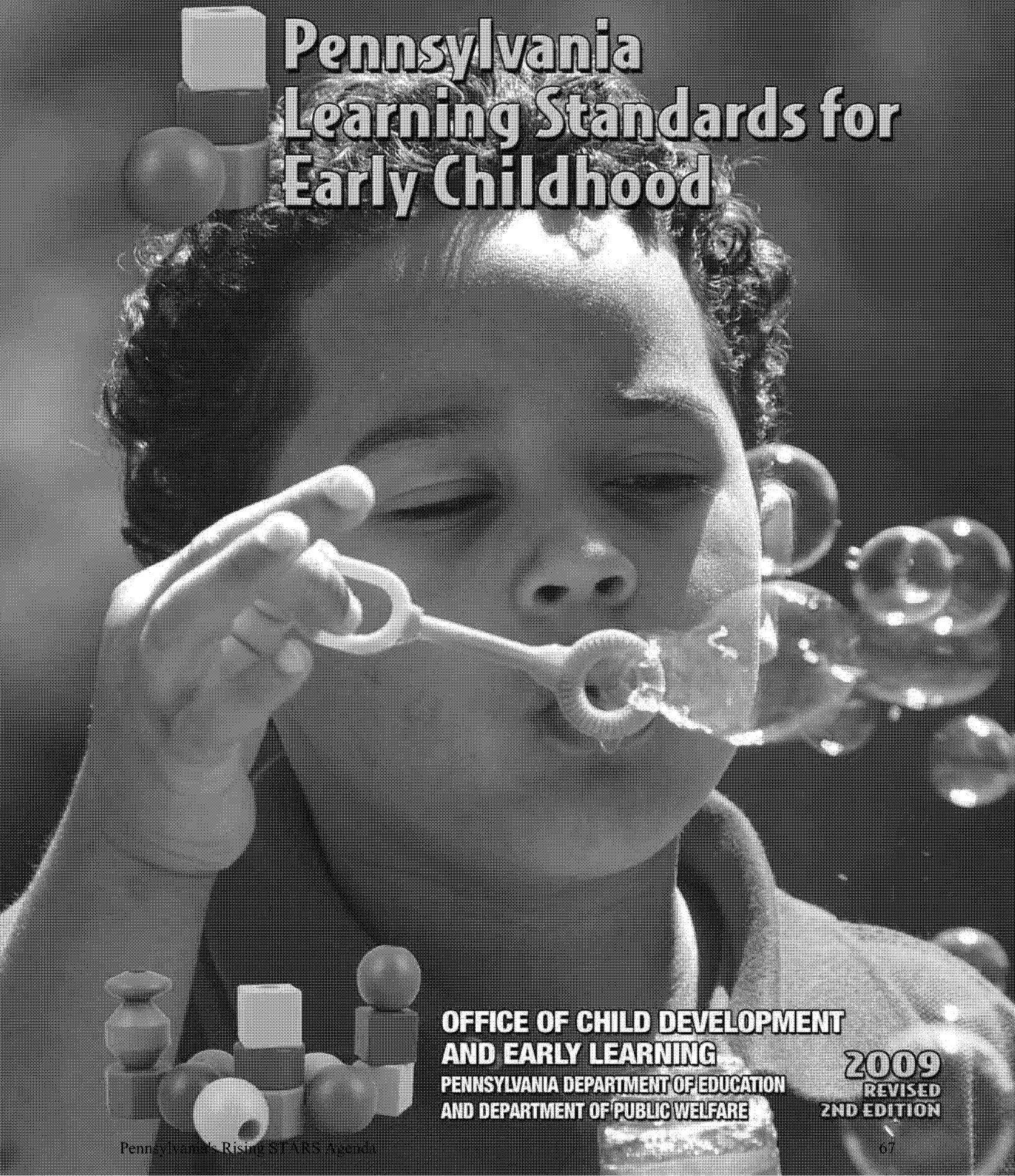

Pennsylvania Learning Standards for Early Childhood

OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

PENNSYLVANIA DEPARTMENT OF EDUCATION AND DEPARTMENT OF PUBLIC WELFARE

2009 REVISED 2ND EDITION

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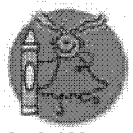

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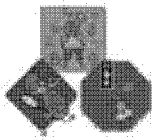

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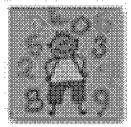

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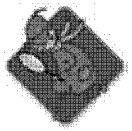

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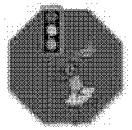

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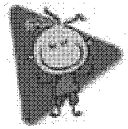

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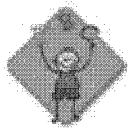

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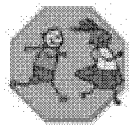

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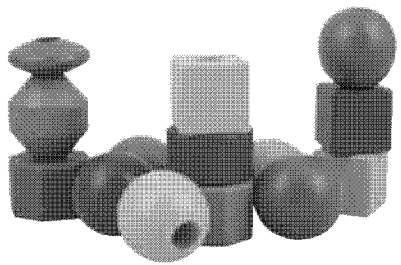


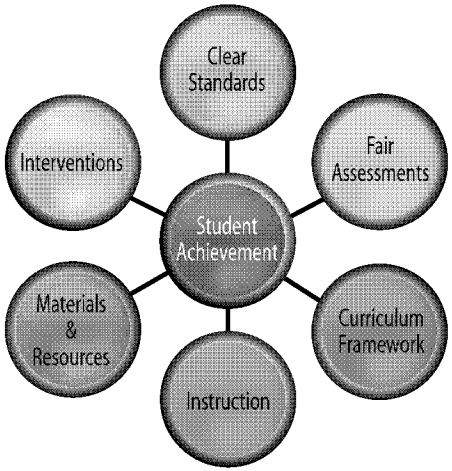
INTRODUCTION

Children are born with an incredible capacity and desire to learn. Over 30 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential, then, that students' first school experiences are robust ones, steeped in expectations that develop critical thinking and problem solving skills, a deep understanding about themselves in a social society and age appropriate content.

Teachers' instructional practices must embed the domains of development: cognitive, social-emotional, language, and physical within the foundations or approaches to learning that enable children to explore, understand and reach beyond the "here and now" to challenge themselves and to experiment and transform information into meaningful content and skills.

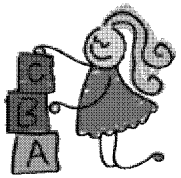
Teachers of very young children have the awesome task of providing rich information and experiences that build skills and understanding in the context of every day routines *and* within intentionally-designed play opportunities that capture children's interests, wonder and curiosity so they want to know more. Pennsylvania's learning standards join hand-in-hand with the learning environment; the responsive relationships that have been built with children, families and the community; the age, cultural and linguistically-appropriate curriculum; and the practices being used to assess children, classrooms and programs to create the best possible experiences for learning success.

The Department of Education and the Office of Child Development and Early Learning utilize a Standards Aligned System (SAS) that links the elements of instruction, materials and resources, curriculum framework, fair assessment and interventions, and learning standards to children's engagement in learning and their school success.



1. MATERIALS AND RESOURCES

Every early learning classroom, whether it is in a home atmosphere or center-based setting, must be a comfortable, safe and nurturing environment where children can play with blocks, manipulatives, art materials, and dramatic play items to enhance skill development. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by teachers who intentionally design activities that engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others and how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.



School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed classrooms demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive and language learning.

Classroom assessment instruments that help providers assess the arrangement of indoor and outdoor space, the provision of materials and activities, and their development of class schedules are useful in assuring best practice implementation and alignment to Pennsylvania's Learning Standards for early childhood.

2. INSTRUCTION

Instruction in the early years often looks different than in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery and in experimentation and interaction with materials, their peers and nurturing adults.

Teachers help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. A limited amount of direct teaching combined with child-initiated play produce optimal conditions for young children's education. Teachers become facilitators or guides of learning who interact with children throughout the school day. They ask open-ended questions that encourage children to think about what comes next or want to know more and they support children's creativity, problem solving, intuition and inventiveness (approaches to learning) by challenging and encouraging them. Teachers design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities and culture.

3. CURRICULUM FRAMEWORK

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, vocabulary, concepts and competencies that further define the learning standards.

4. FAIR ASSESSMENTS

Teachers must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing in the classroom allow teachers to make adaptations or adjustments in the individualized learning plans for every child.

Early childhood professionals observe and assess children in their classroom setting using the materials that are found in their school environment. Blocks that children count or stack, for example, provide the information teachers need to understand children's math or fine motor skills. Outdoor play or recess allows the adult to observe children's gross motor skills or the social interactions with peers.

Teachers must use the information they have documented during observation, along with information from the parent, to identify goals and next steps for children's learning through play.

5. CLEAR STANDARDS

Learning Standards provide the framework for learning. They provide the foundational information for what children should know and be able to do. Pennsylvania's learning standards build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, gradually getting more difficult as it extends through high school.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Keystone STARS, PA Pre-K Counts, ABG, HSSAP all use similar sets of standards that provide guidance on program operation that exhibits best
practices.

6. INTERVENTIONS

When teachers are observant and assess children's abilities, interests and achievement using the standards as a guide, interventions become part of the teachers' everyday practice. Revising activities, adjusting lesson plans and accommodating children's individual differences becomes matter-of-fact and the norm. Successful strategies that allow children to master skills at his or hew own pace provide benefits for all children as they interact with others of varying abilities and cultures.

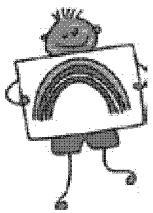
Early Childhood Special Education

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experiences alongside their typically developing peers. Teachers may need to adapt or modify the classroom environment, teacher interactions and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards does not need to be specific to an age, grade or specific functional level, but instead provide the breadth of information from which to create goals and experiences for children that will help them reach their highest potential while capturing their interests and building on what they already know. Teachers must emphasize and celebrate all children's accomplishments and focus on what all children can do.

English Language Learners

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. The skills needed for young English language learners to become proficient in English are fully embedded in the Pennsylvania's Standards for Early Childhood.



EARLY CHILDHOOD CONNECTIONS

High quality early learning programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early learning programs, school districts and grades within districts create strong partnerships for success.

1. CONNECTIONS TO CHILDREN

Relationships are the key to successful connections between a teacher and the students. Teachers must take time to know every child, to understand the way in which they learn best, to identify the special talents and skills each child possesses and the interests that excite them to learn more. Adults who work with young children must be students themselves as they learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning and experiences into new achievements and acquisition of knowledge.

2. CONNECTIONS TO FAMILIES

Parents of young children have much to offer in the learning process. When a partnership is formed between teacher (or school) and the family, the connection between home and school has been strengthened, assuring that children receive consistent messages about learning and skill development. Parents should be given opportunities to learn about their children's day at school, to provide input into the information they want children to learn and master, and to understand what they can do at home to enhance the school experience. Frequent informal conversations, invitations to participate in classroom life and voluntary take-home activities that relate to school experiences help to build the partnership.

At-home resources for parents such as *Kindergarten, Here I Come, Kindergarten, Here I Am* or *Learning is Everywhere* provide both teachers and families with tools to connect at home and school learning and to share age appropriate expectations and activities that support that connection.

Families' ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Staff must embrace all children's heritages and provide activities, materials and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others'. Staff in high quality early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

3. CONNECTIONS WITH OTHER EARLY LEARNING PROGRAMS

Children and families often have other needs and priorities in addition to participation in high quality early childhood learning programs. Families may need to coordinate their early learning program services with child care, health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their early intervention provider assure linkages that support children's school readiness and ongoing success.

4. CONNECTIONS FOR LEARNING

Young children make learning connections through play. Providers that allow children time to explore and discover, both inside and outside, have optimized children's capacity to internalize and generalize content by making their own connections to prior-learned knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play.

Adults must also use literature connections in all domains. Literature supports both content and social and cultural learning. It is a foundation for curriculum integration.

CONTINUED...

LEARNING STANDARDS TASK FORCE

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Public Welfare as part of Governor Rendell's commitment to early childhood education. The Office of Child Development and Early Learning, established in 2006 to administer both Departments' early childhood programs, has overseen revisions to the standards.

Each set of Standards has been formulated with help and guidance from practitioners who represent early childhood programs and advocacy groups, higher education, and policy analysts and researchers. Support for the development of the Standards was provided through the national Build Initiative, a multi-state partnership that helps states construct a coordinated system of programs and policies that respond to the needs of all young children.

THE LEARNING STANDARDS CONTINUUM

Within all of Pennsylvania's Early Childhood Standards, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social-emotional development, language and literacy development, physical or motor development, creative expression and the cognitive areas of mathematics, science and social studies. The Standards within each Key Learning Area provide the information that children should be able to know and/or do when they leave the age level or grade. The Standards are also organized by Standard Statements that specify specific skills. New, in 2009, strands further define the standards by organizing the information into focus areas. The strands become the connections to the Academic Standards for grades 3-12. They, too, use these strands to organize the content that all children in Pennsylvania should be able to know and do.

PENNSYLVANIA'S EARLY CHILDHOOD CONTINUUM OF STANDARDS

Infant-toddler, Pre-kindergarten and Kindergarten standards are connected through the Continuum of Learning and further linked to the 3rd grade academic standards. Using the strands as the organizer, professionals are able to look across ages and grades to understand how children's development emerges. Some skills will not emerge in a noticeable way until a child is older. These standards statements will be identified on the continuum as "emerging". For example, concepts about money are not ones that infant teachers need to develop. They show in the social studies standards for infants as "emerging". Strands that are missing numerically are skills that do not need attention during the Early Childhood Education years.

Teachers who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.

LEARNING STANDARDS FOR EARLY CHILDHOOD DO:

- Inform teachers and administrators about curriculum and assessment and guide the selection of program materials and the design of instruction
- Inform parents of age-appropriate expectations for children
- Provide a common framework for community-based work on curriculum and transitions

THE LEARNING STANDARDS FOR EARLY CHILDHOOD ARE NOT USED:

- As a specific curriculum or to mandate specific teaching practices and materials
- To prohibit children from moving from one grade or age level to another
- To assess the competence of children or teachers

AGE GROUPINGS IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

INFANT-TODDLER LEARNING STANDARDS

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months – 27 months) and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 – 27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an infant-toddler continuum with the content within one strand presented together on one page. Practitioners can look across each age level to determine the skills that best match their children's current development, identifying additional standard statements, examples and supportive practices to scaffold children's learning.

When strands include "Emerging" under infant or young toddler, these concepts are beginning to emerge but are expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

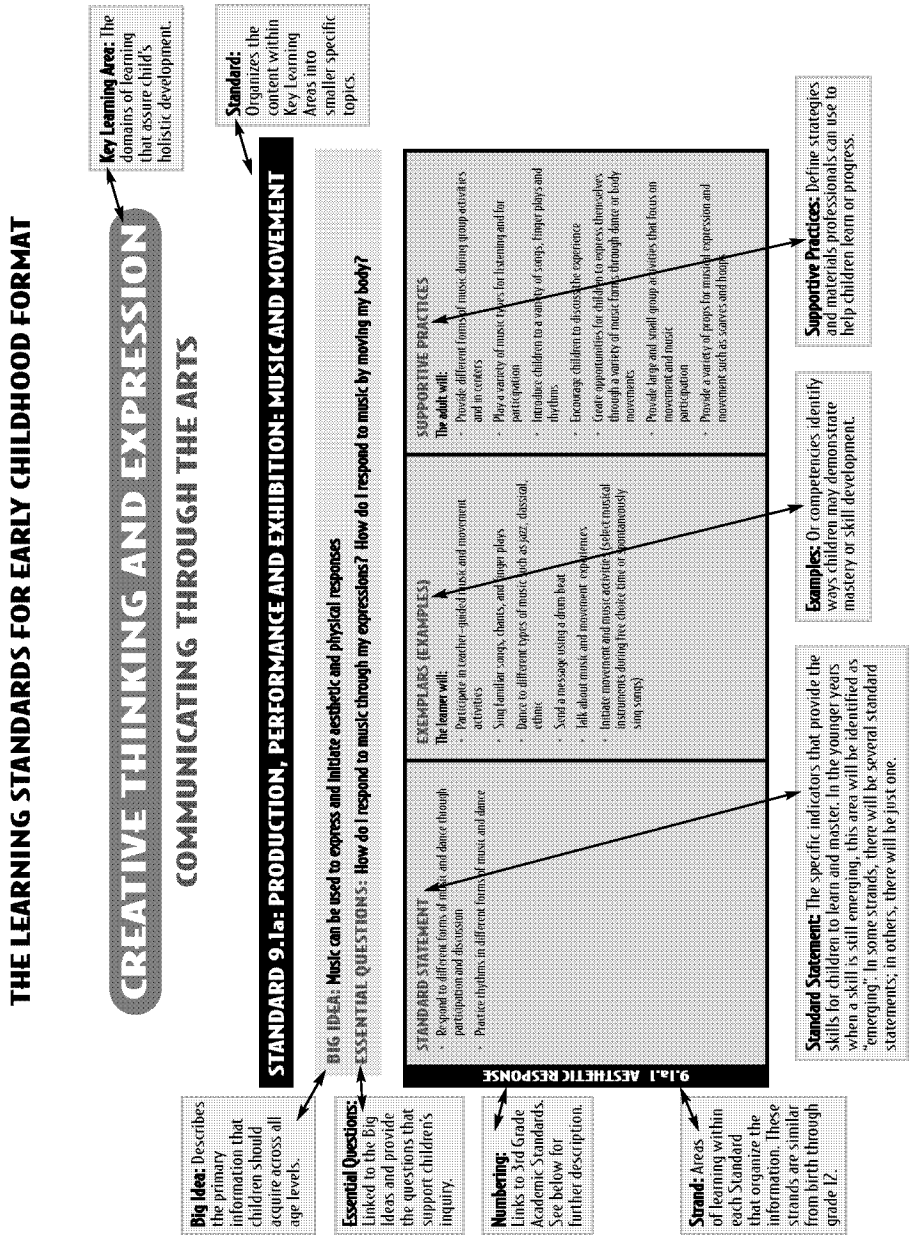
LEARNING STANDARDS FOR PRE-KINDERGARTEN

Teachers will find the skills that pre-kindergarteners (ages three and four) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency in many of them. Classroom environments, materials and activities that are developed for this age will be appropriate for both three and four year olds; expectations for mastery will be different.

LEARNING STANDARDS FOR KINDERGARTEN

Students who complete kindergarten should demonstrate mastery of many of the skills within the Kindergarten Standards. This document is designed for full day kindergarten classrooms. Half day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-directed instruction should be predominant with language and literacy and math infused through the day in addition to their special focus learning times. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills and their creative expression within the course of a kindergarten day.

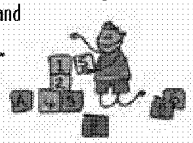


GUIDING PRINCIPLES

High quality early childhood programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills, and concepts children need to make progress socially and academically. High quality early childhood programs maintain high developmentally achievable expectations for all children using clear performance standards with a continuous cycle of assessment understood and used by staff, children, and parents.

1. High quality early childhood education and care programs have a significant impact on children's future successes.

2. All children can learn and deserve high expectations that are age, individually, and culturally appropriate.**



3. Young children learn best when they are able to construct knowledge through meaningful play, active exploration of the environment and thoughtfully planned activities.

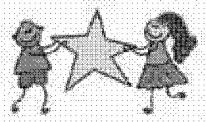
4. The learning environment for young children should stimulate and engage their curiosity of the world around them, and meet their physical needs and emotional needs so that children feel safe and secure.

5. Language and early literacy development must be supported and integrated throughout all aspects of early childhood care and education programs.

6. Children's learning, development and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development, and are intentional in their relationships and work with children and families.

7. Early childhood care and education programs must address the individual needs of a diverse population of children, e.g., children with special needs, children from diverse cultural backgrounds, children from all social-economic groups.

8. Early childhood care and education programs are defined by a set of comprehensive standards that maximize a child's growth and development across domains.



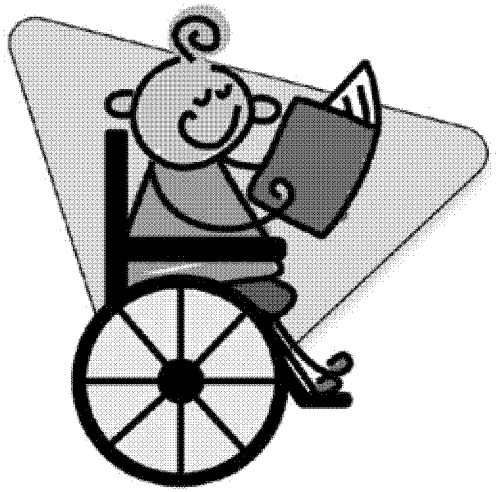
9. There must be a system of research based assessment that documents children's growth and development in relationship to a defined set of standards, and is used to inform instruction.

10. Children's learning is enhanced when families, schools, and communities work together.

**Footnote: Young children with disabilities will meet standards consistent with their individualized education programs (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Education Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990).

APPROACHES TO LEARNING THROUGH PLAY

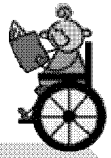
CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE



Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help students feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment, and enhancing their curiosity and knowledge about the world in which they live.

FAMILY RELATIONSHIPS

There is no greater gift for children's successful endeavors in school then for schools to create a strong relationship between home and school. The connections that teachers and schools form with parents and guardians, especially in the early childhood years, provide the link for learning and assures that children, teachers and families work together to support children's growth and development and skill mastery. Families can be invited to participate in many ways – volunteerism, donations of time, resources and materials, shared decision-making about children's educational goals, support and referrals – but the key is a reciprocal relationship that invites parent input about a child's school performance and information about the values and home culture, while sharing details of the child's school routine and perceived successes and challenges in the classroom. Parents who perceive themselves as an integral member of the learning team are more likely to provide ongoing support and encouragement for children's learning that will carry them through high school.



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15.2 Organizing and Understanding Knowledge	9
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15.4 Learning Through Experience	11

APPROACHES TO LEARNING THROUGH PLAY: CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

STANDARD 15.1: CONSTRUCTING AND GATHERING KNOWLEDGE

BIG IDEA: Children actively construct knowledge through routines, play, practice and language. They observe others and their environment, use their senses to manipulate objects and materials and develop their own individualized approach to learning.

ESSENTIAL QUESTIONS: How do I find out about things? What information do I need to learn new things? What do I learn when I am playing?

15.1.1 CURIOSITY AND INITIATIVE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Show interest in a growing range of topics, ideas and tasks • Utilize all available senses to explore and learn from the environment • Ask questions for clarification and to seek meaningful information • Show interest and interact with others about their work or actions	**The learner will:** • Show an interest in the outcome of stories and guess what might happen next • Demonstrate interest in new materials that are introduced into the classroom • Ask questions to understand something, such as, "How does that work?" • Look at another's painting or drawing and ask, "What's that?" • Watch others play and ask to join in	**The adult will:** • Introduce a book by asking, "What do you think this book might be about?" • Ask children to guess what might be inside a box or bag as a way to introduce a topic or idea • Provide real objects that can be manipulated or explored to understand a concept, such as lining children up from short to tall to understand sequencing • Respond to children's questions with explanations that help them to understand • Encourage children to research answers to questions through books, such as "Let's find a book about dogs to see why their noses are cold." • Regularly rotate classroom materials and formally introduce new objects and activities into the classroom by showing excitement, "Look what I brought for us to do today!"

15.1.2 RISK TAKING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate an increased willingness to participate in both familiar and new experiences • Differentiate between appropriate and inappropriate methods for learning information 	**The learner will:** • Participate in a new song or circle time activity • Try to walk across a balance beam after an adult explains the proper technique • Try a new type of playdoh that has been introduced • Understand that jumping from a high wall is a dangerous way to discover its height • Explain that pulling off a doll's arm is an inappropriate strategy for learning how it is put together	**The adult will:** • Introduce new materials and activities by explaining what they are and providing instructions on their use • Rotate materials in the classroom, pairing new and familiar things for children's comfort • Demonstrate enthusiasm when introducing new materials • Allow children time to warm up to new ideas or activities without expecting them to fully participate right away • Describe appropriate strategies for children's participation or exploration of materials • Engage children in "what if" scenarios to discuss potentially dangerous or inappropriate responses and situations

CONTINUED...

APPROACHES TO LEARNING THROUGH PLAY: CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

STANDARD 15.1: CONSTRUCTING AND GATHERING KNOWLEDGE continued

15.1.3 STAGES OF PLAY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Engage in simple games with rules • Use materials and objects to represent other objects • Engage in complex play sequences that may be continued over several days	**The learner will:** • Play Lotto or Candyland with teacher support • Use a stick to represent a magic wand • Build a road with blocks and run cars across it saying it's a speedway • Join others in play such as acting out a doctor's office scenario using dolls as sick children over several days	**The adult will:** • Engage children in simple game play with their peers by introducing and participating with them in games such as lotto or dominoes • Describe objects and their pretend uses, such as "that looks just like a magic wand!" • Rotate props and materials in the dramatic play area to encourage children to engage in play scenarios with others • Provide opportunities for children to create objects that represent other things such as providing playdoh to make "snow balls" • When appropriate allow structures or scenario props to stay in location for several days without clean-up

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION

BIG IDEA: Children learn to organize complex information and thoughts into small steps and goals. They develop plans for completing tasks by establishing goals and carrying out plans to meet those goals.

ESSENTIAL QUESTIONS: How do I understand the steps of a task? How do I decide how to approach a task?

15.2.1 ENGAGEMENT, ATTENTION AND PERSISTENCE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Attend and follow through on adults' one or two step directions • Initiate and extend activities • Complete short tasks, activities, projects and experiences from beginning to end independently • Work towards completing task despite interruptions or classroom disruptions	**The learner will:** • Listen to instructions and perform two step tasks such as "Go to your cubby and get your coat" • Begin an activity and invite peers to join or offer suggestions for the direction of an activity • Attend by watching and listening to an adult's direction on how to approach a task and follow through, such as "Hold the paper this way and then rip at the top." • Put together a 9-12 piece puzzle independently • Follow an adult's suggestion for completing a task or solving a problem, such as "Hold the bottom of the cup when you pour"	**The adult will:** • Give clear and simple directions or explanations • Allow time for children to follow simple directions to complete a task • Save children's work for later completion if transition to a new activity is necessary • Show flexibility during transitions to allow children who are working on an project time to complete it • Offer help to children who are demonstrating difficulty completing a task or activity • Praise children's efforts to complete a project • Minimize interruptions and disruptions for children who are concentrating on a specific task or activity

15.2.2 TASK ANALYSIS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Test objects to determine their purpose • Explain a routine sequence to another • Break simple tasks into steps and complete them one at a time	**The learner will:** • Use trial and error to find the puzzle piece that fits or the shape that fits into the shape sorter • Identify the sequence of events in a story • Explain to a new student what happens next during the day • Explain what needs to happen first in order to complete a specific task or activity	**The adult will:** • Provide multiple types of materials that can be used to explore and experiment • Ask students to guess what a specific object may be used for • Ask what might happen next in a story or ask children to review the sequence of a story's events • Review steps of a task with children prior to asking them to complete the task and provide reminders throughout the process

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION cont.

15.2.4 REASONING AND PROBLEM SOLVING

STANDARD STATEMENT

- Try different ways to complete a task
- Attempt to accomplish a difficult task on own

EXEMPLARS (EXAMPLES)

The learner will:

- Try new ways to accomplish a familiar task
- Use familiar materials to create something new such as using playdoh to make a road for small cars or fold paper to make a book
- Attempt to complete a task in more than one way before asking for help

SUPPORTIVE PRACTICES

The adult will:

- Encourage children to try alternative uses for materials, "I wonder if we could use this box to catch the worm."
- Encourage children to develop alternative solutions to accomplish a task "Did anyone try to do this a different way?"
- Display a variety of materials and ask learners to complete a task, allowing them to choose the material that best suits the activity
- Ask questions that require thought and creative thinking, "How can we move this heavy box onto the floor?"

STANDARD 15.3: APPLYING KNOWLEDGE

BIG IDEA: Children extend their understanding when they think creatively about new ideas in the context of past experiences and knowledge.
ESSENTIAL QUESTIONS: How do I relate new information to things I already know? How do I use what I already know to learn new things? How do I finish a task?

15.3.1 CREATIVITY, FLEXIBILITY AND INVENTION

STANDARD STATEMENT

- Use both observation and imitation to understand information
- Use music, art and stories to express ideas and feeling
- Use materials in unique ways to represent other things
- Try several ways to complete a task
- Produce and explain the purpose for a new creation

EXEMPLARS (EXAMPLES)

The learner will:

- Experiment with ways to put blocks together to keep them from falling
- Imitate teacher's expressions or intonations during a song, story or finger play
- Act out different roles or characters from a story
- Gallop like horses or slither like snakes to music that suggests these actions
- Use a tool to achieve a purpose similar to one already accomplished, such as using the scale to "measure" teddy bears because it was used last week to "measure" acorns
- Use a proven strategy to accomplish a new task, such as using a pencil sharper to sharpen a point onto a crayon
- Combine legos, unit blocks and wood signs to make a neighborhood with roads, houses and people
- Roll paper into a tube to act as a megaphone, explaining "I am making my voice louder."
- Try a new role in the dramatic play area that is suggested by another child
- With teacher guidance, provide ideas for re-writing familiar stories such as the Three Billy Goats Gruff into the Three Blond Hair Kids

SUPPORTIVE PRACTICES

The adult will:

- Ask children to think about alternative ways to complete a project or task if the original strategy is not successful , such as "How else could we have built that tower so it wouldn't fall?"
- Use "I wonder" when talking with children giving them time to contemplate what might happen or offer an alternative idea such as "I wonder how I could get that to fit."
- Provide opportunities for children to use materials in non-traditional ways
- Ask children to describe their creations and tell you how they work or why they were made
- Ask children for input into needed changes in the daily schedule, such as, "The photographer is coming today at the time we usually play outside. Can you think of how we might still be able to go outside today?"

APPROACHES TO LEARNING THROUGH PLAY: CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

STANDARD 15.4: LEARNING THROUGH EXPERIENCE

BIG IDEA: Each child's biological make-up, family, history and learning style provide the important context in which learning is constructed.
ESSENTIAL QUESTIONS: How do my home experiences help me learn? How do I learn how to cope with difficult situations?

15.4.1 HOME-SCHOOL IDENTITY

STANDARD STATEMENT

- Demonstrate culture and home experiences during play
- Relate home or outside-learned knowledge to school experiences
- Understand that appropriate activities and events may differ from home to school

EXEMPLARS (EXAMPLES)

The learner will:

- Ask for additional help to master a skill or task that was begun at home such as buttoning a shirt
- Identify new skills or tasks that were learned or practiced at home such as "Mommy taught me how to tie my shoe."
- Explain that watching TV or walking around without shoes are home activities and that different rules apply at school
- Demonstrate a forward roll that was learned during a weekend gymnastics class
- Ask parents to continue school activities when they get home, such as "Can we read this book when we get home?"

SUPPORTIVE PRACTICES

The adult will:

- Provide families with regular updates about the events that are occurring in school including songs, stories, and special events
- Talk with families about what children are working on at home and incorporate those goals in the school day, such as helping a child who is learning to go to sleep on his/her own at home by helping him/her lay down for nap independently at school
- Ask children to describe the extra curricular activities they participate in and show what they are learning
- Provide "take home" activity kits that can travel back and forth to school and home
- Acknowledge and value differences in class and home structure, such as, "At school we leave our shoes on during the day – I know you like to go barefoot at home"

15.4.2 RESILIENCE

STANDARD STATEMENT

- Understand how behavior may impact others' response to action
- Understand who or where there is help when needed
- Attempt problem solving activities to achieve a positive outcome

EXEMPLARS (EXAMPLES)

The learner will:

- Say "uh-oh" when doing something wrong
- Tell teacher when she/he is feeling scared or apprehensive about a particular task
- Accept teacher's or others' ideas about new strategies to complete a project when the original attempt does not work
- Identify activities to complete that are achievable, not too hard or too easy
- Try new activities or tasks that build on previously-learned skills
- Strive to correct his/her own mistakes
- Show interest in attempting new tasks

SUPPORTIVE PRACTICES

The adult will:

- Provide non-threatening guidance for improvement when children have failures
- Comfort children and provide encouragement during stressful times
- Provide strategies for children to control their own behavior or stress such as stopping and taking a breath before acting when angry
- Encourage children to be autonomous by offering situations and tasks that can be completed independently
- Make referrals to health care, social service and other agencies as appropriate
- Model appropriate responses to difficult or uncomfortable situations
- Encourage step by step problem solving and completion of a task to maximize perception of successful outcomes

CONTINUED...

STANDARD 15.4: LEARNING THROUGH EXPERIENCE continued

15.4.3 CULTURE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Show pride in belonging to a family unit • Show understanding that family structures may differ from one family to another • Explore unusual materials that represent other cultures • Demonstrate awareness of some physical differences among children	• Talk about a newborn brother and sister • Describe the adults and their roles in their home • Ask another child if she/he has a grandma that lives with him/her • Use multicultural crayons to depict skin coloring when making self-portrait and compare it to others' colors and portraits • Help the teacher learn useful classroom phrases from a home language • Show interest in adaptive devices, such as a wheelchair or feeding tube and how they help children • Offer support or help to a child with a disability	• Seek out information from families or community organizations to assure appropriate responses and practices that represent the cultures of children in the classroom and school • Learn words or phrases from children's home language to use during the school day • Label classroom materials and equipment as well as take-home materials in the home languages of the children in the classroom • Encourage family members to volunteer or share information, materials and activities that reflect home cultures • Use varied approaches or methods for instruction and learning to accommodate children's learning abilities and styles • Learn about families' expectations for children's school success and incorporate those goals into classroom activities and experiences • Incorporate ethnic foods, music, books and materials into classroom life • Use sensitivity in celebrating traditional holidays and incorporate other cultures' holidays into the curriculum • Provide opportunities for children to practice non-specific gender roles such as dads taking care of babies and moms acting in non-traditional female careers

APPROACHES TO LEARNING THROUGH PLAY GLOSSARY

Associative Play – A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction or a definite goal; children may imitate others in a group but each child acts independently

Attention – An ability to focus; take all stimuli in environment and focus the mind on one thing

Competence – The ability to perform a task, action, or function successfully

Cooperative Play – Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, arts, customs and behaviors

Curiosity – A desire to learn or know about something; an inquisitiveness

Engagement – Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work

Initiative – A readiness and ability to be eager to lead an action

Invention – An act of devising, creating or producing using imagination (art, music)

Parallel Play – A developmental stage of social development; an activity in which children play with toys like those the children around them are using, but child is absorbed in his/her own activity; usually play beside rather than with one another

Persistence – The steady continuance of an action in spite of obstacles or difficulties

Pretend Play – Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas

Resilience – The ability to cope with and bounce back from all types of challenges. A person thrives, matures and increases competence by drawing on biological, psychological and environmental resources

Solitary Play – A form of play among a group of children within the same room or area in which each child engages in an independent activity using toys that are different from the toys of others; shows no interest in joining in or interfering with the play of others

Task Analysis – A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success

Temperament – The combination of mental, physical, and emotional traits of a person; natural predisposition

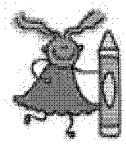
CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS

Creative thinking and expression is an important component of children's early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities and knowledge. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children's growing competence as creative problem solvers and provides insight about the world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

DIVERSITY AND CULTURE

Today's early childhood classrooms include an increasingly diverse group of children, families and teachers who represent many cultures, values and lifestyles. Providers have a unique opportunity to create welcoming environments that emphasize respect for diversity and support families' cultural and linguistic differences. Teachers must help assure the preservation of the child's home language while supporting their second language acquisition. Programs that create experiences and opportunities that honor all children's home cultures and values by developing creative strategies for including and expanding the home to school connection and provide children with varied ways to demonstrate their learning and understanding are assuring all children's success in school.



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CREATIVE THINKING AND EXPRESSION: COMMUNICATING THROUGH THE ARTS

STANDARD 9.1a: PRODUCTION AND PERFORMANCE: MUSIC AND MOVEMENT

BIG IDEA: Music can be used to express and initiate aesthetic and physical responses.
ESSENTIAL QUESTION: How can I express myself through music and movement activities?

9.1a.1 AESTHETIC RESPONSE

STANDARD STATEMENT
- Respond to different forms of music and dance through participation and discussion
- Practice rhythms in different forms of music and dance

EXEMPLARS (EXAMPLES)
The learner will:
- Participate in teacher-guided music and movement activities
- Sing familiar songs, chants, and finger plays
- Dance to different types of music such as jazz, classical, ethnic
- Send a message using a drum beat
- Talk about music and movement experiences
- Initiate movement and music activities (select musical instruments during free choice time or spontaneously sing songs)

SUPPORTIVE PRACTICES
The adult will:
- Provide different forms of music during group activities and in centers
- Play a variety of music types for listening and for participation
- Introduce children to a variety of songs, finger plays and rhythms
- Encourage children to discuss experiences
- Create opportunities for children to express themselves through a variety of music forms through dance or body movements
- Provide large and small group activities that focus on movement and music participation
- Provide a variety of props for musical expression and movement such as scarves and hoops

9.1a.2 EXPLORATION

STANDARD STATEMENT
- Use instruments to accompany music or songs

EXEMPLARS (EXAMPLES)
The learner will:
- Explore rhythm instruments from different cultures
- Use rhythm instruments as intended
- Select the music and movement area during free choice

SUPPORTIVE PRACTICES
The adult will:
- Provide experiences through large and small group activities that focus on movement elements and techniques
- Model appropriate use of instruments
- Call attention to the varying changes and styles in music as children are listening

9.1a.3 CREATION

STANDARD STATEMENT
- Use imagination and creativity or express self through music and dance
- Use body to represent form in space

EXEMPLARS (EXAMPLES)
The learner will:
- Improvise songs and rhythmic patterns
- Change words or tone of familiar songs to make new songs
- Use dance steps and styles to respond to music
- Represent finger plays or stories using body such as imitating a seed growing into a flower

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities through play for children to explore a variety of musical instruments throughout the day, both individually and in groups
- Encourage children to be creative during singing by changing words and song endings
- Use finger plays and stories that children can represent using their bodies

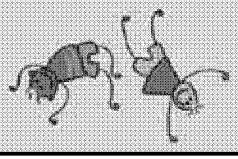
CREATIVE THINKING AND EXPRESSION: COMMUNICATING THROUGH THE ARTS

STANDARD 9.1b: PRODUCTION AND PERFORMANCE: DRAMATIC AND PERFORMANCE PLAY

BIG IDEA: Dramatic and performance play is a way to act out reality and fantasy and to solve problems.
ESSENTIAL QUESTIONS: How can I express myself through dramatic play? Can I participate in guided performances?

9.1b.1 DRAMATIC EXPRESSION

STANDARD STATEMENT
- Use nonconforming objects to create representations of real life objects or activities
- Represent fantasy and real-life experiences through pretend play
- Repeat similar play scenarios
- Use pretend play to represent known or anticipated situations



EXEMPLARS (EXAMPLES)
The learner will:
- Participate with other children in dramatic play situations (mother and baby, doctor and patient)
- Change play based on suggestions and questions by adults
- Imitate roles of people, animals or objects observed in the child's life experiences
- Use props or costumes during dramatic play
- Create props from available materials either realistic or symbolic (stick becomes a wand)

SUPPORTIVE PRACTICES
The adult will:
- Provide dramatic play opportunities both inside and outside
- Create situations where child can role-play familiar roles or situations (home living, grocery store, restaurants)
- Ask questions and make suggestions to children to extend their play in new directions
- Provide clothing, materials, and pros that facilitate make believe play
- Talk with children about real and pretend situations, helping them to understand the difference
- Encourage imagination by providing "pretend props"

9.1b.2 PERFORMANCE

STANDARD STATEMENT
- Create various voice inflections and facial expressions in play
- Recreate dramatic play experiences for an audience

EXEMPLARS (EXAMPLES)
The learner will:
- Change voice inflection when recreating various characters
- Direct peers or follow peers' instructions about dramatic play schemes
- Act out stories with the guidance of the adult

SUPPORTIVE PRACTICES
The adult will:
- Use various voice inflection and facial expressions during read-aloud
- Provide pops and costumes associated with favorite stories
- Participate in dramatic play events as the audience, providing praise and applause
- Develop teacher-guided dramatic activities such as acting out a story or performing a short play for a special event

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS

BIG IDEA: Visual arts allow individual expression of interests, abilities and knowledge.
ESSENTIAL QUESTION: How do I share ideas about personal artwork and the work of others?

9.1c.1 REPRESENTATION

STANDARD STATEMENT
- Represent experiences, thoughts and ideas through visual arts

EXEMPLARS (EXAMPLES)
The learner will:
- Use a growing number of details and make more realistic representations
- Choose different art materials to represent different types of thoughts or feelings

SUPPORTIVE PRACTICES
The adult will:
- Encourage children to use materials for individual expression of feelings or thoughts

CONTINUED...

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS continued

9.1.c.2 CONSTRUCTION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Combine a variety of materials to create new products	**The learner will:** • Use a variety of materials: chalk, paint, crayons, pencils, markers, wood, playdoh • Draw art work to explore and extend themes in the classroom • Use line, shape, form, color, texture, design and patterns • Draw a picture using different colors, varying the intensity of strokes and combining colors • Manipulate materials in a variety of ways: pounding, squeezing, cutting , rolling • Use art materials to create art without a model • Choose to work with art materials during free choice time	**The adult will:** • Provide opportunities for children to use 3-dimensional materials such as clay, playdoh or wood • Allow for individual or group projects to extend over several days • Relate art activities to other classroom experiences • Provide children with opportunities to explore a variety of art materials and tools in their own way • Make art materials accessible to children throughout the day for play experiences

9.1.c.3 PERSONAL CONNECTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Share how artwork is connected to own personal experience	**The learner will:** • Talk about the meaning and answer questions about works of art • Draw/paint a picture of a pet or family member	**The adult will:** • Encourage children to talk about their artwork • Display children's art throughout the classroom and building and encourage displays at home

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXT OF WORKS IN THE ARTS

BIG IDEA: Every culture has its own art forms.
ESSENTIAL QUESTION: Can I identify cultures based on art forms?

9.2.1 PATTERNS AND THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify cultures represented by various art forms	**The learner will:** • Explain that instruments or art forms represent a culture • Identify the culture of an art form	**The adult will:** • Display many types of art work • Show a variety of music and movement forms • Play many types of music • Discuss the cultures represented by art forms and instruments such as hiero-glyphics (Egyptian), maracas (Spanish)

STANDARD 9.3: CRITICAL RESPONSE TO WORKS OF ART

BIG IDEA: People use characteristics of art to make choices about the types they prefer.
ESSENTIAL QUESTIONS: Can I explain why I like or do not like an art form? Can I describe or name an art form?

9.3.1 CRITICAL RESPONSE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Share an opinion about others' art products	**The learner will:** • Observe, applaud or comment on the works of others • Share an opinion about art work when asked, "What do you think this is about?"	**The adult will:** • Provide opportunities for children to work on creative activities in groups or individually • Model and encourage children to positively comment on others' work

9.3.2 IDENTIFICATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Recognize and name a variety of art forms	**The learner will:** • Identify a photo, painting, drawing, dance, and songs	**The adult will:** • Display children's professional art throughout the classroom at the child's eye level • Discuss the various types and characteristics of photography, painting, dance, performance

STANDARD 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS

BIG IDEA: Artists create works as a form of self-expression and to share thoughts and ideas.
ESSENTIAL QUESTIONS: Can I show that I like an art form through my emotions and language?

9.4.1 EMOTIONAL RESPONSE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate emotional response to viewing or creating various art works	**The learner will:** • Respond through body language, facial expression or oral language • Respond through humming, swaying, tapping foot to others' work • Respond at appropriate times (laugh, sigh) at others' performance	**The adult will:** • Ask children how the artwork makes them feel • Display children's and professional art throughout the classroom • Provide a wide variety of art materials for children's use throughout the day • Ask children how the music or movement makes them feel • Provide a wide variety of music and movement materials for children's use throughout the day • Ask children how the dramatic or performance play makes them feel • Provide a wide variety of dramatic and performance play materials for children's use throughout the day

CONTINUED...

STANDARD 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS continued

9.3.2 IDENTIFICATION	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	• Recognize and name a variety of art forms	**The learner will:** • Identify a photo, painting, drawing, dance, and songs	**The adult will:** • Display children's and professional art throughout the classroom at the children eye level • Discuss the various types and characteristics of photography, painting, dance, performance

CREATIVE THINKING AND EXPRESSION GLOSSARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce

Aesthetic Response – A philosophical reply to works in the arts

Artistic Choices – Selections made by artists in order to convey meaning

Arts Resource – An outside community asset (e.g., performances, exhibitions, performers, artists)

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form

Community – A group of people who share a common social, historical, regional or cultural heritage

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, customs, arts and behaviors

Elements – Core components that support the principles of the arts

Genre – A type or category (e.g., music - opera, oratorio; theater - tragedy, comedy; dance - modern, ballet; visual arts- pastoral, scenes of everyday life)

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment

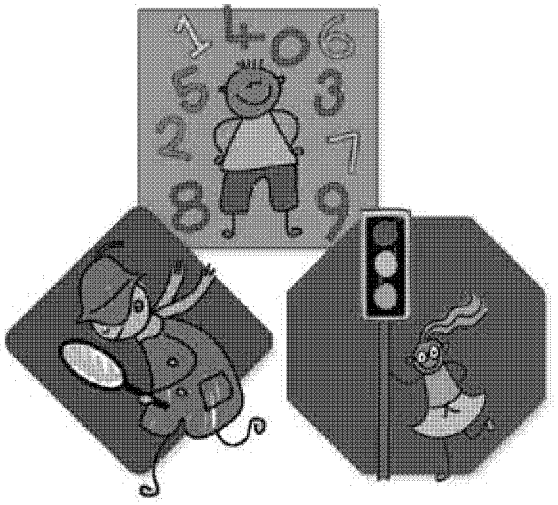
Multimedia – The combined use of media, such as movies, cd-roms, television, radio, print and the internet for entertainment and publicity

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists.

Style – A distinctive or characteristic manner of expression

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts

Timbre – A unique quality of sound



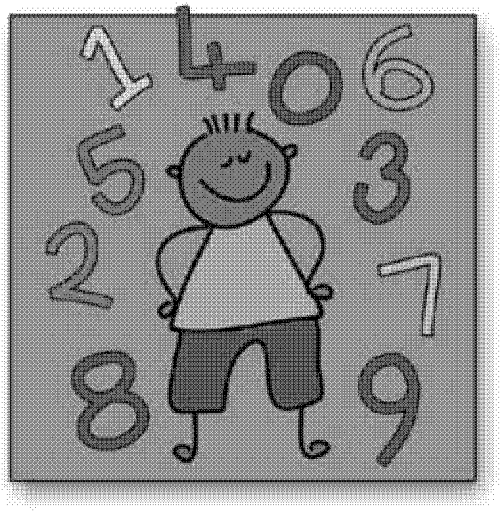
Learning and development is typically divided into learning domains: Physical, Intellectual or Cognitive, Social-Emotional, and Language and Literacy. Cognitive learning refers to the brain's functions that develop thinking, learning, awareness, judgment and information processing. In early childhood, Pennsylvania's Cognitive Domain includes the standards for the Key Learning Areas of Mathematics, Science and Social Studies. While each Key Learning Area contains content-specific information, children learn this information best when activities and materials are integrated together. A science experience that uses graphing (math) and cooperative small group work (social studies) combines thinking and processing to enhance and expand problem solving and critical thinking. Units of study that incorporate all the domains of learning into connected activities and projects scaffold learning and build new understandings and connections.

COGNITIVE THINKING & GENERAL KNOWLEDGE

- MATHEMATICAL THINKING AND EXPRESSION: EXPLORING, PROCESSING AND PROBLEM SOLVING
- SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY
- SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

MATHEMATICAL THINKING AND EXPRESSION

EXPLORING, PROCESSING AND PROBLEM SOLVING



Mathematical learning in the early years relies on children's opportunities to describe and explore the relationship of objects and materials. Children's knowledge and understanding of mathematics is built through active manipulation where children use their senses to build concept knowledge in the areas of numbers and operations, patterns, algebra, geometry, measurement, and comparison. When children truly understand the fundamentals and have mastered the basic mathematical skills they will have the capacity and confidence to excel at learning more advanced mathematics. Teachers facilitate mathematical learning when they encourage children to problem solve, reason, communicate, connect and represent. When engaged in manipulative mathematical activities, children better understand the world around them, begin to use number concepts to communicate their own thoughts and ideas which means they are beginning to think and reason.

USE OF MANIPULATIVES IN EARLY LEARNING SETTINGS

Small toys or objects may be one of the most important teaching tools for early childhood classrooms. Teddy bear counters, pegs or small blocks support children's learning in math and science as a means of learning complex concepts. As children combine, sort, count or describe the characteristics of these small objects, they are using active, hands-on strategies for problem solving, exploration and experimentation and scaffolding previous knowledge and interactions to learn new information. In addition, children are learning motor control, patterns and concrete ways to understand abstract ideas. All classrooms should provide ample opportunities for children's independent access to manipulatives throughout the daily routine.

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STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

BIG IDEA: Mathematic knowledge is built through active manipulation in the areas of numbers and operations by organizing, representing and comparing numbers.

ESSENTIAL QUESTIONS: Why do I need to be able to count objects? How do I use numbers every day? How can I record what I count?

2.1.1 COUNT AND COMPARE NUMBERS

STANDARD STATEMENT
- Use counting and numbers as part of play and as a means for determining quantity
- Rote count to 20
- Count up to 10 objects using one to one correspondence
- Name numerals to 10
- Use vocabulary to compare numbers of objects with teacher support

EXEMPLARS (EXAMPLES)
The learner will:
- Use fingers to represent numbers when counting
- Count blocks in a structure made in the block area
- Practice rote counting to 20
- Count and match up to 10 demonstrating one to one correspondence (napkins to child; papers to child; snack to child)
- Provide a name for some numerals when shown
- Use math vocabulary with teacher support
- Compare number of objects in sets
- Create sets of objects with same and different amounts
- Apply numbers and counting to daily routine (count number holding up hands, children in attendance)

SUPPORTIVE PRACTICES
The adult will:
- Teach children counting songs, rhymes and chants
- Provide books about numbers and counting
- Provide manipulatives, such as counting bears, magnetic numbers, lacing numbers
- Model strategies to help children keep track of what they are counting
- Provide daily opportunities for children to count and recount objects
- Engage children in counting in daily routines

2.1.2 REPRESENT NUMBERS IN EQUIVALENT FORMS

STANDARD STATEMENT
- Understand number concepts, vocabulary, quantities and written numerals in meaningful ways
- Differentiate numerals from letters

EXEMPLARS (EXAMPLES)
The learner will:
- Represent quantity using invented forms (tally marks to represent number of objects)
- Match numerals to sets of objects with same number
- Choose numeral from choice of numerals and letters (set of 3 numbers and one letter)

SUPPORTIVE PRACTICES
The adult will:
- Use number words and numerals including zero, in everyday situations
- Play numeration games
- Read books, poems, chants with numbers and number concepts
- Provide opportunities for writing numerals and representing numbers
- Provide opportunities in learning centers for discriminating letters from numerals
- Ask children to pass out utensils, napkins, cups at snack time to reinforce one to one correspondence

2.1.3 CONCEPTS OF NUMBERS AND RELATIONSHIPS

STANDARD STATEMENT
- Practice combining, separating and naming quantities
- Match a numeral to a set 0 to 5
- Use ordinal number words to describe the position of objects (first, second, last)

EXEMPLARS (EXAMPLES)
The learner will:
- Use concrete objects to represent quantities up to and including 5
- Represent equivalent forms of the same number using concrete objects and drawings up to and including 5
- Group objects into equal groups
- Group objects and count the number of groups

SUPPORTIVE PRACTICES
The adult will:
- Provide experiences with numbers through daily routines such as attendance, calendar and weather activities
- Provide opportunities in group instruction for counting (large, small, individual)
- Model counting objects and matching to numeral
- Provide experiences for choosing sets of different amounts of objects and counting objects

STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

2.1.6 CONCEPTS AND APPLICATIONS OF OPERATIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Solve oral word problems using concrete objects with assistance • Visually quantify one to three objects • Sort objects by two or more attributes • Identify properties of numbers • Apply strategies of "counting on"	**The learner will:** • Join two sets of objects • Separate two sets of objects (3 blocks separated into a set of 2 and a set of 1) • Attempt to attach a numerical value to a set of objects (1to3) without counting • Match a numeral to a set of 1 – 5 objects • Group objects by attributes • Practice counting on from sets of 1 – 10 (one....two....three.) • Practice attaching properties to numbers (10 = 5 and 5; 10 has a 1 and a 0)	**The adult will:** • Tell stories about joining and separating sets • Play number recognition games • Use manipulatives to demonstrate joining and separating sets • Provide opportunities for quantifying sets of objects (place 3 objects on flannelboard or math mat and ask how many are in that set?) • Provide materials and activities in learning centers for using manipulatives • Provide daily practice in counting on (build upon numbers slowly)

STANDARD 2.2: COMPUTATION AND ESTIMATION

BIG IDEA: Students link concepts and procedures as they develop and use computational techniques, including estimation and mental arithmetic, to seek reasonable answers.
ESSENTIAL QUESTIONS: How do I estimate? How do I build knowledge through problem solving?

2.2.1 FLUENCY IN BASIC FACTS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe adult reading number sentences created with manipulatives	**The learner will:** • Watch as adult points to set of manipulatives to read number sentence such as 1 circle +1 circle = 2 circles	**The adult will:** • Encourage young learner to watch, point and read number sentence along with you

2.2.2 COMPUTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Solve problems using manipulatives to correspond to given number 1 to 6	**The learner will:** • Use counters to make sets up to 6 • Group objects and count number of groups • Combine and separate objects into groups	**The adult will:** • Provide opportunities and support learners in their attempts • Create addition problems that join two sets of the same amount of objects • Help child divide objects equally among a group of people by assigning one for each person in turn and checking that the quantities are the same (each person gets three strips of colored paper) • Talk aloud while doing simple computations

CONTINUED...

STANDARD 2.2: COMPUTATION AND ESTIMATION continued

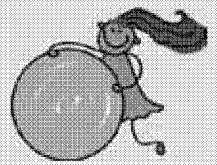
2.2.4 NUMERICAL ESTIMATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Make estimates of a set of objects up to 6 • Practice checking estimates	**The learner will:** • Solve problems by guessing and checking, using concrete objects (figures out how many napkins are needed for snack) • Solve problems through trial and error • Check estimate by counting the number of objects • Use numbers when guessing amounts	**The adult will:** • Use open-ended questions to encourage problem solving • Describe problem solving strategies employed • Provide support for learners estimating quantity and counting the number of objects • Provide a variety of objects to handle and manipulate • Provide group experiences in estimating • Estimate, count and ask questions such as, "How many?" and "Why?"

STANDARD 2.3: MEASUREMENT AND ESTIMATION

BIG IDEA: Learners will identify attributes, units or systems of measurement and apply a variety of tools to explore the distance, weight, length, height, time and temperature of objects.
ESSENTIAL QUESTIONS: What do I understand about the measurement? How can I group objects according to common properties? What can I discover about quantities of objects?

2.3.1 CONCEPTS OF MEASUREMENT

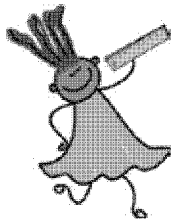
STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice measuring by attributes • Engage in number conservation experiences 	**The learner will:** • Select non-standard items to measure objects (hands, shoe lengths, yarn and blocks) • Identify clocks for telling time, thermometers for telling the temperature • Label times of day as morning and night • Match and compare objects of similar size as a beginning understanding of number conservation	**The adult will:** • Show children how to measure with non-standard items (The shelf is 6 blocks long) • Ask questions about measurement ("How tall is someone? How many footsteps to the door? How much does someone/something weigh?") • Use a weekly calendar, indicating special days, birthdays and use terms such as yesterday, today or tomorrow • Demonstrate and allow children to explore clocks and other time pieces in the classroom (learning centers) • Engage in activities where objects are matched one to one to assist learner in understanding the number conservation e.g. size versus number of objects; 3 grapefruit in a set is more than 7 apples; size does not denote number or amount

2.3.2 UNITS AND TOOLS OF MEASUREMENT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice using standard and non-standard measures in everyday situations	**The learner will:** • Use standard measuring items to explore measurement with adult assistance (ruler, yardstick, measuring tape, height charts measuring objects in the classroom) • Describe the daily routine (e.g. what happens first, before lunch, after lunch, at end of day)	**The adult will:** • Provide measuring tools (clocks, rulers, scales, thermometers, timers, measuring cups) for children to explore and use in their play • Anticipate what happens next in the daily schedule • Relate sequence of events from classroom or home experiences

STANDARD 2.3: MEASUREMENT AND ESTIMATION continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
2.3.4 CONVERSIONS	• Group objects according to common properties • Develop an awareness of seriation through comparison of attributes	**The learner will:** • Compare and order objects on the basis of length, capacity, height and weight	**The adult will:** • Provide materials to group • Provide scaffolding as needed
2.3.6 MEASUREMENT AND ESTIMATION	• Practice using measurement vocabulary with adult support • Practice estimating distance with adult assistance	**The learner will:** • Practice using the terms inches, feet, longer, shorter, o'clock with adult assistance • Use measuring cups and spoons during cooking activities • Guess how many steps to...the door, the hallway, the library	**The adult will:** • Provide experiences with measuring through the use of play money, price tags, cash registers, clocks, indoor and outdoor movement activities • Engage in cooking experiences with learners • Provide recipes, recipe books and measuring tools in the classroom environment • Provide opportunities for estimating the distance between places



STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

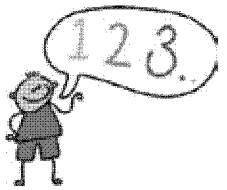
BIG IDEA: Learners use inductive and deductive reasoning to make, check and verify predictions and to develop connections.
ESSENTIAL QUESTIONS: Why do I think my estimation is appropriate? How do I decide what connections there are between objects?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
2.4.1 REASONING	• Predict and verify use of environmental objects	**The learner will:** • Practice analyzing the size of containers and objects inside them to decide which one to use to hold specific objects or number of objects	**The adult will:** • Model, using the appropriate language/vocabulary related to size and shape, the process of estimation • Provide opportunities for learners to make mistakes • Support choices • Ask how and why questions

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

BIG IDEA: Learners solve and interpret results in various ways.
ESSENTIAL QUESTIONS: How do I apply a variety of concepts, processes and skills to solve problems? How do I present mathematical ideas using words, symbols visual display or technology?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
2.5.1 PROBLEM SOLVING	• Use both familiar and new strategies for solving problems • Recognize objects, places and ideas by symbols	**The learner will:** • Ask questions to clarify problems • Solve problems by guessing and checking • Solve problems through trial and error • Identify and think about possible solutions to solve daily problems • Begin to describe the steps necessary to solve a problem • Recognize which is the men's room and which is the women's room by the symbols on the outside doors	**The adult will:** • Model, using the appropriate language/vocabulary, the process of identifying and solving a problem • Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems • Create and provide opportunities for learners to engage in problem solving activities (role play) • Engage learners in symbolic play (use a block to represent a phone) • Identify and point out symbols during daily activities (numbers, letters, signs) • Engage learners in interactions that use known strategies in new situations • Ask open ended questions, encourage conversations, and create classroom activities that encourage learners to explore a variety of possible solutions (set up situations) • Observe how learners solve problems in the classroom and offer assistance when needed • Praise and encourage problem solving
2.5.2 COMMUNICATION	• Communicate the findings from the problem solving process using math vocabulary • Use pictures to replicate a process	**The learner will:** • Practice using math vocabulary to describe process of solving problems • Create pictures to demonstrate a problem • Practice explaining solutions using classroom materials, such as pictures, graphs, oral presentation and other visual displays • Ask questions about problem solving process	**The adult will:** • Engage learner in the practice of describing the problem solving process (tell me more about...) • Provide learners with opportunities to explore and ask questions • Pose open ended questions to promote thinking and reasoning • Encourage children to use manipulatives or pictures to demonstrate a process



STANDARD 2.6: STATISTICS AND DATA ANALYSIS

BIG IDEA: Learners collect, represent and analyze data to answer questions, solve problems and make predictions.

ESSENTIAL QUESTIONS: How do I collect data? How do I explore and display data? How do I talk about data? What patterns can I create and describe?

2.6.1 COLLECTION OF DATA

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use environmental objects for data collection purposes • Create graphs cooperatively with an adult and /or other child	**The learner will:** • Use collected objects and create a graph with the class (green apples, red apples, yellow apples; velcro shoes, tie shoes) • Make tally marks under yes or no on a clipboard while doing a survey of what the group prefers for snack • Participate in group graphing activities by adding his/her input to a class graph	**The adult will:** • Engage the learners in activities that involve collecting data • Provide questions during daily routine that lend themselves to graphing • Collect objects to use for data collection

2.6.2 ORGANIZATION AND DISPLAY OF DATA

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Organize and display objects by one attribute	**The learner will:** • Explore and display data by answering a yes/no question • Organize and display data using pictures or tallies	**The adult will:** • Model organization of data (collections) for graphing purposes • Provide daily graphing experiences such as recording the weather

2.6.3 NUMERICAL SUMMARIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Compare groups of one to five objects	**The learner will:** • Compare data on a graph using vocabulary such as more, same, different • Sort legos or other small blocks by color, stating, "these are the red blocks and these are the yellow ones • Count the number of sunny days on the weather chart	**The adult will:** • Model, using the appropriate language/vocabulary data on graphs and charts (more, equal, not equal, less) • Support learners in making comparisons • Make comparisons part of the daily routine, such as "Do more people walk or ride to school?"

2.6.5 INTERPRETATION OF DATA

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Draw conclusions with adult guidance and questioning	**The learner will:** • Draw conclusions from data charts and graphs with adult assistance (this chart shows 3 red apples and 2 green apples; therefore there are more red apples than green apples; I would need one more green apple to have the same number of red and green) • Sort Legos or other small blocks by color stating, "These are the red blocks and these are the yellow ones."	**The adult will:** • Provide opportunities for learners to explore graphs and charts on a regular basis • Encourage and reinforce learners' efforts in explaining data on a chart (Why do you think...? How did you decide...?)

STANDARD 2.7: PROBABILITY AND PREDICTIONS

BIG IDEA: Learners develop and evaluate predictions that are based on knowledge and data.

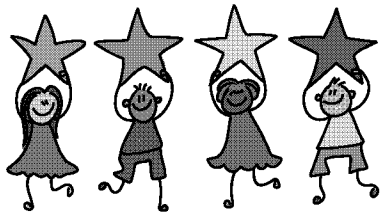
ESSENTIAL QUESTIONS: What words can I use to describe what is on the graph? How do I predict what will come next? What predictions can I make? How accurate will my predications be?

2.7.1 CALCULATE PROBABILITIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Predict the probability of an event occurring based on observation and prior knowledge with scaffolding	**The learner will:** • Determine the likelihood of an event occurring based on past experience (raise my hand to answer question, will get called upon; shout out, will be reprimanded; 5 follows 4 when rote counting, therefore 5 follows 4 when counting objects; dark clouds usually mean rainy day, not sunny)	**The adult will:** • Set up situations for young learners to ask questions to predict the probability of an event occurring • Pose and answer questions • Model, using the appropriate language/ vocabulary, the process of predicting • Observe and listen for questions being discussed among young learners

2.7.3 REPRESENTATIONS OF PROBABILITIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Complete a simple yes/no graph to make a selection with assistance	**The learner will:** • Circle the response to a written question such as "Do you like apples?" Yes or No • Attach response to the appropriate position on a graph, such as placing name on the column that depicts blue eyes	**The adult will:** • Provide simple graphs daily for learners to complete with adult assistance • Have learners complete graph during the daily routine



STANDARD 2.8: ALGEBRA AND FUNCTIONS

BIG IDEA: Learners discover how objects are related to each other using models, patterns and functions involving numbers, shapes, and graphs in problem solving situations.

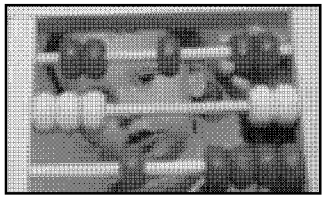
ESSENTIAL QUESTIONS: How do I respond to routines? How do I use manipulatives to show relationships? What patterns can I create and describe?

2.8.1 ALGEBRAIC PROPERTIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Compare quantities of concrete objects	**The learner will:** • Identify how objects are the same and different in quantity, pattern, or use	**The adult will:** • Help children recognize and describe attributes • Provide varied materials for sorting and classifying (shells, cereal, pebbles, and buttons) • Help children describe similar and different objects

2.8.2 ALGEBRAIC MANIPULATIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice and count using numbers as a means of determining quantity • Practice using concrete objects to portray simple story	**The learner will:** • Count sets of objects and then verbalize how many are in the set • Add one or two objects to a set and tell a number story about the set	**The adult will:** • Provide a variety of manipulatives to use for counting and quantifying • Model using appropriate math vocabulary the process of using objects to portray a story • Provide opportunities for telling stories with manipulatives • Provide assistance when necessary



2.8.3 PATTERNS

STANDARD STATEMENT:	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and describe patterns • Recognize and extend simple patterns	**The learner will:** • Identify patterns in the environment, such as the stripes on a flag • Clap out rhythmic patterns, such as clap-clap-snap, clap-clap-snap • Recognize and practice extending simple repeating patterns using manipulatives, such as adding a blue block to the end of a pattern – blue, white, blue, white, XXX (blue)	**The adult will:** • Provide opportunities for children to identify and describe patterns • Model creating simple patterns • Have children recreate patterns using lacing beads, geoboards, and other manipulatives • Encourage, model and discuss patterns (what is missing? Why do you think that is a pattern?) • Engage children in finding and patterns in the environment, (number patterns on number charts, calendars, color patterns) • Draw children's attention to various patterns in the environment (I see a pattern on your shirt – blue stripe, red, strip, blue stripe)

STANDARD 2.9: GEOMETRY

BIG IDEA: Children identify, name and describe a variety of shapes in many ways.

ESSENTIAL QUESTIONS: What makes shapes different from each other? What shapes can we see in our environment? How do shapes fit together and come apart? What attributes do shapes possess? How can shapes be sorted?

2.9.1 DEFINITIONS, PROPERTIES AND RELATIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and name simple three-dimensional shapes • Replicate simple three-dimensional shapes • Determine the attributes of basic shapes	**The learner will:** • Recognize and describe the attributes of geometric figures • Match and sort dimensional objects according to attributes • Point out specific geometric figures in environment • Create shapes from objects in environment (e.g. playdoh, popsicle sticks) • Name common geometric shapes in the environment, such as the sun is a circle or the block is a square	**The adult will:** • Converse with learners about geometric shapes in the environment • Take children on a shape walk looking for geometric shapes in the environment • Provide books about geometric shapes • Provide shape templates, puzzles, attribute blocks, parquetry and pattern blocks in centers (e.g. different textures, sizes, materials) • Provide experiences in making shapes with playdoh, geoboards, popsicle sticks, pattern blocks

2.9.2 TRANSFORMATIONS AND SYMMETRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe symmetry • Create a symmetrical design from a model	**The learner will:** • Identify symmetrical design • Create a symmetrical design with assistance (folded paper with blob of paint)	**The adult will:** • Provide opportunities for creating symmetrical designs • Provide materials to use in creation of symmetrical designs

2.9.3 COORDINATE GEOMETRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice using directionality and appropriate vocabulary with assistance • Demonstrate an understanding of directionality, order and positions of objects	**The learner will:** • Follow directions that use positional words (in, on, under, over, next to, between, beside, above, below, front, back) • Use positional words in play (e.g. "My truck is under the table.") • Use geoboards to create shapes with rubber bands	**The adult will:** • Use music and movement experiences to explore positions in space • Model and provide experiences and opportunities for learners to place objects in positions in space (small group, large group, learning centers)

MATHEMATICAL THINKING AND EXPRESSION GLOSSARY

Addends – Numbers used in mathematical operation of addition

Algebraic Expression – A group of numbers, symbols and variables that express a single series of operations

Angle – A geometric figure consisting of two rays with a common endpoint

Ascending Order – A listing in which numbers or terms are organized in increasing value

Bar Graph – A graph in which horizontal or vertical bars represent data

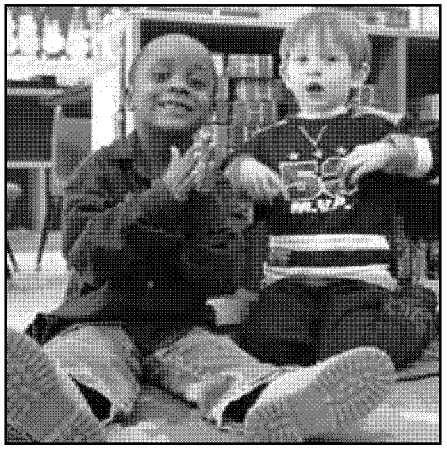
Concrete Objects – Physical objects used to represent mathematical situations

Counting On – Given two sets of objects in which to find the sum, learner counts one set and then counts on from the first set to the second set (3 apples in one set; 1 apple in other set- learner says 1-2-3 and then 4; there are 4 in all)

Data – Information gathered by observation, questioning or measurement, usually expressed with numbers

Descending – An order in which numbers or terms are organized in decreasing value

Estimate – A close rather than exact answer



Fractional Part – Part of a whole or part of a group that is less than a whole

Function – A rule that describes the commonalities between two patterns

Graph – A pictorial device that shows a relationship between variables or sets of data

Manipulatives –A wide variety of physical materials, objects and supplies that students use to foster mathematical learning

Non Standard Measurement – A measure that is not determined by the use of standard units (paper clips, blocks)

Numerical Operations – Place value, number sense, counting, correspondence, comparison, ordering numbers, addition/subtraction (joining/separating sets)

Number Sense – Understanding of numbers and their quantities

Ordinal Number – A whole number that names the position of an object in a sequence

Pattern – A set or sequence of shapes or numbers that are repeated in a predictable manner

Pictograph – A graph that uses pictures or symbols to represent data

Place value – The value of the position of a digit in a numeral

Predictions – Use of base information to produce an approximation of change or result

Probability – The measure of the likelihood of an event occurring

Reflection – A transformation creating a mirror image of a figure on the opposite side of a line

Seriation – Arranging objects in order by size or position in space (arrange in a series of pattern)

Spatial Sense – Building and manipulating mental representations of two and three dimensional objects

Standard Measurement – A measure determined by the use of standard units such as, inches, feet, pounds, cups, pints, gallons

Symbol – A sign used to represent something

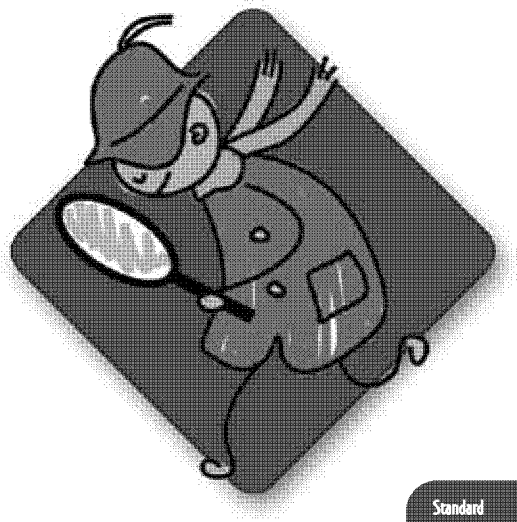
Symmetry – An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place

Trigonometry – Relationship between the sides and angles of triangles

Whole numbers – The set of numbers consisting of the counting numbers and zero

SCIENTIFIC THINKING AND TECHNOLOGY

EXPLORING, INQUIRY AND DISCOVERY



All young children are naturally curious about their environment and the world around them and learn best when allowed to actively explore using their senses. These experiences provide the foundation for abstract and scientific thought. Students, who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support discovery about the natural world and the scientific process. For the young learner scientific concepts can be incorporated throughout the key areas of early learning; for example, children use pretend play to explore and manipulate materials, creative arts to express their ideas, and literacy and language arts to research answers to questions.

ASSESSMENT

Child assessment is an integral component of early childhood programs. When combined with observation, curriculum development and appropriate teaching practices, assessment provides the foundation for understanding children's growth and development. Ongoing and frequent reviews of children's accomplishments and progress enable teachers to learn how children change over time and provide information for developing responsive and appropriate instruction. Teachers use authentic assessment when they combine observation, portfolio collection, and parent report with research-based, standards-aligned curriculum-embedded instruments to obtain a clear picture of a child's interests, abilities and areas for focus.

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STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS

BIG IDEA: **There are a variety of living and non-living things.**
ESSENTIAL QUESTIONS: **Can I categorize plants and animals? Can I state what living things need to survive? Can I name parts of living things?**

3.1a.1 COMMON CHARACTERISTICS OF LIFE

STANDARD STATEMENT
- Recognize the difference between living and non living things
- Categorize common living things into plants and animals.
- State that living things need air, food and water to survive

EXEMPLARS (EXAMPLES)
The learner will:
- Sort objects by living and non-living such as rock to plant or dog to doll
- Describe observations accurately
- Compare observations with others
- Sort pictures into plants and animals
- Draw pictures of plants or animals
- Describe basic needs of living things

SUPPORTIVE PRACTICES
The adult will:
- Include live animals and plants along with models, stuffed animals, plastic animals and plants and pictures and posters in the classroom
- Display worm farms, bird feeders or ant hills for observation
- Encourage documentation of observations in journals with words and pictures
- Read books about plants and animals
- Provide classroom with gardening tools, for inside and outside use
- Take nature walks
- Set up a science table and exploration area

3.1a.3 LIFE CYCLES

STANDARD STATEMENT
- Identify that plants and animals have life cycles

EXEMPLARS (EXAMPLES)
The learner will:
- Observe changes in plants or animals such as beans sprouting or animals' fur thickening
- Observe the effect of darkness and light on growing plants

SUPPORTIVE PRACTICES
The adult will:
- Encourage documentation of observations in journals with words and pictures

3.1a.5 FORM AND FUNCTION

STANDARD STATEMENT
- Identify parts of living things

EXEMPLARS (EXAMPLES)
The learner will:
- Tell the parts of a person, an animal or a plant
- Draw a picture of a person, an animal or plant including most of the major observable features

SUPPORTIVE PRACTICES
The adult will:
- Provide pictures and real objects for observation
- Discuss the names of parts such as root, stalk, bud or hoof, wing, claw

3.1a.8 UNIFYING THEMES

STANDARD STATEMENT
- Identify that plants and animals have different kinds of parts

EXEMPLARS (EXAMPLES)
The learner will:
- Identify that people have legs and plants have roots
- Describe difference and similarities in animals of the same species such as, "One cat is striped" and "Two dogs have floppy ears"

SUPPORTIVE PRACTICES
The adult will:
- Discuss the names of plant and animal parts
- Compare and contrast animals
- Compare and contrast plants
- Discuss how plants and animals are similar and different

CONTINUED...

SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY

STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS

3.1a.9 SCIENCE AS INQUIRY

STANDARD STATEMENT
- Use the five senses as tools with which to observe, classify, collect information and describe observations

EXEMPLARS (EXAMPLES)
The learner will:
- Ask questions about observations
- Collect objects during nature walk
- Note observations using all senses, "This feels soft" or "This flower smells pretty"
- Taste a variety of foods

SUPPORTIVE PRACTICES
The adult will:
- Keep a classroom pet
- Provide materials for children to sort, examine and explore at the science table
- Encourage use of all senses during observations

STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS

BIG IDEA: **There are a variety of living and non-living things.**
ESSENTIAL QUESTIONS: **Can I identify physical characteristics of my family? Can I tell what grows from seeds, eggs or babies?**

3.1b.1 HEREDITY

STANDARD STATEMENT
- Identify similar characteristics of own family such as hair color, eye color and height

EXEMPLARS (EXAMPLES)
The learner will:
- Note things that are similar among family members when looking at photographs

SUPPORTIVE PRACTICES
The adult will:
- Display photos of families
- Discuss similarities among members

3.1b.2 REPRODUCTION

STANDARD STATEMENT
- Describe that seeds grow into plants, eggs hatch and babies grow into adults

EXEMPLARS (EXAMPLES)
The learner will:
- Identify how plants and animals begin and what they become
- Use proper names for animal offspring such as calf rather than baby cow

SUPPORTIVE PRACTICES
The adult will:
- Display pictures that show life cycles
- Discuss how the adult begins as a seed, egg or baby
- Provide non-fiction literature connections

3.1b.5 UNIFYING THEMES

STANDARD STATEMENT
- Describe observable patterns in objects

EXEMPLARS (EXAMPLES)
The learner will:
- Identify a pattern when presented such as AB, ABC or ABCD
- Notice patterns in objects, such as the stripes on shirts or the spots on a dog's fur

SUPPORTIVE PRACTICES
The adult will:
- Provide natural materials to make patterns
- Provide examples of patterns for students to use as models
- Describe patterns with children to model language
- Show examples of patterns in natural objects like leaves and shells

CONTINUED...

SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY

STANDARD 3.1c: BIOLOGICAL SCIENCES: EVOLUTION

BIG IDEA: There are a variety of living and non-living things.
ESSENTIAL QUESTIONS: Can I choose clothing that will be safe and comfortable for weather conditions? Can I describe changes in home or school environments? Do I ask questions about what I observe?

3.1c.2 ADAPTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Match types of clothing to seasonal weather conditions • Identify changes that occur in animals during the seasons	**The learner will:** • Match pictures of clothing to season • Dress toys and dolls for weather conditions • Choose appropriate seasonal clothing for self • Describe that some animals, such as a bear, sleep when it gets cold • Notice the birds or geese that are flying south or north in the fall and spring • Notice that dogs' fur gets thicker in the winter	**The adult will:** • Read books about animals and their adaptation to the season changes • Take outside walks to watch for bird migration and to notice weather changes • Provide different types of seasonal clothing in the dramatic play area • Talk about and graph the changes in temperature and children's adaptations, such as "How many wore their boots today?"

3.1c.3 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe change in home and school environments	**The learner will:** • Notice and explain changes at home such as new carpeting or a new pet • Notice and explain changes at school such as new materials or room arrangement	**The adult will:** • Ask children about happenings at home • Extend thinking to ask how this makes things different • Encourage children to consider why changes are made at school

3.1c.4 SCIENCE AS INQUIRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Discuss observations and discoveries	**The learner will:** • Investigate new materials and displays • Ask questions about observations • Describe discoveries during exploration	**The adult will:** • Provide tools for exploration including magnifying glass, magnets, microscope, color paddles, tweezers, eye droppers, scale • Display materials for exploration such as rocks, stones, seed pods, gourds, nests, pine cones, fossils, feathers • Ask questions about discoveries during play such as "How did you get that block to stay up there?"

STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY

BIG IDEA: Physical properties help us to understand the world.
ESSENTIAL QUESTIONS: What happens when I combine objects or substances? How do I discover the properties of objects?

3.2a.1 PROPERTIES OF MATTER

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe objects according to size, shape, color or properties of matter	**The learner will:** • Collect leaves and sort them according to shape, color or edges • Describe their collection	**The adult will:** • Encourage children to collect, sort, classify and describe many materials • Use the appropriate science vocabulary

SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY

STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY continued

3.2a.2 STRUCTURE OF MATTER

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Recognize the different types of matter	**The learner will:** • Observe experiments with solids, liquids and gases • Notice the different properties of matter in specific materials, such as milk is a liquid or a rock is hard and solid	**The adult will:** • Conduct experiments that use solids, liquids and gas such as melting an ice cube and refreezing it or adding powdered drink mix to water • Talk about the properties of objects, such as the bunny is soft or maple syrup is sticky

3.2a.4 REACTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Experiment with changes in matter • Experiment with changes in substances when combined	**The learner will:** • Shake cream in a jar to make butter • Observe differences in water, such as an ice cube or snow melting and freezing • Notice changes in food substances during cooking, such as chocolate or cheese melting when heated • Observe what happens when water is mixed with soil • Add crackers to soup and talk about what happens • Mix colors of paint and discuss the changes	**The adult will:** • Provide materials for children to mix and combine, such as ice, snow and water • Cook with learners and talk about the changes that occur when foods are combined • Ask for predictions about what might happen when one substance is combined with another • Talk about observable changes in matter, such as a balloon being blown up or ice cream at room temperature • Conduct experiments where learners predict and analyze outcomes

STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS

BIG IDEA: Physical properties help us to understand the world.
ESSENTIAL QUESTIONS: Can I describe motion? Can I make predictions about energy? How can I categorize sounds? Do I participate in scientific investigations?

3.2b.1 FORCE AND MOTION OF PARTICLES AND RIGID BODIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Explore and describe motion of toys and objects	**The learner will:** • Notice the speed of a toy truck if it is pushed on carpet or hard surface • Notice the motion of swings and jump ropes on the playground • Comment about the motion of the boat as waves are created • Demonstrate understanding of fast, slow, back and forth	**The adult will:** • Encourage children to extend thinking by asking why questions • Describe the motion of objects and toys as children are engaged in play

3.2b.2 ENERGY STORAGE AND TRANSFORMATIONS: CONSERVATION LAWS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe demonstrations and make predictions about basic energy types and sources	**The learner will:** • Observe wind blowing or the sun melting snow • Create a painting using a straw to blow paint onto paper • Guess what might happen to a kite when the wind blows or dies down	**The adult will:** • Provide experiences involving wind, water and solar power for children to observe • Encourage them to make predictions about what might happen

CONTINUED...

STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS continued

3.2b.4 ELECTRICAL AND MAGNETIC ENERGY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use magnets to explore and sort materials	**The learner will:** • Use magnets to test many items by placing the magnet to see if it sticks • Sort items by magnetic and non-magnetic	**The adult will:** • Provide many items for children to use with magnets • Provide bar magnets as well as refrigerator magnets for exploration

3.2b.5 NATURE OF WAVES AND SOUND

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Categorize and create sounds based on different attributes	**The learner will:** • Listen to sounds from outside or inside and identify if it is loud, soft, high, low • Listen to sounds and identify the source • Make sounds with instruments	**The adult will:** • Provide materials for creating sounds • Use vocabulary to describe sounds regarding volume or pitch • Provide instruments for exploration

3.2b.6 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Predict a reaction based on previous experiences	**The learner will:** • Identify items that will sink based on previous attempts	**The adult will:** • Encourage children to experiment, observe and record information from experiences

3.2b.7 SCIENCE AS INQUIRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Participate in scientific investigations	**The learner will:** • Experiment with objects or ideas to obtain a result • Ask and answer questions • Make predictions about an outcome	**The adult will:** • Set up opportunities for children to assist or experiment on their own • Ask questions • Encourage children to create predictions • Encourage children to create questions

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES

BIG IDEA: Interactions occur on earth and in space.

ESSENTIAL QUESTIONS: Can I identify earth forms? Can I sort different types of earth? Do I know a variety of uses for water? Can I identify and use weather observation and tools for information? Can I verify predictions?

3.3a.1 EARTH FEATURES AND THE PROCESSES THAT CHANGE IT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify earth forms in pictures	**The learner will:** • Identify mountains, hills and flat land in pictures • Create mountains or hills in the sand table • Notice that she/he is walking uphill or downhill during a walk	**The adult will:** • Provide pictures of a variety of land forms that children may encounter • Read books about mountains, hills and flat land • Take walks that include different types of terrain, such as a hill or flat land • Provide opportunities to represent different types of terrain through sand and soil

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES

3.3a.2 EARTH'S RESOURCES AND MATERIALS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Sort different types of earth	**The learner will:** • Sort earth into rocks, soil and sand • Use a hand lens to discover details	**The adult will:** • Provide soil and containers for planting • Display rocks, stones and pebbles of different colors and shapes for sorting • Encourage children to compare and contrast types of earth

3.3a.4 WATER

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe and explore water in solid and liquid states • Identify a variety of uses for water	**The learner will:** • Play with water in the water table • Identify ice and explore it • Identify ways we use water such as drinking, washing, watering plants	**The adult will:** • Provide opportunities for exploration with water and ice • Make a list of ways we use water • Provide supporting literature

3.3a.5 WEATHER AND CLIMATE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify season that corresponds with observable conditions • Identify how weather affects daily life • Identify different types of precipitation • Identify a thermometer as a tool for measuring temperature 	**The learner will:** • Name the four seasons and an observable condition for that season such as falling leaves, snow, rain, buds on trees or green grass • Sort pictures of activities clothing and toys according to the types of weather and season they would be connected to such as sled with snow, bathing suit with sun • Identify snow, rain, drizzle • Look at a thermometer to see what the temperature might be • Use a thermometer for doctor play in the dramatic play area	**The adult will:** • Take nature walks to observe changes in the seasons • Talk about the weather conditions daily • Hang a thermometer outdoors and read it daily to determine the temperature • Talk about the purpose of a thermometer

3.3a.6 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Examine change through simple observation	**The learner will:** • Note changes that occur to plants, animals or the environment during walks • Notice the growth of classroom plants or pets • Identify changes in weather, such as "I had to wear a coat today because it got cold." • Recognize that changes in weather or the earth and sky relate to changes in temperature or climate, such as "leaves turn colors when the air turns cooler"	**The adult will:** • Plant seeds and measure changes that occur daily. Ask children to record the changes through pictures or graphs • Take children on walks to notice changes in the weather or environment • Encourage children to make journal entries about noticeable changes in the environment • Write stories about the growth of a classroom pet • Display pictures or sequencing cards that show the growth or changes over time, such as a seed, a seedling, a thin tree, a mighty oak

STANDARD 3.3b: EARTH AND SPACE SCIENCES: ORIGIN AND EVOLUTION OF THE UNIVERSE

BIG IDEA: Interactions occur on Earth and in space.
ESSENTIAL QUESTION: Can I identify features in space?

3.3b.1 COMPOSITION AND STRUCTURE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the characteristics of the sun, moon, stars and clouds	**The learner will:** • Talk about things that can be found in the day or night sky • Notice different types of clouds • Explore shadows made from the sun	**The adult will:** • Provide flashlights for use • Offer opportunities to trace shadows on the sidewalk • Display items for sorting by day or night use, such as sunglasses, visors, flashlights • During walks observe clouds and discuss their shapes • Read books about day and night, stars, or clouds

STANDARD 3.4a: SCOPE OF TECHNOLOGY

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I identify the function of simple technology? Do I choose the right technology for a task?

3.4a.1 CHARACTERISTICS OF TECHNOLOGY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify examples of technology	**The learner will:** • State examples of technology such as telephone, cell phone, television, DVD • Use a pretend phone during dramatic play • Take pretend pictures of classroom objects	**The adult will:** • Provide technological equipment that children can use independently during play, such as pretend telephones, tape recorders, and computers • Include objects that children can take apart and put back together • Provide non-working real objects for children to investigate, such as hair dryers, old typewriters, or cassette players • Display pictures that reflect technology in use

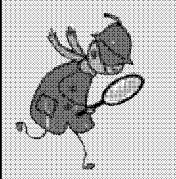
3.4a.3 TECHNOLOGY CONNECTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the function of simple technological objects • Identify the appropriate technology to complete a task	**The learner will:** • Describe the uses of cameras, cell phones and/or DVD players • Use models of technological equipment during pretend play in the dramatic play area • Perform basic tasks using technological objects, such as turning on a computer or pushing the start button on a tape recorder • Describe that a phone is used to call someone and a video camera is used to record movies	**The adult will:** • Talk about the purposes of technological items • During class discussions, identify the technology that could help learners find out more • Discuss how to choose the correct tool for the purpose • Model the use of technology in the classroom • Read books that include characters using technology

STANDARD 3.4c: TECHNOLOGY AND ENGINEERING DESIGN

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I use simple tools as intended?

3.4c.1 DESIGN ATTRIBUTES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use simple tools and materials 	**The learner will:** • Use tools such as a ruler, a hammer, a magnifying glass or a flashlight	**The adult will:** • Provide simple household and classroom tools for children to use independently • Create activities that require the use of simple tools

STANDARD 3.4e: TECHNOLOGY: THE DESIGN WORLD

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Do I use medical equipment correctly? Can I use wind power to make something move? Can I identify types of communication devices and their functions? Can I identify construction vehicles, tools and materials?

3.4e.1 MEDICAL TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice using medical equipment and materials	**The learner will:** • Attempt to use model and real medical equipment as it is used at the doctor's office during play	**The adult will:** • Provide model and real medical equipment for children to use in the dramatic play area • Use the technical names of equipment when describing it to children • Read books about characters using medical equipment or non-fiction text about health care • Discuss children's experiences with medical care

3.4e.3 ENERGY AND POWER TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Explore wind power	**The learner will:** • Fly a kite • Spin a pinwheel • Float a sailboat across water • Observe a flower blowing in the breeze • Describe that trees' limbs move as a result of the wind	**The adult will:** • Create opportunities for learners to experiment with wind power to make things move • Provide materials for children to make paper airplanes or pinwheels and encourage them to try them out • Take children outside on a windy day to use pinwheels or kites • Play games such as blowing a ping pong ball across a surface • Use outdoor time to observe the clouds moving across the sky on a windy day

STANDARD 3.4e: THE DESIGN WORLD continued

3.4e.4 INFORMATION AND COMMUNICATION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify communication devices in the home • Identify parts of a computer • Use a computer to run specific software independently	**The learner will:** • Identify telephone, cell phone, and computer • Name the parts of a computer, such as monitor, screen, mouse or keyboard • Use a computer to run a program independently	**The adult will:** • Discuss the ways we can communicate at home • Use the correct vocabulary and label the corresponding parts of the computer • Allow children to work on developmentally appropriate computer programs independently during choice time

3.4e.5 TRANSPORTATION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Classify types and uses of transportation vehicles	**The learner will:** • Sort vehicles as those that are used on ground, on water or in the air or as those that transport a few people or many people • Sort vehicles by use or characteristics, such as those that are used on the ground or water • Describe the different characteristics and uses between a bus, car, bicycle or airplane	**The adult will:** • Display pictures of many kinds of transportation • Provide a variety of transportation toys • Encourage children to sort and classify vehicles using a variety of categories • Sing the Wheels on the Bus • Perform a group activity where children go on a pretend train ride; they purchase tickets, board the train, find a seat, chug down the track, and disembark • Talk about the modes of transportation needed to get to school, to take a trip to California, and to go to the doctor

3.4e.7 CONSTRUCTION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify construction vehicles, simple tools and materials • Build structures using a variety of block types	**The learner will:** • Identify the types of tools and materials needed in construction, such as hammers, screwdrivers, nails or measuring tapes, and hard hats • Talk about construction vehicles, such as bull-dozer, cement trucks or dump trucks and their purpose • Put together blocks to create a tower or building, identifying that larger or heavier blocks belong on the bottom • Use wood construction vehicles to move blocks or objects • Practice using hammers and nails or screws and screwdrivers in a construction learning center	**The adult will:** • Provide a variety of blocks or materials for building • Offer non-traditional materials from which buildings or structures can be made, such as stones, sticks, or clay • Include wood dump trucks, cement mixers and other construction vehicles in the block area • Display pictures of construction sites • Set up a construction zone with hard hats, workbench, and tools for children to use • Include maps and blueprints in the block area

STANDARD 4.1: ENVIRONMENT AND ECOLOGY

BIG IDEA: We are impacted and have impact on our environment.

ESSENTIAL QUESTIONS: Can I name the bodies of water in the local area? Can I name some things that can be recycled? How does litter have an impact on the environment? What kinds of things are produced on a farm? What kinds of cycles are evident in the environment? Can I name some dinosaurs? Can I name a variety of shelters that humans use?

4.1 WATERSHEDS AND WETLANDS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
Identify bodies of water	**The learner will:** • Name lakes, streams, creeks and puddles in the local area	**The adult will:** • Name and discuss local bodies of water • Read books about different bodies of water

STANDARD 4.1: ENVIRONMENT AND ECOLOGY continued

4.2 RENEWABLE AND NON-RENEWABLE RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify objects that can be recycled • Discuss the purpose of recycling	**The learner will:** • Sort objects into those things that can be recycled and those things that cannot • Name objects that can be recycled • Practice recycling of classroom objects as part of the classroom routine	**The adult will:** • Provide recycling bins for children to use • Discuss what can be recycled such as aluminum cans, plastic bottles, glass jars • Create a list of items that can be recycled or reused such as a cloth grocery bag

4.3 ENVIRONMENTAL HEALTH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify how litter can have a negative impact on animals and the environment	**The learner will:** • Participate in experiments that show how litter can impact the environment • Identify ways that litter should be handled	**The adult will:** • Create experiments about litters' impact on environment • Show pictures and videos about the impact on animals • Clean up the playground or street near the classroom

4.4 AGRICULTURE AND SOCIETY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe the purpose of a farm • Identify the products that are produced on a farm • Describe the people, animals and equipment that are found on a farm	**The learner will:** • Name the farmer and the jobs she/he does • Talk about corn that grows on a farm or milk that comes from cows that live on a farm • Name basic farm structures and equipment such as a barn or tractor	**The adult will:** • Read books about farms and farmers • Show pictures and videos about the kinds of things that come from a farm • Take a field trip to a farm • Provide materials for dramatic play representations of farm life

4.6 ECOSYSTEMS AND THEIR INTERACTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe events that occur in a cycle	**The learner will:** • Observe and record what happens to a tree throughout a year or the growth of a seed into a plant • Discuss the changes as things that happen in a cycle • Talk about the changes of a caterpillar into a butterfly or an egg hatching into a chicken	**The adult will:** • Read books about cycles in nature such as The Tiny Seed or books about seasonal changes • Include sequencing cards where children order life cycle events, such as a tree growing from a seedling or an egg hatching

4.7 THREATENED, ENDANGERED AND EXTINCT SPECIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify some species that are extinct	**The learner will:** • Describe what animals and plants need to stay alive • Name some dinosaurs • Talk about why dinosaurs no longer exist	**The adult will:** • Provide dinosaur toys • Use the correct names when discussing dinosaurs • Read books about dinosaurs and other now-extinct animals and how they became extinct • Talk about the impact of the environment on animals' capacity to remain plentiful • Read books and talk about species that are endangered and things that could be prevent them from becoming extinct

STANDARD 4.1: ENVIRONMENT AND ECOLOGY continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
4.8 HUMANS AND THE ENVIRONMENT	• Identify types of shelters that humans use	**The learner will:** • Name house, trailers, apartments, igloos, tepees or tree houses as types of shelters humans use	**The adult will:** • Provide information about types of shelter that are local and those shelters that are unfamiliar • Discuss why shelters vary according to where people live
4.9 ENVIRONMENTAL LAWS AND REGULATIONS	• Discuss rules that protect the environment	**The learner will:** • Participate in discussions about the types of things people can do to protect the environment such as disposing of trash and recycling materials	**The adult will:** • Facilitate discussions about protecting the environment and the things that children can do to help to protect it

SCIENCE AND TECHNOLOGY GLOSSARY

Construction Technology – The ways that humans build structures on sites

Fact – Information that has been objectively verified

Hypothesis – An assertion subject to verification or proof as a premise from which a conclusion is drawn

Information Technology – The technical means that humans create to store and transmit information

Inquiry – A systematic process for using knowledge and skills to acquire and apply new knowledge

Law – Summarizing statement of observed experimental facts that has been tested many times and is generally accepted as true

Manufacturing Technology – The ways that humans produce goods and products

Model – A description, analogy or a representation of something that helps us understand it better (e.g., a physical model, a conceptual model, a mathematical model)

Patterns – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form

Science – Search for understanding of the natural world using inquiry and experimentation

System – A group of related objects that work together to achieve a desired result

Transportation Systems – A group of related parts that function together to perform a major task in any form of transportation

Transportation Technology – The physical ways humans move materials, goods and people

Tool – Any device used to extend human capability including computer-based tools

ENVIRONMENT AND ECOLOGY GLOSSARY

Ecosystem – A community of living organisms and their interrelated physical and chemical environment

Endangered species – A species that is in danger of extinction throughout all or a significant portion of its range

Environment – The total of the surroundings (air, water, soil, vegetation, people, wildlife) influencing each living being's existence, including physical, biological and all other factors; the surroundings of a plant or animal, including other plants or animals, climate and location

Extinction – The complete elimination of a species from the earth

Nonrenewable resources – Substances (e.g., oil, gas, coal, copper, gold) that, once used, cannot be replaced in this geological age

Recycling – Collecting and reprocessing a resource or product to make into new products

Regulation – A rule or order issued by an executive authority or regulatory agency of a government and having the force of law

Renewable – A naturally occurring raw material or form of energy that will be replenished through natural ecological cycles or sound management practices (e.g., the sun, wind, water, trees)

Wetlands – Lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes)

SOCIAL STUDIES THINKING

CONNECTING TO COMMUNITIES

The foundation of social studies, economics, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand this scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

PLAY, PLAY AND PLAY SOME MORE!

The best way to support children's learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information in order to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children who learn together in the dramatic play or block areas how to cooperate in order to figure out how many blocks can be added to a structure before it falls have stronger social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children's thinking and problem solving.

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SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

BIG IDEA: Good citizens follow rules.
ESSENTIAL QUESTIONS: What rules and consequences are important? Can I identify some American symbols?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
5.1.1 SOURCES, PURPOSE AND FUNCTIONS OF LAW	• State rules and some consequences	**The learner will:** • Tell a friend to stop running • Explain that you must hold onto the swing so you don't fall	**The adult will:** • Discuss rules with children • Explain purpose of rules (safety, respect) • Begin to introduce games that have rules • Read books that support following rules (fiction and non-fiction) • Create a class rules chart

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

BIG IDEA: Citizenship involves responsibility to myself and others.
ESSENTIAL QUESTIONS: Can I describe why I am important in the classroom or my family? Can I identify more than one solution to a problem? How do I show that I can be a leader?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
5.2.1 CIVIC RIGHTS, RESPONSIBILITIES AND DUTIES	• Display awareness of role as a member of a group • Explain how community workers keep us healthy and safe	**The learner will:** • Talk about responsibilities at home • Participate in group decision-making • Participate in classroom and family responsibilities • Work cooperatively with other children to achieve an outcome • Play act fire fighters or doctors	**The adult will:** • Talk with children about their family • Create a class chart listing family members and the job each person does to help the family • Engage children in class meetings and decision-making • Give children classroom jobs and responsibilities (feeding fish, hand out paper towels) • Provide activities that require cooperative play • Include dress-up clothes and materials to encourage dramatic play that represent community helpers
5.2.2 SOURCES AND RESOLUTION OF CONFLICT	• Identify one or two solutions to a conflict or a problem • Attempt to independently solve a conflict with a peer	**The learner will:** • Tell a friend that an action was inappropriate, such as "you ripped my paper." • Suggest a solution for a peer who wants the toy that is being used, such as "I'll give it to you in two minutes when I'm finished." • Work with a peer to develop a solution to a problem, such as ways to share the playdoh when there isn't enough	**The adult will:** • Observe and encourage children's attempts to solve their own problems • Provide feedback on solutions that were attempted • Provide reinforcement for solutions that are successful • Hold group meetings to discuss ways to solve classroom problems or conflicts

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SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
5.2.3 POLITICAL LEADERSHIP AND PUBLIC SERVICE	• Show interest in leadership opportunities	**The learner will:** • Pretend to be the conductor when playing a musical instrument • Pretend to be the teacher during dramatic play • Choose a leader for the block building project • Ask to be line leader • Request to help teacher, such as telling others that it's clean-up time	**The adult will:** • Model positive leadership skills • Provide opportunities for children to make choices • Provide positive feedback when children assume leadership roles • Read books about people who are leaders in a variety of ways

STANDARD 6.1: ECONOMIC SYSTEMS

BIG IDEA: People work in our community.
ESSENTIAL QUESTIONS: How do I know when things are distributed equally? What are the jobs that people do in the community?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
6.1.2 TRADITIONAL, COMMAND AND MARKET ECONOMIES	• Recognize equal distribution	**The learner will:** • State when someone has more or less • Attempt to distribute items equally among a group such as snack, materials or toys	**The adult will:** • Ask open-ended questions about unfair distribution such as one child has more or less • Assist with equal distribution
6.1.3 MEASURES OF ECONOMIC	• Demonstrate knowledge about community workers and their roles	**The learner will:** • Recognize community workers through their uniforms or equipment • Describe the work that community workers do • Describe the jobs people do and how they work together	**The adult will:** • Invite community helpers into the classroom to talk about their jobs • Arrange field trips to community service agencies and businesses such as fire house, post office, grocery store, pet store or beauty shop • Add community worker props to play areas such as uniforms, mailbag, doctor kit or menus • Read books, both fiction and non-fiction that model people working together

SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

BIG IDEA: Money and resources impact our life.
ESSENTIAL QUESTIONS: Can I state the names of some coins? Can I use pretend money in play situations? Can I describe where to purchase certain items?

6.2.3 FUNCTION OF MONEY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate an awareness of the uses of money	**The learner will:** • Use pretend money while engaging in dramatic play activities • Recognize that coins have specific values	**The adult will:** • Set up dramatic play opportunities that involve the use of pretend money such as the bank, grocery store or restaurant • Use the names of coins and currency and provide an opportunity for children to handle real money • Introduce the purpose of a bank, creating opportunities for children to use banking in their classroom experience

6.2.5 CHANGES IN SUPPLY AND DEMAND

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify where some products originate	**The learner will:** • List items that come from farms or factories • Explain that certain businesses such as McDonalds, Burger King and Wendy's make specific products such as hamburgers • Practice exchanging play money for goods	**The adult will:** • Provide advertisements of businesses in the communities that make specific products • Discuss where you would go to buy shoes, to find books or to get a toy

STANDARD 6.3: SCARCITY AND CHOICE

BIG IDEA: There is a difference between wants and needs and how we acquire items.
ESSENTIAL QUESTIONS: What do I do if I do not have enough of an item?

6.3.1 SCARCITY AND LIMITED RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Understand that some resources and money are limited • Notice when materials are gone	**The learner will:** • Determine when they need more of something that isn't available, but may be available elsewhere • Notice when materials are running low, such as we need more paper in the art area • Ask teacher for more milk when the pitcher is empty	**The adult will:** • Talk about situations that might occur if materials are limited • Discuss how to resolve situations when there are not as many materials as needed • Use class meeting times to brainstorm ways for getting more

6.3.3 ALLOCATION OF RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Share or offer items to others	**The learner will:** • Share or offer own resources when another child needs something • Ask another to share a needed item	**The adult will:** • Provide enough resources for children working in an area • Encourage children to think about how to get more resources if needed • Indicate that a resource was empty but now has been replenished

STANDARD 6.5: WORK AND EARNINGS

BIG IDEA: People work to earn money.
ESSENTIAL QUESTIONS: Can I indicate that adults earn money by working to buy things? Can I name certain businesses? How can I save money?

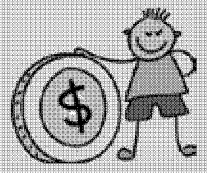
6.5.1 FACTORS INFLUENCING WAGES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Understand that one earns money from working	**The learner will:** • Talk about things that have been bought among themselves or with the teacher • Respond that adults earn money to buy things by working	**The adult will:** • Reinforce the idea that we work to get money • Support the idea that money to buy items comes from this work • Indicate that people do many different kinds of jobs to earn money • Provide play money in dramatic play area • Include materials that will encourage business practice experiences as part of the dramatic play area, such as food, a cash register, play money and grocery bags to make a grocery store • Create a token system where children collect tokens that can be traded in for supplies or trinkets

6.5.3 TYPES OF BUSINESSES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Name businesses and their corresponding goods and services	**The learner will:** • Participate in role play that is related to a business such as a pet store • Identify that food is purchased at the grocery store or hair is cut at the beauty salon or barber shop • Describe where customers go to acquire specific materials, goods or services, such as the stamps are purchased at the post office	**The adult will:** • Provide materials in the dramatic play area to create many types of businesses • Read books about businesses both fiction and non-fiction • Invite a business owner to visit and describe the service or goods that are sold or performed • Take a walk around the neighborhood to identify the businesses in the community

6.5.7 COSTS AND BENEFITS OF SAVING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice saving money or tokens 	**The learner will:** • Talk about saving money in a bank • Talk about things they might like to buy with saved money • Use play money to buy things in the dramatic play area • Collect and save tokens for an anticipated "purchase" • Trade in tokens for a desired prize	**The adult will:** • Encourage saving money in a bank or other safe place • Talk about the benefits of saving money to buy special things • Develop situations where children can earn and save tokens, then use them to "purchase" a desired item • Include play money in classroom learning areas, such as the dramatic play area or block corner

SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 7.1: BASIC GEOGRAPHIC LITERACY

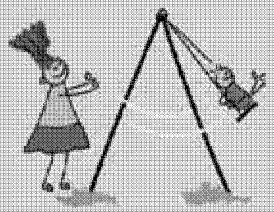
BIG IDEA: Each individual is a member of a larger community.
ESSENTIAL QUESTIONS: How do I use or create a simple map? Can I describe basic features of places I've visited?

7.1.1 GEOGRAPHIC TOOLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate a beginning understanding of maps as actual representations of places	**The learner will:** • Use a simple map • Use blocks to represent buildings, roads or houses • Include representations of roads, bodies of water and buildings in play	**The adult will:** • Display maps and globes and pictures of construction sites • Talk about how to get from one place to another

7.1.2 PLACES AND REGIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe the characteristics of his/her home and frequently visited locations	**The learner will:** • Give information about the place she/he lives such as address and phone number • Identify and locate familiar places in the neighborhood • Describe if dwelling is apartment, house, mobile home • State information about the park, playground or other friends' homes • List the kinds of furniture that belong in specific rooms, such as bed in bedroom and stove in kitchen • Describe simple characteristics of a business or community structure, such as the store with the big windows or the house that has the flag out front	**The adult will:** • Practice address recognition with children • Compare types of homes • Talk about favorite places to visit • Create a class bulletin board with favorite places listed



STANDARD 7.2: PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: Every location can be described by its physical characteristics.
ESSENTIAL QUESTIONS: How do I describe the location of objects to others?

7.2.1 PHYSICAL CHARACTERISTICS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe the location of items/areas in the classroom and areas at home	**The learner will:** • Use directionality, size and position such as left, right, first, last, little, big, top, bottom to describe location in the classroom • Place pictures of common household items in the proper rooms of a house floor plan • Listen to directions and retrieve items	**The adult will:** • Encourage children to move in various ways, including climbing, jumping and rolling so they experience position in space • Point out where things are located • Use left and right and other directional terms

SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 7.3: HUMAN CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: All humans have similarities and differences.
ESSENTIAL QUESTIONS: How do I respect and appreciate others' differences?

7.3.1 HUMAN CHARACTERISTICS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify some similarities and differences of physical and personal characteristics • Demonstrate an appreciation of one's own characteristics and those of others and others' cultures	**The learner will:** • Make self-portraits that include body parts and clothing • Demonstrate an appreciation of one's own characteristics and those of others • Show understanding and respect for diverse customs and practices • Share information about family customs	**The adult will:** • Provide skin tone crayons and markers for children to use • Discuss similarities and differences in dress, customs, tools and transportation as seen in books, movies, and pictures • Include multicultural materials throughout the classroom, including books, dolls, dress-up materials and props, art materials, posters

STANDARD 7.4: INTERACTIONS BETWEEN PEOPLE AND THE ENVIRONMENT

BIG IDEA: People and the environment affect each other.
ESSENTIAL QUESTIONS: How do I make changes based on what is occurring in the environment? How do I use basic technology?

7.4.1 IMPACT OF PHYSICAL SYSTEMS ON PEOPLE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Recognize that environmental changes can impact what people do	**The learner will:** • Describe types of clothing to wear in specific weather • Note if children can play outdoors based on the weather • Share information about roadwork noticed on the way to school • Discuss reasons for not picking flowers on the way to school • Assist with classroom jobs • Help to clean up outside the classroom	**The adult will:** • Discuss the impact of the weather on the day's activities • Provide seasonal clothing and props in the dramatic play area • Provide opportunities for children to dress a weather character with appropriate clothing • Talk about changes occurring near or around the school • Discuss and reinforce how to maintain the indoor and outdoor environment

7.4.2 IMPACT OF PEOPLE ON PHYSICAL SYSTEMS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Understand how to make simple technology work	**The learner will:** • Turn a tape recorder or CD player on or off • Independently operate computer game • Explore multimedia effects on the computer • Look at X-rays in the dramatic play area	**The adult will:** • Provide a green sticker on the play button and a red sticker on the stop button on tape or CD player • Provide a variety of age appropriate computer games • Provide X-rays in the dramatic play area • Provide supervision when children are using devices • Put non-working devices in play areas, including objects that can be taken apart and put back together

STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

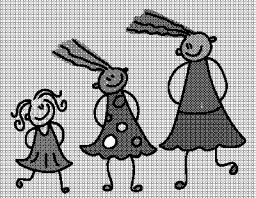
BIG IDEA: Past and present experiences and ideas help us make sense of the world.

ESSENTIAL QUESTIONS: How can I sequence events? Can I recall things that have occurred? Can I get information about a topic from several sources?

8.1.1 CONTINUITY AND CHANGE OVER TIME

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate understanding of a sequence of events • Use words to describe time (yesterday, today, tomorrow)	**The learner will:** • Put pictures from a story in sequential order • Show anticipation for regularly scheduled events • Describe a daily routine • Describe what happens next in a familiar story	**The adult will:** • Talk about what is happening during the day and the week • Use the names of the days of the week • Establish and maintain a consistent routine • Ask children to recall what happened last night or yesterday • Use calendars to talk about what happened in the past and what will happen in the future • Read familiar story and pause so children can say what might happens next

8.1.2 HISTORICAL COMPREHENSION AND INTERPRETATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Understand how things, people and places change over time 	**The learner will:** • Recall information from the immediate past • Predict how events today or in the recent past affect the near future such as "We had crackers for snack yesterday, so we'll have pretzels today" • Attempt to use terms like yesterday, tomorrow, last night correctly • Sequence pictures of self from birth to present	**The adult will:** • Provide access to clocks, timers and watches • Discuss what happens in the beginning, middle and end of stories • Label events and routines using language such as today, tomorrow, next, later, long ago • Include materials (dinosaurs and robots) from the past and future for play and discussion • Invite grandparents to talk about their experiences • Display pictures and books that show children in different stages of growth

8.1.3 RESEARCH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Understand that information comes from many sources, such as books, computer,or newspapers	**The learner will:** • Look at books, pictures and authentic items related to a topic to gather information • Watch a movie on a topic • Play act looking up a phone number in a directory or a recipe in a cookbook	**The adult will:** • Provide books, pictures and authentic objects on a theme • Model going to the library to get information about a question • Provide multimedia information about a theme • Talk about the resources you use for specific information such as a cookbook or a map • Model researching to answer a question by looking it up on the computer or in a book • Include topical books in multiple learning areas for children's access

SOCIAL STUDIES THINKING GLOSSARY

CIVICS AND GOVERNMENT

Authority – Right to control or direct the actions of others, legitimized by law, morality, custom or consent

Citizen – Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government

Community – A group of people who share a common social, historical, regional or cultural heritage

Conflict Resolution – The process of attempting to solve a dispute or conflict

Country – The acceptable political boundaries or borders recognized throughout the world

Decision-making Process – An organized approach to making choices

Government – Institutions and procedures through which a territory and its people are ruled

Leadership – State or condition of one who guides or governs

State – A commonwealth; a nation; a civil power

ECONOMICS

Community Helpers – Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firemen, policemen, trash collectors, animal control officers

Competition – The rivalry among people and/or business firms for resources and/or consumers

Consumer – One who buys or rents goods or services and uses them

Cost – What is given up when a choice is made; monetary and/or non monetary

Demand – The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various prices during a specific time period

Goods – Objects that can satisfy people's wants

Household – The group of people living together under one roof; a group of individuals whose economic decision- making is interrelated

Money – A medium of exchange

Natural Resource – Anything found in nature that can be used to produce a product (e.g., land, water, coal)

Price – The amount people pay in exchange for a particular good or service

Producer – One who makes goods or services

Profit – Total revenue minus total costs

Services – Actions that are valued by others

Supply – The different quantities of a resource, good or service that potential sellers are willing and able to sell at various prices during a specific time period

Wants – Desires that can be satisfied by consuming goods, services or leisure activities

GEOGRAPHY

Climate – Long-term patterns and trends in weather elements and atmospheric conditions

Culture – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing

Environment – Everything in and on earth's surface and its atmosphere within which organisms, communities, or objects exist.

Geographic Tools – Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs)

Place – An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas

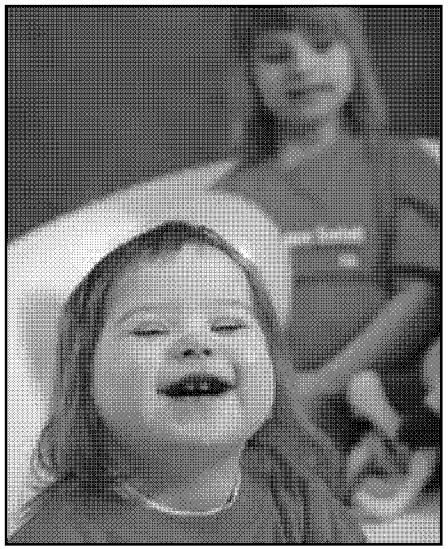
Resource – An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value

HISTORY

Conflict – The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

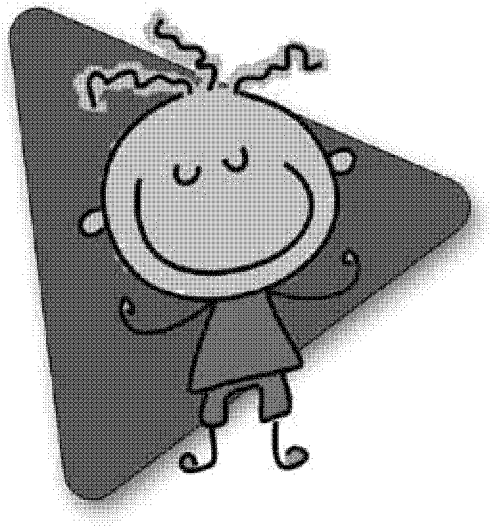
Document – A formal piece of writing that provides information or acts as a record of events or arrangements

Media Sources – Various forms of mass communication such as television, radio, magazines, newspapers and internet



HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

LEARNING ABOUT MY BODY



Children's future health and well-being are directly related to the development and strengthening of their gross and fine motor muscles. Children must have opportunities to experience active indoor and outdoor play in which they can use their bodies to explore the environment while acquiring muscle control, balance, coordination, strength , eye-hand coordination and other related skills. Health and safety activities must be integrated throughout the day as teachers model healthy and safe practices and promote healthy lifestyles for children.

GET UP AND MOVE!

Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children's healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in outdoor play, weather permitting. Including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain good healthy choices and habits influence children's ongoing development and school success.

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10.5: Concepts, Principles and Strategies of Movement: Fine Motor Coordination	56

STANDARD 10.1-3: HEALTH AND SAFE PRACTICES

THIS STANDARD HAS BEEN COMBINED AND ALIGNED TO THE GRADES 3-12 STANDARDS 10.1, 10.2 AND 10.3.

BIG IDEA: Children need to make healthy choices, physically and nutritionally, to optimize their learning potential.
ESSENTIAL QUESTIONS: What are things I can do to keep myself healthy and safe? Can I identify ways to help my body develop? What are some healthy foods?

10.1-3.1 FUNDAMENTALS OF GOOD HEALTH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Practice basic hygiene routines with adult reminders • Identify medicine and know that is it used to stay healthy • Identify fundamental practices for good health • Identify how people keep us healthy	• Wash own hands, brush teeth, cover nose and mouth when sneezing, wash hands after using tissue • Discuss what medicine is used for • Discuss times medicine might be needed • Explain that we need to eat well, get rest and exercise to be healthy • Explain how a doctor, nurse or dentist can keep us healthy	• Provide opportunities in daily schedule to practice hygiene routines (tooth brushing, flossing teeth) • Create learning centers that support healthy practices • Provide opportunities for children to discuss what happens when we are sick and what we do to feel better • Discuss the positive and negative points of medication • Remind children to only take medicine from a trusted adult • Provide examples of healthy meals • Display the food pyramid • Encourage children to rest to help their bodies stay healthy • Model and encourage exercise and active play • Read books about staying healthy

10.1-3.2 BODY AWARENESS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Identify and locate body parts • Identify specific practices that support body development and function	• Name and point to body parts when asked • Discuss what is meant by feeling healthy • Identify rest, exercise and good eating as ways to stay healthy • Participate I body part identification games and songs such as Hokey Pokey or Where is Thumbkin?	• Provide play opportunities to point to and name different body parts on dolls and child • Provide dolls and puzzles with body parts • Make outlines of body and add body parts such as facial features and fingernails • Read books about healthy practices and images • Discuss the concepts of rest, exercise and good eating related to good health • Encourage children to engage in healthy practices

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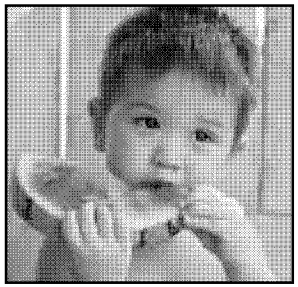
STANDARD 10.1–3: HEALTH AND SAFE PRACTICES continued

10.1–3.3 SAFE PRACTICES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and follow basic safety rules • Identify how people help to keep us safe • Identify the consequence of unsafe behavior	**The learner will:** • Identify potential hazards at home, school, and community • Identify and avoid unsafe practices, such as playing with matches, crossing streets and talking to strangers • Identify and use playground and classroom rules • Identify emergency procedures • Explain how a firefighter and police officer can keep us safe • Explain what could happen if unsafe behavior occurs	**The adult will:** • Talk with children about harmful substances and objects, discuss and practice crossing street • Practice making "911" calls • Model and positively guide playground and classroom rules • Demonstrate and practice "STOP DROP ROLL" and emergency procedures • Practice fire and emergency evacuation procedures • Use sunscreen • Provide safety worker props for dramatic play area • Read books about safety • Invite safety workers to visit class • Include nontraditional roles using display, pictures, puppets, dolls • Discuss consequences of unsafe behavior such as injury or damage to property



10.1–3.4 NUTRITION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Name foods that keep us healthy • Classify foods by their food group	**The learner will:** • Make healthy food choices • Identify healthy and not healthy foods • Match foods to others in a similar category such as fruit, vegetable, milk or grain	**The adult will:** • Provide a variety of healthy choices at snack or meal time • Create a healthy/not healthy picture sort game • Discuss the importance of making healthy choices • Model healthy eating • Display the food pyramid • Provide a variety of foods and pictures including ethnic foods such as tortillas, lasagna, black-eyed peas, bagels or chili for children to classify

STANDARD 10.4: PHYSICAL ACTIVITY: GROSS MOTOR COORDINATION

BIG IDEA: **Children gain control over their bodies and body movements through active experiences and exploration.**
ESSENTIAL QUESTIONS: **Do I participate in large motor activities and games? Am I able to comfortably use large motor equipment?**

10.4.1 CONTROL AND COORDINATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Combine large motor movements with the use of equipment • Demonstrate coordination of body movements in active play • Move and stop with control • Perform a variety of movement skills along side and with a partner	**The learner will:** • Throw a bean bag or ball overhand with aim • Catch a ball • Pull wagons or push wheelbarrows • Ride a tricycle, using feet to pedal • Use outdoor gross motor equipment such as swings, climbers and tunnels safely and appropriately • Run with control and direction • Stop when intended • Engage in games like Hokey Pokey, London Bridge or Simon Says	**The adult will:** • Play catch with children • Provide light balls that easily fit in a hand. Encourage child to throw with one hand while stepping forward • Provide targets for children to throw toward such as hula hoops or baskets • Include toys and equipment that encourage active play such as three and four wheeled steerable vehicles, balls, climbers and slides, balance beams, ramps • Provide areas on the playground for riding toys to be used safely • Ensure riders wear helmets • Provide outside time for children to run • Create opportunities for children to participate in large motor movement games that involve partners

10.4.3 BALANCE AND STRENGTH

STANDARD STATEMENT:	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Exhibit balance while moving on large motor equipment • Show enthusiasm for mastery of gross motor movements through repetitive practice	**The learner will:** • Engage in large motor activities such as marching, hopping, running, jumping and dancing • Walk on a balance beam • Climb stairs using alternating feet • Jump over an object with both feet • Walk on tip toe for a short distance • Participate in an obstacle course going through tunnels, over or under equipment • Participate in movement games • Climb a short ladder on a slide • Kick a ball	**The adult will:** • Provide space and opportunities for children to walk, run and climb every day • Provide opportunities for children to engage in gross motor activities inside such as dancing and moving to music, bean bag toss, or Velcro mitts • Include large motor activities during transitional times such as hop to the table, jump five times while you wait to wash your hands • Include motor games and songs such as Skip to my Lou and The Farmer in the Dell • Create obstacle courses to practice gross motor movements

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

BIG IDEA: Fine motor practice helps children develop eye-hand coordination, strength and controlled use of tools.
ESSENTIAL QUESTIONS: Can I perform simple finger plays? How do I use my hands and fingers to manipulate objects? How do I develop hand-eye coordination?

10.5.1 STRENGTH, COORDINATION AND MUSCLE CONTROL

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use hands, fingers and wrists to manipulate objects • Practice manual self help skills	**The learner will:** • Manipulate dough and clay by squeezing, pounding, rolling • Tear paper with purpose • Use scissors to cut • Use tongs or tweezers to pick up objects • Manipulate pegs into a pegboard • String beads, noodles, or cereal onto a string • Play with pop beads and snap cubes • Zip zippers • Snap, button and Velcro clothes • Practice tying • Act out finger plays and songs using hands and fingers • Complete wooden and cardboard shape and frame puzzles	**The adult will:** • Provide opportunities and materials to play with playdough • Provide opportunities to use scissors • Provide pegs and peg boards • Provide a variety of objects for stringing • Supply tweezers and tongs to grasp objects. • Provide a wide variety of beads and snap cubes for children to put together and pull apart • Encourage children to attempt to use closures • Encourage and practice shoe tying • Teach and participate in finger plays • Provide a variety of puzzles

10.5.2 EYE/HAND COORDINATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Coordinate eye and hand movements to perform a task	**The learner will:** • Act out finger plays with hands and fingers • Complete self-help skills such as zip, snap or button • String beads, manipulate pegs, build with small blocks • Use tools to pour, such as funnels, basters, and pitchers • Put together puzzles	**The adult will:** • Provide small toys that need to be put together, such as snap beads or lacing beads • Include puzzles of varying levels of difficulty for children to put together • Develop activities or opportunities for children to practice drawing and writing with a variety of tools • Encourage children to practice their own self help skills such as zipping • Provide opportunities for children to pour water or milk and to serve their own foods such as spooning out applesauce

10.5.3 USE OF TOOLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use writing and drawing implements with correct grip to make pictures • Use classroom and household tools independently to accomplish a purpose	**The learner will:** • Hold pencils, crayons, and markers in a functional grasp (pincer grasp) • Use glue sticks to paste various items • Use paint brushes to make strokes at the easel • Use appropriate tools to complete classroom jobs • Use fork and spoon appropriately • Use cup or glass for drinking	**The adult will:** • Encourage children to use pencil sharpener, chalkboard erasers and watering can to complete classroom jobs • Provide both forks and spoons for children to use when eating

HEALTH, WELLNESS & PHYSICAL DEVELOPMENT GLOSSARY

Agility – A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy

Balance – A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving

Coordination – A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately

Developmental Differences – Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners' developmental status will affect their ability to learn or improve

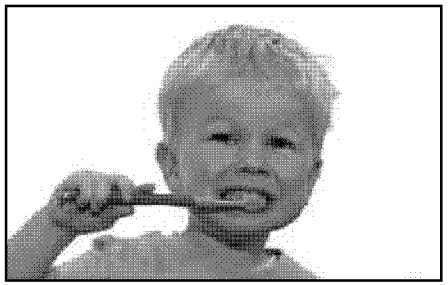
Developmentally appropriate – Motor skill development and change that occur in an orderly, sequential fashion and are age and experience related

Directions – Forward, backward, left, right, up, down

Flexibility – A health-related component of physical fitness that relates to the range of motion available at a joint

Food Guide Pyramid – A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America

Health – A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity



Health Education – Planned, sequential PK-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health

Locomotor Movement – Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop

Motor Skills – Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (tennis serve, shooting a basketball)

Movement Skills – Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities

Nonlocomotor Movement – Movements that do not produce physical displacement of the body

Physical Activity – Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure

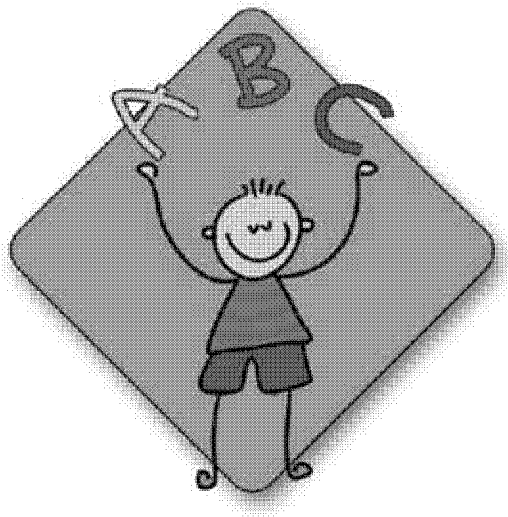
Physical Education – Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life

Physical Fitness – A set of attributes that people have or achieve that related to their ability to perform physical activity

Safety Education – Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury

LANGUAGE AND LITERACY DEVELOPMENT

EARLY LITERACY FOUNDATIONS; READING, WRITING, SPEAKING AND LISTENING



Communication occurs in different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming stories and songs and engaging in word play activities.

INCLUSIVE CLASSROOMS

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying classroom experiences alongside their typically developing peers. Teachers, specialists, and families must work together to understand all children's unique needs while adapting teaching strategies, materials and/or environment to assure that every child can learn and develop to his/her highest potential. Adults must celebrate all children's accomplishments and appreciate what children can learn and do.

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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

BIG IDEA: Emerging reading involves the use of pictures, symbols and text to gain information and derive meaning.
ESSENTIAL QUESTIONS: How do I practice pre-reading skills? How do I understand information and details from a variety of books?

1.1.1 PURPOSES FOR READING

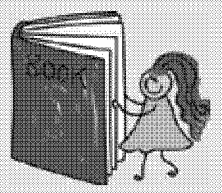
STANDARD STATEMENT
- Use a variety of text during play
- Select a variety of genre during play

EXEMPLARS (EXAMPLES)
The learner will:
- Choose books from classroom library to peruse
- Identify environmental print
- Pretend to read by moving eyes and /or pointing with finger from left to right, top to bottom, front to back
- Use print materials in learning centers, such as cookbooks, menus, phone books or maps

SUPPORTIVE PRACTICES
The adult will:
- Provide purposeful and playful exposure to a variety of printed materials
- Use printed material for functional purposes
- Model and explicitly demonstrate to read print top to bottom and left to right
- Provide opportunities for learners to practice to read print top to bottom and left to right
- Read and re-read quality literature daily
- Provide learning centers and a classroom library where learners can independently interact with quality books

1.1.2 WORD RECOGNITION SKILLS

STANDARD STATEMENT
- Identify upper case letters
- Associate some names of letters with their shapes and sounds
- Differentiate words and letters
- Continue teacher-initiated word patterns
- Identify familiar words and environmental print



EXEMPLARS (EXAMPLES)
The learner will:
- Name upper case letters
- Begin to differentiate between and among letters, numbers, words, sentences
- Recognize that one child's name begins with the same sound as another child's name
- Recognize when two or more words begin with the same sound
- Create two words, a phrase or short sentence with words that begin with the same sound
- Read familiar names and words in the environment

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for children to experiment and play with the sounds that words make through rhymes, nonsense words, poems, music and chants
- Provide opportunities to clap out the syllables of names or words
- Read books that contain rich language (rhyme, repetition and rhythm)
- Provide rich environmental print in classroom (posters, charts, word walls)
- Play rhyming and sound games
- Provide opportunities for children to hear and identify rhyming words and alliteration of beginning sounds
- Provide opportunities in group and centers for identifying letters, words, numbers, sentences
- Provide materials for exploration of letters and sounds

1.1.3 VOCABULARY DEVELOPMENT

STANDARD STATEMENT
- Describe pictures in books using detail
- Practice new vocabulary with teacher assistance
- Match vocabulary to picture clues
- Use new vocabulary when speaking

EXEMPLARS (EXAMPLES)
The learner will:
- Talk about pictures using many details
- Match pictures with new vocabulary words
- Use new vocabulary in the context of dramatic play, daily routines and classroom conversations
- Begin to use new vocabulary when asking questions or describing situations or objects

SUPPORTIVE PRACTICES
The adult will:
- Encourage children to use new vocabulary words when discussing pictures or real objects
- Provide learning centers for children to engage with words and pictures
- Support and praise children's use of new words
- Introduce vocabulary in the context of topics when using books, fingerplays or songs, poems

CONTINUED...

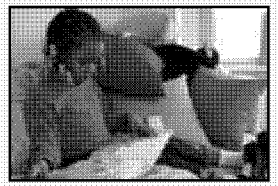
STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

1.1.4 COMPREHENSION AND INTERPRETATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Respond appropriately to directions and stories • Use verbs to describe illustrations showing action • Retell a simple story in sequence with picture support • Identify story details through questioning • Draw connections between story events and personal experiences	**The learner will:** • Demonstrate understanding of directions and stories by appropriate responses • Attach action words to illustrations showing action, such as "That girl in the picture is running fast." • Retell a story in sequential order using various materials • Answer questions about stories • Use prior knowledge to draw connections between events of story and self	**The adult will:** • Reinforce appropriate responses to directions or stories • Provide purposeful and playful exposure to a variety of printed materials • Read rich literature (stories/books, poems) daily and model making connections between story events and background knowledge • Provide opportunities to practice sequencing using pictures and flannel boards • Model attaching nouns and verbs to illustrations on a regular basis

1.1.5 FLUENCY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Recite rhymes, songs, and familiar text while using tracking • Apply knowledge of letters, words, and sounds to read simple sentences	**The learner will:** • Say or sing nursery rhymes • Read chants, poems daily using pointers or finger to track print • Assemble words to form sentences and share with classmates	**The adult will:** • Provide charts and morning messages for children to read independently • Promote reading the room strategy, such as searching for environmental print • Expose learners to poems, chants, finger-plays, and songs that include rhyme, rhythm and repetition • Create learning centers that focus on letters, sounds, words and creating simple sentences



STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT

BIG IDEA: Children understand and respond to a wide variety of text.
ESSENTIAL QUESTIONS: How do I identify parts of books? How do I show print awareness? Can I make and confirm predictions about text?

1.2.1 TEXT ANALYSIS AND EVALUATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify title and author of story • Identify characters in story • Discuss events in book or story • Explain reasons for liking or disliking a book or story with prompting	**The learner will:** • Tell the name of a book and author when asked • Name characters in a story • Talk about events that happened within a story • Tell why a book is liked or disliked	**The adult will:** • Point out title, author and illustrator when reading • Discuss characters and story events after reading • Graph likes and dislikes • Encourage children to explain why they like or dislike a book

CONTINUED...

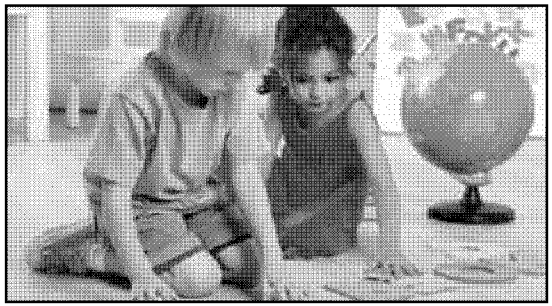
STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT cont.

1.2.2 TEXT ORGANIZATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice book handling skills • Identify beginning and end of a story • Practice tracking from top to bottom and left to right with scaffolding	**The learner will:** • Orient a book correctly • Turn pages in order • Tell what happens at the beginning and end of the story • Use pointers or finger to track print on charts, posters, environmental print or in books	**The adult will:** • Model correct book orientation • Model turning pages carefully and in order • Ask about the beginning and end of the story • Provide pointers and charts for children to practice tracking • Reinforce children moving from top to bottom and left to right

1.2.3 FACT AND OPINION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Differentiate between real and make-believe • State at least one important fact from informational text	**The learner will:** • Tell what could or could not happen in a story • Identify real or make believe characters • Tell one thing learned from a non-fiction text	**The adult will:** • Ask children to talk about what could really happen, such as "Do you think pigs can really fly?" • Verify children's responses about real and make believe characters • Read non-fiction texts to children • Encourage children to use non-fiction to find out information • Ask children to identify facts from text



1.2.5 INFERENCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use illustration clues and story sequence to infer and predict what happens next in a story • Decide if predications were confirmed	**The learner will:** • Make predictions before a story or during a story • Determine if the prediction was correct after reading	**The adult will:** • Encourage children to make predictions before and during story reading • Use the story to confirm predictions

STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE

BIG IDEA: Literature consists of a variety of elements to convey meaning.
ESSENTIAL QUESTIONS: How do I recognize the different elements in a story? How do I respond to questions about the story?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
1.3.1 ANALYSIS AND EVALUATION	• Select favorite book from many by same author	The learner will: • Listen to many books by the same author and determine favorite	The adult will: • Use author studies to read many books by the same author • Ask children to choose favorite book • Graph results
1.3.2 LITERARY GENRES	• Identify a variety of literary genre with teacher support	The learner will: • Tell if a book or reading selection is a fairy tale, poetry, fiction or non-fiction	The adult will: • Discuss genres when reading • Make a chart of books that fit into each category • Ask children to name genre
1.3.3 LITERARY ELEMENTS	• Respond to questions about main characters, setting and events during a read aloud	The learner will: • Answer who, how, when and where questions	The adult will: • Ask questions during and after reading that focus on character, setting and events
1.3.4 LITERARY DEVICES	• Recognize rhyming words in works of literature with teacher support	The learner will: • Identify rhyming words in a story when asked by the teacher	The adult will: • Point out rhyming words and patterns in books

STANDARD 1.4: TYPES OF WRITING

BIG IDEA: Children write for different purposes and audiences.
ESSENTIAL QUESTIONS: How do I share information through writing? How do I describe my writing?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
1.4.1 NARRATIVE	• Create illustration and write about it	The learner will: • Draw a picture and write symbols or words that tell about it	The adult will: • Encourage children to write symbols or words that describe their pictures • Use journals pages where children can write about stories or events in their day

CONTINUED...

STANDARD 1.4: TYPES OF WRITING continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
1.4.2 INFORMATIONAL	• Share information through pictures and dictated words	The learner will: • Create a picture about a nonfiction topic and talk about it with the teacher • Share information from various sources about non-fiction topics	The adult will: • Write the child's words on the picture • Display in the classroom • Create charts of children's ideas about topics • Display informational text in various locations in the room, such as on posters or bulletin boards, in stories and books or in learning areas

STANDARD 1.5: QUALITY OF WRITING

BIG IDEA: Writing conveys the author's ideas about a topic.
ESSENTIAL QUESTIONS: How do I choose the key ideas of a topic about which to write? How do I practice writing symbols and words?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
1.5.1 FOCUS	• Illustrate and /or tell about a specific topic	The learner will: • Create a picture that is related to a topic and talk about it	The adult will: • Talk about the focus of books and pictures that children see
1.5.2 CONTENT	• Generate ideas for a picture, story or shared writing • Identify and/or create illustrations that depict story detail	The learner will: • Brainstorm ideas for pictures and stories • Create pictures that represent details in the story • Tell teacher what she/he will draw when asked	The adult will: • Create a list of ideas brainstormed by the children • Ask children to explain the pictures drawn to represent a story
1.5.3 ORGANIZATION	• Write symbols, words or simple phrases that communicate an idea	The learner will: • Work with teacher to create words or sentences that relate to one topic	The adult will: • Provide materials and opportunities for children to write daily • Allow children to create written work of their choice
1.5.6 CONVENTION	• Experiment with a variety of writing tools and surfaces • Create letter forms using various materials • Print letters in name using letter-like forms or conventional print	The learner will: • Use markers, paints, crayons, chalk and chalkboard to communicate • Use pipe cleaners, playdoh, foam, tooth-picks and other materials to create letters and letter forms • Write name using letter-like forms or even conventional print	The adult will: • Provide a variety of materials in the writing center for children to communicate or create • Post children's names on word wall and in writing center to practice letter formation

STANDARD 1.6: SPEAKING AND LISTENING

BIG IDEA: Speaking and listening are connected skills that build the foundation for literacy and communication.
ESSENTIAL QUESTION: How do I listen for meaning? How do I appropriately express my thoughts?

1.6.1 DISCUSSION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Listen and respond attentively to conversations • Ask and answer relevant questions • Follow two-step directions	The learner will: • Make a statement that shows attention to the conversation • Ask or answer a question with a response that makes sense • Respond to adult's directions	The adult will: • Engage children in conversation about topics of interest daily • Ask questions regularly • Reinforce following directions

1.6.2 LISTENING SKILLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Share experience when asked • Speak in simple sentences • Recite rhymes, songs and familiar text in a group • Answer questions	The learner will: • Talk about experiences clearly using some details • Speak clearly enough to be understood by most listeners • Use appropriate volume to be heard by group, paying attention to inside and outside voices • Participate in fingerplays and songs • Practice and play with words and language • Answer question about shared information	The adult will: • Speak to and engage children in group and individual conversations every day • Model appropriate volume when speaking • Introduce children to new words through fingerplays, songs and rhymes • Ask children questions that involve detailed answers instead of one word responses

1.6.3 DISCUSSION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Communicate using detail when relating personal experiences • Pose questions and listen to ideas of others • Contribute to class discussion	The learner will: • Use details to share personal experiences • Ask questions and listen to others to acquire new knowledge • Participate respectfully in class or group discussions	The adult will: • Encourage children to use detail in describing experiences • Encourage children to ask questions to find out more information • Model appropriate participation in group or class discussions including polite interactions, one person speaking at a time or asking questions

1.6.4 PRESENTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Share information about an item of interest 	The learner will: • Talk about an object or experience during circle time • Tell teacher or peer about a home experience or event • Respond to questions about shared information	The adult will: • Give children time to talk with each other throughout the day • Use meal time as an opportunity for peer sharing and discussion • Re-phrase learners' sentence structure or grammar by repeating the sentence properly • Praise children's efforts to share information • Introduce new ideas or words to increase vocabulary

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

BIG IDEA: Information can be shared in many ways.
ESSENTIAL QUESTION: How do I communicate in more than one way?

1.7.1 COMMUNICATING IN MORE THAN ONE LANGUAGE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use verbal and nonverbal language to communicate for a variety of purposes • Repeat a few words in a language other than native language	The learner will: • Use words and gestures to communicate meaning in many forms • Say words in a new language after hearing them	The adult will: • Encourage children to use words frequently • Model common sign language signs • Introduce words in new languages for familiar objects or words such hello, numbers, goodbye or friend

STANDARD 1.8: RESEARCH

BIG IDEA: Information to answer questions is available through a variety of resources.
ESSENTIAL QUESTION: Where can I go to find the answer to my question?

1.8.1 INQUIRY BASED PROCESS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Ask questions about topics of personal interest to gain information	The learner will: • Ask adult for explanations or information using why, how, where and when questions, such as "Why do leaves turn colors?" or "Where are the towels?"	The adult will: • Engage children in discussions about interests such as cars, dinosaurs or dogs

1.8.2 LOCATION OF INFORMATION AND CITING SOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Locate information on identified topics using resources provided by teacher	The learner will: • Use books or computer programs to find new information • Use a cookbook to find a recipe or a phone book to get a phone number during dramatic play	The adult will: • Provide a variety of resources on topics that interest children including books, computer programs, maps or pictures

1.8.3 ORGANIZATION AND PRODUCTION OF FINAL PRODUCT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Produce a simple project based on research with assistance	The learner will: • Create a picture or other product using information learned through research	The adult will: • Support children, ask questions and encourage thinking while children are working on a project based on research

STANDARD 1.9: INFORMATION, COMMUNICATION AND TECHNOLOGY LITERACY

BIG IDEA: Technology provides access to new information.
ESSENTIAL QUESTIONS: How do I use technology to gain information?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
1.9.1 MEDIA AND TECHNOLOGY RESOURCES	• Identify technology that can be used to gain information • Use age appropriate computer program after training	**The learner will:** • Name computer and television as technology that can give information • Use the computer with assistance from the teacher	**The adult will:** • Talk about ways that television and computers can help us to learn new things • Model and support learners using the computer • Provide various computer programs for children's use during free play • Limit amount of time children spend on the computer at one sitting to 15 minutes or less

LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY

Alliteration – The repetition of initial consonant sounds in neighboring words

Antonym – A word that is the opposite of another word.

Characterization – The method an author uses to reveal characters and their various personalities

Compare –Place together characters, situations or ideas to show common or differing features in literary selections

Context Clues – Information from the reading that identifies a word or group of words

Concepts of Print – Print goes left to right; one to one match with voice to print, concept of first and last; concept of letter, word, sentence, space, letter order in words is important; different punctuations have meaning

Conventions of Language – Mechanics, usage and sentence completeness

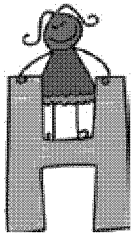
Decoding – Analyzing text in order to identify and understand individual reading

Echo Reading – Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line

Emergent Literacy – One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy

Expressive Language – Being able to convey messages using words

Evaluate – Examine and judge carefully



Fine Motor – Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay or pinching clothespins

Fluency – The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading

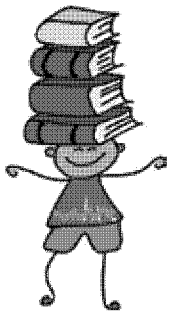
Genre – A category used to classify literary works, usually by form, technique or content (prose, poetry)

Guided Reading – Teachers work with students at their instructional level to guide them in using context, visual and structural cues

Homophone – One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode)

Language Experience – Reading own writing; teacher takes dictation from students or students do own writing. Use student's own words as reading material; an effective way to encourage self-expression and build awareness of the connections between oral and written language.

LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY continued



Learning Styles –
- Visual (learn through seeing) needs to see the teacher's body language and facial expression to fully understand the content of the lesson
- Auditory (learn through listening) learns through lectures, discussion and listening and needs to talk things through
- Tactile/kinesthetic (learn through moving and touching) learns best through a hands-on approach actively exploring the physical world around them

Literary/Story Elements – The essential techniques used in literature (characterization, setting, plot, theme, problem, solution)

Literary Devices – Tools used by the author to enliven and provide voice to the writing (dialogue, alliteration)

Multiple Intelligences – Howard Gardner's theory of intelligences
- Visual –spatial (ability to perceive the visual)
- Verbal–linguistic (ability to use words and language)
- Logical/mathematical (ability to use reason, logic and numbers)
- Bodily/kinesthetic (ability to control body movements and handle objects skillfully)
- Musical/rhythmic (ability to produce/appreciate music, sound, rhythm)
- Interpersonal (ability to relate and understand others; other people's feelings)
- Intrapersonal (ability to self-reflect and be aware of one's inner state of being; self awareness)
- Naturalist (ability to recognize, categorize and draw upon certain features of the environment)

Narrative – A story, actual or fictional, expressed orally or in writing

Onset – A sound in word that comes before the vowel

Phonemic Awareness – Ability to hear and identify parts of spoken language and auditorily divide into phonemes

Phoneme – A sound unit of speech

Phonics – A way of teaching reading that stresses sound symbol relationship; refers to the relationship between the letters and letter sounds of a language

Phonological Awareness – A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables and onsets and rimes

Picture Walk – A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story

Point of view – The way in which an author reveals characters, events and ideas in telling a story; the vantage point from which the story is told

Print Awareness – Ability to understand how print works

Reading Awareness –
- Uses the language of literacy (top, bottom, same, different)
- Identifies the beginning, middle, and end of a story, with the main idea coming first and details added later
- Demonstrates awareness that language can be written down and read later
- Differentiates between pictures and words
- Shows curiosity about environmental print
- Differentiates between pictures and words

Reading critically – Reading in which a questioning attitude, logical analysis and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria

Receptive Language – Being able to receive and give meaning to message/words heard

Research – A systematic inquiry into a subject or problem in order to discover, verify or revise relevant facts or principles having to do with that subject or problem

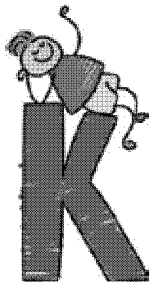
Rime – The part of a syllable that contains at least one vowel and all that follows

Shared Reading – Teacher guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading or fill the gap reading)

Shared Writing – Teacher and learner work together to compose a message or story

Tone – The attitude of the author toward the audience and characters (serious or humorous)

Voice – The fluency, rhythm and liveliness in writing that make it unique to the writer



PARTNERSHIPS FOR LEARNING

FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES

The school experience consists of much more than the academic content that teachers share with students every day. School success is also dependent on children's ability to learn, their interest in learning, and the connections between schools, community agencies and families that enable the child to learn in a way that supports his or her own learning style, needs and home experience. The partnership, links and connections that begin in the early childhood years between teachers and administrators and families, along with the other agencies in which a child or family interacts are critical to providing a holistic and seamless approach to children's learning. Schools and families should work together to share information about individualized learning plans and goals; assure positive transition to and from the current school setting; and identify and refer family members to other community agencies when appropriate.

WONDER AND DELIGHT!

Young children are curious, and from birth, they naturally seek out problems or questions to solve. They use their senses to explore materials and the environment and the search for answers to perceived problems or situations is motivational, holding their attention and creating their enthusiasm for learning. When classrooms or learning environments are structured to promote this curiosity or a sense of wonder and delight, they use instructional strategies that are based on inquiry. Inquiry is the active searching for knowledge and understanding of a specific idea and occurs most successfully when adults' intentionally create activities and experiences that allow children to use previously learned knowledge to understand new information. The adults' role during this active exploration is to scaffold children's thinking by asking "open-ended" questions that encourage problem solving and support children's imagination and story-telling. Open-ended questions or statements such as, "I wonder why that's painted blue" or "If you were Sally, what would you have done?" Allow children to express their thoughts, think creatively and problem solve. They are a more successful choice to encourage learning and critical thinking than closed questions, such as "What color did you choose?" or "Did Sally make a good choice?" that typically result in short answers that don't ask or provide good insight into children's thinking.

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STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

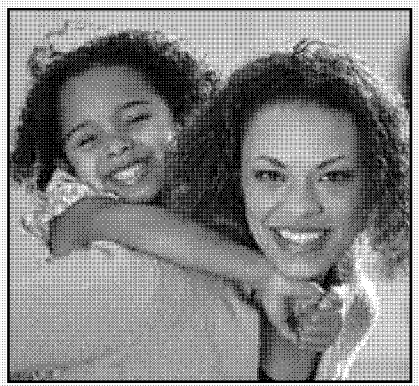
BIG IDEA: The relationship between the family and school personnel is a critical foundation to children's success in school.

ESSENTIAL QUESTION: How do schools understand families' home lives, their values, and attitudes towards learning? How do schools incorporate family preferences and interests into the life of the classroom? How do schools assure that families are familiar with and accepting of school values, attitudes and philosophies?

20.1.1 INFORMATION EXCHANGE

STANDARD STATEMENT

- Offer an on-site enrollment meeting where family can meet school personnel and observe the classroom where the child will be attending
- Share families' and school routines and discuss any needed accommodations
- Provide and regularly review a Parent Handbook that outlines program expectations and operating details
- Offer parent-teacher school events that provide updates and give families opportunities to participate in school life
- Identify home culture, language, and routines and how they might impact a child's adjustment to school
- Discuss schedules, events or past experiences that may impact a child's school experience
- Share instructional philosophies that help families understand the school structure



THE FAMILY AND SCHOOL TOGETHER

- Participate in introductory enrollment meetings that enable both family and school representatives to share values, attitudes, philosophies about learning along with unique details and needs of the child and family
- Provide a classroom tour for child and family where they can meet the teacher and explore the classroom setting
- Discuss families' needs for drop-off and pick-up, health concerns, and potential language barriers
- Hold a "Back to School" or Open House night
- Talk about a recent event, such as divorce or death, which may impact a child's behavior and what might occur at school as a result; discuss ways to communicate reciprocally about child's adjustment
- Discuss child guidance and management strategies so both family and school understand the similarities and differences in approach
- Talk about previous group experiences and child's reaction – what might be expected on the first few days
- Ask questions to learn about the child's temperament
- Ask child to bring to school pictures of family members, home environment or other important home elements that might make the adjustment to a new school easier
- Support family's apprehensions during the first few weeks of school by calling them on the first day to describe child's adjustment, or where appropriate, inviting the family to stay with the child for increasingly shorter periods of time prior to drop off
- Formulate a survey or questionnaire that can be done orally or in writing to learn about family attitudes and philosophy on child rearing, learning, reading
- Talk about the classroom structure and how children learn through play
- Learn about who the child considers 'family' and how the family defines itself, including extended family members if relevant

CONTINUED...

STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

20.1.2 HOME TO SCHOOL CONNECTIONS

STANDARD STATEMENT

- Identify family practices and traditions that should be included within the classroom
- Work with families to identify books, songs and finger plays, dances, foods, and toys that should be included in the classroom or school environment; ask for donations
- Learn about the family and home setting and incorporate into the school experience, asking for updates and new information regularly
- Invite family members into the classroom to discuss cultural information with the children, to participate in classroom life, or to identify community locations or businesses that can be visited
- Work with families to determine child's best classroom placement including when to transition from one to the next, personality types

THE FAMILY AND SCHOOL TOGETHER

- Identify ways to assure the child's positive and comforting entry into a new classroom setting, such as a picture in the cubby, a stuffed animal or blanket
- Encourage volunteers and program participation from cultural groups in the community such as foster grandparents or other multi-generational connections
- Determine if child may eat traditionally served foods, and celebrate holidays
- Use family or culturally specific phrases or words to describe activities or materials
- Ask about family members, calling them by name, such as how is the newborn, and how grandpa is doing after return home from hospital
- Add culturally-specific materials and experiences into the schedule and environment such as adding a wok to the cooking area, or counting in both English and Spanish during morning message
- Invite a family member to teach the class a culturally-specific song or to provide the words to the song
- Display family pictures inside and outside the classroom
- Seek out community volunteers to share information about specific events or activities that are meaningful to children
- Invite family members to participate in classroom events, whenever possible
- Serve familiar cultural foods and introduce new traditional foods periodically – such as rigatoni with cheese or bagels and cream cheese
- Encourage children to show pride in family-specific beliefs or practices by showing interest and describing them to the class

20.1.3 SCHOOL TO HOME CONNECTIONS

STANDARD STATEMENT

- Assure that family communications are done in culturally-sensitive ways that accommodate family literacy levels, and culture barriers
- Regularly send home information about the child's growth and progress and adjustment to the school setting
- Discuss the program and classroom operational procedures such as absences, snow delays, payment, etc and learn if there are potential challenges for families, making accommodations as appropriate
- Make available voluntary "at home" activities that families can complete with child, being sensitive to family structure and culture
- Create an "open-classroom" policy where family members can visit or volunteer in the classroom or school
- Where appropriate, complete home visit with family
- Support families' efforts to build the child-child or family-family connection

THE FAMILY AND SCHOOL TOGETHER

- Create videos, picture books and written schedules that depict the classroom daily routine and send home to families as requested
- Ask family members to identify successful accomplishments the child may have completed at home during the week and acknowledge them in school
- Provide connections between school and school activities such "We are learning about caterpillars and read The Very Hungry Caterpillar. Here's green paper and scissors for you to make a caterpillar at home"
- Take a picture of a child at school, such as sitting with a completed block structure or wiping the table after lunch, and send home to family or email it to family member, "Look what Tamika did today!"
- Disseminate newsletters that highlight key events in the life of the program and the classroom; identify key songs, books and recipes, and clarify a key program expectation
- Post the daily schedule in the parent information area for families to become familiar with the sequence of the day
- Regularly update classroom or program message boards to keep information current and fresh
- Create a classroom web page and provide family members with the link – include a bulletin board or question and answer section that is checked by classroom staff regularly
- Provide opportunities for families to meet each other and connect based on commonalities, such as "Miles' family lives in your neighborhood too" or "Sandy's mom just found out she's going to have a new baby also", being respectful of confidentiality

STANDARD 20.2: FAMILY ENGAGEMENT

BIG IDEA: Children's motivation to learn and succeed in school is impacted by family support and involvement in the life of the program.

ESSENTIAL QUESTION: How do families and schools work together to make decisions about the program? What kinds of school events and activities encourage family participation? How do we assure that information exchange is reciprocal?

20.2.1 SHARED GOVERNANCE OR DECISION-MAKING

STANDARD STATEMENT

- Implement a family-school annual review of program operation
- Develop and update annually a Parent Manual that details operational procedures
- Establish conflict resolution policies that identify procedures for complaints or suggestions
- Post regulations and program requirements in strategic locations within the school so family members can review it regularly
- Offer training to Advisory or Board on shared governance

THE FAMILY AND SCHOOL TOGETHER

- Invite family feedback from classroom observations and share summary of results
- Invite family members to participate in oral interviews about the program experience
- Create a Parent Handbook committee which includes staff, families and community members that annually reviews information and suggests updates as needed
- Develop a joint family-school committee that investigates new state, federal or local initiatives that may impact the school's operation and recommends next steps
- Identify a procedure which includes family members and staff to consider complaints and make recommendations for improvement
- Disseminate parent surveys or interviews to all or a percentage of the clientele which provides feedback about general program operation or about newly instituted policies
- Inform families of ways to share concerns or worries about school policy and develop a review process to handle issues
- Design a Governing Board or Advisory Committee whose members represent families, community agencies and school personnel
- Involve the families in program goal-development and strategic planning

20.2.2 SPECIAL EVENTS AND ACTIVITIES

STANDARD STATEMENT

- Learn families' interest and capacity for participation in specific events such as a holiday party, and graduation event
- Offer family education events such as parenting classes, sign language, health and safety that reflect families' interests and needs
- Incorporate unique cultural events or beliefs into classroom life

THE FAMILY AND SCHOOL TOGETHER

- Inform families about community cultural events that may be occurring at specific times of the year and determine if/how the event could be expanded into the classroom
- Ask a family to share information about a specific event, such as Chinese New Year, and help you design a related activity
- Within classrooms or programs, come to consensus about how holiday celebrations or birthdays should occur at school
- Create a family resource area that contains books, toys, and informational pamphlets that families can access
- Design parent education events that families can do together after work, such as Parents as Teachers workshops, or ways to transition children into kindergarten
- Offer parent nights or events at mutually-agreed upon times, including meals or babysitting when appropriate
- Seek feedback from families to design field trips or big classroom events that may be of particular interest to the children
- Ask families if they'd like to volunteer materials or information about specific cultural events
- Increase awareness by finding locations in the community that will allow children's work to be displayed, such as a library or town hall

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

BIG IDEA: Early childhood programs must work closely with families to support children's development and learning, both at school and at home.

ESSENTIAL QUESTION: How do families and school work together to identify children's skills, interests and long-term and short-term goals for learning? How do I understand families' at-home learning attitudes and strategies? How do I provide individualized and meaningful at-home learning connections to the school experience?

20.3.1 SCREENING AND ASSESSMENT

STANDARD STATEMENT

- Identify screening, assessment and referral processes that include families' involvement
- Utilize screening and assessment instruments that are aligned with the early learning standards
- Assure that children are screened for health, mental health, dental, social-emotional, and cognitive development and the results are shared with families
- Be familiar with community agencies that provide additional screenings or assessments upon referral
- Provide information on child development and parenting that identifies age-appropriate skill development
- Conduct age appropriate baseline and ongoing authentic assessments to identify strengths and areas of focus for future learning and development that are culturally-sensitive, delivered in the language requested by the family and whenever possible, incorporate family feedback
- Utilize multiple sources of evidence to understand individual children's growth and development, including parent report, observations, and standardized checklists

THE FAMILY AND SCHOOL TOGETHER

- Assure families' understanding of the purpose of screening and prepare them for the process, including their input and shared-decisions about referrals when appropriate
- Share initial results of screening and assessment with the family in a way that enables family adults to understand the child's strengths and areas for focus
- Work with family to explain screening and assessment results and identify how they align with home experiences and observations
- Work together to identify referral agencies where needed and support families' contact with them
- Be sensitive to some families' reluctance to act on potential referral or additional evaluation recommendations, periodically re-assessing and discussing until action is taken, if needed
- Collect and share portfolio items with families, asking for at-home contributions as well, that show children's growth and development of specific skills
- Provide information on child development that is written in easy-to-understand language

20.3.2 GOAL DEVELOPMENT

STANDARD STATEMENT

- Use assessment results to lay the framework for understanding individual children's strengths and areas of need
- Share with parents information about each child, including stages of development, interests and assessed skill levels, identifying those that are on track and those that could use additional attention
- Meet periodically to discuss previously determined goals, identify any strengths or improvements and make new decisions about learning goals and activities
- Periodically assess the learning environment and provided activities for age, linguistic and cultural appropriateness and modify if needed

THE FAMILY AND SCHOOL TOGETHER

- At the family-school meeting, both family and teaching adult share information about the child's interests and skills to facilitate joint planning of activities and goals
- Teaching adult shows family the continuum of learning development in the Key Areas of Learning and together they identify where the child falls on the continuum, next steps and whether it should be a specific area of instructional focus
- Family and teacher agree on key skills or attitudes for focus and accommodate each other's interests when appropriate. For example, the family changes math goal expectation from "counting to 100" to "counting to 20," based on learning standards or the teacher adds a math skill since it is important to family even though it wasn't identified in the assessment
- Teaching staff and family talk about ways each goal could be supported at home, identifying basic at-home routines that can be used to "teach", such as counting steps or sorting socks, and the types of intentional instruction that will occur at school
- Classroom personnel praise family interest and participation, helping them to see that they are the young child's primary teacher
- Participate in development and review of child's IFSP or IEP , working with the parent and intervention program to formulate appropriate expectations

PARTNERSHIPS FOR LEARNING: FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

20.3.3 ONGOING PROGRESS REVIEW

STANDARD STATEMENT

- Classroom adults and families should work as a team to review children's goals and progress regularly and to develop new strategies that promote children's successful growth and development
- Classroom staff and families should participate in a minimum of two face to face conferences to discuss children's developmental progress and other pertinent updates
- Offer informal opportunities for family members to converse with classroom adults as needed about children's progress
- Schools should offer a wide variety of materials and ideas that link home and school learning environments, offer information on child development and parenting and support parents' interest and participation in the child's learning process

THE FAMILY AND SCHOOL TOGETHER

- Send home a brief note that identifies growth towards skill mastery such as, "Mary counted to 10 today during circle time!" Read comment to child so she/he feels excited about sharing the note with the family adults
- Schedule a fall and spring conference date, identifying with the family where the conference should occur either home or school, and accommodating families' unique schedules
- Offer notes to families (or other culturally appropriate communication strategies) that help families understand what's occurring in the classroom and how it could link to home, such as "We're going to work on gross motor skills this week with relay races, outside play, and a trip to the park. Take them to the park this week and watch how their skills have grown"
- Identify potential areas of concern for shared focus, "I noticed Sammy was trying really hard to hop on one foot, but was getting frustrated. Have you seen him do that at home? You may want to play some jumping and hopping games like we're doing at school"
- Develop strategies for sharing children's accomplishments. Ask family members to send samples of children's at-home work to school and post or send home classroom samples that help families notice progress
- Remind children how much they're grown, "Remember when you had trouble making the S in your name? Now, look at your name. You've got the S T and E. Way to go!"
- Identify the skills being learned in each activity, helping families to understand the role of play and active learning in the instructional process

20.3.4 COMMUNITY SUPPORTS

STANDARD STATEMENT

- Identify and understand the services that are provided within the community and identify contacts within each to facilitate collaborative work
- Develop ongoing information-sharing processes with other agencies who work with families
- Create information-sharing processes with other educational or youth activity programs such as the local fitness center, or library
- Develop and honor confidentiality policies regarding information exchange
- Utilize community agency's suggestions to enhance classroom experiences for all children

THE FAMILY AND SCHOOL TOGETHER

- Tell families about special gym classes or music workshops when children show a specific interest or need in those areas, collecting and making available brochures
- Invite a gym instructor into the classroom regularly to help children develop coordination or balance
- Ask the local librarian to provide books and reading activities during an evening parent meeting
- Invite school district personnel to review kindergarten registration and attendance policies with outgoing preschool families
- Work with Early Intervention to assure referrals have been received and child will get evaluations or services as needed
- Incorporate specialists' ideas such as a speech therapist or behavioral therapist into the classroom practice to support all children, including the child with a special need
- Assure confidentiality statements and release of information approvals have been signed prior to information sharing approvals have been signed prior to information sharing

STANDARD 20.4: TRANSITION

BIG IDEA: Schools and families must work together to coordinate information exchange from one setting to another that will assure children's seamless learning experiences.

ESSENTIAL QUESTION: How do I create a seamless transition into and out of the program? What resources and materials do I make available for families to assure at-home learning links with school learning?

20.4.1 PROGRAM ENTRY

STANDARD STATEMENT

- Create processes and procedures for welcoming incoming families through enrollment meetings, sharing of expectations and values, parent handbooks and discussion of sensitive issues that may impact school success
- Identify welcome strategies that excite children and families about their upcoming, new experience
- Establish processes for information-sharing with sending schools
- Develop strategies for communicating with community agencies with which incoming families have been involved for information exchange as well as parent interest in continuing

THE FAMILY AND SCHOOL TOGETHER

- Provide incoming family forms to complete prior to the enrollment visit so they can gather the needed information
- Welcome incoming family by holding an enrollment meeting that reviews the daily schedule, program and classroom expectations, values and philosophies as well as pre-enrollment requirements such as physical, and first tuition payment
- Prior to the child's attendance, learn about the child's interests and display toys or activities that may be especially appealing, display books about the first day of school, post pictures from home, and create activities that will capture the child's interests
- Create orientation books or manuals for both children and adults – "What to expect when you come to school"
- Invite family to visit at least once prior to the first full day, giving children time to meet the new teacher and play in the classroom; pair up a child who has been in program for a while with a new child
- With parent permission, communicate with sending school about child's past experiences, review screening and assessment results and other information that will support the child and family's move from one school to another
- Wherever possible, use some of the sending school's routines or materials, such as singing the clean-up song or displaying home-made books with pictures of sending school, to ease child's transition into the new situation
- Develop on-going classroom communication between both schools, such as encouraging children to write letters or draw pictures about their new experience and send to the sending school or create "pen pals" between sending and receiving schools
- Develop process for assessing child's readiness to move from one age group to another that includes parent feedback

PARTNERSHIPS FOR LEARNING: FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES

STANDARD 20.4: TRANSITION

20.4.2 PROGRAM EXIT

STANDARD STATEMENT

- Develop policies and procedures for transferring information about child's program participation to the next school location
- Help family understand the expectations and schedules of the receiving school, mapping out strategies for success whenever possible
- Work with receiving school to facilitate pen pals, visits, or other activities where the children can become familiar with the new school and stay in touch with the old school
- Set up information-sharing processes with receiving school to discuss child's goals, progress, and interests

THE FAMILY AND SCHOOL TOGETHER

- Meet with receiving schools to identify commonalities between the schools' approaches and convey them to families so they will have some comfort with similar routines and activities
- Establish information-exchange processes between sending and receiving school that provide opportunities for teachers to share successful strategies for learning that will support the transition
- Provide the receiving school with materials or activities that can be used to offer familiarity and comfort during the transition, such as a "treasure hunt" activity or set of questions to answer in the new school or picture books of the sending school
- Display materials from the receiving school that children will recognize when they transition such as a picture book of the new school, classrooms and teachers; talk with children about what to expect
- Send child to new school with a portfolio of completed work – either to keep at home or to share with the school
- Arrange a time to visit child at new school or to call and talk with family after they have left the sending school atmosphere

20.4.3 COMMUNITY CONNECTIONS

STANDARD STATEMENT

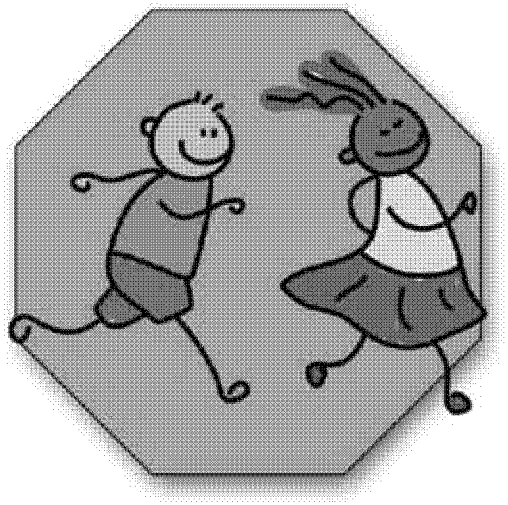
- Identify and include child's participation in other schools or programs on information that is sent to receiving school –in transition
- Develop relationship with local Early Intervention agencies, birth to three and three to five, and create process for information and referral exchange
- Participate in the county Community Engagement Group and other community-collaborative agencies that advocate for early childhood locally and statewide early
- Assure the program's representation at county or community days
- Produce regularly-updated program brochures or promotional materials and distribute throughout the community
- Arrange for information-sharing sessions with local school districts to develop shared expectations for entry and exit into the programs
- Offer early childhood professional development to other community agencies
- Invite community agencies to provide special seminars or workshops for families

THE FAMILY AND SCHOOL TOGETHER

- Develop a transition form that assures transfer of information from sending to receiving school
- Schedule meetings with Early Intervention providers, local Head Start agency to introduce your school and to discuss collaboration
- Invite local librarian to visit the school to present a story hour. Invite family members
- Hold a registration day where families can register children for kindergarten at your familiar location
- Use field trips to introduce children to nearby agencies and resources that may be tapped or invite community agency representatives to visit the school and read to children or work on activities with small groups
- Meet with local school district to review their strategies for use of the learning standards in their instruction and develop common grounds
- Post a display shelf of community agencies' brochures for family access or feature a community agency in the monthly newsletter
- Disseminate state resources such as Kindergarten, Here I Come, Kindergarten, Here I Am and Learning is Everywhere
- Participate in community events that allow school to stay updated on state and local events or create a booth/display for county events
- Join online state list serves to stay current (not everyone might know what these are, thus the clarification)
- Host joint meetings of schools, district, community agencies to network and talk about community needs
- Offer PQAS standards-based training to other community providers
- Disseminate agency newsletter to community agencies

SOCIAL AND EMOTIONAL DEVELOPMENT

LEARNING ABOUT MYSELF AND OTHERS



All children need early childhood programs that nurture emotional security, positive self concept and respect for others. Children's social and emotional development is strengthened when they have classroom experiences that promote a sense of identity and belonging within an accepting and responsive environment. Teachers support children's self identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self control and interpersonal problem solving, and by encouraging positive approaches to learning and interacting with others.

TEMPERAMENT

Every human being has a unique way of looking and interacting with the world known as temperament. Some of us are reserved or shy; others are outgoing and make friends easily. Some of us enjoy learning new things and others are wary about trying new things or dealing with new situations. These temperament traits influence the way in which a child learns, interacts with others, and expresses himself. Adults need to adapt their teaching practices to match the individualized needs of children and consider how their own temperament affects the way in which important relationships with children are developed and maintained.

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STANDARD 25.1: SELF CONCEPT (IDENTITY)

BIG IDEA: Children see themselves as valuable and worthwhile individuals in their homes, classrooms and communities.

ESSENTIAL QUESTIONS: How do I know what my preferences are? How do I develop a positive feeling about myself? How do I grow confident in myself and my abilities?

25.1.1 SELF AWARENESS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate awareness of self and one's own preferences • Know and state independent thoughts and feelings	**The learner will:** • Refer to self as "I" • Participate in self care activities, such as putting on clothes, pouring milk or zipping jacket • Choose specific activities, toys, foods when given options • Show preferences for familiar adults and peers • Show preference for favorite books, activities and toys • State preferences such as "I like peas" or "I don't want to play with blocks"	**The adult will:** • Refer to the child by name • Write or encourage children to write name on papers or pictures • Provide child with opportunities to make decisions and choices • Design a daily schedule with a large block of time for child-directed play and learning • Ask children to share opinions about classroom activities and experiences • Graph children's likes and dislikes • Share enthusiasm and describe child's abilities and preferences "I see you enjoy building with the blocks on the floor."

25.1.2 UNDERSTANDING EMOTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use socially-accepted ways to express emotions • Recognize and label basic feelings • Express feelings that are appropriate to the situation	**The learner will:** • Express feelings that are appropriate to the situation • Express feelings verbally or through play and artistic representation • Name a range of feelings, such as happy, sad, angry, surprised • Control most negative responses by expressing in appropriate ways, such as talking with a peer or telling the teacher	**The adult will:** • Offer materials in dramatic play, blocks and art that encourage children to creatively express emotions • Read books about feelings such as "When Sophie Gets Mad" and talk about the outcome • Engage children in discussions about how they feel when they experience certain situations (both positive and negative) • Use expressions such as "I feel" or "That must have made you feel..." when interacting with children • Describe children's emotional expressions such as "When your lips are turned down like that, I can tell you're sad."

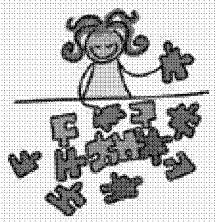
CONTINUED...

STANDARD 25.1: SELF CONCEPT (IDENTITY) continued

25.1.3 COMPETENCE

STANDARD STATEMENT

- Show pride in own accomplishments
- Choose materials and activities independently
- Participate in new experiences with confidence and independence



EXEMPLARS (EXAMPLES)

The learner will:

- Choose activities, select materials, and carry out tasks
- Show adult an accomplishment with pride, such as "I made my name!"
- Ask peers to look at pictures or accomplishments with pride
- Demonstrate confidence in own abilities, such as "I can kick that ball really far."
- Express intent to play in a specific area or to make a certain object
- Independently decide to begin a project or activity
- Work on a task until completion

SUPPORTIVE PRACTICES

The adult will:

- Display children's work at their eye level
- Provide encouragement and praise children's efforts, "You worked really hard on that picture."
- Be supportive when children want to try something new, giving them time to investigate
- Store materials on the children's level so they can access them by themselves
- Design activities that combine new experiences with the familiar to engage children in trying new things
- Ask children about their decisions to play or make specific objects, "How did you decide to play with the legos today?" or "What will you make when you go to the art table this morning?"

STANDARD 25.2: SELF REGULATION

BIG IDEA: Children will express feelings, thoughts and needs appropriately to adults and peers.
ESSENTIAL QUESTIONS: How do I express my feelings appropriately? How do I manage my feelings? How do I use healthy strategies to manage my behavior?

25.2.1 EMOTIONAL REGULATION

STANDARD STATEMENT

- Ask for and accept offers of help when needed or appropriate
- Know when to withhold expression of feelings in certain situations
- Adjust to changes in routines and activities with guidance
- Begin to understand the consequences of own behavior

EXEMPLARS (EXAMPLES)

The learner will:

- Begin to use words to tell others how she/he feels
- Separate feelings from actions
- Use non-verbal and verbal interactions that are congruent with feelings
- Help teacher announce a transition
- Accept warnings about play ending and begin to clean up
- Stop action when told such as "Stop running and use your walking feet"
- Ask and then wait for teacher's attention

SUPPORTIVE PRACTICES

The adult will:

- Model genuine, appropriate emotional responses
- Encourage open expression of feelings by asking children how they feel
- Respond to child's non-verbal and verbal cues
- Offer warnings prior to a change in activity (transition)
- Use picture schedules that describe the flow of the day and explain during morning meeting time if a change will occur that day
- Promptly respond to children's requests for attention
- Use the Pyramid Model to support children's social and emotional success

CONTINUED...

STANDARD 25.2: SELF REGULATION continued

25.2.2 BEHAVIORAL REGULATION

STANDARD STATEMENT

- Demonstrate increased self reliance in self-care activities
- Follow the rules and routines in classroom and other settings with reminders
- Use materials with purpose, safety and respect
- Understand and follow simple classroom rules
- Make transitions between activities after warning
- Wait for teacher approval before acting in required situations
- Recognize unsafe situations and tell an adult
- Clean up or put away materials on own with teacher direction

EXEMPLARS (EXAMPLES)

The learner will:

- Complete self care activities with a minimum of teacher help (toileting, hand washing)
- Remember and express simple classroom rules
- Keep behavior within bounds most of the time
- Complete activities that she/he has started
- Move from one activity to another with minimal adult support
- Respond to adult requests or enter into conversation about the request
- Return materials to the shelves when finished
- Tell adults when she/he has to go to the bathroom.
- Check in with adults when she/he thinks something is not safe
- Take turns and wait for a turn
- Offer to share materials with other children

SUPPORTIVE PRACTICES

The adult will:

- Use logical consequences and guidance practices that support self-control ("As soon as you clean up, you can go outside" rather than "You didn't clean up so you can't go outside.")
- Provide activities that engage children in self control practice, such as stop-start games or block play
- Whenever possible, wait until play is finished before pulling children from an activity in which they are engaged
- Give advanced notice so that children can bring their play to an end
- Give clear directions with expectation that child will comply
- Ask children to identify safe and unsafe situations
- Develop a few simple and basic classroom rules that children can follow independently

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

BIG IDEA: Early adult-child relationships, based on attachment and trust, set the stage for lifelong expectations that impact children's ability to learn, respect adult authority and express themselves.
ESSENTIAL QUESTIONS: How do I learn to trust adults? How do I learn to separate from my parents and familiar adults? How do I learn to communicate with my parents and familiar adults?

25.3.1 TRUST

STANDARD STATEMENT

- Seek help from familiar adults when needed
- Respond to familiar adults' questions and directions
- Engage in reciprocal conversation with familiar adults

EXEMPLARS (EXAMPLES)

The learner will:

- Ask for help with fastening pants or jacket
- Comply with teacher directions
- Tell the teacher what happened at home the night before or talk about something special that may be coming up such as, "I'm going to the store with Mommy after school"
- Ask adult to help solve a problem or to help complete a task, "I can't put this puzzle together"

SUPPORTIVE PRACTICES

The adult will:

- Create an environment that is nurturing and accepting for all children
- Ask if child wants help before jumping in and solving a situation, "Can I help you with that zipper?"
- Promptly respond to children's requests for help
- Talk to children about events that are going on in their lives during lunch, "How is baby sister doing?"
- Provide clear and consistent directions
- Follow through with things you've said or offered

CONTINUED...

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

25.3.2 ATTACHMENT

STANDARD STATEMENT

- Demonstrate affection for familiar adults through hugs, kisses or making gifts
- Separate from familiar adults in a familiar setting with minimal distress
- Show preference for one adult over another when more than one is present

EXEMPLARS (EXAMPLES)

The learner will:

- Affectionately greet teacher upon arrival to school
- Give adults a picture that has been made just for them
- Smile and show happiness to see parent at end of day
- Affectionately talk about home events and relationship with parents
- Ask to sit at one adult's table or ask to hold teacher's hand on walk
- Say good-bye to parent upon arriving at school and become involved in the life of the classroom

SUPPORTIVE PRACTICES

The adult will:

- Provide consistency and predictability in daily routines, environment, and staff
- Assign a primary adult for each child when there are multiple adults in the classroom
- Encourage family members to say goodbye to child when leaving the classroom and inform the child where they are going and when they will return
- Tell children when a familiar adult is going to be absent for an extended period of time
- Permit children to keep pictures or comfort objects from home in their cubbies for limited access when sad or upset

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

BIG IDEA: **Children will learn to develop healthy relationships through positive peer interactions.**
ESSENTIAL QUESTIONS: **How do I learn to interact with peers? How do I make friends?**

25.4.1 SOCIAL IDENTITY

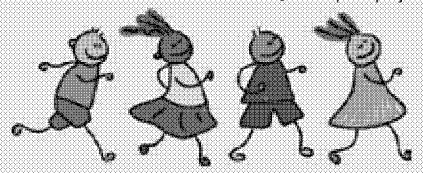
STANDARD STATEMENT

- Imitate others' actions using social play or dramatic play situations
- Initiate play with 1 or 2 peers
- Play cooperatively with a few peers for sustained period of time
- Cooperate in both large and small group activities that are facilitated by adults

EXEMPLARS (EXAMPLES)

The learner will:

- Seek out companionship from another child
- Re-establish a relationship with others after a conflict
- Use multiple strategies for getting what is needed such as asking another child, then an adult for help
- Ask another child to play, "Do you want to make a block house with me?"
- Act out a conflict or uncomfortable situation during dramatic play
- Participate in group activities like Hokey Pokey or Duck, Duck, Goose
- Play a simple game with another child



SUPPORTIVE PRACTICES

The adult will:

- Engage in joint activities with children
- Arrange the environment so that children can work together on activities
- Provide duplicate materials (trucks, telephones) so children can play together
- Set aside large blocks of uninterrupted time for child-directed play
- Provide opportunities for one on one conversations between children and adults
- Introduce large group games or activities where children can participate alone or with a partner

CONTINUED...

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

25.4.2 RESPECT AND EMPATHY

STANDARD STATEMENT

- Respond with empathy to others who are upset
- Seek help from peers
- Share and take turns with adult guidance
- Respect feelings and belongings of peers
- Solve simple conflicts with peers with independence
- Demonstrate polite and respectful interactions
- Demonstrate respect for children's differences

EXEMPLARS (EXAMPLES)

The learner will:

- Express sympathy to a friend who is feeling sad
- Asks another child to help carry a heavy basket of blocks
- Ask for a toy before grabbing it
- Begin to negotiate conflicts that arise using words, "Give me back my toy" before seeking help
- Say "I'm sorry" when she/he bumps into another child or causes a toy to fall
- Use words during a conflict, "Stop hurting me" instead of physically responding
- Show understanding that others might be feeling differently than self
- Identify others' differences in feelings or thought

SUPPORTIVE PRACTICES

The adult will:

- Use eye contact and body proximity to give children support when needed
- Be available to help children resolve conflicts rather than removing the child or the toy
- Give children the words to use in difficult situations, "Tell her how that made you feel"
- Describe others' feelings during difficult situations, "Look at Susie's face. She is mad."
- Read books about empathy and discuss the outcome
- Set timers for toy or equipment sharing
- Invite children to help others, "Can you help Mary with her jacket?"
- Create spaces in the classroom where children can store their own belongings
- Praise children's efforts to help others

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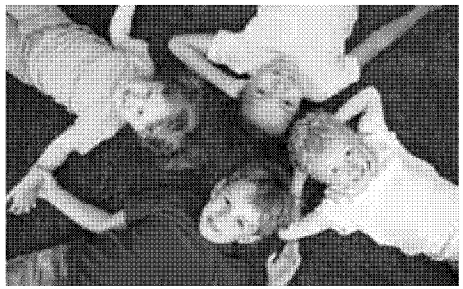
CASEL: Collaborative for Academic, Social and Emotional Learning: www.casel.org

James Comer School Development Program www.schooldevelopmentprogram.org/

Rutgers University Social Emotional Learning Law www.rci.rutgers.edu/~melias/



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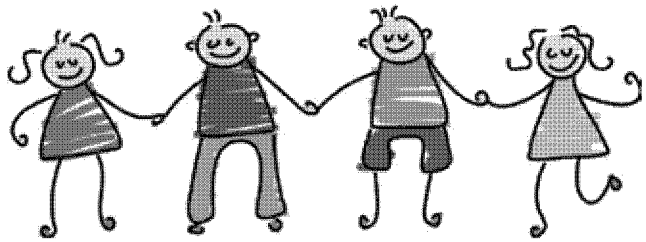

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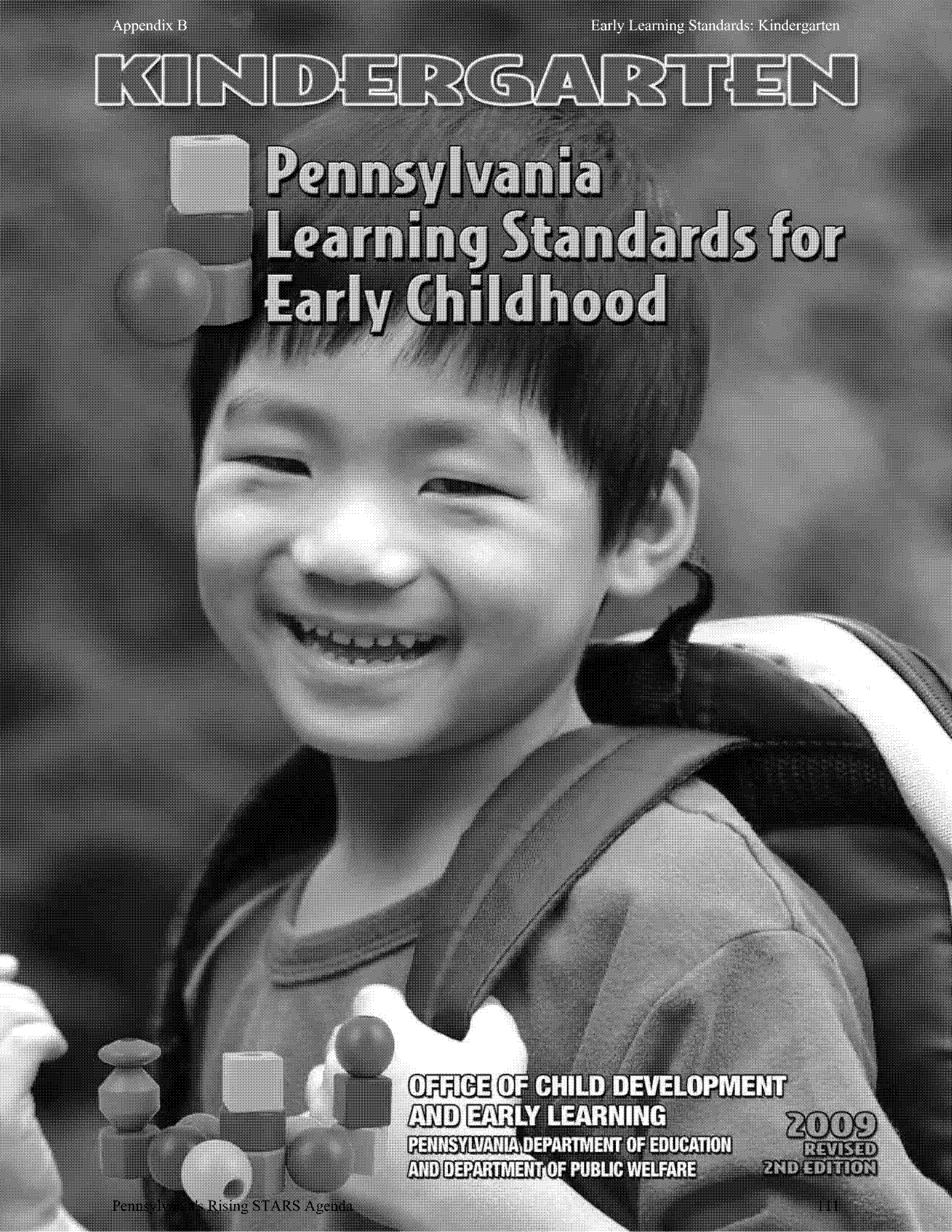

Pennsylvania Learning Standards for Early Childhood

OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING
PENNSYLVANIA DEPARTMENT OF EDUCATION AND DEPARTMENT OF PUBLIC WELFARE

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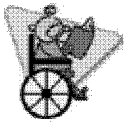

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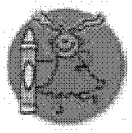

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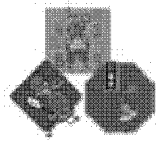

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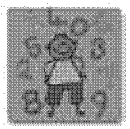

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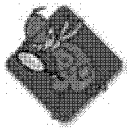

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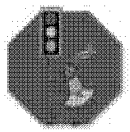

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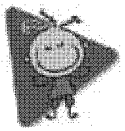

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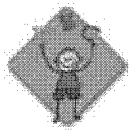

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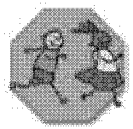

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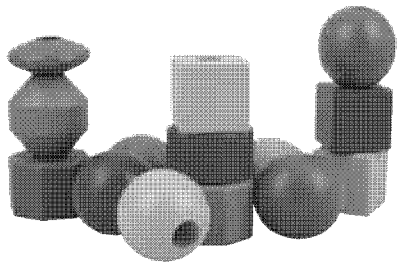


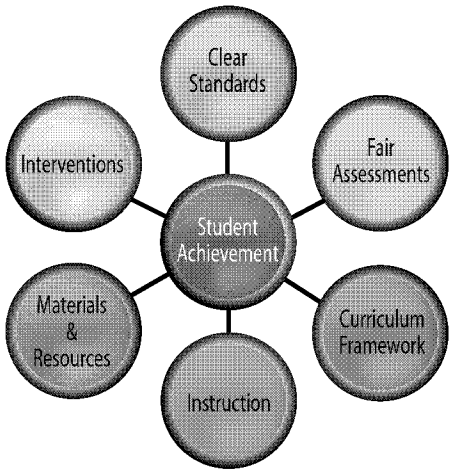
INTRODUCTION

Children are born with an incredible capacity and desire to learn. Over 30 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential, then, that students' first school experiences are robust ones, steeped in expectations that develop critical thinking and problem solving skills, a deep understanding about themselves in a social society and age appropriate content.

Teachers' instructional practices must embed the domains of development: cognitive, social-emotional, language, and physical within the foundations or approaches to learning that enable children to explore, understand and reach beyond the "here and now" to challenge themselves and to experiment and transform information into meaningful content and skills.

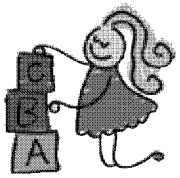
Teachers of very young children have the awesome task of providing rich information and experiences that build skills and understanding in the context of every day routines *and* within intentionally-designed play opportunities that capture children's interests, wonder and curiosity so they want to know more. Pennsylvania's learning standards join hand-in-hand with the learning environment; the responsive relationships that have been built with children, families and the community; the age, cultural and linguistically-appropriate curriculum; and the practices being used to assess children, classrooms and programs to create the best possible experiences for learning success.

The Department of Education and the Office of Child Development and Early Learning utilize a Standards Aligned System (SAS) that links the elements of instruction, materials and resources, curriculum framework, fair assessment and interventions, and learning standards to children's engagement in learning and their school success.



1. MATERIALS AND RESOURCES

Every early learning classroom, whether it is in a home atmosphere or center-based setting, must be a comfortable, safe and nurturing environment where children can play with blocks, manipulatives, art materials, and dramatic play items to enhance skill development. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by teachers who intentionally design activities that engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others and how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.



School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed classrooms demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive and language learning.

Classroom assessment instruments that help providers assess the arrangement of indoor and outdoor space, the provision of materials and activities, and their development of class schedules are useful in assuring best practice implementation and alignment to Pennsylvania's Learning Standards for early childhood.

2. INSTRUCTION

Instruction in the early years often looks different than in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery and in experimentation and interaction with materials, their peers and nurturing adults.

Teachers help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. A limited amount of direct teaching combined with child-initiated play produce optimal conditions for young children's education. Teachers become facilitators or guides of learning who interact with children throughout the school day. They ask open-ended questions that encourage children to think about what comes next or want to know more and they support children's creativity, problem solving, intuition and inventiveness (approaches to learning) by challenging and encouraging them. Teachers design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities and culture.

3. CURRICULUM FRAMEWORK

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, vocabulary, concepts and competencies that further define the learning standards.

4. FAIR ASSESSMENTS

Teachers must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing in the classroom allow teachers to make adaptations or adjustments in the individualized learning plans for every child.

Early childhood professionals observe and assess children in their classroom setting using the materials that are found in their school environment. Blocks that children count or stack, for example, provide the information teachers need to understand children's math or fine motor skills. Outdoor play or recess allows the adult to observe children's gross motor skills or the social interactions with peers.

Teachers must use the information they have documented during observation, along with information from the parent, to identify goals and next steps for children's learning through play.

5. CLEAR STANDARDS

Learning Standards provide the framework for learning. They provide the foundational information for what children should know and be able to do. Pennsylvania's learning standards build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, gradually getting more difficult as it extends through high school.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Keystone STARS, PA Pre-K Counts, ABG, HSSAP all use similar sets of standards that provide guidance on program operation that exhibits best practices.

6. INTERVENTIONS

When teachers are observant and assess children's abilities, interests and achievement using the standards as a guide, interventions become part of the teachers' everyday practice. Revising activities, adjusting lesson plans and accommodating children's individual differences becomes matter-of-fact and the norm. Successful strategies that allow children to master skills at his or hew own pace provide benefits for all children as they interact with others of varying abilities and cultures.

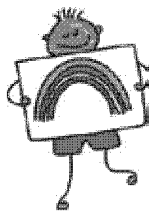
Early Childhood Special Education

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experiences alongside their typically developing peers. Teachers may need to adapt or modify the classroom environment, teacher interactions and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards does not need to be specific to an age, grade or specific functional level, but instead provide the breadth of information from which to create goals and experiences for children that will help them reach their highest potential while capturing their interests and building on what they already know. Teachers must emphasize and celebrate all children's accomplishments and focus on what all children can do.

English Language Learners

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. The skills needed for young English language learners to become proficient in English are fully embedded in the Pennsylvania's Standards for Early Childhood.



EARLY CHILDHOOD CONNECTIONS

High quality early learning programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early learning programs, school districts and grades within districts create strong partnerships for success.

1. CONNECTIONS TO CHILDREN

Relationships are the key to successful connections between a teacher and the students. Teachers must take time to know every child, to understand the way in which they learn best, to identify the special talents and skills each child possesses and the interests that excite them to learn more. Adults who work with young children must be students themselves as they learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning and experiences into new achievements and acquisition of knowledge.

2. CONNECTIONS TO FAMILIES

Parents of young children have much to offer in the learning process. When a partnership is formed between teacher (or school) and the family, the connection between home and school has been strengthened, assuring that children receive consistent messages about learning and skill development. Parents should be given opportunities to learn about their children's day at school, to provide input into the information they want children to learn and master, and to understand what they can do at home to enhance the school experience. Frequent informal conversations, invitations to participate in class-room life and voluntary take-home activities that relate to school experiences help to build the partnership.

At-home resources for parents such as *Kindergarten, Here I Come, Kindergarten, Here I Am* or *Learning is Everywhere* provide both teachers and families with tools to connect at home and school learning and to share age appropriate expectations and activities that support that connection.

Families' ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Staff must embrace all children's heritages and provide activities, materials and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others'. Staff in high quality early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

3. CONNECTIONS WITH OTHER EARLY LEARNING PROGRAMS

Children and families often have other needs and priorities in addition to participation in high quality early childhood learning programs. Families may need to coordinate their early learning program services with child care, health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their early intervention provider assure linkages that support children's school readiness and ongoing success.

4. CONNECTIONS FOR LEARNING

Young children make learning connections through play. Providers that allow children time to explore and discover, both inside and outside, have optimized children's capacity to internalize and generalize content by making their own connections to prior-learned knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play.

Adults must also use literature connections in all domains. Literature supports both content and social and cultural learning. It is a foundation for curriculum integration.

CONTINUED...

LEARNING STANDARDS TASK FORCE

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Public Welfare as part of Governor Rendell's commitment to early childhood education. The Office of Child Development and Early Learning, established in 2006 to administer both Departments' early childhood programs, has overseen revisions to the standards.

Each set of Standards has been formulated with help and guidance from practitioners who represent early childhood programs and advocacy groups, higher education, and policy analysts and researchers. Support for the development of the Standards was provided through the national Build Initiative, a multi-state partnership that helps states construct a coordinated system of programs and policies that respond to the needs of all young children.

THE LEARNING STANDARDS CONTINUUM

Within all of Pennsylvania's Early Childhood Standards, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social-emotional development, language and literacy development, physical or motor development, creative expression and the cognitive areas of mathematics, science and social studies. The Standards within each Key Learning Area provide the information that children should be able to know and/or do when they leave the age level or grade. The Standards are also organized by Standard Statements that specify specific skills. New, in 2009, strands further define the standards by organizing the information into focus areas. The strands become the connections to the Academic Standards for grades 3-12. They, too, use these strands to organize the content that all children in Pennsylvania should be able to know and do.

PENNSYLVANIA'S EARLY CHILDHOOD CONTINUUM OF STANDARDS

Infant-toddler, Pre-kindergarten and Kindergarten standards are connected through the Continuum of Learning and further linked to the 3rd grade academic standards. Using the strands as the organizer, professionals are able to look across ages and grades to understand how children's development emerges. Some skills will not emerge in a noticeable way until a child is older. These standards statements will be identified on the continuum as "emerging". For example, concepts about money are not ones that infant teachers need to develop. They show in the social studies standards for infants as "emerging". Strands that are missing numerically are skills that do not need attention during the Early Childhood Education years.

Teachers who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.

LEARNING STANDARDS FOR EARLY CHILDHOOD DO:

- Inform teachers and administrators about curriculum and assessment and guide the selection of program materials and the design of instruction
- Inform parents of age-appropriate expectations for children
- Provide a common framework for community-based work on curriculum and transitions

THE LEARNING STANDARDS FOR EARLY CHILDHOOD ARE NOT USED:

- As a specific curriculum or to mandate specific teaching practices and materials
- To prohibit children from moving from one grade or age level to another
- To assess the competence of children or teachers

AGE GROUPINGS IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

INFANT-TODDLER LEARNING STANDARDS

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months – 27 months) and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 – 27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an infant-toddler continuum with the content within one strand presented together on one page. Practitioners can look across each age level to determine the skills that best match their children's current development, identifying additional standard statements, examples and supportive practices to scaffold children's learning.

When strands include "Emerging" under infant or young toddler, these concepts are beginning to emerge but are expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

LEARNING STANDARDS FOR PRE-KINDERGARTEN

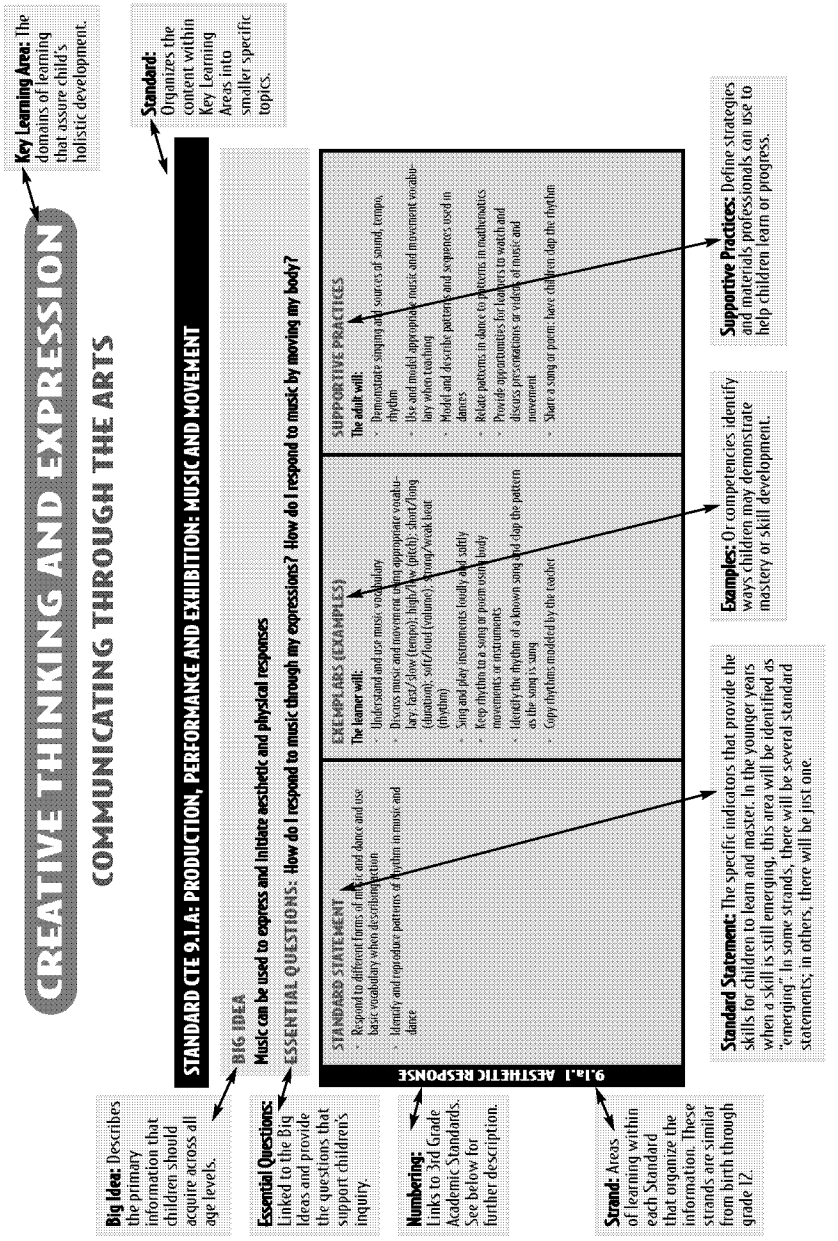
Teachers will find the skills that pre-kindergarteners (ages three and four) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency in many of them. Classroom environments, materials and activities that are developed for this age will be appropriate for both three and four year olds; expectations for mastery will be different.

LEARNING STANDARDS FOR KINDERGARTEN

Students who complete kindergarten should demonstrate mastery of many of the skills within the Kindergarten Standards. This document is designed for full day kindergarten classrooms. Half day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-directed instruction should be predominant with language and literacy and math infused through the day in addition to their special focus learning times. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills and their creative expression within the course of a kindergarten day.

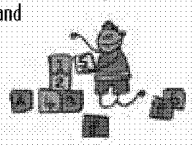
THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT



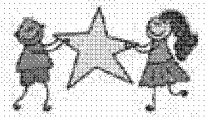
GUIDING PRINCIPLES

High quality early childhood programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills, and concepts children need to make progress socially and academically. High quality early childhood programs maintain high developmentally achievable expectations for all children using clear performance standards with a continuous cycle of assessment understood and used by staff, children, and parents.

1. High quality early childhood education and care programs have a significant impact on children's future successes.
2. All children can learn and deserve high expectations that are age, individually, and culturally appropriate.**



3. Young children learn best when they are able to construct knowledge through meaningful play, active exploration of the environment and thoughtfully planned activities.
4. The learning environment for young children should stimulate and engage their curiosity of the world around them, and meet their physical needs and emotional needs so that children feel safe and secure.
5. Language and early literacy development must be supported and integrated throughout all aspects of early childhood care and education programs.
6. Children's learning, development and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development, and are intentional in their relationships and work with children and families.
7. Early childhood care and education programs must address the individual needs of a diverse population of children, such as children with special needs, children from diverse cultural backgrounds, children from all social-economic groups.
8. Early childhood care and education programs are defined by a set of comprehensive standards that maximize a child's growth and development across domains.

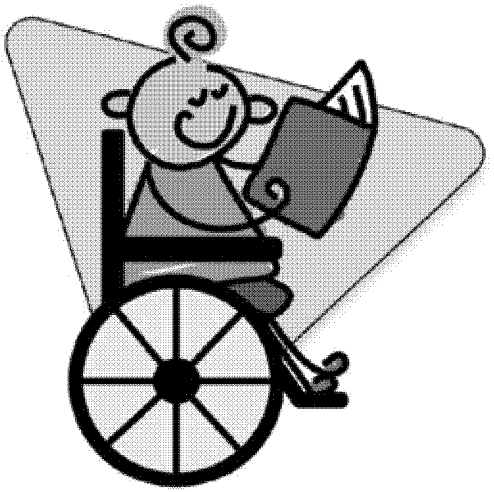


9. There must be a system of research based assessment that documents children's growth and development in relationship to a defined set of standards, and is used to inform instruction.
10. Children's learning is enhanced when families, schools, and communities work together.

**Footnote: Young children with disabilities will meet standards consistent with their individualized education programs (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Education Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990).

APPROACHES TO LEARNING THROUGH PLAY

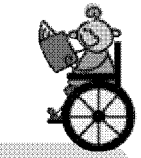
CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE



Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help students feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment, and enhancing their curiosity and knowledge about the world in which they live.

FAMILY RELATIONSHIPS

There is no greater gift for children's successful endeavors in school then for schools to create a strong relationship between home and school. The connections that teachers and schools form with parents and guardians, especially in the early childhood years, provide the link for learning and assures that children, teachers and families work together to support children's growth and development and skill mastery. Families can be invited to participate in many ways – volunteerism, donations of time, resources and materials, shared decision-making about children's educational goals, support and referrals – but the key is a reciprocal relationship that invites parent input about a child's school performance and information about the values and home culture, while sharing details of the child's school routine and perceived successes and challenges in the classroom. Parents who perceive themselves as an integral member of the learning team are more likely to provide ongoing support and encouragement for children's learning that will carry them through high school.



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15.4 Learning Through Experience	10

APPROACHES TO LEARNING THROUGH PLAY: CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

STANDARD 15.1: GATHERING AND CONSTRUCTING KNOWLEDGE

BIG IDEA: Children actively construct knowledge through routines, play, practice and language. They observe others and their environment, use their senses to manipulate objects and materials and develop their own individualized approach to learning.

ESSENTIAL QUESTIONS: How do I find out about things? What information do I need to learn new ideas? What do I learn while I am playing?

15.1.1 CURIOSITY AND INITIATIVE

STANDARD STATEMENT

- Demonstrate an eagerness to discover and discuss a growing range of topics, ideas and tasks
- Ask questions and seek meaningful information about a topic or idea
- Show interest and ask questions about others' work or stories
- Use play to demonstrate new skills and knowledge
- Explore technological equipment and materials with interest

EXEMPLARS (EXAMPLES)

The learner will:

- Share ideas and interests with teacher
- Ask "how" or "what" questions
- Predict story endings or ask questions about a story
- Use vocabulary words or concepts learned in class during play
- Try a new computer game or use a CD player that has been added to the reading corner

SUPPORTIVE PRACTICES

The adult will:

- Encourage children to discuss and learn more about their interests
- Introduce a book by asking, "What do you think this book might be about?"
- Ask children to guess what might be inside a box or bag as a way to introduce a topic or idea
- Provide real objects that can be manipulated or explored to help understand a concept
- Respond to children's questions with explanations that help them understand
- Encourage children to research answers to questions through books, such as "Let's find a book about dogs to see why their noses are cold."
- Regularly rotate classroom materials and formally introduce new objects and activities into the classroom by showing excitement, "look what I brought for us to do today?"

15.1.2 RISK TAKING

STANDARD STATEMENT

- Demonstrate a willingness to participate in an increasing variety of diverse experiences
- Determine appropriate method for learning information in a specific situation

EXEMPLARS (EXAMPLES)

The learner will:

- Participate in experiments, cooking experiences or field trips
- Use books, ask questions or use materials to find out more about a topic

SUPPORTIVE PRACTICES

The adult will:

- Introduce new materials and activities by explaining what they are and providing instructions on their use
- Rotate materials in the classroom, pairing new and familiar things for children's comfort
- Demonstrate enthusiasm when introducing new materials
- Provide experiments, field trips and other experiences to expand children's learning
- Support and encourage children's independent exploration of a topic

15.1.3 STAGES OF PLAY

STANDARD STATEMENT

- Engage in simple games with rules with the ability to plan ahead to develop strategies
- Engage in elaborate interactive play sequences that include acting out rules and negotiating play themes

EXEMPLARS (EXAMPLES)

The learner will:

- Play kickball, Four Square, Checkers or Go Fish
- Use materials and props to support an ongoing play experience such as a safari adventure

SUPPORTIVE PRACTICES

The adult will:

- Encourage children to play board games and group games
- Provide support while children are learning games
- Provide props and materials to support play experiences

APPROACHES TO LEARNING THROUGH PLAY: CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE

STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION

BIG IDEA: Children learn to organize complex information and thoughts into small steps and goals. They develop plans for completing tasks by establishing goals and carrying out plans to meet those goals.

ESSENTIAL QUESTIONS: How do I understand the steps of a task? How do I decide how to approach a task?

15.2.1 ENGAGEMENT, ATTENTION AND PERSISTENCE

STANDARD STATEMENT

- Pay attention to adult who is providing instructions and follow through on directions
- Demonstrate capacity to concentrate over time on task, despite interruptions or classroom disruptions
- Complete simple activities or tasks from beginning to end with independence
- Work or interact with a specific toy or object until complete

EXEMPLARS (EXAMPLES)

The learner will:

- Follow two- or three-step directions such as, "Get a book, choose a partner and find a space to partner read"
- Work on a project or engage in a play experience while others are doing other activities
- Complete a classroom job such as watering the plants without adult assistance
- Complete a 24 piece puzzle

SUPPORTIVE PRACTICES

The adult will:

- Give clear and simple directions or explanations
- Allow time for children to follow simple directions to complete a task
- Save children's work for later completion if transition to a new activity is necessary
- Show flexibility during transitions to allow children who are working on an project time to complete it
- Offer help to children who are demonstrating difficulty completing a task or activity
- Praise children's efforts to complete a project
- Minimize interruptions and disruptions for children who are concentrating on a specific task or activity

15.2.2 TASK ANALYSIS

STANDARD STATEMENT

- Classify, contrast and compare objects, events and experiences
- Complete multi-step tasks with independence

EXEMPLARS (EXAMPLES)

The learner will:

- Use comparison of daily experiences or favorite activities to learn more about a topic
- Gather materials, place in backpack, put on coat, and put chair up on desk before lining up at the end of the day

SUPPORTIVE PRACTICES

The adult will:

- Provide multiple types of materials that require use of classification skills such as blocks that can be sorted by size, shape, or color
- Use story picture cards that children can put in sequential order
- Ask children to describe the steps required to complete a certain task

15.2.3 REASONING AND PROBLEM SOLVING

STANDARD STATEMENT

- Explore a new way to continue with a task, project or experience after initially experiencing a failure

EXEMPLARS (EXAMPLES)

The learner will:

- Determine why the block tower fell over and experiment with alternate ways to build it so that it remains standing

SUPPORTIVE PRACTICES

The adult will:

- Ask "Why do you think" or "How can we" questions to help children discover alternate ways to approach a task such as "Why do you think the tower fell over when you put the big block on top?"

STANDARD 15.3: APPLYING KNOWLEDGE

BIG IDEA: Children extend their understanding when they think creatively about new ideas in the context of past experiences and knowledge.
ESSENTIAL QUESTIONS: How do I relate new information to things I already know? How do I use what I already know to learn new things? How do I finish a task?

15.3.1 CREATIVITY, FLEXIBILITY AND INVENTION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Observe and imitate both adults and peers to gain understanding of specific tasks and skills • Create an object to serve a functional purpose • Combine unique materials to make a new (real or pretend) object or result	**The learner will:** • Combine different types of materials to represent a scenario or situation such as using legos, unit blocks and wood signs to make a neighborhood with roads, houses and people • Use a toilet paper tube as a kazoo humming into it to make noise • Try a new role in the dramatic play area that is suggested by another child • Use a block as a truck or a large box to act as a fort	**The adult will:** • Provide opportunities for children to give input into the daily schedule when changes are needed • Offer varied opportunities for children to work with materials to create projects that demonstrate learned skills • Provide a diverse set of materials that can be combined to create an end product • Use the Project Approach as a way for children demonstrate learned skills across Key Areas of Learning • Use "What If" scenarios that require children's creative thinking and problem solving • Incorporate creative play scenarios within content instruction such as, pretend to buy a train ticket to go to the beach – discuss cost, preparations for trip and what you'll see when you get there

STANDARD 15.4: LEARNING THROUGH EXPERIENCE

BIG IDEA: Each child's biological make-up, family, history and learning style provide the important context in which learning is constructed.
ESSENTIAL QUESTIONS: How do my home experiences help me learn? How do I learn how to cope with difficult situations?

15.4.1 HOME-SCHOOL IDENTITY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use home experiences to learn new knowledge • Transfer information from home to school and from school to home • Develop attitudes and values about the way she/he learns to understand new experiences • Understand how information learned in other settings impacts school learning • Understand the difference between school and home processes	**The learner will:** • Ask for additional help to master a skill or task that was begun at home such as writing his/her name • Share notes with teacher and parent back and forth • Show pleasure about learning something new when a parent is also pleased • Tell about a song that was learned at piano lessons • Ask parents to continue school activities when they get home, such as "Can we read this book when we get home?"	**The adult will:** • Provide families with regular updates about the events that are occurring in school including songs, stories and special events • Talk with families about what children are working on at home and incorporate those goals in the school day, such as helping a child who is learning to go to sleep on own at home by helping them lay down for nap independently at school • Ask children to describe the extra curricular activities they participate in and show what they are learning • Provide "take home" activity kits that can travel back and forth to school and home • Acknowledge and value differences in class and home structure such as, "At school we leave our shoes on during the day – I know you like to go barefoot at home"

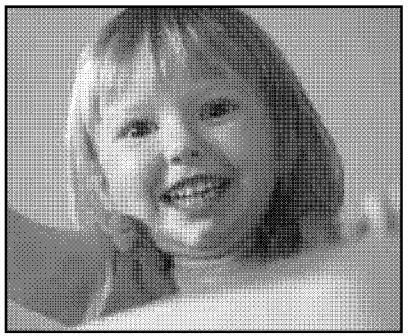
STANDARD 15.4: LEARNING THROUGH EXPERIENCE continued

15.4.2 RESILIENCE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate a beginning understanding of consequences for behavior • Utilize help when needed • Communicate feelings of distress or anxiety • Engage in problem solving activities to achieve a positive outcome	**The learner will:** • Name a consequence for a specific behavior • Ask a friend who has mastered a skill to assist • Tell teacher when she/he is feeling scared or apprehensive about a particular task • Try new activities or tasks that build on previously-learned skills • Strive to correct his/her own mistakes	**The adult will:** • Provide guidance for improvement when children experience a lack of progress or failure to accomplish a goal or task • Comfort children and provide encouragement during stressful times • Encourage children to be autonomous by offering situations and tasks that can be completed independently • Make referrals to health care, social service and other agencies as appropriate • Model appropriate responses to difficult or uncomfortable situations • Encourage step by step problem solving and completion of a task to maximize perception of successful outcomes

15.4.3 CULTURE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Express information about own family or background • Show interest in different familial structures • Interact with materials from different cultures such as rain stick, map that depicts Asia or Africa • Show acceptance of children who appear to be different	**The learner will:** • Talk about spending the weekend with grandparents • Look at pictures of families and make comparisons about what is similar or different from his/her own • Play with materials from other cultures • Use multicultural crayons to depict skin coloring when making a self portrait and compare it to others' colors and portraits • Help the teacher learn useful classroom phrases from a home language • Show interest in adaptive devices, such as a wheelchair or feeding tube and how they help children • Show acceptance of a child with a disability and offer support where appropriate	**The adult will:** • Seek out information from families or community organizations to assure appropriate responses and practices that represent the cultures of children in the classroom and center • Learn words or phrases from children's home language to use during the school day • Label classroom materials and equipment as well as take-home materials in the home languages of the children in the classroom • Encourage family members to volunteer or share information, materials and activities that reflect home cultures • Use varied approaches or methods for instruction and learning to accommodate children's learning abilities and styles • Learn about families' expectations for children's school success and incorporate those goals into classroom activities and experiences • Incorporate ethnic foods, music, books and materials into classroom life • Use sensitivity in celebrating traditional holidays and incorporate other cultures' holidays into the curriculum • Provide opportunities for children to practice non-specific gender roles such as dads taking care of babies and moms acting in non-traditional female careers • Adapt the environment, materials, and instructional practices to assure all children have opportunities for success



APPROACHES TO LEARNING THROUGH PLAY GLOSSARY

Associative Play – A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction or a definite goal; children may imitate others in a group but each child acts independently

Attention – An ability to focus; take all stimuli in environment and focus the mind on one thing

Competence – The ability to perform a task, action, or function successfully

Cooperative Play – Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, arts, customs and behaviors

Curiosity – A desire to learn or know about something; an inquisitiveness

Engagement – Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work

Initiative – A readiness and ability to be eager to lead an action

Invention – An act of devising, creating or producing using imagination (art, music)

Parallel Play – A developmental stage of social development; an activity in which children play with toys like those the children around them are using, but child is absorbed in his/her own activity; usually play beside rather than with one another

Persistence – The steady continuance of an action in spite of obstacles or difficulties

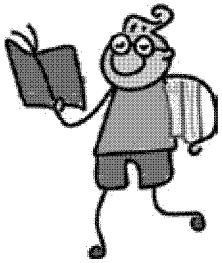
Pretend Play – Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas

Resilience – The ability to cope with and bounce back from all types of challenges. A person thrives, matures and increases competence by drawing on biological, psychological and environmental resources

Solitary Play – A form of play among a group of children within the same room or area in which each child engages in an independent activity using toys that are different from the toys of others; shows no interest in joining in or interfering with the play of others

Task Analysis – A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success

Temperament – The combination of mental, physical, and emotional traits of a person; natural predisposition



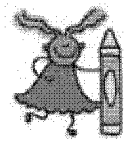
CREATIVE THINKING AND EXPRESSION

COMMUNICATING THROUGH THE ARTS

Creative thinking and expression is an important component of children's early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities and knowledge. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children's growing competence as creative problem solvers and provides insight about the world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

DIVERSITY AND CULTURE

Today's early childhood classrooms include an increasingly diverse group of children, families and teachers who represent many cultures, values and lifestyles. Providers have a unique opportunity to create welcoming environments that emphasize respect for diversity and support families' cultural and linguistic differences. Teachers must help assure the preservation of the child's home language while supporting their second language acquisition. Programs that create experiences and opportunities that honor all children's home cultures and values by developing creative strategies for including and expanding the home to school connection and provide children with varied ways to demonstrate their learning and understanding are assuring all children's success in school.



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CREATIVE THINKING AND EXPRESSION: COMMUNICATING THROUGH THE ARTS

STANDARD 9.1a: PRODUCTION AND PERFORMANCE: MUSIC AND MOVEMENT

BIG IDEA: Music can be used to express and initiate aesthetic and physical responses.
ESSENTIAL QUESTIONS: How can I use music and movement to express my ideas and feelings? Can I use the appropriate vocabulary to describe experiences?

9.1a.1 AESTHETIC RESPONSE

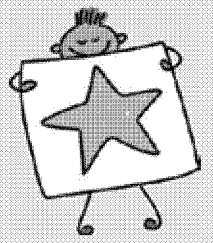
STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Respond to different forms of music and dance and use basic vocabulary when describing action • Identify and reproduce patterns of rhythm in music and dance	The learner will: • Understand and use music vocabulary • Discuss music and movement using appropriate vocabulary: fast/slow (tempo); high/low (pitch); short/long (duration); soft/loud (volume); strong/weak beat (rhythm) • Sing and play instruments loudly and softly • Keep rhythm to a song or poem using body movements or instruments • Identify the rhythm of a known song and clap the pattern as the song is sung • Copy rhythms modeled by the teacher	The adult will: • Demonstrate singing and sources of sound, tempo, rhythm • Use and model appropriate music and movement vocabulary when teaching • Model and describe patterns and sequences used in dances • Relate patterns in dance to patterns in mathematics • Provide opportunities for learners to watch and discuss presentations or videos of music and movement • Share a song or poem: have children clap the rhythm

9.1a.2 EXPLORATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use instruments to accompany music or songs	The learner will: • Use instruments to imitate sounds – a horses' hooves, a doorbell • Use instruments to demonstrate the melody of a song	The adult will: • Play many types of music • Talk about the ways things sound and how that sound could be recreated • Provide objects such as wooden bowls, that can be used to represent other sounds

9.1a.3 CREATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use imagination and creativity to design and perform music and dance • Work with partner or others to represent form in space	The learner will: • Express ideas and feelings through music • Use instruments to create a song • Create a dance sequence with a beginning, middle and end • Create movements of different tempos • Invent rhythm to accompany a favorite story or poem • Create movement patterns • Create repetitive motions for songs, rhymes, finger plays and chants • Play rhythms with instruments • Use bodies to represent letters, shapes, objects by oneself or with others	The adult will: • Provide different types of music for children to dance and sing to • Provide a variety of instruments for children to use, such as bells, chimes, shakers, and rhythm sticks • Provide props to use when dancing and singing such as ribbons, hoops, and sticks • Model examples of creating music • Create different lyrics to a familiar song • Provide opportunities for children to perform music and movement activities • Take class to school assemblies and programs • Model appropriate handling of instruments • Demonstrate movement using time, space and locomotion • Read a story about a particular animal and have students move like that animal • Include vocabulary such as high/low, up/down, fast/slow, over/under



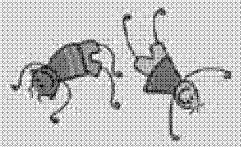
CREATIVE THINKING AND EXPRESSION: COMMUNICATING THROUGH THE ARTS

STANDARD 9.1b: PRODUCTION AND PERFORMANCE: DRAMATIC AND PERFORMANCE PLAY

BIG IDEA: Dramatic and performance play is a way to act out reality and fantasy and to solve problems.
ESSENTIAL QUESTIONS: How can I use role-play to solve problems? Can I perform a play?

9.1b.1 DRAMATIC EXPRESSION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use multiple nonconforming representations of real life objects or activities • Create and enact fantasy play scenarios • Extend pretend play scenarios over multiple periods of time • Use pretend play as a means to negotiate and resolve challenging situations	The learner will: • Participate in role-play experiences and engage in discussion • Use vocabulary to discuss play activities such as, character, role, setting, story • Recreate situations that have caused concern during dramatic play • Use materials and props in non-traditional ways • Create new scenarios to enact	The adult will: • Provide props and costumes associated with themes children are experiencing • Ask questions about the experience to guide thinking and problem-solving • Use appropriate theatre vocabulary as children create plays and performances • Use theatre vocabulary to discuss stories and poems shared in class • Observe dramatic play situations • Encourage problem-solving of classroom situations through play • Discuss possible solutions with children • Model new uses for materials and ideas • Provide materials that can be used in multiple ways



9.1b.2 PERFORMANCE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Represent a character by using voice inflections and facial expressions • Recreate a familiar story for an audience individually or cooperatively	The learner will: • Act out parts of stories by inventing a voice and creating various facial expressions for the character • Act out actions that relate to stories • Create a play based on a familiar story • Use appropriate tone, actions and speech to represent characters, setting and plot in a play	The adult will: • Model voices and facial expressions of characters while reading aloud • Provide opportunities for learners to practice different voice types • Play charades • Encourage learners to create plays based on familiar stories or original ideas • Provide guidance and suggestions during preparation of play

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS

BIG IDEA: Visual arts allow individual expression of interests, abilities and knowledge.
ESSENTIAL QUESTIONS: Can I identify color, texture, form, objects and patterns in art? Can I create artwork using a variety of colors, forms and lines? How can I express my ideas about art and connect it to everyday life?

9.1c.1 REPRESENTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Represent common themes and patterns in visual arts	The learner will: • Paint and draw works of art • Create a picture using lines and shapes • Create various textures in a picture using different media • Create simple sculpture using clay and various tools to create texture • Use paints to create new shades and colors	The adult will: • Model use of shape, texture and color • Discuss use of line, shape, texture, patterns in art work • Provide various objects with different textures to define and use • Display a variety of artwork • Provide a variety of examples of art • Provide opportunities for children to explore and discover

STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS continued

9.1c.2 CONSTRUCTION

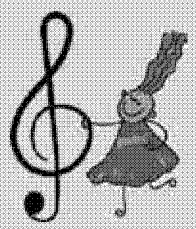
STANDARD STATEMENT
- Create expressive images using a variety of media and techniques

EXEMPLARS (EXAMPLES)
The learner will:
- Express ideas and feelings through visual arts
- Create pictures that define mood
- Make choices about tools mediums, etc for visual arts

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities to create expressive images through play experiences
- Provide opportunities to explore a variety of art materials and tools in their own way
- Discuss and expand the child's art work through guided questions allowing for child's ownership and creativity
- Model and expect safe care, handling and use of art tools

9.1c.3 PERSONAL CONNECTIONS

STANDARD STATEMENT
- Discuss how art work represents an artist and his/her thoughts, emotions



EXEMPLARS (EXAMPLES)
The learner will:
- Recognize and discuss own and others' art work using appropriate vocabulary – color, shape, line and texture
- Discuss works of art to determine mood or emotion
- Point out differences and similarities in works of art
- Select pieces of artwork for display in the room or hallway
- Show respect for artwork exhibited by other students

SUPPORTIVE PRACTICES
The adult will:
- Use appropriate visual arts vocabulary when describing art work
- Use literature illustrations and other art-works to model vocabulary and to determine mood or idea
- Describe common themes and patterns that are repeated within each art form such as color, design, movement, and shape
- Model how to self-select a best piece of artwork
- Point out artwork in hallways, offices and on field trips

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXT OF WORKS IN THE ARTS

BIG IDEA: Every culture has its own art forms.
ESSENTIAL QUESTION: Can I use various cultural art forms within my own creations?

9.2.1 PATTERNS AND THEMES

STANDARD STATEMENT
- Use various art forms from other cultures while creating own art works

EXEMPLARS (EXAMPLES)
The learner will:
- Create own works using various art forms from other cultures
- Create similar works of art to those displayed
- Reproduce songs and dance movements that are familiar

SUPPORTIVE PRACTICES
The adult will:
- Display many types of art work
- Show a variety of music and movement forms
- Play many types of music
- Provide materials and instruments from many cultures

STANDARD: 9.3 CRITICAL RESPONSE TO WORKS OF ART

BIG IDEA: People make choices about the types of art they like.
ESSENTIAL QUESTIONS: Can I make a judgment about an art form? Can I use appropriate words and terms to talk about works of art?

9.3.1 CRITICAL RESPONSE

STANDARD STATEMENT
- Compare others' products to ones own work

EXEMPLARS (EXAMPLES)
The learner will:
- Evaluate and form judgments about art using I statements
- Show respect for the response of others to a work of art
- Make comparative statements such as "I used color just like...." Or "I can tap dance like...."

SUPPORTIVE PRACTICES
The adult will:
- Model and describe judgments about others' work using "I" statements
- Use appropriate vocabulary when discussing art (volume, rhythm, line, color, jumps, characters, and action)
- Provide opportunities to explore increasingly more complex art forms throughout the year

9.3.2 IDENTIFICATION

STANDARD STATEMENT
- Recognize and name a variety of elements within one form

EXEMPLARS (EXAMPLES)
The learner will:
- Identify a painting, sculpture, drawing, types of dance, and types of songs
- Name music by type, such as drumming or singing

SUPPORTIVE PRACTICES
The adult will:
- Display art work throughout the classroom at children's eye level
- Discuss the various types and characteristics of painting, sculpture, dance, and song

STANDARD: 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS

BIG IDEA: Artists create works as a form of self-expression and to share thoughts and ideas.
ESSENTIAL QUESTION: Can I explain how an art form makes me feel?

9.4.1 EMOTIONAL RESPONSE

STANDARD STATEMENT
- Make statements that express emotion about viewing or creating various art works

EXEMPLARS (EXAMPLES)
The learner will:
- Respond to works of art by expressing feelings ("This makes me feel happy because...", "This makes me feel sad because...")
- Show appreciation for visual arts
- Respond to music by expressing feelings related to types of music
- Show appreciation for music and movement
- Respond to dramatic performances by expressing feelings about characters and actions
- Show appreciation for dramatic and performance play

SUPPORTIVE PRACTICES
The adult will:
- Model responding to works using emotions
- Model showing appreciation through notes
- Model showing appreciation clapping and saying thank you
- Ask clarifying questions such as, "Why did you say that?", "What do you notice that makes you respond that way?"

CREATIVE THINKING AND EXPRESSION GLOSSARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce

Aesthetic Response – A philosophical reply to works in the arts

Artistic Choices – Selections made by artists in order to convey meaning

Arts Resource – An outside community asset (performances, exhibitions, performers, artists)

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form

Community – A group of people who share a common social, historical, regional or cultural heritage

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis

Culture – The way of life of a particular social, ethnic or age group of people which includes beliefs, customs, arts and behaviors

Elements – Core components that support the principles of the arts

Genre – A type or category (music - opera, oratorio; theater - tragedy, comedy; dance - modern, ballet; visual arts- pastoral, scenes of everyday life)

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment

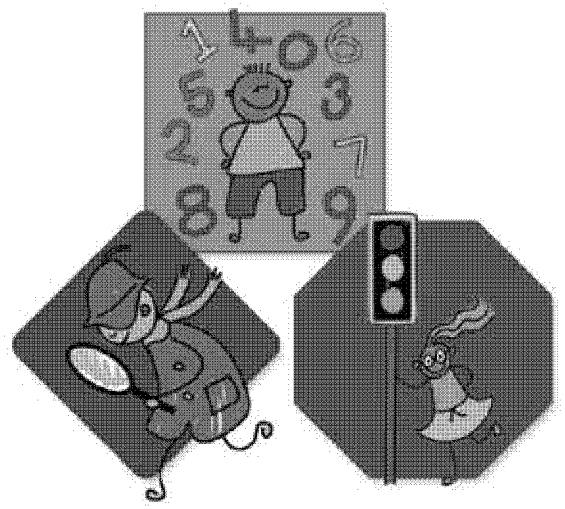
Multimedia – The combined use of media, such as movies, cd-roms, television, radio, print and the internet for entertainment and publicity

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists

Style – A distinctive or characteristic manner of expression

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts

Timbre – A unique quality of sound



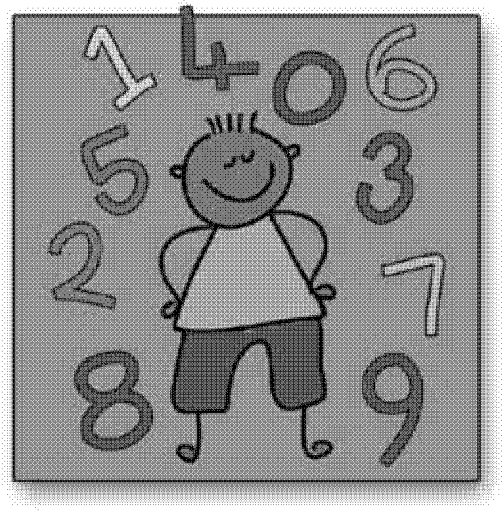
Learning and development is typically divided into learning domains: Physical, Intellectual or Cognitive, Social-Emotional, and Language and Literacy. Cognitive learning refers to the brain's functions that develop thinking, learning, awareness, judgment and information processing. In early childhood, Pennsylvania's Cognitive Domain includes the standards for the Key Learning Areas of Mathematics, Science and Social Studies. While each Key Learning Area contains content-specific information, children learn this information best when activities and materials are integrated together. A science experience that uses graphing (math) and cooperative small group work (social studies) combines thinking and processing to enhance and expand problem solving and critical thinking. Units of study that incorporate all the domains of learning into connected activities and projects scaffold learning and build new understandings and connections.

COGNITIVE THINKING & GENERAL KNOWLEDGE

- MATHEMATICAL THINKING AND EXPRESSION: EXPLORING, PROCESSING AND PROBLEM SOLVING
- SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY
- SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

MATHEMATICAL THINKING AND EXPRESSION

EXPLORING, PROCESSING AND PROBLEM SOLVING



Mathematical learning in the early years relies on children's opportunities to describe and explore the relationship of objects and materials. Children's knowledge and understanding of mathematics is built through active manipulation where children use their senses to build concept knowledge in the areas of numbers and operations, patterns, algebra, geometry, measurement, and comparison. When children truly understand the fundamentals and have mastered the basic mathematical skills they will have the capacity and confidence to excel at learning more advanced mathematics. Teachers facilitate mathematical learning when they encourage children to problem solve, reason, communicate, connect and represent. When engaged in manipulative mathematical activities, children better understand the world around them, begin to use number concepts to communicate their own thoughts and ideas which means they are beginning to think and reason.

USE OF MANIPULATIVES IN EARLY LEARNING SETTINGS

Manipulatives are physical objects that are used as teaching tools to engage students in hands-on learning. They can be used to introduce, practice, or remediate a concept. They can be used in all areas of math instruction. One kind of basic manipulative is a counter. There are a variety of counters that can be used to explore concepts. Objects can be sorted, arranged in patterns, counted, seriated, compared, calculated and investigated. Children's development moves from concrete to abstract so manipulatives need to be a part of instruction in all areas of development in the early years. Children can be given specific problems and activities to use with manipulatives or can use them to make discoveries and explore new ideas. The exploration of manipulatives allows children to have their curiosity satisfied. The use of manipulatives should be shared with families also.

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STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

BIG IDEA: Mathematic knowledge is built in the areas of numbers and operations by organizing, representing and comparing numbers.
ESSENTIAL QUESTIONS: Why do I need to be able to count objects? How do I use numbers every day? How can I record what I count?

2.1.1 COUNT AND COMPARE NUMBERS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Rote count by whole numbers to 100 by ones • Attempt to count by tens along with an adult • Read and write whole numbers 0 – 20 • Count up to 20 objects using one to one correspondence • Use basic numbers and counting • Use vocabulary independently to compare number of objects • Tell what number comes before or after (up to 20)	**The learner will:** • Practice group and individual rote counting experiences such as counting objects or children in the classroom • Count by ones and tens • Count and match up to 20 objects using one to one correspondence • Practice using vocabulary to compare numbers of objects (5 is more than 3; 2 is less than 3) • Choose from a group of three numbers what comes next	**The adult will:** • Provide opportunities and support learner's counting during everyday activities • Provide opportunities and support learners matching and counting objects (passing out snacks, counting manipulatives, learner's jacket, classroom materials; how many more do you need) • Practice rote counting on a daily basis during small group and individual activities • Post a number chart in the classroom for reference and daily use during small group and individual activities • Engage children in activities related to order of numbers (before, after) during small and individual group activities • Provide practice of ordering numbers in learning center activities

2.1.2 REPRESENT NUMBERS IN EQUIVALENT FORMS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use concrete objects to represent quantities up to and including twenty • Identify penny, nickel, dime • Represent equivalent forms of the same number through the use of concrete objects and drawings up to and including 20	**The learner will:** • Represent a given number up to twenty with manipulatives • Count a set of manipulatives to match a given number • Create sets of objects up to 20 • Recognize and practice writing numerals through 20 to label sets • Practice producing sets of objects and attach to number words through five with assistance (create a set of two and match to the number word 2; show the number 2 and create a set of two objects)	**The adult will:** • Model using the appropriate language/vocabulary, the process of counting with one to one correspondence and write the number representing that amount • Provide opportunities and support learners' counting with one to one correspondence during classroom activities • Provide opportunities to write numerals to label sets • Write numerals to represent a number

2.1.3 CONCEPTS OF NUMBERS AND RELATIONSHIPS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use concrete objects to separate a set into two equal parts • Group objects into sets of ten • Use ordinal number words to describe the position of objects • Match numerals to sets of objects	**The learner will:** • Analyze a set of objects and practice dividing into two equal parts (4 blocks= 2 blocks and 2 blocks) • Count a set of ten single objects and combine to create one set of ten • Use ordinal numbers to describe the positions of objects (first, second, third, last) • Match a numeral to a set up to 20	**The adult will:** • Provide opportunities, and support learners counting, reading and writing numbers during various classroom activities • Provide opportunities and support learners creating groups of ten during classroom activities (popsicle sticks, baggies of objects) • Provide opportunities for learners to order objects (classmates, colored manipulatives) in groups and centers

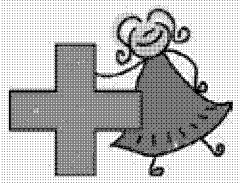
STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

2.1.4 PLACE VALUE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice regrouping ones to tens with adult assistance	**The learner will:** • Practice counting objects up to 20 and grouping into sets of ten with assistance (12 = one group of 10 and 2 more)	**The adult will:** • Provide opportunities for regrouping ones to tens during the daily routine

2.1.6 CONCEPTS AND APPLICATIONS OF OPERATIONS

INDICATOR	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Analyze numbers • Visually quantify zero to five objects • Solve word problems using concrete objects independently • Create a sorting method	**The learner will:** • Apply strategies of "counting on" and counting backwards • Build new mathematical knowledge through problem solving • Apply and adapt a variety of appropriate strategies to solve problems • Increase ability to combine, separate and name how many concrete objects	**The adult will:** • Analyze numbers and state properties of them • Practice visually quantifying the number in a given set of 0 to 5 objects (that set has 3; no counting) • Represent equivalent forms of the same number using concrete objects and drawings up to and including 10 • Sort objects by various attributes and into groups of different quantities • Practice addition by combining sets of concrete objects • Practice subtraction by separating sets of objects • Practice describing the results of combining and separating two sets using math vocabulary • Implement the strategy of "counting on" when counting two sets of objects joined together (2 apples in one set and 3 apples in another set– say 2...3, 4, 5, five apples in all)



STANDARD 2.2: COMPUTATION AND ESTIMATION

BIG IDEA: Students link concepts and procedures as they develop and use computational techniques, including estimation and mental arithmetic, to seek reasonable answers.

ESSENTIAL QUESTIONS: How do I estimate? How do I build knowledge through problem solving?

2.2.1 FLUENCY IN BASIC FACTS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice reading number sentences with adult	**The learner will:** • Read number sentences in pictorial form with and without numbers with adult support (2 apples plus- 1 apple =equals 3 apples)	**The adult will:** • Create number sentences up to the sum of 5 using flannelboard, and/or other manipulatives on a regular basis • Provide opportunities for learners to create and read number sentences in group settings and in learning centers

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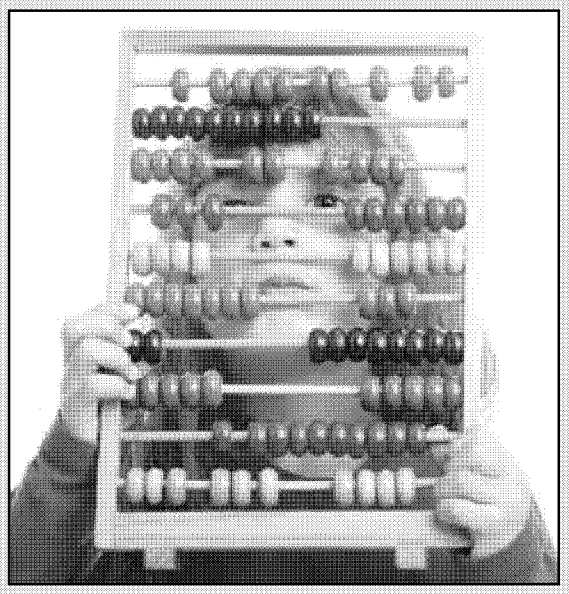
STANDARD 2.2: COMPUTATION AND ESTIMATION continued

2.2.2 COMPUTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Separate concrete objects into groups • Represent addition and subtraction in every day situations using up to ten concrete objects • Use "counting on" as a strategy for determining the sum • Explain the results of joining and separating sets of objects up to and including 10 using math vocabulary • Use counting backwards as a strategy for finding a difference in the numbers 1 – 10	**The learner will:** • Use counters to solve simple math stories • Draw pictures of two sets of objects, count them together and explain the process of joining the sets • Explore the concepts of addition (sum) and subtraction (difference) by joining and separating sets of objects • Use counters to make sets up to ten • Practice "counting on" and counting backwards to join and separate sets • Practice verbalizing that addition joins objects together and that subtraction separates items or takes away objects	**The adult will:** • Create real life addition and subtraction problems for learners to solve by using pictures and/or concrete manipulatives • Identify everyday classroom opportunities that involve the operation of addition and/or subtraction • Create addition problems that join two sets of the same amount of objects • Provide opportunities and support learners separating sets of objects and/or counters into two equal groups • Provide opportunities and support learners using counters or objects to make and count sets (small group, individual, large group)

2.2.4 NUMERICAL ESTIMATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Estimate how many objects are in a set/group up to and including twenty objects • Check estimate by counting the number of objects	**The learner will:** • Estimate how many objects are in a group • Check estimate by counting the number of objects • Use mathematical language to explain estimating and/or comparing	**The adult will:** • Model using the appropriate language/ vocabulary the process of estimation (less, more, almost close, nearly) • Provide opportunities and support learners in estimating a quantity (students bring objects from home) • Provide support for learners estimating and counting the number of objects • Encourage and support learners in explaining how they applied their skills during mathematical tasks • Provide opportunities for learners to explore and apply understanding of joining subtracting, and dividing sets in learning centers • Incorporate estimating activities into play • Use cooking utensils in estimation activities (add measuring cups, pizza pans, bowls into dramatic play area)



STANDARD 2.3: MEASUREMENT AND ESTIMATION

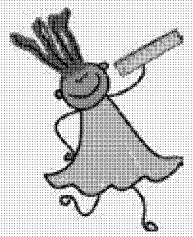
BIG IDEA: Learners will identify attributes, units or systems of measurement and apply a variety of tools to explore the distance, weight, length, height, time and temperature of objects.

ESSENTIAL QUESTIONS: What do I understand about the measurement? How can I group objects according to common properties? What can I discover about quantities of objects?

2.3.1 CONCEPTS OF MEASUREMENT

STANDARD STATEMENT

- Measure objects
- Practice measuring calendar time using appropriate vocabulary with scaffolding
- Demonstrate understanding of number conservation



EXEMPLARS (EXAMPLES)

The learner will:

- Use positional vocabulary to describe the relative positions of objects
- Practice using the names of the days of the week, months of the year and the four seasons through songs, chants and fingerplays
- Recognize parts of the day and discuss activities that occur in the morning, afternoon, and night
- Participate using the calendar
- Practice identifying the season, the month, and the date of today, tomorrow and yesterday with assistance
- Match objects one to one to determine equal, more, or less in set, and verbalize the size of objects does not affect the number of objects in a set

SUPPORTIVE PRACTICES

The adult will:

- Incorporate spatial concept words into directions and sensorimotor activities throughout the day
- Order daily events and discuss the time that daily events occur
- Encourage the class at the end of the day to brainstorm things that happened during the day that were memorable
- Point out months and seasons of the year as they change (characteristics)
- Introduce and use measurement vocabulary
- Practice one to one matching to reinforce number conservation concept (size versus number of objects; 3 oranges matched to 4 raisins = one more raisin than orange, even though oranges are larger in size than raisins)
- Pose questions about number conservation

2.3.2 UNITS AND TOOLS OF MEASUREMENT

STANDARD STATEMENT

- Estimate and measure objects using non-standard units
- Determine the length and height of objects with nonstandard units
- Practice naming the instruments used for measuring time, length, weight, volume, and temperature
- Order events based on time

EXEMPLARS (EXAMPLES)

The learner will:

- Select appropriate tools for the attribute being measured (clock to tell time, scale to weigh, measuring cups to help bake a cake)
- Explore objects to determine which will make a good measuring tool (classroom objects like paper clips, unifix cubes, new pencils, shoes, hands, coins)
- Use multiple units of the same size (non-standard units) to measure (paperclips, unifix cubes)
- Attempt to determine activities that take a long or short time
- Review what we do first, next, last
- Recall what we did or plan to do yesterday, today and tomorrow
- Talk about daily routine (name part of day; order of day; where hands on clock might be)

SUPPORTIVE PRACTICES

The adult will:

- Design and provide activities to help children recognize the attributes of length, weight, time and volume
- Provide opportunities, and support learners in determining the appropriate measurement tool to use
- Create measurement math stories that require students to determine which measuring tool to use (What would I need to do to find out how long I brush my teeth in the morning?)
- Provide sequence activities in group activities (large group, small group, individual group, learning center)

2.3.3 CALCULATIONS

STANDARD STATEMENT

- Analyze charts and graphs of objects with assistance and support from adult

EXEMPLARS (EXAMPLES)

The learner will:

- Share information about graphs and charts

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for sharing information on graphs and charts
- Assist learners in analyzing information from graphs
- Reinforce and encourage efforts

MATHEMATICAL THINKING AND TECHNOLOGY: EXPLORING, PROCESSING AND PROBLEM SOLVING

STANDARD 2.3: MEASUREMENT AND ESTIMATION continued

2.3.4 CONVERSIONS

STANDARD STATEMENT

- Compare two objects using direct comparison
- Group objects according to common properties

EXEMPLARS (EXAMPLES)

The learner will:

- Compare and order objects on the basis of length, capacity, height, weight
- Use comparison vocabulary to describe how objects are related by length or height
- Compare the measurement of different classroom objects

SUPPORTIVE PRACTICES

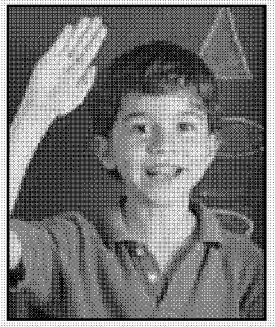
The adult will:

- Incorporate comparative and spatial vocabulary to compare
- Provide interesting items for comparison in learning activities (large group, small group, center time)

2.3.6 MEASUREMENT AND ESTIMATION

STANDARD STATEMENT

- Practice using measurement vocabulary when comparing
- Practice estimating distance/length/weight based on experience



EXEMPLARS (EXAMPLES)

The learner will:

- Investigate the different ways to measure the various attributes of an objects
- Predict and analyze the relationship between items/objects represented by charts and graphs with assistance and support from adult
- Use measurement vocabulary with adult support and guidance

SUPPORTIVE PRACTICES

The adult will:

- Measure objects with learners (start at an end point and add on cubes until the cubes are equal in length to the object measuring)
- Allow students to create the signs for the center areas in the room and determine how many people may be in each area
- Demonstrate how to measure objects starting at an end point and adding on cubes until the cubes are equal in length to the object they are measuring
- Use appropriate measurement vocabulary regularly (Incorporate comparative and spatial vocabulary to compare, locate, and identify positions in space)

STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

BIG IDEA: Learners use inductive and deductive reasoning to make, check and verify predictions and to develop connections.

ESSENTIAL QUESTIONS: Why do I think my estimation is appropriate? How do I decide what connections there are between objects?

2.4.1 REASONING

STANDARD STATEMENT

- Verify predictions and solutions about environmental objects

EXEMPLARS (EXAMPLES)

The learner will:

- Analyze the size of containers and objects inside to estimate the quantity inside
- Make predictions using size and shape information
- Begin to make or test generalizations
- Answer questions about predictions made

SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for learners to make predictions and validate
- Encourage and support learners to make predictions in small groups and learning centers
- Encourage learners to explain their reasoning (predictions, solutions)

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STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

2.4.2 CONNECTIONS

STANDARD STATEMENT
- Identify connections between objects to help with problem solving

EXEMPLARS (EXAMPLES)
The learner will:
- Identify the common properties of objects
- Use the common properties to answer questions about number problems, such as all those objects with straight edges will fit along the sides of a puzzle

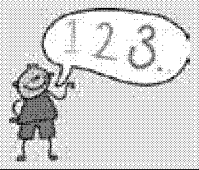
SUPPORTIVE PRACTICES
The adult will:
- Model, encourage and support learners as they attempt to recognize and apply techniques and strategies in solving problems and making connections
- Provide opportunities for learners to discover the cause and effect of predictions
- Pose daily open ended questions to promote thinking and reasoning
- Engage children in brainstorming other objects that "go together"

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

BIG IDEA: Learners solve and interpret results in various ways.
ESSENTIAL QUESTIONS: How do I apply a variety of concepts, processes and skills to solve problems? How do I communicate ideas or solutions with mathematical concepts? How do I present mathematical ideas using words, symbols visual display or technology?

2.5.1 PROBLEM SOLVING

STANDARD STATEMENT
- Identify and analyze a problem for possible solutions
- Seek information through observation, exploration and conversations



EXEMPLARS (EXAMPLES)
The learner will:
- Describe the steps necessary to solve a problem
- Make a plan to solve a problem
- Utilize different strategies and approaches to solve daily problems
- Apply reasoning to solve problems

SUPPORTIVE PRACTICES
The adult will:
- Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems
- Create and provide opportunities for learners to engage in problem solving activities (role play)
- Highlight the process versus the product of an activity (give specific examples)
- Establish problems in learning centers for learners to practice problem solving strategies

2.5.2 COMMUNICATION

STANDARD STATEMENT
- Communicate the findings from the problem solving process using math vocabulary
- Depict problem solving process through the use of pictures, simple chart or graph

EXEMPLARS (EXAMPLES)
The learner will:
- Practice explaining solutions to problems using math vocabulary
- Explain solutions to problems using visual displays
- Ask and answer questions about problems and solutions
- Show a visual representation of the solution

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for explaining problems and solutions through pictures, displays, writing, drawing, or oral discussion
- Provide learning center activities that allow young learners to question and communicate their level of learning and understanding
- Pose higher level questions

MATHEMATICAL THINKING AND TECHNOLOGY: EXPLORING, PROCESSING AND PROBLEM SOLVING

STANDARD 2.6: STATISTICS AND DATA ANALYSIS

BIG IDEA: Learners collect, represent and analyze to answer questions, solve problems and make predictions.
ESSENTIAL QUESTIONS: How do I collect data? How do I explore and display data? How do I talk about the data? What patterns can I create and describe?

2.6.1 COLLECTION OF DATA

STANDARD STATEMENT
- Gather, organize and display data on a bar graph and/or pictograph independently
- Gather data in response to questions posed to learners

EXEMPLARS (EXAMPLES)
The learner will:
- Collect and organize data
- Collect data by answering questions
- Participate in classroom graphing activities by adding his/her input to a graph

SUPPORTIVE PRACTICES
The adult will:
- Provide a variety of materials for sorting, classifying, and creating patterns
- Provide materials in the learning centers that will facilitate collection data
- Provide opportunities for learners to collect information during their learning center time

2.6.2 ORGANIZATION AND DISPLAY OF DATA

STANDARD STATEMENT
- Organize and display objects by one or more attributes
- Practice explaining organization of data
- Create various types of graphs cooperatively with an adult and with other children

EXEMPLARS (EXAMPLES)
The learner will:
- Display data on yes/no, picture and bar graphs
- Practice creating bar graphs, pie graphs, line graphs with scaffolding

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for learners to see graphs used in the real world (pizza, crackers)
- Provide activities in learning centers that allow learners to create graphs and charts
- Invite children to sort and organize collected materials by color, size, shape and graph

2.6.3 NUMERICAL SUMMARIES

STANDARD STATEMENT
- Compare groups of one to ten objects to determine more or less
- Answer questions based on data shown on graphs or charts

EXEMPLARS (EXAMPLES)
The learner will:
- Match objects in groups one to one to compare more or less
- Count number of yes or no answers on a bar graph and recognize which has more answers

SUPPORTIVE PRACTICES
The adult will:
- Pose open ended questions to engage learners in reading the data on a graph
- Model, using the appropriate language/vocabulary, the process of determining equal and not equal sets
- Support learners in determining whether sets are equal (match 1 to 1, fewer, more)
- Encourage and support learners in their explanations
- Work with children to create simple bar graphs, line graphs
- Encourage the use of math vocabulary to explain graphs and charts

2.6.5 INTERPRETATION OF DATA

STANDARD STATEMENT
- Draw conclusions about information shown on a graph or chart

EXEMPLARS (EXAMPLES)
The learner will:
- Answer a variety of questions about the data on graphs such as which has more answers or how many people answered a specific way

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for learners to explain their interpretation of graphs
- Ask learners to compare groups to find which group has the most, least, equal, not equal amount
- Pose questions to promote thinking and reasoning

MATHEMATICAL THINKING AND TECHNOLOGY: EXPLORING, PROCESSING AND PROBLEM SOLVING

STANDARD 2.7: PROBABILITY AND PREDICTIONS

BIG IDEA: Learners develop and evaluate predictions that are based on knowledge and data.

ESSENTIAL QUESTIONS: What words can I use to describe what is on the graph? How do I predict what will come next? What predictions can I make? How accurate will my predications be?

2.7.1 CALCULATE PROBABILITIES

STANDARD STATEMENT
- Predict the probability of an event

EXEMPLARS (EXAMPLES)
The learner will:
- Answer questions posed about particular events based on observation or experience, such as "Is there enough pizza for everyone to have another slice?"

SUPPORTIVE PRACTICES
The adult will:
- Model, using the appropriate language/vocabulary the process of determining the likelihood an event occurring
- Review examples of events that are most likely to occur at certain times (music class on Mondays, snow on a cold blustery day, hot on a summer day)

2.7.2 PREDICTION OF OUTCOMES

STANDARD STATEMENT
- Predict outcomes of events

EXEMPLARS (EXAMPLES)
The learner will:
- What would happen if (ice cream was not put in the freezer; What would happen if you never came to school? If all the class had two cookies and the learner only had one cookie)
- Develop questions to ask prior to a field trip

SUPPORTIVE PRACTICES
The adult will:
- Facilitate predictions for possible results by referring to previous events
- Provide opportunities for making predictions
- Support prediction efforts
- Provide opportunities for field trips

2.7.3 REPRESENTATIONS OF PROBABILITIES

STANDARD STATEMENT
- Complete a simple graph to make selection with little or no assistance

EXEMPLARS (EXAMPLES)
The learner will:
- Choose yes/no as the probability of a familiar action occurring (only 5 of 20 learners coming to school on a given day)
- Choose an answer to a question about a routine occurrence (When do we go to lunch? When do you go to recess?)

SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities and materials to complete simple graphs
- Provide graphs to read and interpret as part of daily routine

2.7.4 DISPLAY SIMPLE SPACES

STANDARD STATEMENT
- Create a graph or chart and describe the contents

EXEMPLARS (EXAMPLES)
The learner will:
- Create a graph or chart and describe the contents (bar graph or yellow, red, orange– Which has more? Which has 3?)

SUPPORTIVE PRACTICES
The adult will:
- Provide materials for creating graphs and charts
- Provide assistance when needed

2.7.5 COMPARE THEORETICAL AND EXPERIMENTAL PROBABILITIES

STANDARD STATEMENT
- Answer questions based on data

EXEMPLARS (EXAMPLES)
The learner will:
- Answer questions about graph or chart

SUPPORTIVE PRACTICES
The adult will:
- Ask questions about graph or chart (open ended and close ended)

MATHEMATICAL THINKING AND TECHNOLOGY: EXPLORING, PROCESSING AND PROBLEM SOLVING

STANDARD 2.8: ALGEBRA AND FUNCTIONS

BIG IDEA: Learners discover how objects are related to each other using models, patterns and functions involving numbers, shapes, and graphs in problem solving situations.

ESSENTIAL QUESTIONS: How do I respond to routines? How do I use manipulatives to show relationships? What patterns can I create and describe?

2.8.1 ALGEBRAIC PROPERTIES

STANDARD STATEMENT
- Compare concrete objects to show equal or not equal

EXEMPLARS (EXAMPLES)
The learner will:
- Use manipulatives to create sets that are equal
- Compare number sentences that show answers that demonstrate equal/unequal amounts (2 apples + 3 apples= 5 apples and 3 apples +2 apples also = 5 apples) (2 counters + 1 counter = 3 counters, but 1 counter + 3 counters does not equal 3 counters)

SUPPORTIVE PRACTICES
The adult will:
- Provide varied materials and amounts of materials for comparison (shells, cereal, pebbles, buttons)
- Help children describe similarities and differences in concrete objects

2.8.2 ALGEBRAIC MANIPULATIONS

STANDARD STATEMENT
- Recreate a simple story problem using manipulatives
- Explain story problem solutions
- Identify the purposes for different mathematical symbols with scaffolding

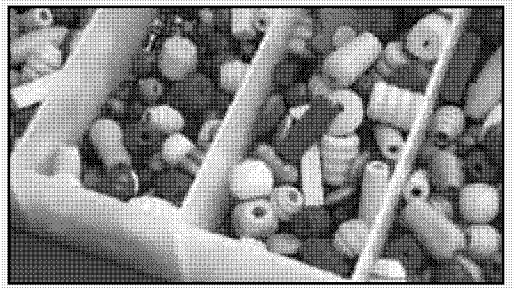
EXEMPLARS (EXAMPLES)
The learner will:
- Use manipulatives and/or draw pictures to recreate a story
- Practice using numbers and symbols to represent addition and subtraction (+, –, =) in simple story problems
- Solve a simple story problem and explain the process using math language with scaffolding if necessary

SUPPORTIVE PRACTICES
The adult will:
- Support learners in their efforts to create number stories
- Create learning center opportunities for learners to develop story problems (flannelboard and pieces; wipe off boards; math manipulatives)
- Ask questions to obtain learners' understanding mathematical symbols

2.8.3 PATTERNS

STANDARD STATEMENT
- Recognize, describe, extend and transfer patterns
- Reproduce an existing pattern and verbalize the pattern
- Identify and create complex patterns using numerous objects

EXEMPLARS (EXAMPLES)
The learner will:
- Recognize, describe, and extend a two and three element pattern (AB, ABC)
- Reproduce an existing pattern and verbalize the pattern
- Create a simple and/or complex pattern using various objects (AB, ABC)



SUPPORTIVE PRACTICES
The adult will:
- Provide opportunities for children to create and extend patterns
- Model the creation of patterns using children, objects and flannelboards
- Have children recreate patterns using lacing beads, geoboards, and other manipulatives
- Encourage, model and discuss patterns (What is missing? Why do you think that is a pattern?)
- Engage learners in finding patterns in the environment, patterns in mathematics
- Engage learners in activities and interactions that encourage learners to look for patterns in and out of the classroom
- Provide opportunities for learners to create, reproduce and extend patterns in learning centers

STANDARD 2.8: ALGEBRA AND FUNCTIONS continued

2.8.4 FUNCTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice using concrete objects or pictures to represent a number story that involves a missing addend with adult assistance	**The learner will:** • With adult assistance and manipulatives, practice determining the missing addend in a number story	**The adult will:** • Provide opportunities for determining missing addend • Model solving problems with missing addend using manipulatives • Support efforts of learners

2.8.5 MODELING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Create a math story from a picture	**The learner will:** • Create a math story from a picture (2 oranges plus 2 oranges equals 4 oranges) verbalize, write, draw	**The adult will:** • Provide opportunities for learners to practice creating math stories from pictures (flannelboard stories, manipulative stories) • Model for learners and offer support for efforts

2.8.6 INTERPRET RESULTS OF MODELING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe data on classroom graphs using numerical math language	**The learner will:** • Describe data through the use of a number sentence (I see 2 blue squares and 1 red square. If I put the squares together I would have 3 squares)	**The adult will:** • Provide support to learners as they practice describing data using number sentences

STANDARD 2.9: GEOMETRY

BIG IDEA: Children identify, name and describe a variety of shapes that are presented in many ways.
ESSENTIAL QUESTIONS: What makes shapes different from each other? What shapes can we see in our environment? How do shapes fit together and come apart? How can I position shapes in my environment?

2.9.1 DEFINITIONS, PROPERTIES AND RELATIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and name common two- and three-dimensional geometric shapes • Compare the attributes of shapes • Sort geometric figures according to common attributes	**The learner will:** • Recognize and describe the attributes of geometric figures • Match and compare the attributes of shapes • Point out specific geometric figures in environment	**The adult will:** • Model, using the appropriate language/vocabulary, the process of recognizing, describing the properties and naming geometric shapes (line segment, diagonal, angle, length, width, height) • Provide opportunities and support learners in locating geometric shapes within the environment • Provide materials and support learners in creating shapes (toothpicks, popsicles sticks, foam shapes, playdoh, straws, Model Magic) • Provide opportunities and support learners in describing the attributes of shapes

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STANDARD 2.9: GEOMETRY continued

2.9.2 TRANSFORMATIONS AND SYMMETRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Explore symmetry in nature • Identify a reflection • Create an example of symmetry independently 	**The learner will:** • Determine if shapes folded in half are the same or different (symmetrical or non-symmetrical) • Observe items from nature to determine if they are symmetrical or non-symmetrical (leaves, butterflies, acorns) • Use a variety of materials to create a symmetrical shape, such as paint blots • Be able to define a reflection as a figure that does not change size	**The adult will:** • Share examples of symmetry • Provide opportunities and support learners in determining whether a shape or object is symmetrical • Examine materials in nature for symmetry • Share reflections with learners • Model appropriate vocabulary

2.9.3 COORDINATE GEOMETRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice using directionality independently • Use position words to describe the location of objects	**The learner will:** • Explore geometric shapes turned in different ways • Create various geometric shapes with manipulatives (pattern blocks, geoboards and tangrams) • Talk about position and location of objects in the environment	**The adult will:** • Model how a shape can be turned in different ways and remain the same shape • Use appropriate vocabulary related to geometry • Provide opportunities for learner to explore and apply understanding of geometry through the day

STANDARD 2.11: CALCULUS

BIG IDEA: Living objects grow and move at different rates.
ESSENTIAL QUESTIONS: How do I know how fast one thing grows or moves?

2.11.1 EXTREME VALUES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Order whole numbers (0-20) from least to greatest value	**The learner will:** • Place number cards in order from 0 – 20	**The adult will:** • Model, using the appropriate language/vocabulary, the process of ordering numbers from least to greatest • Use classroom tools such as the number line or the 100's chart to model strategies that support learning • Provide opportunities and support learners in ordering numbers from least to greatest

2.11.2 RATES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify situations that occur in real life that occur quickly or slowly	**The learner will:** • Compare vehicles, pictures of people different ages and discuss the speed or rate of growth • Identify animals that travel faster or slower than others • Sequence pictures of human growth from infancy through adulthood	**The adult will:** • Provide opportunities and support learners in deciding which real life object or event is faster or slower (talk about growth) • Encourage and support learners in explaining how they applied their skills during mathematical tasks • Model using the appropriate language/vocabulary, the process of deciding which real life event or object is faster and slower

MATHEMATICAL THINKING AND EXPRESSION GLOSSARY

Addends – Numbers used in mathematical operation of addition

Algebraic Expression – A group of numbers, symbols and variables that express a single series of operations

Angle – A geometric figure consisting of two rays with a common endpoint

Ascending Order – A listing in which numbers or terms are organized in increasing value

Bar Graph – A graph in which horizontal or vertical bars represent data

Concrete Objects – Physical objects used to represent mathematical situations

Counting On – Given two sets of objects in which to find the sum, learner counts one set and then counts on from the first set to the second set (3 apples in one set; 1 apple in other set– learner says 1–2–3 and then 4; there are 4 in all)

Data – Information gathered by observation, questioning or measurement, usually expressed with numbers

Descending – An order in which numbers or terms are organized in decreasing value

Estimate – A close rather than exact answer

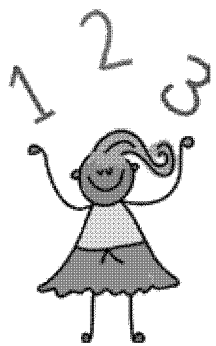
Fractional Part – Part of a whole or part of a group that is less than a whole

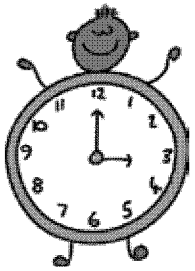
Function – A rule that describes the commonalities between two patterns

Graph – A pictorial device that shows a relationship between variables or sets of data

Manipulatives – A wide variety of physical materials, objects, and supplies that students use to foster mathematic learning

Non Standard Measurement – A measure that is not determined by the use of standard units (paper clips, blocks)





Numerical Operations – Place, value, number sense, counting, correspondence, comparison, ordering numbers, addition/subtraction (joining/separating sets)

Number Sense – Understanding of numbers and their quantities

Ordinal Number – A whole number that names the position of an object in a sequence

Pattern – A set or sequence of shapes or numbers that are repeated in a predictable manner

Pictograph – A graph that uses pictures or symbols to represent data

Place value – The value of the position of a digit in a numeral

Predictions – Use of base information to produce an approximation of change or result

Probability – The measure of the likelihood of an event occurring

Reflection – A transformation creating a mirror image of a figure on the opposite side of a line

Seriation – Arranging objects in order by size or position in space (arrange in a series of pattern)

Spatial Sense – Building and manipulating mental representations of two and three dimensional objects

Standard Measurement – A measure determined by the use of standard units such as, inches, feet, pounds, cups, pints, gallons

Symbol – A sign used to represent something

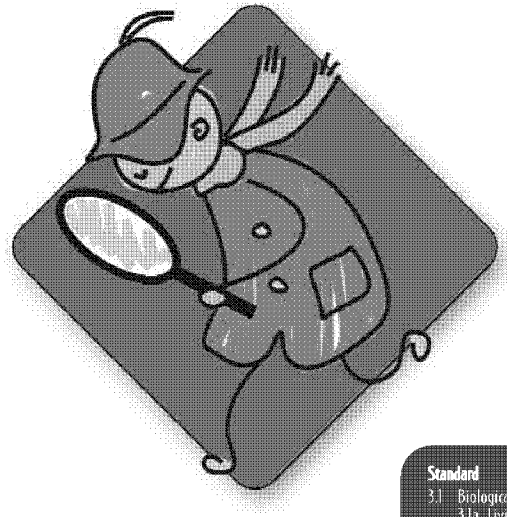
Symmetry – An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place

Trigonometry – Relationship between the sides and angles of triangles

Whole numbers – The set of numbers consisting of the counting numbers and zero

SCIENTIFIC THINKING AND TECHNOLOGY

EXPLORING, INQUIRY AND DISCOVERY



All young children are naturally curious about their environment and the world around them and learn best when allowed to actively explore using their senses. These experiences provide the foundation for abstract and scientific thought. Students, who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support discovery about the natural world and the scientific process. For the young learner scientific concepts can be incorporated throughout the key areas of early learning; for example, children use pretend play to explore and manipulate materials, creative arts to express their ideas, and literacy and language arts to research answers to questions.

ASSESSMENT

Child assessment is an integral component of early childhood programs. When combined with observation, curriculum development and appropriate teaching practices, assessment provides the foundation for understanding children's growth and development. Ongoing and frequent reviews of children's accomplishments and progress enable teachers to learn how children change over time and provide information for developing responsive and appropriate instruction. Teachers use authentic assessment when they combine observation, portfolio collection, and parent report with research–based, standards–aligned curriculum–embedded instruments to obtain a clear picture of a child's interests, abilities and areas for focus.

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STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS

BIG IDEA: There are a variety of living and non-living things.
ESSENTIAL QUESTIONS: Do I notice similarities and patterns in living things? Can I explain why living things need air and water? Can I use my senses to help solve problems?

3.1a.1 COMMON CHARACTERISTICS OF LIFE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Identify the similarities and differences of living and non-living things • Categorize plants and animals by external characteristics • Describe why living things need air, food and water to survive	• Observe and document the growth of a living thing through drawings, writing and/or photos • Note things that living things have in common (need air and water to survive) • Note things that make living and non-living things different • Sort animals according to their coverings such as fur, feathers, scales • Classify insects by the ways they move such as hopping, crawling or flying • Sort plants according to size, type of leaf, flowering or non-flowering • Explain that living things need air and water to stay alive when asked	• Make comparison charts or Venn diagrams • Display real objects as examples of living and non-living things • Provide connections with literature • Provide ways for children to document and illustrate their observations and discoveries • Have children share how to care for a pet • Grow a plant with children • Keep a classroom pet

3.1a.3 LIFE CYCLES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Identify stages of life cycles for plants and animals	• Draw and/or write the stages of a life cycle • Recognize and sequence illustrations of a life cycle of a plant or animal	• Provide illustrations to demonstrate stages in life cycles • Provide opportunities for children to observe plants or animals over time

3.1a.5 FORM AND FUNCTION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Identify the specific functions of living things' parts	• Explain that the lungs are for breathing, legs are for walking, roots intake water • Draw and label a picture of a plant to identify specific parts	• Provide nonfiction texts for students to explore parts of living things • Use diagrams to demonstrate parts of plants, animals and the human body

3.1a.8 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Identify that living things and non-living things are made of parts that perform specific functions	• Identify parts of living things and explain their relationship to the whole • Discuss function of specific parts, such as wings are for flying and legs are for walking	• Set up a learning area where children can take apart items, categorize parts and draw conclusions about their functions and relationships to the whole • Integrate the concept of parts and whole whenever possible

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STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS

3.1a.9 SCIENCE AS INQUIRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Use the five senses as tools with which to observe, collect information, classify, describe and solve problems • Use observation to develop a descriptive vocabulary based on sensory experiences	• Identify the many ways senses are used • Identify common items using senses • Describe similarities and differences of items discovered using senses • Use comparative vocabulary to express degrees of similarities and differences • Use vocabulary to describe observation	• Compare and contrast materials • Provide connections to literature • Provide many opportunities for sensory explorations • Model vocabulary to extend children's observations • Engage children in observation and use of all senses • Use vocabulary when answering and asking questions • Write vocabulary on cards to be hung in classroom near science center

STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS

BIG IDEA: There are a variety of living and non-living things.
ESSENTIAL QUESTIONS: Can I compare common physical characteristics? Can I identify ways living things produce?

3.1b.1 HEREDITY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Compare similar characteristics of own family with other families	• Name characteristics observed in photographs such as hair color, eye color and height that are common among families • Notice characteristics that are common within families such as everyone has red hair or blue eyes • Organize data to identify similarities and differences among humans • Describe ways in which people are more like each other than animals	• Provide pictures of adults and their offspring for identification of inherited physical characteristics • Display family photographs • Have children compare handprints

3.1b.2 REPRODUCTION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Identify different ways living things reproduce	• Identify eggs, seeds, babies and match to the parent bird, plant or adult human	• Display pictures that show life cycles • Discuss how the adult begins as a seed, egg or baby • Provide non-fiction literature connections

3.1b.5 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	The adult will:
• Explore patterns that regularly occur in nature	• Identify natural patterns in leaves, insides of shells, coats of animals • Replicate natural patterns using appropriate materials in the classroom	• Discuss attributes of a pattern whenever appropriate • Show examples of patterns in the environment • Provide materials for children to create patterns

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STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
3.1b.6 SCIENCE AS INQUIRY	• Connect known ideas with new knowledge to build understanding or refine concepts	**The learner will:** • Ask questions about observations • Predict what might happen next • Review results of experiments or observations to plan for new experiment • Respond to "what if" questions	**The adult will:** • Ask "what if" questions • Compare and contrast materials • Provide opportunities to observe and explore to build a broader base of knowledge from which to construct new ideas

STANDARD 3.1c: BIOLOGICAL SCIENCES: EVOLUTION

BIG IDEA: There are a variety of living and non-living things.

ESSENTIAL QUESTIONS: Can I tell what animals and humans need based on weather conditions? Can I explain why changes have occurred? Can I explain what I've observed?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
3.1c.2 ADAPTATION	• Identify characteristics for animal and human survival identified with seasonal changes	**The learner will:** • Describe how animals and people adapt to the seasonal temperature change • Observe and record the behavior of local animals as they prepare for changes in the seasons • Match pictures of animals engaged in specific activity to a season • Identify animal adaptations that help them to move in different habitats such as the webbed toes of a frog, wings on a bird, giraffe's long neck • Sort animals according to their habitat • Name ways humans adapt for the seasons	**The adult will:** • List animals that hibernate or migrate • List types of clothing people use seasonally • Compare and contrast body structures of certain animals • Discuss how body structures help animals survive • Provide literature connections – both fiction and non-fiction
3.1c.3 UNIFYING THEMES	• Identify reasons for observed changes	**The learner will:** • Use drawings or descriptions to explain why plants change or humans dress differently for seasons	**The adult will:** • Take nature walks to observe and discuss changes in the local plants and animals • Provide observation journals and materials • Read books or visit a construction site to observe and discuss change in natural and physical systems
3.1c.4 SCIENCE AS INQUIRY	• Form clear explanations based on observations	**The learner will:** • Record observations, explanations and ideas through multiple forms of representation including drawing, simple graphs, writing and movement • Ask clarifying questions • Use information collected to support answer to "why" questions • Draw conclusions from results	**The adult will:** • Provide opportunities to observe and record information • Provide documentation of steps taken and results by chart, posters, photography • Answer questions • Provide resources for children to find answers • Provide feedback on child's conclusions

STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY

BIG IDEA: Physical properties help us to understand the world.

ESSENTIAL QUESTIONS: What happens when I combine objects or substances? How do I discover the properties of objects?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
3.2a.1 PROPERTIES OF MATTER	• Classify items by properties of matter	**The learner will:** • Sort and classify common classroom materials or household items by solid, liquid or gas	**The adult will:** • Provide materials such as clay, cloth, paper or pictures for children to sort and classify • Compare and contrast properties of matter
3.2a.2 STRUCTURE OF MATTER	• Identify the three types of matter	**The learner will:** • Identify solid, liquid and gas when presented with real objects or pictures	**The adult will:** • Fill two clear containers; one with solid objects and the other with colored liquid. Label another empty container. Encourage children to identify the type of matter in each container
3.2a.3 MATTER AND ENERGY FLOW	• Describe the way matter can change	**The learner will:** • Use the words melt, heat, mix, cut, freeze to describe what happens to matter	**The adult will:** • Model appropriate vocabulary while engaging with children in experiments • Use words such as mixture, liquid, solid, combine, mix, freeze, melt
3.2a.4 REACTIONS	• Describe what happens when two or more substances are combined	**The learner will:** • Participate in safe classroom cooking activities • Describe what happens when ingredients are combined • Observe and describe an ocean in a bottle	**The adult will:** • Add water and vegetable or baby oil to make an ocean in a bottle • Use vocabulary when conducting cooking activities • Ask children to predict what will happen as substances are combine
3.2a.5 UNIFYING THEMES	• Examine and explain change through simple observation and recording	**The learner will:** • Record results of cooking activities or experiments using matter • Draw an explanation of what occurred	**The adult will:** • Provide activities for observation and the documentation of change • Provide literature to support connections

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STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS

BIG IDEA: Physical properties help us to understand the world.
ESSENTIAL QUESTIONS: Can I use wind or water power? Can I describe variations in sound? Can I explain a reaction sequence? Can I design a scientific investigation?

3.2b.1 FORCE AND MOTION OF PARTICLES AND RIGID BODIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Apply knowledge of motion to new toys and objects	**The learner will:** • Push or pull a toy to make it go forward, forward, around or zig zag • Use ramp to increase speed • Create ramps of various sizes • Describe play with toys using directional words	**The adult will:** • Include materials in centers for children to explore motion such as inclines and wheeled toys in the block area or clear tubing at the water table

3.2b.2 ENERGY STORAGE AND TRANSFORMATIONS: CONSERVATION LAWS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Explore basic energy types and sources	**The learner will:** • Identify energy forms such as sunlight, heat, wind and motion • Make rockets with balloons • Build pinwheels, kites or paper airplanes to explore wind • Use water wheels and tubing at the water table to create different effects	**The adult will:** • Provide experiments that use energy • Read non-fiction books • Ask children to explain what is making the object move

3.2b.4 ELECTRICAL AND MAGNETIC ENERGY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use and explain the concepts of magnetic force	**The learner will:** • Use a magnet to attach one object to another • Describe and record what occurs when magnets are near objects • Identify things that are magnetic or non-magnetic	**The adult will:** • Create a chart of things that are magnetic • Encourage children to use magnets in structures and buildings when possible

3.2b.5 NATURE OF WAVESAND SOUND

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Demonstrate and describe variations of sound	**The learner will:** • Use a variety of materials to create sounds • Identify sources of sound • Identify a sound as high or low, loud or soft • Use varying force to create different sounds • Observe and relate that vibrations of objects such as guitar strings or a drum head create sound	**The adult will:** • Provide materials for sound exploration • Take a sound walk to identify sounds • Provide instruments for exploration

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STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS continued

3.2b.6 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the relationship between and action and its reaction using an "if-then" statement	**The learner will:** • Make a statement such as "If I do...then...will happen"	**The adult will:** • Ask children to describe an action/reaction sequence using if –then statements

3.2 b.7 SCIENCE AS INQUIRY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Create scientific investigations	**The learner will:** • Identify a problem to be solved, pose possible solutions and test them, with adult support	**The adult will:** • Engage children in identifying and implementing solutions • Set up problem solving activities • Provide materials to test out solutions

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES

BIG IDEA: Interactions occur on Earth and in space.
ESSENTIAL QUESTIONS: Can I identify earth forms in my community? Can I identify changes through observation and explanation? Can I distinguish between types of earth? Can I use tools and observation to find information?

3.3a.1 EARTH FEATURES AND THE PROCESSES THAT CHANGE IT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and distinguish between earth forms 	**The learner will:** • Use the terms flat land, hills and mountains to describe local spaces in the community • Create a mural that illustrates the concepts of flat land, hills and mountains	**The adult will:** • Use books and pictures to show examples of land forms • Take the children on a walk or field trip to experience these landforms • Provide art materials to make pictures and models of these landforms

3.3a.2 EARTH'S RESOURCES AND MATERIALS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Distinguish between three types of earth: rock, soil and sand	**The learner will:** • Use vocabulary to describe features of types of earth • Examine materials and label them • Sort rocks by attributes on a rock chart • Compare and contrast a collection of rocks • Place rocks on a balance to determine which one is heavier	**The adult will:** • Rotate soil, sand and different rock types in the sensory table for exploration • Take children to dig for soil samples and observe what is in the soil such as worms, leaves and rock • Take children on a rock discovery walk • Ask questions about the attributes of rocks • Provide tools for observation

CONTINUED...

STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES cont.

3.3a.4 WATER

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify examples of water in solid and liquid states • Identify sources of water	**The learner will:** • Identify water and ice • Explain what makes water solid and what makes ice melt • Identify streams, lakes, oceans	**The adult will:** • Provide water for exploration • Bring icicles and snow into the classroom for exploration and experimentation • Talk about sources of water • Create a KWL chart about water around the world • Provide literature connections about fresh and salt water

3.3a.5 WEATHER AND CLIMATE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify seasonal changes in the environment • Distinguish between different types of precipitation • Collect, describe and record information about weather • Read a thermometer to identify the temperature	**The learner will:** • Create a seasonal collage or booklet for each season • Create a picture showing different types of precipitation • Name various types of precipitation such as rain, fog, snow, hail • Discuss the weather as it pertains to meaningful events such as going outside for recess or going on a field trip • Conduct an experiment using a rain gauge • Read a thermometer to determine the outside temperature	**The adult will:** • Provide materials for children to sort according to weather or season • Provide materials to investigate weather concepts such as making a cloud in a jar, making hail with colored clay or building a wind vane with cardstock and straws • Use the newspaper weather report to discuss weather around the state, country and world • Conduct weather experiments • Chart the daily temperature • Create a daily weather graph to compare and contrast monthly weather and temperature patterns

3.3a.6 UNIFYING THEMES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Examine and explain change through simple observation and recording	**The learner will:** • Record own growth from infancy to kindergarten through the use of photographs, drawings and writings • Plant seeds, recording the change in their appearance over time • Record the seasonal change in the appearance of a tree throughout the year	**The adult will:** • Read books about animals and changes • Visit a construction site to observe and record changes • Go on nature walks to observe and discuss changes in the local plants and animals • Provide activities for observation and the documentation of change

STANDARD 3.3b: EARTH AND SPACE SCIENCES: ORIGIN AND EVOLUTION OF THE UNIVERSE

BIG IDEA: Interactions occur on Earth and in space.
ESSENTIAL QUESTION: Can I identify features in space?

3.3b.1 COMPOSITION AND STRUCTURE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify features of space	**The learner will:** • Name features found in space such as stars, moon, planets, sun • Tell an adult about how big the moon was last night • Discuss how people travel in space • Notice changes in sidewalk shadows over time	**The adult will:** • Provide pictures of space including planets, stars, galaxy • Read books about space and space travel • Provide models of planets and spaceships for play • Discuss space travel • Show videos of space ships taking off, traveling in space and landing

STANDARD 3.4a: TECHNOLOGY: SCOPE OF TECHNOLOGY

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I identify many types of technology and functions? Can I use technology to complete a task?

3.4a.1 CHARACTERISTICS OF TECHNOLOGY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify types of technology in the workplace, school or home	**The learner will:** • Identify phones, computers, printers and copiers	**The adult will:** • Talk about the kinds of technology at school or in a business • Compare and contrast this technology to what is found in a home

3.4a.2 CORE CONCEPTS OF TECHNOLOGY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify types of technology by function	**The learner will:** • Sort and classify technology by function such as a camera and video recorder can take pictures	**The adult will:** • Provide pictures or examples of real items for children to sort and classify

3.4a.3 TECHNOLOGY CONNECTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Select and use appropriate technology to complete a task	**The learner will:** • Use a computer to write a document or a CD player to listen to a song or story	**The adult will:** • Enable children to have the capacity to use technology independently

STANDARD 3.4a: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTION; TECHNOLOGY AND ENGINEERING DESIGN

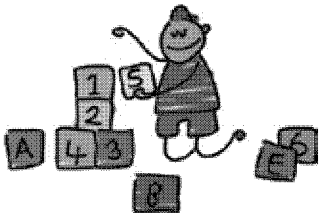
BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I use simple tools as intended?

3.4c.1 DESIGN ATTRIBUTES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Solve simple problems using appropriate tools and materials	**The learner will:** • Use a thermometer to discover the temperature • Get a pail to carry water to the water table • Sweep up spilled pencil shavings using a dust pan and broom	**The adult will:** • Ask children how they could solve a problem • Encourage children to solve problems independently • Provide household and classroom tools for children to use independently

3.4c.2 ENGINEERING DESIGN

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Experiment creating new designs with a variety of materials	**The learner will:** • Experiment creating new designs using classroom materials (a variety of shapes, blocks, manipulatives, scrap of fabric)	**The adult will:** • Encourage experimentation with a variety of materials • Assist learner in designing new creation • Reinforce efforts of learner • Provide opportunities for learner to share designs



STANDARD 3.4d: TECHNOLOGY: EXPLORATION, INQUIRY AND INVENTION: ABILITIES FOR A TECHNOLOGICAL WORLD

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I identify the steps in completing a project?

3.4d.1 APPLYING THE DESIGN PROCESS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the steps in completing a project	**The learner will:** • Tell all the steps necessary in constructing a block structure	**The adult will:** • Visit a real construction site to document progress • Take pictures as children are creating a block structure • Encourage children to document their own progress and identify the steps they are taking

STANDARD 3.4e: TECHNOLOGY: THE DESIGN WORLD

BIG IDEA: Technology impacts daily living.
ESSENTIAL QUESTIONS: Can I describe medical equipment? Can I describe and use wind power? Can I use a computer in many ways? Can I describe transportation and construction vehicles?

3.4e.1 MEDICAL TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe the appropriate instruments used in medical technology	**The learner will:** • Explain which device would be used to listen to the heart or lungs or which one would be used to take blood pressure	**The adult will:** • Provide pictures that show instruments being used for certain functions • Discuss how instruments should be used

3.4e.3 ENERGY AND POWER TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe wind power	**The learner will:** • Describe how wind power can move objects • Move objects by different types of wind power, such as blowing or waving in the air	**The adult will:** • Provide materials for children to create objects to use in the wind

3.4e.4 INFORMATION AND COMMUNICATION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify communication methods that exist within the home and school • Use a computer for a variety of applications	**The learner will:** • Identify phone, intercom, computer • Access information via a web browser with teacher assistance • Design a picture on the computer • Create a word processed document	**The adult will:** • Talk about the ways that people can communicate with one another at home and at school • Use computer • Identify topics to explore using a web browser • Provide regular computer access during play and structured parts of the day • Use the computer to enhance other learning • Send email to parent or guardian

3.4e.5 TRANSPORTATION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe types of transportation vehicles and how they operate	**The learner will:** • Explain that a train moves on rails, a boat floats with wind or motor power, a car or truck drives on the road and a plane flies in the air	**The adult will:** • Display pictures of many kinds of transportation • Provide a variety of transportation toys • Encourage children to sort and classify vehicles using a variety of categories

3.4e.7 CONSTRUCTION TECHNOLOGIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe construction vehicles, simple tools, materials and processes	**The learner will:** • Use toys and vehicles to recreate and describe a construction process	**The adult will:** • Provide pictures of constructions sites with tools, materials and equipment • Provide books describing types of vehicles, tools and materials • Visit a construction site

STANDARD 4.1: ENVIRONMENT AND ECOLOGY

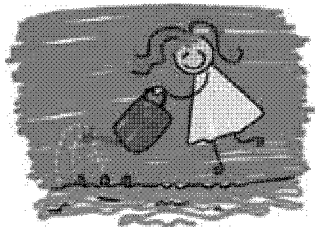
BIG IDEA: We are impacted and have impact on our environment.
ESSENTIAL QUESTIONS: Can I identify types of moving water? What are some products that come from nature? How can I conserve and protect natural resources? How does agriculture support human needs? What are some events that occur in a cycle in nature? Can I explain that dinosaurs are extinct? Can I match shelters to an appropriate environment?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
4.1 WATERSHEDS AND WETLANDS	• Identify bodies of water in the world • Identify types of moving water	**The learner will:** • Describe the differences between bodies of water such as ocean, river, lake and puddle • Identify different bodies of water in photographs and videos • Participate in experiments to see how water moves • Identify moving water such as rivers and oceans	**The adult will:** • Read books about different bodies of water • Provide photographs and videos that show various bodies of water • Take field trips to experience and observe bodies of water, when possible • Provide opportunities for experiments to understand the movement of water
4.2 RENEWABLE AND NON-RENEWABLE RESOURCES	• Identify products that come from nature • Identify ways to conserve resources	**The learner will:** • Identify paper or syrup as things that come from nature • Distinguish between something in its natural state and something in a manufactured state such as cotton and cloth • List ways to conserve water or electricity at home and school • Create illustrations, poster and/or murals showing ways to save water or electricity	**The adult will:** • Provide examples of items in natural and manufactured forms such as apples and applesauce • Discuss the importance of water and electricity and ways to conserve it • Read books about conservation of resources • Invite guest speakers to discuss conservation
4.3 ENVIRONMENTAL HEALTH	**INDICATOR** • Describe the effects litter and pollution have on the environment	**EXEMPLARS (EXAMPLES)** **The learner will:** • Name the ways litter and pollution harm the environment	**SUPPORTIVE PRACTICES** **The adult will:** • Facilitate experiments that demonstrate the effects of pollutions such as oil spills or excessive noise • Conduct a litter clean up
4.4 AGRICULTURE AND SOCIETY	• Explain that agriculture (farming) provides humans with basic needs	**The learner will:** • Identify the components of the farming system such as the farmer, animals, buildings, land in drawings or models • Identify the activities on a farm such as shearing and how that provides humans with clothing • Connect the types of things produced on a farm with things humans need	**The adult will:** • Take a field trip to a local farm or dairy and a grocery store to see where the food comes from • Display photographs of Pennsylvania farms • Invite a farmer to visit the classroom to share what they do

CONTINUED...

STANDARD 4.1: ENVIRONMENT AND ECOLOGY continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
4.6 ECOSYSTEMS AND THEIR INTERACTIONS	• Record and describe events that occur in a cycle	**The learner will:** • Illustrate and describe the cycle of day and night • Discuss other cycles that occur in nature such as seasons, seeds to plants • Sequence pictures of cyclical events in nature	**The adult will:** • Provide pictures to practice sequencing • Discuss and compare cycles in nature • Read books such as The Very Hungry Caterpillar, The Tiny Seed or A House for a Hermit Crab
4.7 THREATENED, ENDANGERED AND EXTINCT SPECIES	• Identify why some animals and plants are extinct	**The learner will:** • Explain that dinosaurs are no longer on the Earth because they are extinct • Define the meaning of extinct • Tell why species become extinct • Identify the difference between extinct and endangered	**The adult will:** • Read books and other information about dinosaurs • Use the word extinct to explain why dinosaurs are no longer present on the Earth



	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
4.8 HUMANS AND THE ENVIRONMENT	• Explain that humans live in shelters dependent on the environment	**The learner will:** • Describe protective shelters • Name a variety of shelters that humans use • Match shelters to areas in which they would be appropriate	**The adult will:** • Talk about matching shelter to the environment such as a houseboat on a river or an apartment in a city • Read books about types of shelters • Display pictures of a variety of shelters in many environments
4.9 ENVIRONMENTAL LAWS AND REGULATIONS	• State rules that protect the environment	**The learner will:** • Describe the ways in which these rules are helpful • Name specific rules such as Do Not Litter • Create posters or murals describing these rules	**The adult will:** • Discuss how laws and rules help us • Create a list of rules that help protect the environment • Invite people who hold jobs dealing with the environment to describe their job and why it's important

SCIENCE AND TECHNOLOGY GLOSSARY

Construction Technology – The ways that humans build structures on sites

Fact – Information that has been objectively verified

Hypothesis – An assertion subject to verification or proof as a premise from which a conclusion is drawn

Information Technology – The technical means that humans create to store and transmit information

Inquiry – A systematic process for using knowledge and skills to acquire and apply new knowledge

Law – Summarizing statement of observed experimental facts that has been tested many times and is generally accepted as true

Manufacturing Technology – The ways that humans produce goods and products

Model – A description, analogy or a representation of something that helps us understand it better (a physical model, a conceptual model, a mathematical model)

Patterns – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form

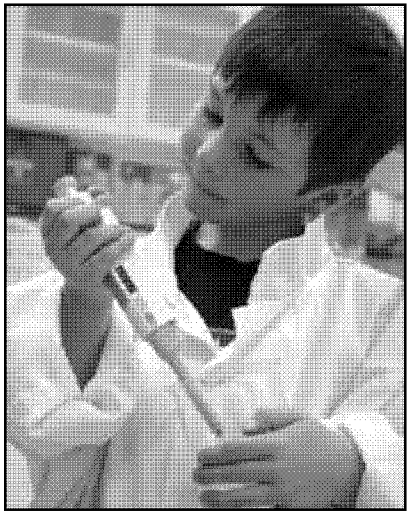
Science – Search for understanding of the natural world using inquiry and experimentation

System – A group of related objects that work together to achieve a desired result

Transportation Systems – A group of related parts that function together to perform a major task in any form of transportation

Transportation Technology – The physical ways humans move materials, goods and people

Tool – Any device used to extend human capability including computer-based tools



ENVIRONMENT AND ECOLOGY GLOSSARY

Ecosystem – A community of living organisms and their interrelated physical and chemical environment

Endangered species – A species that is in danger of extinction throughout all or a significant portion of its range

Environment – The total of the surroundings (air, water, soil, vegetation, people, wildlife) influencing each living being's existence, including physical, biological and all other factors; the surroundings of a plant or animal, including other plants or animals, climate and location

Extinction – The complete elimination of a species from the earth

Nonrenewable resources – Substances (oil, gas, coal, copper, gold) that, once used, cannot be replaced in this geological age

Recycling – Collecting and reprocessing a resource or product to make into new products

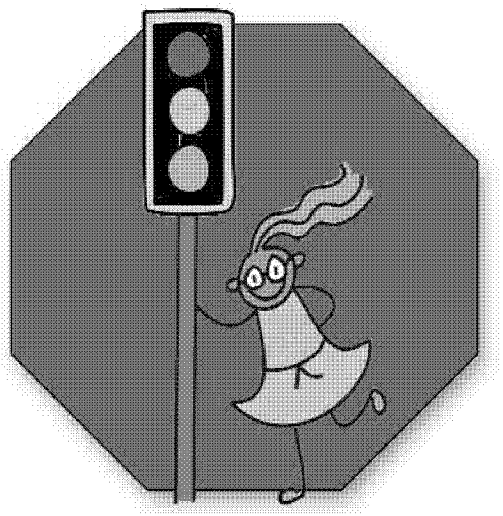
Regulation – A rule or order issued by an executive authority or regulatory agency of a government and having the force of law

Renewable – A naturally occurring raw material or form of energy that will be replenished through natural ecological cycles or sound management practices (the sun, wind, water, trees)

Wetlands – Lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (sloughs, estuaries, marshes)

SOCIAL STUDIES THINKING

CONNECTING TO COMMUNITIES



The foundation of social studies, economics, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand this scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

PLAY, PLAY AND PLAY SOME MORE!

The best way to support children's learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information in order to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children who learn together in the dramatic play or block areas how to cooperate in order to figure out how many blocks can be added to a structure before it falls have stronger social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children's thinking and problem solving.

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STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

BIG IDEA: Good citizens follow rules.
ESSENTIAL QUESTIONS: What rules and consequences are important? Can I identify some American symbols?

5.1.1 SOURCES, PURPOSE AND FUNCTIONS OF LAW

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Explain the purpose of a rule	**The learner will:** • Identify rules in school related to fire drills, lunch, walking in the halls, bus safety, classroom, and playground • Explain why rules are important • Explain what happens when rules are broken • Suggest rules that could make the classroom or school a better place	**The adult will:** • Engage students in developing a set of classroom rules • Take a practice bus ride and discuss bus safety rules • Model and practice rules for all areas of the building

5.1.5 SYMBOLS AND HOLIDAYS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify several American symbols	**The learner will:** • Identify images, pictures or items that are symbols of America • Name the American flag • State that George Washington was the first President • Discuss the first Thanksgiving	**The adult will:** • Display the American flag in the classroom • Recite the Pledge of Allegiance daily • Display pictures of American symbols • Read books that relate to symbols of America • Discuss holidays that relate to America

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

BIG IDEA: Citizenship involves responsibility to myself and others.
ESSENTIAL QUESTIONS: Can I describe some jobs I must do at school? Can I apply conflict resolution strategies? What do I do as a leader? How do I show examples of good citizenship at school?

5.2.1 CIVIC RIGHTS, RESPONSIBILITIES AND DUTIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify responsibilities at school • Participate in activities that support the life of the classroom and/or school • Identify community workers that exist in most or all communities	**The learner will:** • Demonstrate the ability to maintain personal materials in an orderly manner • Respect the space and materials of others in the classroom or school • Help care for class and school equipment, tools, materials and environment • Participate in group decision-making • Work cooperatively with other children to achieve an outcome • Name community agencies and workers that protect us or keep us healthy, such as fire fighters and police and hospitals, doctors and nurses	**The adult will:** • Define the expectations in the classroom • Model and reinforce how to care for classroom and personal materials • Give students classroom jobs and responsibilities • Engage children in class meetings and decision-making • Provide cooperative learning activities

CONTINUED...

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

5.2.2 SOURCES AND RESOLUTION OF CONFLICT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the sources of conflict and disagreement and different ways conflict can be resolved	**The learner will:** • State the cause of a problem • Suggest solutions for a problem • Continue to attempt to solve a problem until a solution is successful	**The adult will:** • Provide instruction in conflict resolution strategies • Provide support at children work together to resolve a problem • Use questions to enhance and expand children's thinking about problems

5.2.3 POLITICAL LEADERSHIP AND PUBLIC SERVICE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Participate in leadership opportunities in the classroom	**The learner will:** • Accept job responsibilities • Offer to assist the teacher or another student	**The adult will:** • Provide children with job responsibilities within the classroom • Ask for assistance from children

5.2.4 COMPETENT AND RESPONSIBLE CITIZENS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe how to be a responsible member of a class or other group to which one belongs	**The learner will:** • Share examples of good citizenship and responsibility at school • Recite a bully free pledge	**The adult will:** • Recognize children who demonstrate traits of good citizenship and character • Encourage children to participate in cooperative games and play • Use "what if" situations to help children consider appropriate behaviors and responses • Support a bully free class and school

STANDARD 5.3: HOW GOVERNMENT WORKS

BIG IDEA: Organizations have leaders.
ESSENTIAL QUESTION: How do I identify the roles of specific adults in my school or community?

5.3.1 BRANCHES OF GOVERNMENT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify positions of authority at school and community • Describe the roles of students, teachers and administrators	**The learner will:** • Identify the principal, teachers, guidance counselor as people in authority at school • Identify police officers and firemen as people in authority in the community • Model these people in play	**The adult will:** • Talk about the roles of the principal, guidance counselor, and school nurse, and what they do at school • Invite police officers and firemen to visit to explain their work and how they keep us safe • Observe play situations to correct misinterpretations of roles • Visit the principal's office • Read books about the people who work at the school or in the community

STANDARD 6.1: ECONOMIC SYSTEMS

BIG IDEA: People work in our community.
ESSENTIAL QUESTIONS: Can I determine how to divide and distribute things evenly? Can I describe how community jobs are the same and different?

6.1.2 TRADITIONAL, COMMAND AND MARKET ECONOMIES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice equal distribution	**The learner will:** • Pass out an equal number of snack to all children • Divide materials and toys evenly among those playing • Correct the problem if one child has more or less than another	**The adult will:** • Assist with determining how many are needed to have an equal number • Discuss why everyone should have a fair share

6.1.3 MEASURES OF ECONOMIC

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify the role of people in a community and what they do to make a living • Describe why people work	**The learner will:** • Match descriptions of people's work in a community with pictures illustrating the job • Talk about the need to work and why each job is important • Recognize how jobs are similar and different • Listen to various stories about community helpers and various jobs	**The adult will:** • Read books, both fiction and non-fiction, describing peoples' jobs • Invite parents/community members to share their work • Discuss the importance of work

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

BIG IDEA: Money and resources impact our life.
ESSENTIAL QUESTIONS: Can I define a product and who buys it? Can I name some coins and their values? Can I tell what I could buy at a specific location? Can I talk about what an advertisement is?

6.2.1 MARKET TRANSACTIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Define goods and consumers	**The learner will:** • Give examples of goods and consumers • Give examples of how people can be both buyers and sellers of goods and services	**The adult will:** • Introduce the vocabulary terms goods and consumers • Talk about the types of things people buy • Talk how people acquire items • Talk about who needs certain products • Read books about factories, farms, and other producers of goods • Take a field trip to see production of an item

6.2.3 FUNCTION OF MONEY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify and practice using money	**The learner will:** • Identify some coins and values • Identify some paper currency • Use "money" or tokens to purchase items	**The adult will:** • Discuss names of coins and currency • Discuss values and which are worth more/less • Develop a classroom store where children have the opportunity to make purchases from a selection of materials

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

6.2.5 CHANGES IN SUPPLY AND DEMAND

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Develop an understanding of how goods and services are produced and distributed	**The learner will:** • Recognize that goods are purchased with money • Begin to understand limitations for purchases (Don't always have enough money to buy something) • Discuss the difference between goods and services	**The adult will:** • Compare a good to a service • Make a list of services that can be purchased such as haircuts, dry cleaning, repair work • Talk about how goods are distributed such as trucks and trains • Provide literature about goods and services • Provide props and costumes in the dramatic play area to create a hair salon or a workshop

6.2.11 IMPACT OF MEDIA ON THE COST AND BENEFITS OF DECISIONS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Define an advertisement	**The learner will:** • State that advertisements encourage us to purchase goods or services • Recognize advertisements in magazines, on TV or in the environment	**The adult will:** • Talk about commercials on TV or billboards in the environment that encourage us to purchase things • Provide advertisements from magazines or newspapers for children to identify • Talk about the purposes of advertisements and encourage children to think about them in terms of wants or needs

STANDARD 6.3: SCARCITY AND CHOICE

BIG IDEA: There is a difference between wants and needs and how we acquire items.
ESSENTIAL QUESTIONS: Can I tell if I need or want something? Can I distribute items fairly? Do I notice that items are becoming limited before they run out?

6.3.1 SCARCITY AND LIMITED RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Distinguish between wants and needs and how money or materials should be used	**The learner will:** • Identify resources that help us provide for our wants and needs • Identify how those items are acquired • Determine a want or a need	**The adult will:** • Talk about ways to get more resources if needed • Create a list of limited resources • Compare wants and needs • Provide tokens for children to vote on acquiring items wanted or needed

6.3.3 ALLOCATION OF RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Practice distributing items fairly • Notice when materials are becoming limited	**The learner will:** • Distribute resources fairly when other child(ren) need something • Indicate to teacher that materials such as paper or pencils are becoming limited and need to be replenished	**The adult will:** • Provide enough resources for children working in an area • Encourage children to think about how to get more resources if needed • Indicate that a resource was limited but now has been replenished

STANDARD 6.4: ECONOMIC INTERDEPENDENCE

BIG IDEA: Trade is a way to distribute and receive materials.
ESSENTIAL QUESTIONS: How do I trade fairly?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
6.4.2 TRADE	• Trade materials based on wants and needs	**The learner will:** • Trade toys or materials for others that are wanted or needed	**The adult will:** • Talk about fair trading • Encourage children to trade items when resources are limited

STANDARD 6.5: WORK AND EARNINGS

BIG IDEA: People work to earn money.
ESSENTIAL QUESTIONS: Can I explain why people work? Can I explain what things I might buy at a specific location? How do I save money for a purpose?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
6.5.1 FACTORS INFLUENCING WAGES	• Explain that adult earns money from working to buy things that are wanted or needed • Describe that different jobs pay different amounts of money	**The learner will:** • Explain that people work to earn money • State that this money is used to buy things that are wanted or needed	**The adult will:** • Reinforce the idea that we work to get money • Support the idea that money to buy items comes from this work • Talk about how we buy things that we want and how we buy things that we need • Indicate that people do many different kinds of jobs to earn money
6.5.3 TYPES OF BUSINESSES	• Define types of businesses	**The learner will:** • Explain the kinds of things that could be purchased at a grocery store, toy store, and book store • Create a business in a play situation	**The adult will:** • Plan a tour of the community to highlight businesses and how they serve the community • Provide props and materials to create businesses in the dramatic play area
6.5.7 COSTS AND BENEFITS OF SAVING	• Identify what might be purchased by saving money	**The learner will:** • Identify reasons people might save money for the future	**The adult will:** • Practice saving money • Talk about why people save money • Encourage children to save money to buy special items • Take a field trip to a bank to learn more about saving

STANDARD 7.1: BASIC GEOGRAPHIC LITERACY

BIG IDEA: Each individual is a member of a larger community.
ESSENTIAL QUESTIONS: Can I identify and use maps and globes? How do I identify landmarks in my community?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
7.1.1 GEOGRAPHIC TOOLS	• Identify the following geographic tools: map, globe and photographs	**The learner will:** • Identify a map as a tool to locate familiar places or objects within the classroom or school environment • Identify a globe • Look at photos of places, regions and landforms to identify what object or place is located near some other object or place • Make maps using blocks or paper and pencil to represent familiar places such as the classroom, the school playground or home	**The adult will:** • Practice using a map to get to the bathroom, the playground, the office, the cafeteria • Create scavenger hunts with map-based clues • Note areas and countries of the world on the globe when possible • Use photos to support understanding of using landmarks to locate other places • Provide materials and samples for children to create maps independently
7.1.2 PLACES AND REGIONS	• Describe the types of homes and businesses located in the community	**The learner will:** • Describe if dwelling is apartment, house, mobile home, type of business • State information about the park, playground or other friends' homes • Indicate landmarks or other identifying features of areas such as stream, flagpole, church or trees	**The adult will:** • Compare and contrast types of homes and businesses • Talk about favorite places to visit • Create a class map including student homes and important landmarks • Take a walking field trip around the community to observe types of homes and businesses

STANDARD 7.2: PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: Every location can be described by its physical characteristics.
ESSENTIAL QUESTIONS: Can I locate places based on a description? How can I create representations of places?

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
7.2.1 PHYSICAL CHARACTERISTICS	• Locate and discuss places in the home, school and community	**The learner will:** • Respond to pictures by describing the physical characteristic • Create representations of places using drawing, clay, cardboard • Answer questions about a trip or a place that's been visited	**The adult will:** • Take a walking field trip around the school and local community • Provide pictures of many locations • Display books that have picture of different places on earth and different homes

SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 7.3: HUMAN CHARACTERISTICS OF PLACES AND REGIONS

BIG IDEA: All humans have similarities and differences.
ESSENTIAL QUESTIONS: How do I respect and appreciate others' differences?

7.3.1 HUMAN CHARACTERISTICS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Describe how individuals are unique and special	• Create drawings of family members and friends that show unique characteristics of individuals and describe their characteristics	• Provide skin tone crayons and markers for children to use
• Compare and contrast customs of families in communities around the world	• Write "I like you because..." notes to others	• Create a Student of the Week display to recognize the unique contributions and skills of each child
	• Show understanding and respect for diverse customs and practices	• Make graphs about children's interests, likes and dislikes
	• Share information about family customs	• Include multicultural materials throughout the classroom, including books, dolls, dress-up materials and props, art materials, posters
		• Invite parents or community members to share information about their culture

STANDARD 7.4: INTERACTIONS BETWEEN PEOPLE AND THE ENVIRONMENT

BIG IDEA: People and the environment affect each other.
ESSENTIAL QUESTIONS: Can I describe how changes in the environment affect me and others? Can I show that I know how to use basic technology?

7.4.1 IMPACT OF PHYSICAL SYSTEMS ON PEOPLE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Identify how environmental changes can impact people	• Discuss how the temperature gets warmer or colder as the seasons change	• Read books about weather both fiction and non-fiction
	• Explain what people do or wear in different types of seasons	• Provide seasonal clothing and props in the dramatic play area
	• Explain what transportation is appropriate in different kinds of weather or environment	• Discuss various forms of transportation and how they are suitable for certain weather conditions or types of travel
	• Talk about the change in walking to school because of a sidewalk being replaced	• Include various types of vehicles in the block corner such as cars, trucks, planes, trains, buses, fire engines
	• Gather items to be recycled	• Show examples of work in the community and the changes it makes such as repaving roads or planting trees

7.4.2 IMPACT OF PEOPLE ON PHYSICAL SYSTEMS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Understand that people can use technology to complete tasks	• Use a computer to create a picture or written document	• Allow children to use word processing or graphic programs on the computer
	• Use a tape recorder to record a story or song	• Provide technological devices for students' independent use

SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES

STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

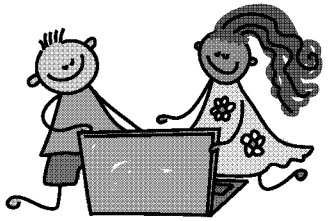
BIG IDEA: Past and present experiences and ideas help us make sense of the world.
ESSENTIAL QUESTIONS: How do I use a timeline to show changes over time? What do I know about families of the past and how do they compare to families today? Can I locate information to answer questions I have?

8.1.1 CONTINUITY AND CHANGE OVER TIME

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Understand chronological thinking through days, weeks, months, years (calendar time)	• Create a personal timeline with photographs or drawings from birth to present	• Use a class calendar to chart the date and weather
	• Practice past, present and future time with a classroom calendar and daily weather recording	• Provide opportunities for grandparents and senior citizens to visit the classroom to provide "living history"
	• Sequence photos of events	• Provide photographs of events for sequencing
	• Pretend to be characters with events occurring over a period of time	• Provide costumes and props for many ages and stages of development

8.1.2 HISTORICAL COMPREHENSION AND INTERPRETATION

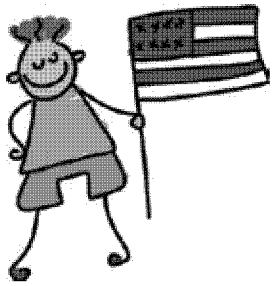
STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Compare children and families of today with those in the past	• Recognize clothing, houses and objects from the past or from the present	• Dramatize stories from history with children
		• Invite re-enactors to visit the classroom
		• Read books that are set in different periods of history



8.1.3 RESEARCH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Know where to go to locate information	• Use books, computers and other sources to get information about a topic	• Provide books, pictures and authentic objects on a theme
		• Model going to the library to get information about a question
		• Provide multimedia information about a theme

SOCIAL STUDIES THINKING GLOSSARY



CIVICS AND GOVERNMENT

Authority – Right to control or direct the actions of others, legitimized by law, morality, custom or consent

Citizen – Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government

Community – A group of people who share a common social, historical, regional or cultural heritage

Conflict Resolution – The process of attempting to solve a dispute or conflict

Country – The acceptable political boundaries or borders recognized throughout the world

Decision-making Process – An organized approach to making choices

Government – Institutions and procedures through which a territory and its people are ruled

Leadership – State or condition of one who guides or governs

State – A commonwealth; a nation; a civil power

ECONOMICS

Community Helpers – Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firemen, policemen, trash collectors, animal control officers

Competition – The rivalry among people and/or business firms for resources and/or consumers

Consumer – One who buys or rents goods or services and uses them

Cost – What is given up when a choice is made; monetary and/or non monetary

Demand – The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various prices during a specific time period

Goods – Objects that can satisfy people's wants

Household – The group of people living together under one roof; a group of individuals whose economic decision- making is interrelated

Money – A medium of exchange

Natural Resource – Anything found in nature that can be used to produce a product (land, water, coal)

Price – The amount people pay in exchange for a particular good or service

Producer – One who makes goods or services

Profit – Total revenue minus total costs

Services – Actions that are valued by others

Supply – The different quantities of a resource, good or service that potential sellers are willing and able to sell at various prices during a specific time period

Wants – Desires that can be satisfied by consuming goods, services or leisure activities

GEOGRAPHY

Climate – Long-term patterns and trends in weather elements and atmospheric conditions

Culture – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing

Environment – Everything in and on Earth's surface and its atmosphere within which organisms, communities, or objects exist

Geographic Tools – Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs)

Place – An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas

Resource – An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value

HISTORY

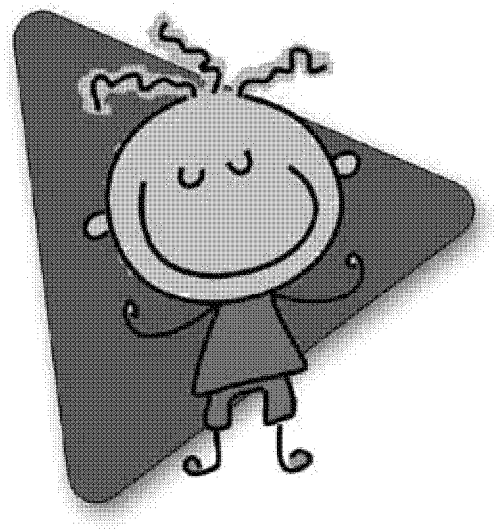
Conflict – The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

Document – A formal piece of writing that provides information or acts as a record of events or arrangements

Media Sources – Various forms of mass communication such as television, radio, magazines, newspapers and internet

HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

LEARNING ABOUT MY BODY



Children's future health and well-being are directly related to the development and strengthening of their gross and fine motor muscles. Children must have opportunities to experience active indoor and outdoor play in which they can use their bodies to explore the environment while acquiring muscle control, balance, coordination, strength, eye-hand coordination and other related skills. Health and safety activities must be integrated throughout the day as teachers model healthy and safe practices and promote healthy lifestyles for children.

GET UP AND MOVE!

Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children's healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in outdoor play, weather permitting. Including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain good healthy choices and habits influence children's ongoing development and school success.

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STANDARD 10.1-3: HEALTH AND SAFE PRACTICES

THIS STANDARD HAS BEEN COMBINED AND IS ALIGNED TO THE GRADE 3-12 STANDARDS 10.1, 10.2 AND 10.3.

BIG IDEA: **Children need to make healthy choices, physically and nutritionally, to optimize their learning potential.**

ESSENTIAL QUESTIONS: **What are things I can do to keep myself healthy and safe? Can I identify ways to help my body develop? What are some healthy foods?**

10.1-3.1 FUNDAMENTALS OF GOOD HEALTH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Demonstrate basic hygiene routines independently	• Wash own hands, brush teeth, cover nose and mouth when sneezing, comb own hair	• Provide opportunities in daily schedule for completion of hygiene routines
• Discuss the role hygiene plays in keeping us healthy	• Describe ways germs can be spread	• Create learning centers that focus on healthy hygiene practices (tooth brushing, flossing teeth)
• Identify how to use medicine safely	• Identify signs of illness such as fever, headache, stomach ache, vomiting or diarrhea	• Discuss signs of illness
• Describe how fundamental practices keep us healthy	• Explain how germs can make someone ill	• Show how germs spread
• Describe the people, practices and tools that keep us healthy	• Identify adults who can give medicine	• Read literature related to good hygiene
	• Demonstrate how to say "No" to drugs	• Read literature related to decision making, saying "No", healthy choices or risk-taking
	• Explain how rest, exercise and good nutrition can keep us healthy	• Reinforce concepts with posters and verbal support
	• Identify tools and practices that doctors and dentists use to keep us healthy	• Role-play saying no to drugs
		• Provide examples of healthy meals
		• Display the food pyramid
		• Encourage children to rest to help their bodies stay healthy
		• Identify tools that doctors and dentists use
		• Discuss or role play the procedures doctors and dentists use to keep us healthy

10.1-3.2 BODY AWARENESS

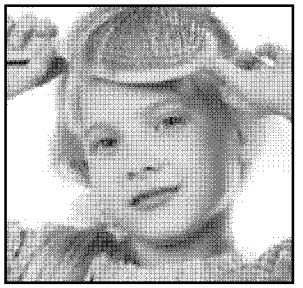
STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Describe function of basic body parts and organs	• Name and point to body parts	• Point to and name different body parts
• Relate how healthy practices support body development and function	• Name and point to where the organs are located in the body	• Make outlines of body and add different body parts
	• Describe the basic functions of the body organs	• Read books about the body organs
	• Explain why we need rest, good nutrition and exercise to stay healthy	• Read books about healthy practices and images
	• Discuss what is meant by being and feeling healthy	• Discuss the concepts of rest, exercise and good eating related to good health
		• Encourage children to engage in healthy practices

CONTINUED...

STANDARD 10.1-3: HEALTH AND SAFE PRACTICES

10.1-3.3 SAFE PRACTICES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Demonstrate and describe the importance of rules to ensure safety	• Demonstrate fire safety practices and emergency procedures	• Talk with children about harmful substances and objects
• Explain how to modify behavior to assure safe practice	• Demonstrate safe ways to answer the phone	• Talk about and practice crossing street
• Describe the people, practices and tools that keep us safe	• Explain how to be safe when walking, riding bicycles, and riding in vehicles	• Practice making "911" calls
	• Demonstrate playground rules	• Demonstrate and practice "STOP DROP ROLL" and emergency procedures
	• Describe things in the environment that can be harmful (loud noise, tobacco, smoke, pollution, temperature, insects)	• Engage learners in interactive activities to first identify the harmful factors and then find ways of protection
	• Describe ways to protect oneself from harmful factors in the environment	• Encourage the use of sunscreen
	• Clean up areas for safety	• Provide positive reinforcement while children put away toys
	• Follow directions during fire drills	• Provide reminders and support about safe practices in the classroom and on the playground
	• Be aware of others on playground	• Read books about being safe
	• Cross street at intersection	• Arrange for field trips and visitors to demonstrate their jobs
	• Explain the role of fire fighters, police, and ambulance driver	• Read books about safety workers
	• Identify the tools that fire fighters, police, ambulance drivers use to keep us safe	



10.1-3.4 NUTRITION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Identify how specific foods keep us healthy	• Classify food as nutritious or not nutritious	• Discuss nutritious and non-nutritious foods
• Identify the foods to include in specific food groups	• Identify water as an important resource for keeping the body healthy	• Discuss how food supports healthy growth and development
	• Identify food groups	• Read books about healthy foods
	• Identify foods that belong together in a specific food group	• Use "Color Me Healthy" program
	• Design a meal using foods from several groups	• Model drinking water
		• Display food pyramid
		• Provide cooking and food experiences
		• Provide materials for children to play healthy meals using foods from several groups

STANDARD 10.4: PHYSICAL ACTIVITY: GROSS MOTOR COORDINATION

BIG IDEA: Children gain control over their bodies and body movements through active experiences and exploration.
ESSENTIAL QUESTIONS: Can I regularly demonstrate a variety of large motor movements? Can I show coordination of muscles as I engage in play?

10.4.1 CONTROL AND COORDINATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Engage in independent large motor skills with control and coordination	• Hit a stationary target with an overhand throw	• Provide stationary marked targets
• Demonstrate coordination of purposeful body movements	• Catch a ball with increasing accuracy	• Play catch games with children
• Start and stop with control	• Pull or push wheeled toys	• Include toys and equipment that encourage active play
• Perform movement skills in team or group games	• Ride and steer a toy using feet to pedal	• Provide areas on the playground for riding toys to be used safely
	• Use outdoor gross motor equipment such as swings, climbers and tunnels safely and appropriately	• Ensure riders wear helmets
	• Reach around or over to retrieve an object	• Ask children to create numbers and shapes with their bodies
	• Move body to represent something else	• Ask children to retrieve objects that require coordinating muscles
	• Begin running without difficulty and stop running when intended	• Provide time and space for children to run
	• Participate in group games like Follow the Leader, tag or kickball to use skills	• Include group and team games regularly

10.4.3 BALANCE AND STRENGTH

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Exhibit balance, strength, stamina and agility while engaged in active play	• Walk on a balance beam forward and backward	• Provide opportunities to participate in a variety of motor activities including sway, stretch, pull, push, bend, squat
• Use mastered gross motor movements to learn new skills and engage in new activities	• Walk up and down stairs using alternating feet without help	• Provide many practice opportunities
	• Gallop, run, hop, jump, start and stop with ease	• Model new skills
	• Jump forward	• Introduce games such as kickball
	• Jump on one foot at a time	
	• Participate in group games	
	• Kick a ball with increasing accuracy	
	• Use throwing, catching, kicking and running in new games and when encountering new challenges	

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

BIG IDEA: Fine motor practice helps children develop eye-hand coordination, strength and controlled use of tools.
ESSENTIAL QUESTIONS: How do I use my hands to develop self-help skills? How do I develop eye-hand coordination? How well do I control my fine muscle movements?

10.5.1 STRENGTH, COORDINATION AND MUSCLE CONTROL

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Use dexterity to manipulate objects	• Use scissors to cut on a line turning paper as needed	• Encourage accuracy when cutting and tracing
• Demonstrate control and strength	• Manipulate dough and clay by squeezing, pounding, rolling into recognizable shapes, objects and letters	• Provide paper for drawing and tearing
• Complete manual self help skills independently	• Manipulate pegs into a pegboard	• Provide opportunities and materials to play with playdough
	• Tear paper with skill	• Provide beads and strings to make necklaces
	• String beads, noodles, or cereal onto a string in a peg board	• Provide pegs, pegboards and hammers
	• Trace forms or templates	• Ensure that children are closing markers and glue bottles completely
	• Open and close markers	• Provide opportunities to use pencils, crayons and scissors
	• Open and close glue bottles	• Provide opportunities to practice zipping, buttoning, snapping
	• Trace a line or circle	• Teach hand and clapping games
	• Pound pegs	• Provide a variety of multi-piece puzzles
	• Complete self help skills (zipping, snapping, buttoning, tying)	
	• Engage in clapping games like Miss Mary Mack or Say, Say My Playmate	
	• Complete multiple piece puzzles	

10.5.2 EYE/HAND COORDINATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Copy structure from a model or plan using a variety of block types and sizes	• Use a variety of blocks to build a recognizable structure following a model or a plan	• Provide different types and sizes of blocks
• Measure amounts of sand or water using tools	• Use measuring tools to move sand and liquid	• Provide sensory experiences (water and sand play) where children can pour, fill and empty
• Begin to write on lined paper	• Use lined paper during daily writing experiences	• Provide measuring cups and spoons
		• Model writing letters and numbers appropriately on lined paper

CONTINUED...

STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT continued

	STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
10.5.3 USE OF TOOLS	• Demonstrate control with writing and drawing implements to draw pictures, letters and words • Use tools with control and skill to perform basic tasks • Choose appropriate tool for a specific task	**The learner will:** • Hold pencils, crayons, and markers in a functional grasp (pincer grasp) • Use glue sticks or liquid glue to paste various items • Use paint brushes to make pictures • Use fork, spoon accurately • Attempt to use knife correctly • Use watering can, dustpan and brush and empty pencil sharpener into garbage can to complete classroom responsibilities	**The adult will:** • Provide a variety of art and writing materials and experiences that offer manipulative practice (finger paint, play dough, paint with brushes, crayons, markers, pencils and paper, collage materials and safety scissors) • Provide opportunities for children to select and use tools and items to complete classroom responsibilities

HEALTH, WELLNESS & PHYSICAL DEVELOPMENT GLOSSARY

Agility – A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy

Balance – A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving

Coordination – A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately

Developmental Differences – Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners' developmental status will affect their ability to learn or improve

Developmentally Appropriate – Motor skill development and change that occur in an orderly, sequential fashion and are age and experience related

Directions – Forward, backward, left, right, up, down

Flexibility – A health-related component of physical fitness that relates to the range of motion available at a joint

Food Guide Pyramid – A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America

Health – A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity

Health Education – Planned, sequential PK-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health

Locomotor Movement – Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop

Motor Skills – Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (tennis serve, shooting a basketball)

Movement Skills – Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities

Nonlocomotor Movement – Movements that do not produce physical displacement of the body

Physical Activity – Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure

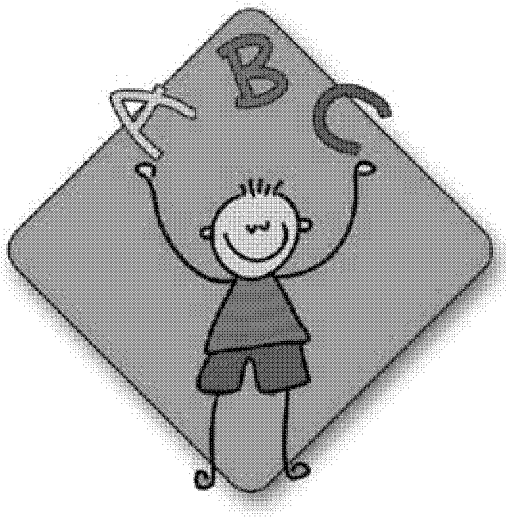
Physical Education – Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life

Physical Fitness – A set of attributes that people have or achieve and that relate to their ability to perform physical activity. Generally accepted to consist of health-related fitness and skill-related fitness

Safety Education – Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury

LANGUAGE AND LITERACY DEVELOPMENT

EARLY LITERACY FOUNDATIONS; READING, WRITING, SPEAKING AND LISTENING



Communication occurs in many different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming stories and songs and engaging in word play activities.

INCLUSIVE CLASSROOMS

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying classroom experiences alongside their typically developing peers. Teachers, specialists, and families must work together to understand all children's unique needs while adapting teaching strategies, materials and/or environment to assure that every child can learn and develop to his/her highest potential. Adults must celebrate all children's accomplishments and appreciate what children can learn and do.

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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

BIG IDEA: Emerging reading involves the use of pictures, symbols and text to gain information and derive meaning.

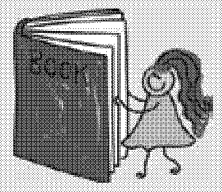
ESSENTIAL QUESTIONS: How do I select text to learn about specific information? Do I read for a variety of purposes? How do I recognize new words in print? How can I build vocabulary? How do I read to learn and understand information?

1.1.1 PURPOSES FOR READING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES) The learner will:	SUPPORTIVE PRACTICES The adult will:
• Read text for a variety of purposes during work and playtime • Choose text based on identified need and purposes • Identify different purposes for text	• Select books, tapes and poems on the basis of personal choice/interest or teacher-criteria • Use magazines, catalogs, circulars, mail , books to locate words and /or sentences or to just peruse • Explain that text has different purposes such as books, signs, lists, charts or menus	• Use big books, messages, charts, letters, notes and signs to share information • Provide daily opportunities for learners to look at and read books, daily messages, charts, posters, and magazines • Read and reread quality literature daily • Assist learners in reading classroom labels, signs and other environmental and class-room print • Provide learning centers and classroom library where learners can independently interact with quality literature books • Provide opportunities for learners to practice how print works

1.1.2 WORD RECOGNITION SKILLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES) The learner will:	SUPPORTIVE PRACTICES The adult will:
• Identify upper and lower case letters • Associate the names of letters with their shapes and sounds • Create words and letters • Identify and produce a variety of patterned words • Segment and blend sounds into words • Identify basic sight words • Decode and encode words in context	• Identify letters, both upper and lower case and make letter and sound correspondence • Write dictated letters and words • Substitute sounds to form new words in word families or follow an alliterative pattern • Isolate initial consonant sounds in single syllable words • Segment individual phonemes in a single syllable word • Blend letters and sounds • Identify own name and names of class • Read basic sight words from word wall • Use decoding and encoding skills to read or write words in context	• Create learning centers to reinforce letter and sound identification skills • Encourage children to write letters and sounds that they hear • Model segmenting learners' names and other words • Provide practice with blending sounds daily • Point out words from vocabulary, calendar, lunch menu, names, word wall throughout the day • Support encoding and decoding with scaffolding



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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

1.1.3 VOCABULARY DEVELOPMENT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES) The learner will:	SUPPORTIVE PRACTICES The adult will:
• Describe pictures in detail using sentences • Discuss unknown words and word meanings • Recognize vocabulary words in print • Use new vocabulary in spoken and written language	• Name, describe and talk about new concepts • Request further information about a concept by using the correct name, label or vocabulary word • Engage in conversation with a variety of partners • Identify designated words in a variety of text, such as word walls, messages, poems, or room labels • Practice reading words on word walls • Use new vocabulary to ask questions • Use new vocabulary in the context of dramatic play, daily routines and classroom conversations • Use new vocabulary during daily writing, talking or reading	• Model rich spoken language • Provide explicit instruction of key vocabulary words in context • Create a word wall of sight words and frequently used words • Provide opportunities for learners to read and identify common reading words within a variety of texts • Provide opportunities for learners to explore and apply new sight words during shared reading, small group instruction, independent reading and learning centers • Provide exposure to new vocabulary in various contexts such as read alouds, class discussions, spoken listening activities and computers • Encourage and support learners as they expand their use of language during play and peer interactions and conversations

1.1.4 COMPREHENSION AND INTERPRETATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES) The learner will:	SUPPORTIVE PRACTICES The adult will:
• Respond appropriately to directions, stories and conversations • Describe illustrations showing action • Retell and summarize a story • Restate main ideas and important details from a story • Draw connections between story events, personal experiences and other books • Answer "why" questions	• Follow directions, answer a question about a story or engage in a conversation • Explain action that is occurring in an illustration • Retell beginning, middle and ending story events • Relate how personal experiences or other stories connect to a new book • Identify basic facts and main ideas in a text • Use basic facts to answer questions	• Provide opportunities for retelling • Provide a variety of books for selection • Ask probing questions • Model connections between story events and background knowledge of students • Model connections among books

1.1.5 FLUENCY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES) The learner will:	SUPPORTIVE PRACTICES The adult will:
• Repeat modeled sentences after teacher • Read phrases grouped by teacher • Use phonics to decode words while reading • Practice oral reading • Recognize common sight words with automaticity	• Repeat a fluent sentence after the teacher using inflection and pacing • Read phrases indicated by the teacher through chunking • Apply knowledge to decode unknown words • Read aloud daily to increase fluency • Practice sight words	• Provide opportunities for learners to practice reading with fluency such as rereading familiar texts • Model reading with fluency • Chunk phrases for children to practice • Encourage students to read along during shared reading • Expose learners to repeated readings of big books, daily message, poems, charts, songs, fingerplays

STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT

BIG IDEA: Children understand and respond to a wide variety of text.
ESSENTIAL QUESTIONS: How do I identify the parts of books and stories? How do I use a variety of texts to learn new information? How do I make predictions about a variety of texts?

1.2.1 TEXT ANALYSIS AND EVALUATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify common features of text • Compare and contrast characters • Identify setting of a story • Identify problem and solution of a story • Compare new and familiar books and stories	**The learner will:** • Identify title, author and illustrator • Explain how characters are the same and different in a story • Draw the setting of a story • Identify the problem in a story and it solution • Discuss the similarities amongst books	**The adult will:** • Ask children to identify and define the title, author and illustrator of a book • Use Venn diagrams to compare and contrast characters • Create murals and pictures of story settings • Discuss problems and solutions in stories and talk about alternate solutions • Provide a variety of texts in the classroom library

1.2.2 TEXT ORGANIZATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Develop book/print awareness • Track consistently and correctly when reading or following along • Identify beginning, middle and end of a story or book • Identify the various types of text and their purpose	**The learner will:** • Turn pages from left to right when reading, read words and sentences from left to right, read from top to bottom and use return sweep • Illustrate, write or tell what happens at the beginning, middle or end of a story • Distinguish between different forms of text such as lists, letters, poems, charts, illustrations and the functions they serve	**The adult will:** • Model appropriate book handling skills • Model and reinforce correct tracking • Encourage children to identify beginning, middle and end • Create lists of types of text • Discuss types of text and share examples of each • Provide a variety of text in play areas

1.2.3 FACT AND OPINION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Identify facts in a selection • Determine important facts from informational text	**The learner will:** • Identify pieces of a selection that are fact rather than fantasy or opinion • Retell some important facts from a read text or from information heard	**The adult will:** • Model and provide examples of facts • Model identifying facts in informational text • Provide a variety of opportunities for children to determine facts from text • Provide ample time for exploration of a variety of texts during center time

1.2.5 INFERENCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Make predictions about story content using prior knowledge, title, illustrations and story sequence • Explain whether or not predictions are confirmed	**The learner will:** • Make a prediction about story content based on background knowledge and personal experiences • Verify predictions made and give simple explanations	**The adult will:** • Provide opportunities for predicting and relating personal experiences • Read a variety of texts for children to make predictions and relationships • Ask open ended questions about text to encourage inference and prediction

STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE

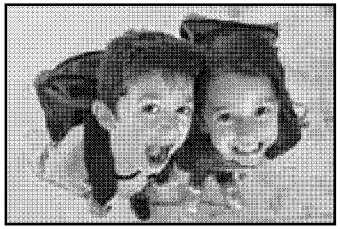
BIG IDEA: Literature consists of a variety of elements to convey meaning.
ESSENTIAL QUESTIONS: How do I create different forms of text? How do I identify literary elements and devices?

1.3.1 ANALYSIS AND EVALUATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Compare and contrast books on a similar topic or by the same author	**The learner will:** • Find similarities and differences among books on the same topic or by the same author	**The adult will:** • Provide many opportunities for learners to read, listen to and discuss texts from a variety of genres and types as well as representing diverse cultures and ethnicities • Create graphs and charts showing similarities and differences

1.3.2 LITERARY GENRES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Create own examples of poetry, fiction and nonfiction with teacher support	**The learner will:** • Attempt to create the genre of literature modeled in the classroom	**The adult will:** • Expose children to a variety of genres and attach names to them • Provide support and models for children when creating their own examples



1.3.3 LITERARY ELEMENTS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Describe the people, places and things in a story • Respond to questions and/or initiate conversation about main characters, setting, events or plot of a story	**The learner will:** • Draw, write or tell about the people, places and things in a story • Answer questions related to a text or engage in a conversation about components of the story	**The adult will:** • Consistently identify the elements of text, such as the people, places and things • Ask open-ended questions about the elements of a story

1.3.4 LITERARY DEVICES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Recognize rhyming patterns and alliterations when text is read aloud • Recognize different tones of stories	**The learner will:** • Identify rhyming patterns and alliterations • Begin to create rhyming patterns or alliteration examples • Identify if the tone of a story is happy, sad, silly or frustrated	**The adult will:** • Point out rhyming patterns and examples of alliteration while reading text • Provide opportunities for learners to identify rhyming patterns and alliterations in text • Discuss the tone of a story • Discuss how the story makes reader feel

STANDARD 1.4: TYPES OF WRITING

BIG IDEA: Children write for different purposes and audiences.
ESSENTIAL QUESTIONS: How do I write for a variety of purposes and audiences?

1.4.1 NARRATIVE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Create a simple story using age appropriate writing skills	**The learner will:** • Write a story that includes character, simple plot or setting • Use drawings and pictures to represent ideas • Participate in group and shared writing experiences	**The adult will:** • Provide opportunities throughout the school day for learners to engage in shared and interactive writing • Model the writing process • Brainstorm ideas for characters, setting, plot for stories to be written • Provide opportunities and materials for learners to write throughout the day

1.4.2 INFORMATIONAL

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Communicate information through writing	**The learner will:** • Write during play for a variety of purposes such as stories, lists, cards, or letters • Write sentences about a non-fiction topic	**The adult will:** • Create charts about children's ideas and topics • Display informational text in various locations in the classroom, such as bulletin boards, children's sample display, and signs or labels

STANDARD 1.5: QUALITY OF WRITING

BIG IDEA: Writing conveys the author's ideas about a topic.
ESSENTIAL QUESTIONS: How do I use the conventions of writing to convey meaning? How do I review and edit my work?

1.5.1 FOCUS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Write about one specific topic	**The learner will:** • Write ideas or sentences about a specific topic that includes people, object, experience or event	**The adult will:** • Provide writing time through the day • Provide learners with opportunities to converse with classmates in group and paired settings about the topic

1.5.2 CONTENT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Generate ideas and topics for writing • Include details about topic when writing • Match illustration to writing	**The learner will:** • Brainstorm ideas for writing topics • Share ideas with classmates • Complete story starters • Write stories with detail • Ask questions to encourage the use of more detail in writing	**The adult will:** • Provide learners with story starter ideas and model use • Provide opportunities for learners to ask questions about writing • Provide materials in learning centers for exploration of writing • Provide word walls and other pertinent environmental print and assistive materials for learners to use when writing • Ask questions to encourage the use of more detail in writing • Provide opportunities throughout the school day for learners to generate ideas for writing

STANDARD 1.5: QUALITY OF WRITING continued

1.5.3 ORGANIZATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Write words or simple sentences in a logical order	**The learner will:** • Write thoughts or words in logical sequence • Begin to use graphic organizers to assist in organizing printed thoughts	**The adult will:** • Provide learners with opportunities to sequence events or pictures • Model, demonstrate, encourage and support learners as they begin to organize thoughts and words • Provide encouragement and support writing efforts • Model the use of graphic organizers

1.5.5 EDITING

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Examine beginning writing for errors with adult assistance • Write pieces that reflect prior adult edits	**The learner will:** • Begin to ask and answer questions about conventions of writing • Share writing with classmates for feedback • Use previous feedback in new writing	**The adult will:** • Support learners in writing attempts • Model the editing and revising process at appropriate level • Provide opportunities for learners to share with one or more than one classmate in a variety of settings

1.5.6 CONVENTION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Use a variety of writing tools and surfaces • Demonstrate conventional penmanship • Use correct spacing with scaffolding • Include some punctuation with support	**The learner will:** • Use pens, markers, pencils, crayons, paints, chalk, computer or other technology during work and play • Trace copy or write upper case and lower case letters of the alphabet attending to the form proper spacing of the letters • Begin to use appropriate spacing between letters, in height of letters, and position of letters • Begin to use period and question mark correctly with assistance	**The adult will:** • Provide a variety of materials for use in tracing, copying, forming, writing letters • Model correct formation of letters in group settings • Provide models of appropriate letter writing in centers and in classroom environment • Purposely point out letter formations during group and individual lesson times

STANDARD 1.6: SPEAKING AND LISTENING

BIG IDEA: Speaking and listening are connected skills that build the foundation for literacy and communication.
ESSENTIAL QUESTION: How do I listen for meaning? How do I appropriately express my thoughts?

1.6.1 LISTENING SKILLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
• Initiate and respond appropriately to conversations and discussions • Ask a series of questions to gather additional information • Follow three-step directions	**The learner will:** • Demonstrates appropriate level of receptive language through appropriate responses to group conversations or discussions • Ask follow up questions to initial question to get more detail • Follow two and three step directions such as "Put away your book, get your jacket and stand by the door" on a regular basis without assistance	**The adult will:** • Provide opportunities and oral language experiences on a daily basis • Ask questions in group and individual settings • Model appropriate answers to given questions • Provide opportunities for learners to ask questions for clarification or inquiry • Provide learners with many opportunities to speak throughout the day

STANDARD 1.6: SPEAKING AND LISTENING continued

1.6.2 SPEAKING SKILLS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Share experiences daily	• Demonstrates appropriate level of expressive language	• Model modulating one's voice volume and intonation
• Speak clearly enough to be understood by all audiences in complete, coherent sentences	• Speak in a voice loud enough for the audience to hear but not loud enough to be distracting	• Allow learners to talk about personal experiences, preferences and topics of interest
• Recite rhymes, songs, and familiar text	• Articulate age appropriate speech sounds correctly	• Model rich spoken language during classroom conversations
• Ask and answer relevant questions	• Verbally recite poems and finger plays with classmates and /or adult	• Encourage and support learners as they expand their use of language and confidence at speaking during group discussions and in front of others
	• Sing songs and/or chants with group	• Provide opportunities and support learners as they engage in teacher-planned and learner-initiated spontaneous conversations throughout the school day
	• Express needs to clearly be understood	

1.6.3 DISCUSSION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Communicate using details when relating experiences and retellings of stories	• Engages in conversation about books, stories, and/or experiences in ways understood by most listeners	• Ask a variety of questions to allow learners to practice communication skills
• Apply listening and speaking strategies during discussions of stories and events	• Demonstrate the difference in the terms inside and outside voice	• Model appropriate voice levels for inside and outside environments
• Pose questions, listen to the ideas of others, and contribute own information in group discussion partner discussion	• Participate appropriately in response to questions posed or information shared	• Model respectful ways to participate in group or partner discussions

1.6.4 PRESENTATION

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Deliver brief oral presentations about stories, familiar experiences and interests	• Share information such as facts in front of a familiar group of peers	• Model appropriate behavior and communication skills on a daily basis
		• Provide support and encouragement for learners' efforts in improving their communication skills

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

BIG IDEA: Information can be shared in many ways.
ESSENTIAL QUESTION: How do I communicate in more than one way?

1.7.1 COMMUNICATING IN MORE THAN ONE LANGUAGE

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Use verbal language supported by nonverbal gestures to communicate for a variety of purposes	• Demonstrate in a verbal and nonverbal manner the answer to posed questions	• Provide opportunities for learners to communicate with others in verbal and nonverbal ways
• Practice speaking a few words in a language other than native language	• Attempt to speak a foreign language heard	• Provide opportunities and experiences for learners to know others communicate in languages foreign to them
• Relate meaning in native language to words in new language	• Connect the meaning of a word in foreign language with native language	
	• Share ways communication can occur including various languages, technological devices, and gestures	

STANDARD 1.8: RESEARCH

BIG IDEA: Information to answer questions is available through a variety of resources.
ESSENTIAL QUESTION: How do I find the answers to questions that interest me? How can I share learned information with others?

1.8.1 INQUIRY BASED PROCESS

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Ask questions on a variety of topics	• Ask questions about topics of personal interest or class-generated topics	• Provide opportunities for learners to research topics

1.8.2 LOCATION OF INFORMATION AND CITING SOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Locate information on identified topics with teacher guidance	• Begin to search for information on specific topics using research materials with assistance	• Provide opportunities for seeking information from research sources with assistance from adult or older children
		• Provide access to books and materials for use in researching

1.8.3 ORGANIZATION AND PRODUCTION OF FINAL PRODUCT

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Produce a project based on research and explain with assistance	• Create a simple product based on research findings	• Provide opportunities to create projects using research materials with assistance
	• Share information learned through research with teacher support	• Provide opportunities for learners to share their products

STANDARD 1.9: INFORMATION, COMMUNICATION AND TECHNOLOGY LITERACY

BIG IDEA: Technology provides access to new information.
ESSENTIAL QUESTIONS: How do I use technology to gain new information?

1.9.1 MEDIA AND TECHNOLOGY RESOURCES

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Use technology to gain information	• Use technological devices such as a computer to gather information	• Continue to introduce new technology during group time and embed into learning centers
• Use age appropriate computer program with little or no assistance	• Use appropriate interactive software programs	• Continue to model the appropriate care of technological devices
	• Use a new program with little or no assistance	• Select software and internet websites that matches children's levels
	• Choose a topic or specific computer program to practice related skills	• Provide classroom materials that promote use of technology
		• Provide opportunities and support for learners as they use new computer programs and skills

LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY

Alliteration – The repetition of initial consonant sounds in neighboring words

Antonym – A word that is the opposite of another word.

Characterization – The method an author uses to reveal characters and their various personalities.

Compare –Place together characters, situations or ideas to show common or differing features in literary selections.

Context Clues – Information from the reading that identifies a word or group of words

Concepts of Print – Print goes left to right; one to one match with voice to print, concept of first and last; concept of letter, word, sentence, space, letter order in words is important; different punctuations have meaning

Conventions of Language – Mechanics, usage and sentence completeness

Decoding – Analyzing text in order to identify and understand individual reading

Echo Reading – Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line

Emergent Literacy – One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy

Expressive Language – Being able to convey messages using words

Evaluate – Examine and judge carefully

Fine Motor – Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay, pinching clothespins

Fluency – The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading

Genre – A category used to classify literary works, usually by form, technique or content (prose, poetry)

Guided Reading – Teachers work with students at their instructional level to guide them in using context, visual and structural cues

Homophone – One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode)

Language Experience – Reading own writing; teacher takes dictation from students or students do own writing. Use student's own words as reading material; an effective way to encourage self-expression and build awareness of the connections between oral and written language.

Learning Styles – Visual (learn through seeing) needs to see the teacher's body language and facial expression to fully understand the content of the lesson

- Auditory (learn through listening) learns through lectures, discussion and listening and needs to talk things through
- Tactile/kinesthetic (learn through moving and touching) learns best through a hands-on approach actively exploring the physical world around them

Literary/Story Elements – The essential techniques used in literature (characterization, setting, plot, theme, problem, solution)

Literary Devices – Tools used by the author to enliven and provide voice to the writing (dialogue, alliteration)

Multiple Intelligences – Howard Gardner's theory of intelligences

- Visual –spatial (ability to perceive the visual)
- Verbal-linguistic (ability to use words and language)
- Logical/mathematical (ability to use reason, logic and numbers)
- Bodily/kinesthetic (ability to control body movements and handle objects skillfully)
- Musical/rhythmic (ability to produce/appreciate music, sound, rhythm)
- Interpersonal (ability to relate and understand others; other people's feelings)
- Intrapersonal (ability to self-reflect and be aware of one's inner state of being; self awareness)
- Naturalist (ability to recognize, categorize and draw upon certain features of the environment)

Narrative – A story, actual or fictional, expressed orally or in writing

Onset – A sound in word that comes before the vowel

Phonemic Awareness – Ability to hear and identify parts of spoken language and auditorily divide into phonemes

Phoneme – A sound unit of speech

Phonics – A way of teaching reading that stresses sound symbol relationship; refers to the relationship between the letters and letter sounds of a language

Phonological Awareness – A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables and onsets and rimes

Picture Walk – A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story

Point of view – The way in which an author reveals characters, events and ideas in telling a story; the vantage point from which the story is told

Print Awareness – Ability to understand how print works

Reading Awareness – Uses the language of literacy (top, bottom, same, different)

- Identifies the beginning, middle, and end of a story, with the main idea coming first and details added later
- Demonstrates awareness that language can be written down and read later
- Differentiates between pictures and words
- Shows curiosity about environmental print
- Differentiates between pictures and words

Reading critically – Reading in which a questioning attitude, logical analysis and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria

Receptive Language – Being able to receive and give meaning to message/words heard

Research – A systematic inquiry into a subject or problem in order to discover, verify or revise relevant facts or principles having to do with that subject or problem

Rime – The part of a syllable that contains vowel and all that follows

Shared Reading – Teacher guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading or fill the gap reading)

Shared Writing – Teacher and learner work together to compose a message or story

Tone – The attitude of the author toward the audience and characters (serious or humorous)

Voice – The fluency, rhythm and liveliness in writing that make it unique to the writer

PARTNERSHIPS FOR LEARNING

FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES

The school experience consists of much more than the academic content that teachers share with students every day. School success is also dependent on children's ability to learn, their interest in learning, and the connections between schools, community agencies and families that enable the child to learn in a way that supports his or her own learning style, needs and home experience. The partnership, links and connections that begin in the early childhood years between teachers and administrators and families, along with the other agencies in which a child or family interacts are critical to providing a holistic and seamless approach to children's learning. Schools and families should work together to share information about individualized learning plans and goals; assure positive transition to and from the current school setting; and identify and refer family members to other community agencies when appropriate.

WONDER AND DELIGHT!

Young children are curious, and from birth, they naturally seek out problems or questions to solve. They use their senses to explore materials and the environment and the search for answers to perceived problems or situations is motivational, holding their attention and creating their enthusiasm for learning. When classrooms or learning environments are structured to promote this curiosity or a sense of wonder and delight, they use instructional strategies that are based on inquiry. Inquiry is the active searching for knowledge and understanding of a specific idea and occurs most successfully when adults' intentionally create activities and experiences that allow children to use previously learned knowledge to understand new information. The adults' role during this active exploration is to scaffold children's thinking by asking "open-ended" questions that encourage problem solving and support children's imagination and story-telling. Open-ended questions or statements such as, "I wonder why that's painted blue" or "If you were Sally, what would you have done?" Allow children to express their thoughts, think creatively and problem solve. They are a more successful choice to encourage learning and critical thinking than closed questions, such as "What color did you choose?" or "Did Sally make a good choice?" that typically result in short answers that don't ask or provide good insight into children's thinking.

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STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

BIG IDEA: The relationship between the family and school personnel is a critical foundation to children's success in school.

ESSENTIAL QUESTION: How do schools understand families' home lives, their values, and attitudes towards learning? How do schools incorporate family preferences and interests into the life of the classroom? How do schools assure that families are familiar with and accepting of school values, attitudes and philosophies?

20.1.1 INFORMATION EXCHANGE

STANDARD STATEMENT

- Offer an on-site enrollment meeting where the family can meet school personnel and observe the classroom where the child will be attending
- Share family and school routines and any needed accommodations
- Provide and regularly review a Parent Handbook that outlines program expectations and operating details
- Offer parent-teacher school events that provide updates and give families opportunities to participate in school life
- Identify home culture, language, routines, and how they might impact a child's adjustment to school
- Discuss schedules, events or past experiences that may impact a child's school experience
- Share instructional philosophies that help families understand the school structure

THE FAMILY AND SCHOOL TOGETHER

- Participate in introductory enrollment meetings that enable both family and school representatives to share values, attitudes, philosophies about learning along with unique details and needs of the child and family
- Provide a classroom tour for child and family where they can meet the teacher and explore the classroom setting
- Discuss family's needs for drop-off and pick-up, food allergies, napping procedures, potential language barriers or infant feeding schedules
- Hold a "Back to School" or Open House night
- Talk about a recent event such as divorce or death, which may be impacting a child's behavior at school and discuss ways to inform the family about school adjustment
- Discuss child guidance and management strategies so both family and school understand the similarities and differences in approach
- Talk about previous group experiences and child's reaction – what might be expected on the first few days
- Ask questions to learn about the child's temperament
- Ask child to bring to school pictures of family members, home environment or other important home elements that might make the adjustment to a new school easier
- Support family's apprehensions during the first few weeks of school by calling them on the first day to describe child's adjustment or by inviting the family to stay with the child for increasingly shorter periods of time prior to drop off
- Formulate a survey or questionnaire that can be done orally or in writing to learn about family attitudes and philosophy on child rearing, learning, reading
- Talk about the classroom structure and how children learn through play
- Learn about who the child considers 'family' and how the family defines itself, including extended family members if relevant

CONTINUED...

STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

20.1.2 HOME TO SCHOOL CONNECTIONS

STANDARD STATEMENT

- Identify family practices and traditions that should be included within the classroom
- Work with families to identify books, songs, and finger plays, dances, foods, toys that should be included in the classroom or school environment; ask for donations
- Learn about the family and home setting and incorporate into the school experience, asking for updates and new information regularly
- Invite family members into the classroom to discuss cultural information with the children, to participate in classroom life, or to identify community locations or businesses that can be visited
- Work with families to determine child's best classroom placement including when to transition from one to the next and personality types

THE FAMILY AND SCHOOL TOGETHER

- Identify ways to assure the child's positive and comforting entry into a new classroom setting, such as a picture in the cubby, a stuffed animal or blanket
- Encourage volunteers and program participation from cultural groups in the community such as foster grandparents or other multi-generational connections
- Determine if child may eat traditionally served foods and celebrate holidays
- Use family or culturally specific phrases or words to describe activities or materials
- Ask about family members, calling them by name, such as how is the newborn and how grandpa is doing after return home from hospital
- Add culturally-specific materials and experiences into the schedule and environment such as adding a wok to the cooking area, or counting in both English and Spanish during morning message
- Invite a family member to teach the class a culturally – specific song or to provide the words to the song
- Display family pictures inside and outside the classroom
- Seek out community volunteers to share information about specific events or activities that are meaningful to children
- Invite family members to participate in classroom events, whenever possible
- Serve familiar cultural foods and introduce new traditional foods periodically – such as rigatoni with cheese or bagels and cream cheese
- Encourage children to show pride in family-specific beliefs or practices by showing interest and describing them to the class

20.1.3 SCHOOL TO HOME CONNECTIONS

STANDARD STATEMENT

- Assure that family communications are done in culturally-sensitive ways that accommodate family literacy levels, and culture barriers
- Regularly send home information about the child's growth and progress and adjustment to the school setting
- Discuss the program and classroom operational procedures such as absences, snow delays, payment, etc and learn if there are potential challenges for families, making accommodations as appropriate
- Make available voluntary "at home" activities that families can complete with child, being sensitive to family structure and culture
- Create an "open-classroom" policy where family members can visit or volunteer in the classroom or school
- Where appropriate, complete home visit with family
- Support families' efforts to build the child-child or family-family connection

THE FAMILY AND SCHOOL TOGETHER

- Create videos, picture books and written schedules that depict the classroom daily routine and send home to families as requested
- Ask family members to identify successful accomplishments the child may have completed at home during the week and acknowledge them in school
- Provide connections between school and school activities such "We are learning about caterpillars and read The Very Hungry Caterpillar. Here's green paper and scissors for you to make a caterpillar at home"
- Take a picture of a child at school, such as sitting with a completed block structure or reading a book, and send home to family or email it to family member, "Look what Tamika did today!"
- Disseminate newsletters that highlight key events in the life of the program and the classroom; identify key songs, books and recipes, and clarify a key program expectation
- Post the daily schedule in the parent information area for families to become familiar with the sequence of the day
- Regularly update classroom or program message boards to keep information current and fresh
- Create a classroom web page and provide family members with the link – include a bulletin board or question and answer section that is checked by classroom staff regularly
- Provide opportunities for families to meet each other and connect based on commonalities, such as "Miles' family lives in your neighborhood too" or "Sandy's mom just found out she's going to have a new baby also", being respectful of confidentiality

STANDARD 20.2: FAMILY ENGAGEMENT

BIG IDEA: Children's motivation to learn and succeed in school is impacted by family support and involvement in the life of the program.

ESSENTIAL QUESTION: How do families and schools work together to make decisions about the program? What kinds of school events and activities encourage family participation? How do we assure that information exchange is reciprocal?

20.2.1 SHARED GOVERNANCE OR DECISION-MAKING

STANDARD STATEMENT

- Implement a family-school annual review of program operation
- Develop and update annually a Parent Manual that details operational procedures
- Establish conflict resolution policies that identify procedures for complaints or suggestions
- Post regulations and program requirements in strategic locations within the school so family members can review it regularly
- Offer training to Advisory or Board on shared governance
- Encourage family members to participate in schoolwide parent-teacher organizations

THE FAMILY AND SCHOOL TOGETHER

- Invite family feedback from classroom observations and share summary of results
- Invite family members to participate in oral interviews about the program experience
- Create a Parent Handbook committee which includes staff, families and community members who annually review information and suggest updates as needed
- Develop a joint family-school committee that investigates new state, federal or local initiatives that may impact the school's operation and recommends next steps
- Identify a procedure which includes family members and staff to consider complaints and make recommendations for improvement
- Disseminate parent surveys or interviews to all or a percentage of the clientele which provides feedback about general program operation or about newly instituted policies
- Inform families of ways to share concerns or worries about school policy and develop a review process to handle issues
- Design a Governing Board or Advisory Committee whose members represent families, community agencies and school personnel
- Involve the families in program goal-development and strategic planning

20.2.2 SPECIAL EVENTS AND ACTIVITIES

STANDARD STATEMENT

- Learn families' interest and capacity for participation in specific events such as a holiday party and graduation event
- Offer family education events such as parenting classes, sign language, health and safety, etc that reflect families' interests and needs
- Incorporate unique cultural events or beliefs into classroom life
- Invite families to plan and implement classroom celebrations

THE FAMILY AND SCHOOL TOGETHER

- Inform families about community cultural events that may be occurring at specific times of the year and determine if/how the event could be expanded into the classroom
- Ask a family to share information about a specific event, such as Chinese New Year, and help you design a related activity
- Within classrooms or programs, come to consensus about how holiday celebrations or birthdays should occur at school
- Create a family resource area that contains books, toys, informational pamphlets, that families can access
- Design parent education events that families can do together after work, such as Parents as Teachers workshops, or ways to transition children into kindergarten
- Offer parent nights or events at mutually-agreed upon times, including meals or babysitting when appropriate
- Seek feedback from families to design field trips or big classroom events that may be of particular interest to the children
- Ask families if they'd like to volunteer materials or information about specific cultural events
- Increase awareness by finding locations in the community that will allow children's work to be displayed, such as a library or town hall

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

BIG IDEA: Early childhood programs must work closely with families to support children's development and learning, both at school and at home.

ESSENTIAL QUESTION: How do families and school work together to identify children's skills, interests and long-term and short-term goals for learning? How do I understand families' at-home learning attitudes and strategies? How do I provide individualized and meaningful at-home learning connections to the school experience?

20.3.1 SCREENING AND ASSESSMENT

STANDARD STATEMENT

- Identify screening, assessment and referral processes that include family's involvement
- Utilize screening and assessment instruments that are aligned with the early learning standards
- Assure that children are screened for health, mental health, dental, social-emotional, and cognitive development and the results are shared with families
- Be familiar with community agencies that provide additional screenings or assessments upon referral
- Provide information on child development and parenting that identifies age-appropriate skill development
- Conduct age appropriate baseline and ongoing authentic assessments to identify strengths and areas of focus for future learning and development that are culturally-sensitive, delivered in the language requested by the family and whenever possible, incorporate family feedback
- Utilize multiple sources of evidence to understand individual children's growth and development, including parent report, observations, and standardized checklists

THE FAMILY AND SCHOOL TOGETHER

- Assure families' understanding of the purpose of screening and prepare them for the process, including their input and shared-decisions about referrals when appropriate
- Share initial results of screening and assessment with the family in a way that enables family adults to understand the child's strengths and areas for focus
- Work with family to explain screening and assessment results and identify how they align with home experiences and observations
- Work together to identify referral agencies where needed and support families' contact with them
- Be sensitive to some families' reluctance to act on potential referral or additional evaluation recommendations, periodically re-assessing and discussing until action is taken, if needed
- Collect and share portfolio items with families, asking for at-home contributions as well, that show children's growth and development of specific skills
- Provide information on child development that is written in easy-to-understand language

20.3.2 GOAL DEVELOPMENT

STANDARD STATEMENT

- Use assessment results to lay the framework for understanding individual children's strengths and areas of need
- Share with parents information about each child, including stages of development, interests and assessed skill levels, identifying those that are on track and those that could use additional attention
- Meet periodically to discuss previously determined goals, identify any strengths or improvements and make new decisions about learning goals and activities
- Periodically assess the learning environment and provide activities for age, linguistic and cultural appropriateness and modify if needed

THE FAMILY AND SCHOOL TOGETHER

- At the family-school meeting, both family and teaching adult share information about the child's interests and skills to facilitate joint planning of activities and goals
- Teaching adult shows family the continuum of learning development in the Key Areas of Learning and together they identify where the child falls on the continuum, next steps and whether it should be a specific area of instructional focus
- Family and teacher agree on key skills or attitudes for focus and accommodate each other's interests when appropriate. For example, the family changes math goal expectation from "counting to 100" to "counting to 20," based on learning standards or the teacher adds a math skill since it is important to family even though it wasn't identified in the assessment
- Teaching staff and family talk about ways each goal could be supported at home, identifying basic at-home routines that can be used to "teach", such as counting steps or sorting socks, and the types of intentional instruction that will occur at school
- Classroom personnel praise family interest and participation, helping them to see that they are the young child's primary teacher
- Participate in development and review of child's IFSP or IEP , working with the parent and intervention program to formulate appropriate expectations

STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING

20.3.3 ONGOING PROGRESS REVIEW

STANDARD STATEMENT

- Classroom adults and families should work as a team to review children's goals and progress regularly and to develop new strategies that promote children's successful growth and development
- Classroom staff and families should participate in a minimum of two face to face conferences to discuss children's developmental progress and other pertinent updates
- Offer informal opportunities for family members to converse with classroom adults as needed about children's progress
- Schools should offer a wide variety of materials and ideas that link home and school learning environments, offer information on child development and parenting and support parents' interest and participation in the child's learning process

THE FAMILY AND SCHOOL TOGETHER

- Send home a brief note that identifies growth towards skill mastery such as, "Mary counted to 10 today during circle time!" Read comment to child so she/he feels excited about sharing the note with the family adults
- Schedule a fall and spring conference date, identifying with the family where the conference should occur either home or school, and accommodating families' unique schedules
- Offer notes to families (or other culturally appropriate communication strategies) that help families understand what's occurring in the classroom and how it could link to home, such as "We're going to work on gross motor skills this week with relay races, outside play, and a trip to the park. Take them to the park this week and watch how their skills have grown"
- Identify potential areas of concern for shared focus, "I noticed Sammy was trying really hard to hop on one foot, but was getting frustrated. Have you seen him do that at home? You may want to play some jumping and hopping games like we're doing at school!"
- Develop strategies for sharing children's accomplishments. Ask family members to send samples of children's at-home work to school and post or send home classroom samples that help families notice progress
- Remind children how much they're grown, "Remember when you had trouble making the S in your name? Now, look at your name. You've got the S T and E. Way to go!"
- Identify the skills being learned in each activity, helping families to understand the role of play and active learning in the instructional process

20.3.4 COMMUNITY SUPPORTS

STANDARD STATEMENT

- Identify and understand the services that are provided within the community and identify contacts within each to facilitate collaborative work
- Develop ongoing information-sharing processes with other agencies who work with families
- Create information-sharing processes with other educational or youth activity programs such as the local fitness center, or library
- Develop and honor confidentiality policies regarding information exchange
- Utilize community agency's suggestions to enhance classroom experiences for all children

THE FAMILY AND SCHOOL TOGETHER

- Tell families about special gym classes or music workshops when children show a specific interest or need in those areas, collecting and making available brochures
- Invite a gym instructor into the classroom regularly to help children develop coordination or balance
- Ask the local librarian to provide books and reading activities during an evening parent meeting
- Invite school district personnel to review kindergarten registration and attendance policies with outgoing preschool families
- Work with Early Intervention to assure referrals have been received and child will get evaluations or services as needed
- Incorporate specialists' ideas such as a speech therapist or behavioral therapist into the classroom practice to support all children, including the child with a special need
- Assure confidentiality statements and release of information approvals have been signed prior to information being shared

STANDARD 20.4: TRANSITION

BIG IDEA: Schools and families must work together to coordinate information exchange from one setting to another that will assure children's seamless learning experiences.

ESSENTIAL QUESTION: How do I create a seamless transition into and out of the program? What resources and materials do I make available for families to assure at-home learning links with school learning?

20.4.1 PROGRAM ENTRY

STANDARD STATEMENT

- Create processes and procedures for welcoming incoming families through enrollment meetings, sharing of expectations and values, parent handbooks and discussion of sensitive issues that may impact school success
- Identify welcome strategies that excite children and families about their upcoming, new experience
- Establish processes for communicating with sending schools about information sharing
- Develop strategies for communicating with community agencies with which incoming families have been involved for information exchange as well as parent interest in continuing

THE FAMILY AND SCHOOL TOGETHER

- Provide incoming family forms to complete prior to the enrollment visit so they can gather the needed information
- Welcome incoming family by holding an enrollment meeting that reviews the daily schedule, program and classroom expectations, values and philosophies as well as pre-enrollment requirements such as physical and first tuition payment
- Prior to the child's attendance, learn about the child's interests and display toys or activities that may be especially appealing, display books about the first day of school, post pictures from home, and create activities that will capture the child's interests
- Create orientation books or manuals for both children and adults – "what to expect when you come to school"
- Invite family to visit at least once prior to the first full day, giving children time to meet the teacher and become familiar with the setting
- With parent permission, communicate with sending school about child's past experiences, review screening and assessment results and other information that will support the child and family's move from one school to another
- Wherever possible, use some of the sending school's routines or materials, such as singing the clean-up song or displaying home-made books with pictures of sending school, to ease child's transition into the new situation
- Develop on-going classroom communication between both schools, such as encouraging children to write letters or draw pictures about their new experience and send to the sending school or create "pen pals" between sending and receiving schools
- For children who arrive mid-year, pair up a new child with a child who has been in the program for a while

STANDARD 20.4: TRANSITION

20.4.2 PROGRAM EXIT

STANDARD STATEMENT

- Develop policies and procedures for transferring information about child's program participation to the next school location
- Help family understand the expectations and schedules of the receiving school, mapping out strategies for success whenever possible
- Work with receiving school to facilitate pen pals, visits, or other activities where the children can become familiar with the new school and stay in touch with the old school
- Set up information-sharing processes with receiving school to discuss child's goals, progress, and interests

THE FAMILY AND SCHOOL TOGETHER

- Meet with receiving schools to identify commonalities between the schools' approaches and convey them to families so they will have some comfort with similar routines and activities
- Establish information-exchange processes between sending and receiving school that provide opportunities for teachers to share successful strategies for learning that will support the transition
- Provide the receiving school with materials or activities that can be used to offer familiarity and comfort during the transition, such as a "treasure hunt" activity or set of questions to answer in the new school or picture books of the sending school
- Display materials from the receiving school that children will recognize when they transition such as a picture book of the new school, classrooms and teachers; talk with children about what to expect
- Send child to new school with a portfolio of completed work – either to keep at home or to share with the school
- Arrange a time to visit child at new school or to call and talk with family after they have left the sending school atmosphere

20.4.3 COMMUNITY CONNECTIONS

STANDARD STATEMENT

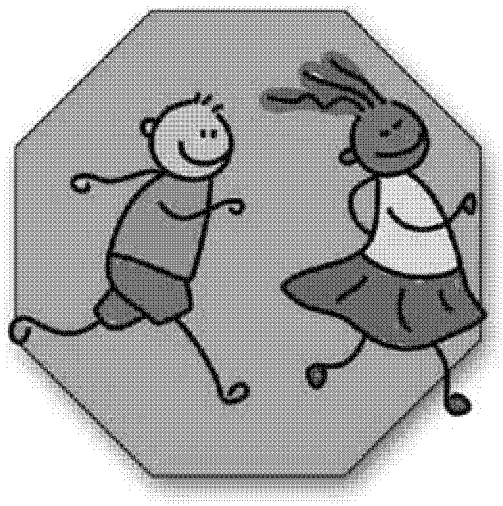
- Identify and include child's participation in other schools or programs on information that is sent to receiving school – in transition
- Develop relationship with local Early Intervention agencies, birth to three and three to five, and create process for information and referral exchange
- Participate in the county Community Engagement Group and other community-collaborative agencies that advocate for early childhood locally and statewide early
- Assure the program's representation at county or community days
- Produce regularly-updated program brochures or promotional materials and distribute throughout the community
- Arrange for information-sharing sessions with local school districts to develop shared expectations for entry and exit into the programs
- Offer early childhood professional development to other community agencies
- Invite community agencies to provide special seminars or workshops for families

THE FAMILY AND SCHOOL TOGETHER

- Develop a transition form that assures transfer of information from sending to receiving school
- Schedule meetings with Early Intervention providers and local Head Start agency to introduce your school and to discuss collaboration
- Invite local librarian to visit the school to present a story hour. Invite family members
- Register incoming kindergartners at local preschool settings for family convenience and familiarity
- Use field trips to introduce children to nearby agencies and resources that may be tapped or invite community agency representatives to visit the school and read to children or work on activities with small groups
- Meet with local preschools to review their strategies for use of the learning standards in their instruction and develop common ground
- Post a display shelf of community agencies' brochures for family access and/or feature a community agency in the monthly newsletter
- Disseminate state resources such as Kindergarten, Here I Come, Kindergarten, Here I Am and Learning is Everywhere
- Participate in community events that allow school to stay updated on state and local events or create a booth/display for county events
- Join online state list serves to stay current (not everyone might know what these are, thus the clarification)
- Host joint meetings of schools, district, and community agencies to network and talk about community needs
- Offer PQAS standards-based training to other community providers
- Disseminate agency newsletter to community agencies

SOCIAL AND EMOTIONAL DEVELOPMENT

LEARNING ABOUT MYSELF AND OTHERS



All children need early childhood programs that nurture emotional security, positive self concept and respect for others. Children's social and emotional development is strengthened when they have classroom experiences that promote a sense of identity and belonging within an accepting and responsive environment. Teachers support children's self identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self control and interpersonal problem solving, and by encouraging positive approaches to learning and interacting with others.

TEMPERAMENT

Every human being has a unique way of looking and interacting with the world known as temperament. Some of us are reserved or shy; others are outgoing and make friends easily. Some of us enjoy learning new things and others are wary about trying new things or dealing with new situations. These temperament traits influence the way in which a child learns, interacts with others, and expresses himself. Adults need to adapt their teaching practices to match the individualized needs of children and consider how their own temperament affects the way in which important relationships with children are developed and maintained.

Standard	Page
25.1: Self Concept / Identity	82
25.2: Self Regulation	83
25.3: Pro-Social Relationships with Adults	84
25.4: Pro-Social Relationships with Peers	85

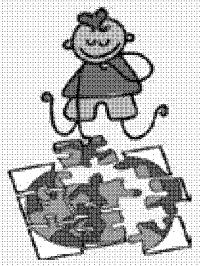
STANDARD 25.1: SELF CONCEPT (IDENTITY)

BIG IDEA: Children see themselves as valuable and worthwhile individuals in their homes, classrooms and communities.
ESSENTIAL QUESTIONS: How do I know what my preferences are? How do I develop a positive feeling about myself? How do I grow confident in myself and my abilities?

25.1.1 SELF AWARENESS

STANDARD STATEMENT

- Demonstrate awareness of preferences and communicate them to others
- State complex thoughts and feelings



EXEMPLARS (EXAMPLES)

The learner will:

- Verbalize own needs, likes, and dislikes
- Describe self using several behavioral or physical characteristics, such as "I am 5 and I can skip."
- Differentiate between preferences for self and others, such as "I like to play with blocks and he likes to draw pictures."
- State the types of books she/he likes to read
- Talk about foods, toys, activities she/he likes or dislikes
- Express an opinion or idea about a particular topic
- Suggest games and activities that demonstrate own abilities and preferences (jumping rope, playing soccer)

SUPPORTIVE PRACTICES

The adult will:

- Refer to each learner by name
- Display children's artwork at their eye level
- Ask learners to talk about how books relate to their personal experiences
- Involve children in classroom decision-making, inviting them to make choices that demonstrate their preferences, such as asking what, where, when, why questions?
- Encourage journaling or story-writing about preferences and accomplishments
- Listen to and validate children's expressed feelings and interests

25.1.2 UNDERSTANDING EMOTIONS

STANDARD STATEMENT

- Express emotions appropriately, modifying intensity of reaction as needed
- Recognize and label complex feelings

EXEMPLARS (EXAMPLES)

The learner will:

- Tell others when she/he feels frustrated, angry, upset, using appropriate language to describe how she/he is feeling
- Respond with appropriate behavior to changes in the environment or routine
- Adapt to new adults in the school setting
- Use art forms or writing to express feelings or thoughts

SUPPORTIVE PRACTICES

The adult will:

- Model appropriate responses to a variety of situations
- Introduce and use new vocabulary pertaining to feelings
- Read books about children and their feelings and discuss them
- Encourage children to use a variety of ways to express feelings such as drawing, writing, and exercise
- Graph's learners' feelings about certain ideas or topics

25.1.3 COMPETENCE

STANDARD STATEMENT

- Express pride in oneself's and others' accomplishments
- Demonstrate self-direction in choosing a wide range of play and learning activities
- Attempt new activities and experiences with independence

EXEMPLARS (EXAMPLES)

The learner will:

- Initiate the sharing of work and accomplishments with peers and adults at appropriate times.
- Work independently for a short period of time
- Express excitement over a successful project and want others to like it too
- Choose activities, select materials, and carry out tasks

SUPPORTIVE PRACTICES

The adult will:

- Provide, encourage, and support opportunities for autonomy and self direction (centers, job chart)
- Encourage learners to try new activities and tasks
- Praise and encourage learners' efforts and accomplishments
- Encourage learners to praise others' efforts and accomplishments
- Ensure that the environment is safe from cultural or other forms of bias

STANDARD 25.2: SELF REGULATION

BIG IDEA: Children will express feelings, thoughts and needs appropriately to adults and peers.
ESSENTIAL QUESTIONS: How do I express my feelings appropriately? How do I manage my feelings? How do I use healthy strategies to manage my behavior?

25.2.1 EMOTIONAL REGULATION

STANDARD STATEMENT

- Attempt to independently resolve a problem or conflict
- React appropriately in challenging or unique situations
- Manage most changes in routines and activities with a minimum of guidance and direction
- Understand the consequences of own behavior and its impact on others

EXEMPLARS (EXAMPLES)

The learner will:

- Think twice when angry before hitting or responding inappropriately to a situation
- Maintain composure when not selected (to answer question, be first in line, and play game)
- Ask for help when feeling frustrated instead of ripping up paper or crying
- Separate feelings from actions
- Control compulsive behavior
- Use words rather than actions in difficult situations
- End one activity when asked and move to another
- Seek cooperative solutions to peer conflicts

SUPPORTIVE PRACTICES

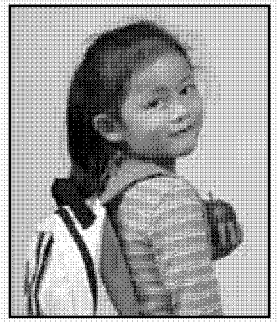
The adult will:

- Use non-verbal and verbal interactions that are congruent with feelings
- Utilize logical consequences and guidance practices that support learner self-control
- Allow time for learners to solve their own conflicts with peers, offering guidance and suggestions where needed
- Provide opportunities for dramatic play where learners can practice appropriate responses to difficult situations
- Announce changes to routines and schedules ahead of time, whenever possible

25.2.2 BEHAVIORAL REGULATION

STANDARD STATEMENT

- Perform self-care tasks independently
- Independently follow rules and routines in classrooms and other settings
- Independently use materials with purpose, safety and respect
- Understand and interpret rules and assure others follow them
- Make transitions between activities upon adult direction
- Demonstrate delayed personal gratification until appropriate time



EXEMPLARS (EXAMPLES)

The learner will:

- Persist in self-care activities, such as fastening jacket and tying shoe
- Stop oneself when running in the classroom and walk instead
- Enter classroom and independently, hang up coat and put away book bag
- Line up and stay in line when moving from classroom to another location
- Use materials for correct purpose such as scissors for cutting paper not hair
- Wait turn to show picture or to receive a sticker from teacher
- Remind a child to stop talking while the teacher is talking
- Return materials to shelf after using them

SUPPORTIVE PRACTICES

The adult will:

- Offer activities that support self control, such as stop-start games and block play
- Cue learners so they can bring their work to an end prior to transitioning
- Give specific directions with reasonable expectations and time to comply
- Provide opportunities for learners to play with games that require adherence to simple rules
- Read books about learners' responses to situations and discuss the outcome
- Play "what if..." where learners discuss potential resolution to problems
- Maintain a clean and neat classroom environment and allow learners time to clean up upon completion of activities
- Post a few simple classroom rules
- Introduce new materials or activities by carefully describing appropriate use or response and verify students' understanding

STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

BIG IDEA: Children will learn to develop healthy relationships through positive adult interactions.
ESSENTIAL QUESTIONS: How do I learn to trust adults? How do I learn to communicate with my parents and familiar adults?

25.3.1 TRUST

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Solicit help from adults to accomplish challenging tasks	• Ask for help when needed to complete a task after independently trying	• Promptly respond to students' requests for help
• Respond, and appropriately question adults' directives for greater understanding	• Ask for clarification, "Do you want me to color this box?"	• Respond quickly to requests for help, giving students cues and time for independent resolution, such as, "try to hold that a different way and see if it will fit now"
• Engage in reciprocal conversation with familiar and unfamiliar adults when appropriate	• Share information about events and happenings at home, "My dad left for a business trip this morning"	• Listen respectfully and with interest to children's stories and situations, asking questions and responding where appropriate
	• Respond to classroom visitors' questions or directives	• Whenever possible, provide explanations about changes in routines or schedules
	• Maintain eye contact for a brief period when talking with adult	• Invite visitors into the classroom and give children opportunities to engage in interactions with them

25.3.2 ATTACHMENT

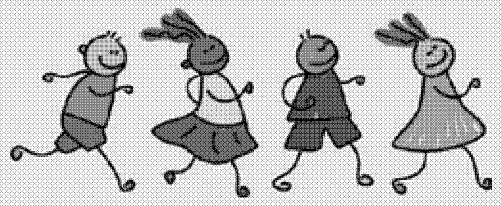
STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Show pleasure when interacting with specific adults	• Greet teacher with warmth upon arrival each day	• Greet students each day and ask questions about how they're feeling or activities they'll be participating in
• Separate in some unfamiliar settings when familiar people are nearby	• Engage in conversation with familiar adult	• Where possible, model positive interactions with parents, engaging them in conversations with interest
	• Show interest in other familiar adults' life and experiences	• Provide warnings when possible about adults who will be visiting or no longer attending
	• Adapt to new adults in the school setting	
	• Notice when adults or students are missing	
	• Leave classroom to go to the nurse when called	

STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

BIG IDEA: Children will learn to develop healthy relationships through positive peer interactions.
ESSENTIAL QUESTIONS: How do I learn to interact with peers? How do I make friends?

25.4.1 SOCIAL IDENTITY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Engage in cooperative learning activities to complete a task	• Ask others to join in during play	• Arrange the environment so there is space for learners to work together and create cooperative activities for learning
• Initiate play with 2-3 peers during free choice time	• Ask to join others' play activities	• Provide tasks where children must work together to complete a task or project
• Play cooperatively with 3 or 4 children for sustained periods of time	• Work with other children to complete a work task or project such as making a collage to depict a story	• Design cooperative play activities where learners develop skills while problem solving and sharing thoughts and ideas
• Participate in cooperative large group activities with adult guidance	• Play simple board games with others, following basic rules	• Provide simple games or activities that require following basic rules
• Engage in games and activities that require adherence to rules	• Participate in group games like dodge ball or relay races	• Give students opportunities to engage in small group creative play activities
	• Engage in dramatic play or block play with others to create scenarios	• Provide opportunities where children can select peers to work with to accomplish a task



25.4.2 RESPECT AND EMPATHY

STANDARD STATEMENT	EXEMPLARS (EXAMPLES)	SUPPORTIVE PRACTICES
	The learner will:	**The adult will:**
• Recognize and label others' feelings	• Notice when others are feeling sad or hurt and tell another, "Johnny doesn't like it when you do that."	• Assist and facilitate learners in solving their own conflicts rather than removing a learner and/or the material
• Seek and accept help from peers	• Ask another child to help pass out the materials for a task	• Model nurturing behaviors by performing acts of kindness and helpfulness to other adults and children
• Initiate sharing and turn-taking when appropriate	• Solve a conflict by talking with the other involved persons, "I'll read this book for 5 minutes and then I'll pass it to you."	• Use classroom management strategies and techniques that promote positive behaviors
• Respect the feelings, rights and belongings of peers	• Return a dropped or forgotten object to another, "you dropped your pencil"	• Use a peace table to help children negotiate their own conflicts
• Engage peers in successful resolution of a problem	• Discuss others' differences matter of factly, "you should use this crayon to match your skin color and I should use this one" or "I have 2 mommies and you have a mom and dad"	• Show visual depictions of children's preferences through graphs or charts such as # children who prefer red or yellow apples
• Communicate in respectful ways to peers and adults		• Partner students with varying levels of competence on specific tasks to work together
• Respect and understand others' differences in comparison to self		

RESOURCES

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LANGUAGE AND LITERACY DEVELOPMENT

http://www.teach-nology.com/teachers/early_education/subject_matter/language_arts/

http://www.kidsource.com/schwab/developing.reading.skills.html- Kid Source Online

http://www.esl4kids.net/ Resources for young English Language Learners

http://curry.edschool.virginia.edu/go/wil/home.html Literacy and Head Start (Webbing into Literacy)

http://www.ed.gov/pubs/CompactforReading/tablek.html (US Government ideas for kindergarten)

http://www.ifg-inc.com/Consumer_Reports/LearnToRead.html Helping your child read- (infancy through age 10) ideas for parents from the US Government

http://www.ed.gov/inits/americareads/educators_early.html Early Childhood and Literacy; US Government

http://www.fcrr.org/ Florida Center for Reading Research (teacher and parent ideas)

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School Readiness and the Transition to Kindergarten in the Era of Accountability (Paperback) by Robert C. Pianta (Author, Editor), Kyle L. Snow (Editor), 2007

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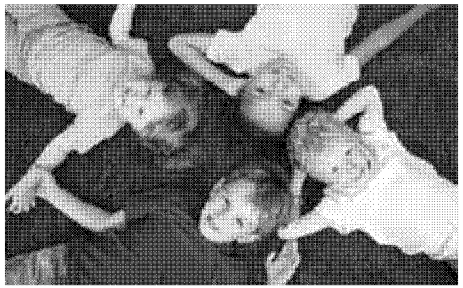
SOCIAL AND EMOTIONAL DEVELOPMENT

Center for Social and Emotional Foundations for Early Learning, www.vanderbilt.edu/csefel/index.html

CASEL: Collaborative for Academic, Social and Emotional Learning: www.casel.org

James Comer School Development Program www.schooldevelopmentprogram.org/

Rutgers University Social Emotional Learning Law www.rci.rutgers.edu/~melias/



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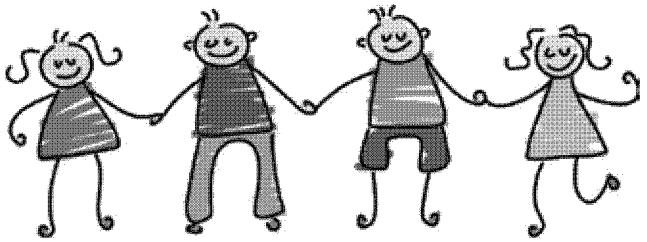
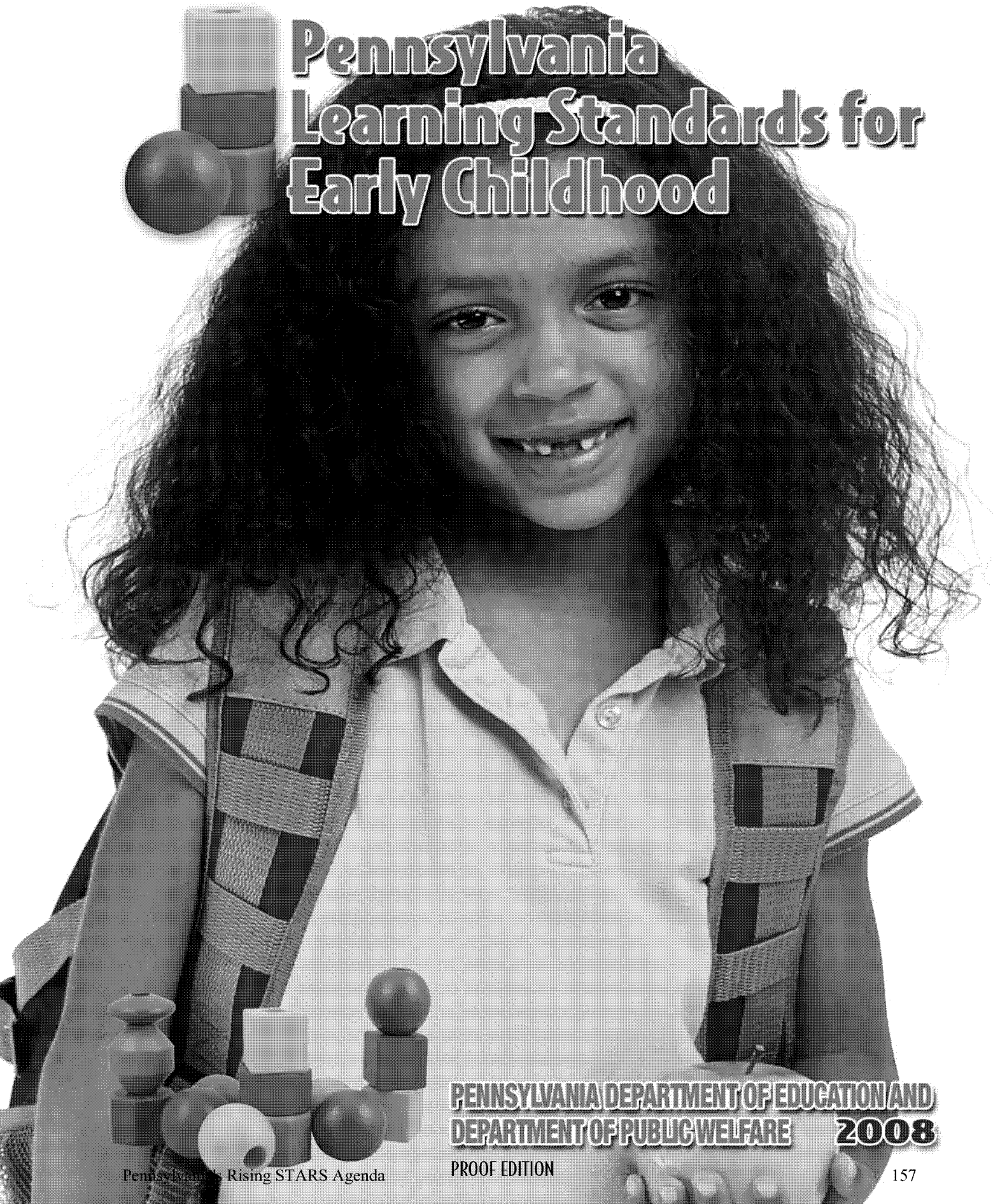


FIRST GRADE



Pennsylvania Learning Standards for Early Childhood

PENNSYLVANIA DEPARTMENT OF EDUCATION AND DEPARTMENT OF PUBLIC WELFARE 2008

PROOF EDITION

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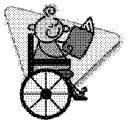

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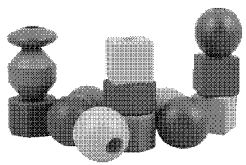

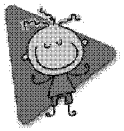

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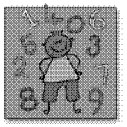

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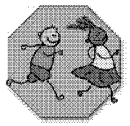

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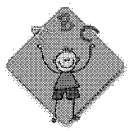

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Pennsylvania's Primary Standards for grade 1 were developed by the Department of Education and Welfare in support of Governor Rendell's commitment to early childhood education. The Primary Standards for grade 1 are meant to guide the development of primary age programs throughout the state. A Task Force consisting of early childhood practitioners, primary teachers, school administrators, policy analysts, researcheras and university faculty developed the standards.

INTRODUCTION

The Commonwealth of Pennsylvania has established high academic standards for all students pre-K through grade 12. Research-based standards are the key to laying a strong academic foundation that will provide children with skills necessary to succeed in every phase of their lives.

Standards-based practices maximize student learning by aligning standards for both instruction and assessment in the following ways:

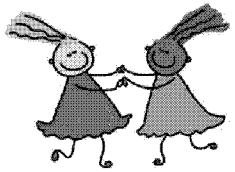
- Guiding teachers' deliberate and intentional instructional practice
- Supporting effective classroom environments
- Framing teachers' age-appropriate expectations for their students

The transition from kindergarten to first grade is critical for successfully entering the primary grades. Research has shown the value of active learning for both cognitive and social development in these grades. Children learn key skills of literacy, number sense, science and social problem solving both through shared explorations and direct instruction. They best develop their understanding of the world around them and how it relates to them by interacting with materials, other children, their teacher and the community.

Primary classrooms, supported by the use of standards, facilitate children's learning across key curricular areas, emphasizing a variety of rigorous literacy, science (inquiry-based), number sense and social experiences. They provide primary children with opportunities to construct knowledge and meaning through active, hands-on/minds-on exploration in a variety of indoor and outdoor experiences that include large and small group, individual and partner-based instructional practices.

The most effective methods utilized by primary teachers should include explicit instructional language, active engagement with children and differentiated instruction that meets the needs of all learners while supporting high quality expectations.

The learning behaviors that assure school success include:



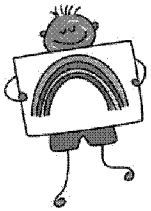
- listening
- participation
- task persistence
- self-regulation
- making choices
- exhibiting self-control
- organization
- cooperation
- collaboration
- respecting the rights, feelings and property of others

Teachers can support children's individualized learning opportunities by providing them with meaningful experiences that engage their interests, abilities and cultures. Teachers who have clear, age-appropriate expectations for children's behavior provide a balance of independence and guidance.

Approaches to Learning

The goal of the primary standards for grades 1 and 2 is to promote the development of a child who has the attributes of: inventiveness, curiosity, persistence, engagement, reasoning, problem solving, responsibility, imagination and creativity. To assist the child in obtaining these attributes, the adult should approach the child's learning through actions that encourage the child to:

Invent	Fantasize	Conceive	Deliberate
Apply	Start	Encounter	Visualize
Adapt	Evaluate	Plan	Confront
Envision	Adjust	Generalize	Lead
Persist	Commit	Inquire	Conclude
Endure	Create	Think	Question
Compare	Analyze	Deduce	Deduct
Predict	Discriminate	Describe	Debate



Classroom environments should stimulate the primary child's curiosity, initiative and inquiry and foster opportunities for adult-student interaction. Classrooms should be organized and structured to support all areas of development through a range of instructional techniques and strategies, be rich in literacy and integrate literacy and numeracy throughout the day. They should provide children with a safe, comfortable atmosphere where they can practice newly acquired skills and build on them to learn new information. The classroom environment should accommodate active and quiet activities. It should offer opportunities for solitary, parallel and group interaction observable by an adult.

In addition to a robust set of standards to guide practice, primary programs should utilize a system of assessment that is valid and reliable, comprehensive, developmentally appropriate and linguistically responsive in order to document a child's growth and development, including the language proficiency of second language learners, in relation to a defined set of standards. The assessment then becomes the mechanism to inform and support instruction.

RATIONALE FOR PERSONAL/SOCIAL LEARNING AND DEVELOPMENT

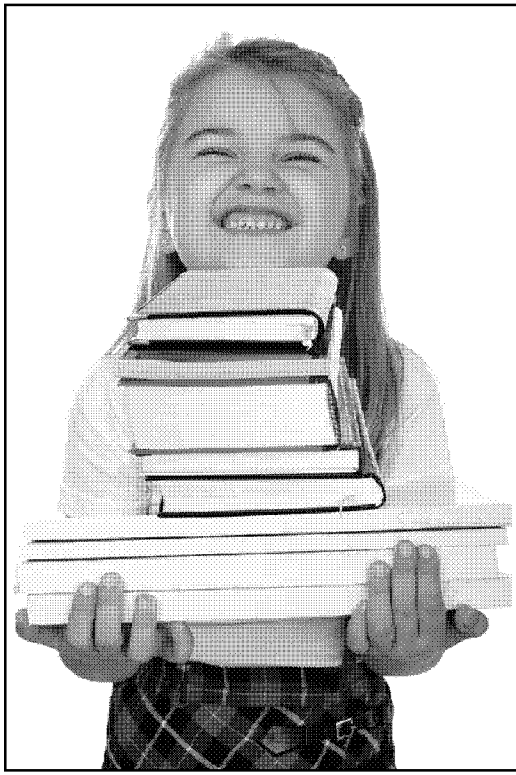
As a child participates in the ongoing classroom routine, the social curriculum supports the academic curriculum. The child who can negotiate interactions with a variety of adults and peers is better equipped to take advantage of the new knowledge base. By following classroom routines and rules, the child moves from whole group to small group to independent work with confidence and efficiency. This provides maximum opportunities for growth and development. By learning to negotiate conflicts and modify his/her behaviors, the child is better served in all environments. These standards provide direction for teachers to enhance this important aspect of learning.

RATIONALE FOR PARTNERSHIPS

The definition of partnership according to Webster is: "one or more persons owning jointly a business and who shares the risks and profits of the company or firm." All citizens in the Commonwealth are stakeholders in how effectively we are educating our youth. The results impact families, communities, law enforcement agencies, social and health agencies, the job market and both local and state government. The obvious responsibility of a formal education has been assigned to the local schools. Children, however, are exposed to many other personal and cultural influences that impact learning. It is crucial to develop a system of communication and contact with the various participants who occupy a role in the development of a child.

Teachers must be trained specifically to understand early childhood development, which is the responsibility of the institutions of higher learning. There should be a strong bond between the colleges and school districts in providing opportunities for student teaching experiences, being cognizant through ongoing dialogue and feedback of what the specific curricular requirements/standards are and how to achieve those standards in a classroom setting. Teachers with a strong background in early childhood education and child development can best provide what children need to grow emotionally, physically and intellectually.

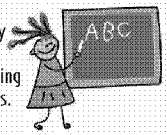
Community leaders and policymakers need to be aware of the importance of early childhood education and the standards for learning. The success of the local education system begins in the early years prior to a child entering the public school system. Local leaders need to understand the diversity of children, yet realize the sense of urgency in assisting and supporting the education of young children.



GUIDING PRINCIPLES

High quality primary programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills and concepts that children need to make steady progress socially, emotionally, physically and cognitively. Outstanding primary programs maintain high expectations for all children using clear performance standards. A continuous cycle of assessment, which is understood by the professional staff and families, must be utilized to track progress and success.

1. All children can learn and deserve the establishment of high expectations that are appropriate for their age and are culturally and technologically appropriate for meeting individual differences.



2. Children learn best through intentionally planned instruction and activities that enable them to construct knowledge through real life connections, peer interactions, meaningful and imaginative experiences and active engagement with the environment.

3. The learning environment for young children stimulates and engages their curiosity about the world around them and meets their physical, emotional and creative needs whereby the children feel safe and secure.

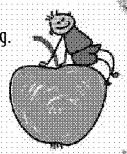
4. Language and literacy (both reading and writing) development is supported and integrated throughout the day in all content areas in the primary grades. Conceptual understandings in content areas and in early literacy are interdependent and have sets of skills that mutually support each other.

5. Children's development and learning is enhanced and supported when their teachers are knowledgeable about early childhood development, educational pedagogy and content. When teachers participate in ongoing opportunities for quality professional development, work with children, families and communities and are intentional in their relationships children benefit.

6. High quality primary programs recognize and provide for a broad spectrum of individual needs in diverse populations of children, which include, but are not limited to: English language learners, children with special needs, and children from diverse cultural backgrounds and socio-economic groups.

7. High quality primary programs are defined by a set of comprehensive standards that maximize children's growth and development that increase their problem-solving abilities across domains.

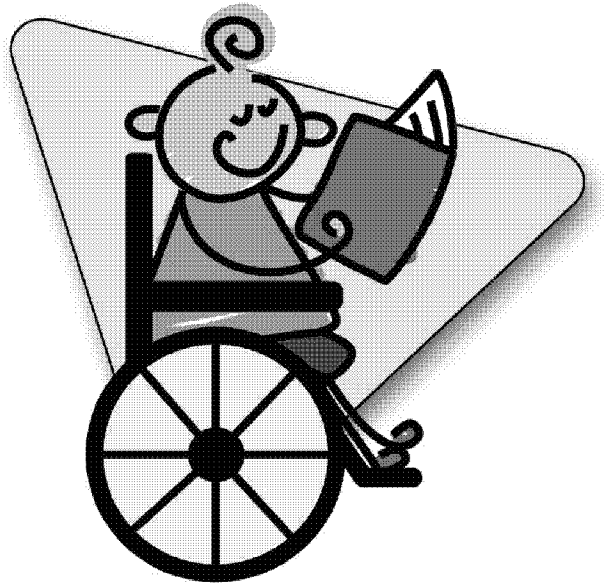
8. High quality primary programs use an appropriate system of assessment that documents children's growth and development in relationship to a defined set of state-mandated standards to guide teaching and learning.



9. Children's development, learning, knowledge and health are enhanced when a strong partnership exists between families, schools and communities.

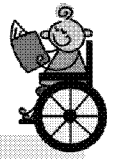
10. High quality primary programs have a collaborative relationship and ongoing communication to provide smooth transitions (between early care programs and Kindergarten or first and then between first and second grades) for children and families to assure continuity of learning.

**Footnote: Young children with disabilities will meet standards consistent with their individualized education program (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990). English language learners will use the Pennsylvania ELF Standards to gain access to and meet the PA Academic Standards.



APPROACHES TO LEARNING

EARLY LEARNING STANDARDS FOR 1ST GRADE



Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help children feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment and enhancing their curiosity and knowledge about the world in which they live.

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AL 2.1 - AL 2.6	Engagement and Persistence	6
AL 3.1 - AL 3.8	Reasoning and Problem Solving	7
AL 4.1 - AL 4.4	Flexibility, Risk-Taking and Responsibility	8
AL 5.1 - AL 5.2	Imagination, Creativity and Invention	8

APPROACHES TO LEARNING

STANDARD AL 1: DEMONSTRATE INITIATIVE AND CURIOSITY

CONTENT FOR 1ST GRADE

AL 1.1 Participate in various experiences

AL 1.2 Express choices/preferences during concrete, immediate and familiar activities

AL 1.3 Demonstrate growing eagerness and satisfaction to discover and discuss a growing range of topics, ideas and tasks

AL 1.4 Use multiple strategies and all available senses to explore and learn from the environment

AL 1.5 Comment, predict and connect on events or aspects of the environment

AL 1.6 Ask questions and seek meaningful information

AL 1.7 Initiate social greetings and carry conversations

EXAMPLES

The learner will:

- Independently choose to participate in at least 80% of the available learning centers including some new experiences.
- Independently choose new and different materials to represent different thoughts or feelings.
- Express preferences, wants and needs in a manner that is appropriate and consistent.
- Choose to engage in preferred activities that match one's developmental strengths, talents and interests.
- Initiate group and individual activities of choice within familiar environment.
- Join and leave group with ease as a leader or a follower as the situation demands.

SUPPORTIVE PRACTICE

The teacher will:

- Enhance learning centers and group activities to attract child participation and enhance learning.
- Provide a classroom with clearly defined interest areas and materials that invite children to explore, discover and create.
- Provide a variety of materials, art work, music, drama and photographs to stimulate experiences, knowledge, participation and interests.
- Provide genre of reading materials.
- Provide varied subject integrated activities in the learning centers.
- Provide materials/activities appealing to a variety of senses, learning styles, technology and multiple intelligences for individuals, small groups and larger group experiences.
- Ask open-ended and higher level questions to facilitate sharing, engage the listener, seek meaningful information and extend learning.

STANDARD AL 2: DEMONSTRATE ENGAGEMENT AND PERSISTENCE

CONTENT FOR 1ST GRADE

AL 2.1 Show persistence in ability to complete a variety of tasks, activities, projects and experiences

AL 2.2 Demonstrate increasing ability to set goals and develop and follow through on plans

AL 2.3 Demonstrate ability to maintain focus on a task, question, set of directions or interactions, despite distractions and interruptions

AL 2.4 Accept environmental conditions and maintain task orientation in a constructive active environment

AL 2.5 Acquire the skills necessary for participating in a group or independently

AL 2.6 Accept redirection and feedback on performance

EXAMPLES

The learner will:

- Express choices, initiate, follow through and complete activities and projects.
- Find, choose and participate in appropriate, constructive and enjoyable ways to occupy leisure time.
- Attend to cues and prompts to adapt behaviors to changing situations.
- Initiate requests for factual information, stories, games and other learning activities.
  - Learner will begin to reflect on his/her performances.
  - Demonstrate how to work cooperatively.

SUPPORTIVE PRACTICE

The teacher will:

- Encourage and praise efforts and facilitate planning and completion.
- Encourage and document sequential progress and effort.
- Anticipate needs and acknowledge progress both process and product.
- Discuss and demonstrate how to work cooperatively.
- Acknowledge and fulfill requests of stories, games and other learning activities.
- Encourage reflection on progress of performance.

APPROACHES TO LEARNING

STANDARD AL 3: DEMONSTRATE REASONING AND PROBLEM SOLVING

CONTENT FOR 1ST GRADE

AL 3.1 Demonstrate a growth pattern in predicting possible outcomes related to cause and effect

AL 3.2 Discover more than one solution to a question, task or problem

AL 3.3 Seek and/or accept assistance from others when encountering a problem

AL 3.4 Recognize and solve problems through observation, active exploration, trial and error, interactions and discussions with peers and adults

AL 3.5 Identify other's social cues during group activities

AL 3.6 Accept assistance and/or cooperate to accomplish a joint task

AL 3.7 Classify, compare and contrast objects, events and experiences

AL 3.8 Recognize ones own point of view as well as others

EXAMPLES

The learner will:

- Predict outcomes in stories and in real life situations.
- Respond to "what if" questions.
- Explain and apply multiple strategies to solve problems.
- Talk through a problem using steps to resolution.
- Use steps or problem solving when involved in role play and real life situations.
- Try to solve problems in conflict situations or seek assistance with conflict resolution when needed.
- Begin to negotiate and compromise in order to resolve conflict.
- Begin to empathize with those in stressful situations.
- Begin to respond in a variety of social situation.
- Feel comfortable enough to collaborate with others in problem solving situation.
- Use an increasing number of details and more realistic representations in a developmentally appropriate strengths, talents and interests.

SUPPORTIVE PRACTICE

The teacher will:

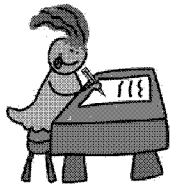
- Help children learn how to function in a group situation demonstrating how to work cooperatively through sharing and taking turns, working toward a specific goal, dividing responsibilities within a group and solving problems in an acceptable manner.
- Provide a variety of materials and situations to support experience with cause and effect and problem solving (ex. Second Step Program).
- Recognize children who support others in problem solving.
- Teach and use vocabulary related to reasoning and problem solving (ex. If, when, after, before, next, what if, then).
- Read stories and utilize role play which include problem solving, helping others and multiple problem solving skills.
- Allow children to solve problems independently when possible, but encourage seeking assistance when all avenues have been exhausted and the conflict cannot be resolved peacefully.
  - Provide role playing situations and/or various technology based resources.
- Strategically place learners according to their needs.
- Offer praise and reinforcement for positive behavior.
- Provide opportunities for learners to share concerns or role play real life situations.
- Use open-ended questions and hands-on practice to encourage classification, sorting, comparisons and problem solving.
- Ask open-ended questions, higher level questions and quality feedback to stimulate and extend representations.

APPROACHES TO LEARNING

STANDARD AL 4: DEMONSTRATE FLEXIBILITY, RISK-TAKING AND RESPONSIBILITY

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
AL 4.1 Grow in the ability to differentiate between appropriate and inappropriate risk-taking	**The learner will:** • Identify and explain dangerous and inappropriate risk taking.	**The teacher will:** • Ask higher level questions in play situations and while reading stories.
AL 4.2 Express choices/preferences during concrete, immediate, familiar and unfamiliar activities	• Demonstrate a willingness to try an increasing number of new experiences.	• Ask "When", "How", "Why" questions about potentially dangerous situations.
AL 4.3 Demonstrate growing eagerness and satisfaction to discover and discuss a growing range of topics, ideas and tasks	• Volunteer and/or participate in discussions and other new learning activities.	• Be accepting of children's willingness or unwillingness to try new experiences.
AL 4.4 Use multiple strategies and all available senses to explore and learn from the environment	• Initiate own learning and play experiences.	• Pair learners to scaffold skills and experiences.
AL 4.5 Comment, predict and connect on events or aspects of the environment	• Offer constructive suggestions to other learners and adults.	• Assign or designate through learner's volunteerism who is responsible for specific classroom tasks.
AL 4.6 Ask questions and seek meaningful information	• Deal with success in a positive way and view challenges as a growing experience.	• Demonstrate an awareness of learner's needs during group activities (role play, discussions).
AL 4.7 Initiate social greetings and carry conversations	• Accept responsibility for the care of the classroom and school environment.	• Allow learners to express their suggestions regarding topics of discussion or material related to course of study.
	• Accept consequences for choices and decisions when appropriate.	• Offer appropriate feedback for responsible choices.
		• Assist in guiding learner's choices.

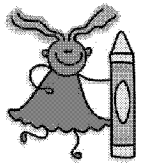
STANDARD AL 5: DEMONSTRATE IMAGINATION, CREATIVITY AND INVENTION

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
AL 5.1 Initiate tasks and experiences as active leaders when selecting topics of self interest with increased flexibility, imagination and ingenuity	**The learner will:** • Use a variety of materials to explore and express ideas and emotions.	**The teacher will:** • Provide sufficient amounts of time for creative play and learning center opportunities and environments.
AL 5.2 Use and connect materials/strategies in uncommon ways to investigate and solve problems	• Create and utilize props during role play activities.	• Read or relate stories about real people who display their use of imagination, creativity and design.
	• Describe creative projects including written stories or poems.	• Provide a diversity of materials and props in all learning centers and aspects of the environment to stimulate and promote learning, exploration, imagination and creativity.
	• Dramatize a variety of roles by reflecting real life situations.	• Allow for diversity, differences and abilities of learners. – Introduce "the arts and humanities" people, places by means of technology and field trips and involving the community. – Teachers will use community resources to demonstrate initiative, creativity and invention.
	• Recognize imagination and creativity in others.	

ARTS & HUMANITIES

EARLY LEARNING STANDARDS FOR 1ST GRADE

Arts and humanities are an important component of children's early learning experiences. Children who are given opportunities to develop their imagination through a variety of media are learning to express their individual interests, abilities and knowledge. Children develop their understanding of the world around them and how it relates to them by interacting with materials, other children, their teacher and their community. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint.



Arts and humanities influence children's growing competence as creative problem solvers and learners. Primary classrooms, supported by the use of the arts and humanities standards, facilitate children's learning across key curricular areas, emphasizing a variety of rigorous literacy, science (inquiry-based), number sense and social experiences. Instruction in the arts and humanities provide primary children with opportunities to construct knowledge and meaning through active, hands-on/minds-on exploration in a variety of environments using large and small group, individual and partner-based instructional practices.

The Production, Performance and Exhibition standard (9.1) has been separated into disciplines for the purpose of clarity only. The arts educator should continue cross-curricular integration within the scope of the arts.

Standard	Page
9.1 Production, Performance and Exhibition of Dance, Music, Theatre and Visual Arts	10
9.2 Historical and Cultural Contexts	13
9.3 Critical Response	14
9.4 Aesthetic Response	15

ARTS & HUMANITIES

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

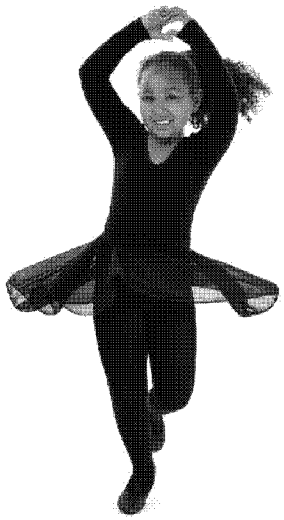
THIRD GRADE STANDARDS:

- Know the elements and principles of each art form to create works in the arts and humanities
- Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts
- Recognize and use fundamental vocabulary within each of the arts forms
- Use knowledge of varied styles within each art form through a production, performance or exhibition of unique work
- Demonstrate the ability to define objects, express emotions, illustrate an action or relate an experience through creation of works in the arts
- Identify works of others through a performance or exhibition
- Recognize the functions of rehearsals and practice sessions
- Handle materials, equipment and tools safely at work and performance spaces
- Identify arts events that take place in schools and in communities
- Know and use traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others
- Know and use traditional and contemporary technologies for furthering knowledge and understanding in the humanities

CONTENT FOR 1ST GRADE

A. Use nonlocomoter/locomotor movement, tempo, levels, pathways and movement size in dance

B. Create and perform dance



EXAMPLES

The learner will:

- Perform movement with kinesthetic awareness (i.e., how the body moves) and concentration at high, middle and low levels in space.
- Move to various sounds, including rhythmic accompaniment and respond to changes in tempo.
- Perform basic nonlocomotor/axial, locomotor and compound locomotor movements.
- Move following straight and curved pathways.
- Make decisions about gestures and movement to create a phrase that communicates feelings.
- Create a series of movements with a beginning, middle and end.
- Use improvisation to explore and create movement ideas.
- Create and perform a dance by self or with a partner based on a theme or idea.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate movement at different levels.
- Demonstrate locomotor and nonlocomotor movements.
- Provide opportunities for learners to watch and discuss presentations or videos of dance.
- Provide different types of music at different tempos to which learners can perform.
- Provide props to use when dancing, such as ribbons, hoops and sticks.
- Provide numerous examples of different types of pathways (curved, linear, zigzag, combinations).
- Provide a dedicated place and time to rehearse for performances, record rehearsals and practices and allow students to view the recordings.
- Provide opportunities for students to create, rehearse and perform simple improvised and structured dance movements.
- Provide a playing space for performing improvised dance to be watched by other students.
- Discuss and model appropriate audience behavior.

CONTINUED...

ARTS & HUMANITIES

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

CONTENT FOR 1ST GRADE

C. Use the musical elements of timbre, rhythm, tempo, intensity, pitch, dynamics and texture

D. Understand melody as it pertains to form

E. Create and perform music

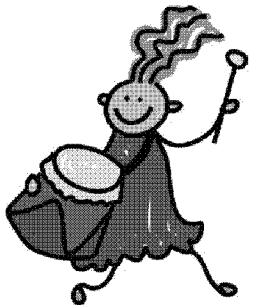
F. Participate individually or in groups in the development of simple improvised scenarios with a clear plot structure of beginning, middle and end

G. Use choices of voice and movement to create original improvised characters or bring to life story characters

H. Recognize and imitate appropriate emotion to communicate a character's feelings

I. Participate in organized dramatic play to identify and recreate themes and emotions

J. Understand that actors warm up their voices and bodies to strengthen and protect them



EXAMPLES

The learner will:

- Use vocal sounds and musical instruments to accompany songs, poems and stories.
- Create simple melodic and rhythmic patterns to accompany songs, poems or stories.
- Identify voices and selected musical instruments from various families.
- Make decisions to manipulate musical elements and discuss how the changes affected the music.
- Use basic music terminology in describing musical sounds.
- Identify repetition and contrast in music examples.
- Use repetition and contrast to create and improvise simple pieces of music.
- Perform a variety of songs and pieces from many different countries and cultures.
- Use vocal sounds and musical instruments to accompany songs, poems and stories.
- Create simple melodic and rhythmic patterns to accompany songs, poems or stories.
- Read basic rhythmic and melodic notation while singing and playing instruments.
- Arrange simple melodic and rhythmic patterns to create new compositions.
- Create improvised dramas both individually and in groups, including imagined characters, relationships and environments, using basic acting skills.
- Create, individually and in groups, animate and inanimate objects through the movement of the human body.
- Combine appropriate sound and motion to create animate and inanimate objects or express abstract moods and themes.
- Analyze plot structure in literature for beginning, middle and end.
- Identify and imitate character's emotions from literature or storytelling.
- Participate in simple warm up routines for voice and body.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate various vocal and instrumental techniques.
- Provide a variety of instruments for students to use, such as rhythm sticks, woodblocks, maracas, bells, Boomwhackers and cymbals.
- Provide opportunities to experiment with loud/soft, high/low, short/long and fast/slow sounds.
- Provide opportunities for students to experience live and recorded performances of various instrumental and vocal ensembles.
- Demonstrate improvisation using voices and instruments.
- Provide aural examples of music in different forms.
- Provide aural examples of music from different parts of the world in different styles.
- Provide a variety of musical instruments with which students can experiment.
- Read books and stories that can be used to improvise musical sounds.
- Provide notation for students to read (e.g. Kodaly or stick notation).
- Teach a variety of simple, traditional and multicultural songs.
- Read aloud simple plays or stories and identify beginning, middle, end, characters and the central conflict or problem.
- Lead students in recreating the events of a story as a series of frozen tableaux or images in sequence.
- Discuss paintings or story illustrations and predict characters feelings, intentions and actions using simple prompts.
- Provide simple props that suggest a character, environment or particular story and encourage improvised dramas as a particular character.
- In role as narrator, lead students through improvised dramatic play to recreate the events of a story with an emphasis on character relationships, actions, feelings and intentions.
- Identify themes or emotions in stories and from life and encourage students to respond as animate or inanimate objects.
- Lead the students in practicing simple warm up exercises for body and voice.

CONTINUED...

ARTS & HUMANITIES

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

CONTENT FOR 1ST GRADE

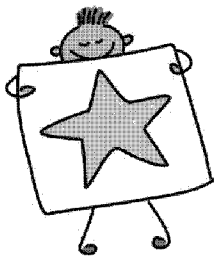
K. Create and perform plays and productions

L. Recognize color, shape, line, texture, size/relationship (proportion/ scale) and pattern (repetition) in visual art

M. Create and exhibit visual art

N. Identify school and community performances and exhibitions relating to the visual and performing arts

O. Understand possible uses of contemporary and traditional technologies in the production and performance of the visual and performing arts



EXAMPLES

The learner will:

- Participate in rehearsals and practice sessions to prepare for performances.
- View and discuss recordings of rehearsals and practice sessions.
- Participate in structured improvised dramas which are rehearsed and refined.
- Take turns being audience and performer to both watch and perform works.
- Use two-dimensional and three-dimensional media, techniques, tools, and processes to depict works of art from personal experiences, observation, or imagination.
- Identify differences within and among art materials, techniques, processes and organizational structures such as elements and principles of design.
- Identify similarities, differences and variations among subjects, using the senses.
- Identify color, texture, form, line, size and pattern in nature and in the human-made environment.
- Produce a body of work and select artwork for display.
- Identify works of their own and of others.
- Use a variety of media to express ideas and opinions.
- Participate as an audience member for school assemblies, performances and exhibits.
- Explore traditional technologies used to create visual art: paper folding, painting, sculpting, etc.
- Explore appropriate vocal and instrumental techniques in music.
- Use contemporary technologies (MIDI, music-writing programs) to create original pieces of music.
- Explore the effects different types of dance shoes have on the sound or movement of a dance (ie. tap shoe vs. ballet shoe).

SUPPORTIVE PRACTICE

The teacher will:

- Provide a dedicated place and time to rehearse for performances, record rehearsals and practices and allow students to view the recordings.
- Provide opportunities for students to create, rehearse and perform simple improvised dramas.
- Provide a playing space for performing improvised dramas to be watched by other students.
- Discuss and model appropriate audience behavior.
- Show students reproductions of artwork by adults and children as exemplars for concepts.
- Allow students time to explore and experiment with various materials and techniques.
- Use technology, such as computers or interactive SmartBoards, to allow students to explore concepts.
- Provide graphic organizers for students to clarify thinking and organize concepts.
- Take students to different environments, i.e. outside or in the community, to explore environments and textures.
- Provide opportunities for students to display and view their own work and the works of others.
- Mat or mount artwork for display.
- Provide opportunities for students to attend school performances, exhibitions and assemblies.
- Discuss and demonstrate appropriate audience behavior.
- Use newspaper clippings, posters or other media to identify and discuss performances and exhibitions available to the student in the community.
- Create and display digital files of student work.
- Demonstrate the use of traditional and contemporary technologies in dance, music, theatre and the visual arts.
- Provide opportunities for students to experiment with traditional and contemporary technologies in dance, music, theatre and the visual arts.
- Demonstrate the use of keyboards, CDs, MP3 players, recording equipment and other technology in music.

ARTS & HUMANITIES

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXTS

THIRD GRADE STANDARDS:

- Explain the historical, cultural and social context of an individual work in the arts
- Relate works in the arts chronologically to historical events (e.g., 10,000 B.C. to present)
- Relate works in the arts to varying styles and genre and to the periods in which they were created
- Analyze a work of art from its historical and cultural perspective.
- Analyze how historical events and culture impact forms, techniques and purposes of works in the arts (e.g., Gilbert and Sullivan operettas)
- Know and apply appropriate vocabulary used between social studies and the arts and humanities
- Relate works in the arts to geographic regions
- Identify, describe and analyze the work of Pennsylvania Artists in dance, music, theatre and visual arts
- Identify, explain and analyze philosophical beliefs as they relate to works in the arts
- Identify, explain and analyze historical and cultural differences as they relate to works in the arts
- Identify, explain and analyze traditions as they relate to works in the arts
- Identify, explain and analyze common themes, forms and techniques from works in the arts

CONTENT FOR 1ST GRADE

A. Identify the historical and cultural context of an individual work in the arts

B. Know the historical and cultural perspective of a work of art

C. Recognize appropriate vocabulary used between social studies and the arts and humanities

D. Identify common themes and patterns in works in the arts

EXAMPLES

The learner will:

- Read or listen to a variety of stories and plays from many different cultures.
- Identify songs and pieces of music by type, e.g. traditional song, folk song, program music.
- Recognize differences in cultures as represented in works in the arts.
- Begin to understand how dances from different cultures and historical periods were made and performed for different reasons.
- Identify the time period or culture of origin of a story or play.
- Identify differences and similarities between a character's experiences and their own.
- Begin to understand that music and art are indicators of culture that change with the times.
- Recognize that cultural perspectives are represented by works in the arts.
- Identify how dress or social manners/customs can impact the movement or structure of a dance.
- Describe the historical and cultural context of a story, play, piece of music, work of art or dance performance using appropriate social studies vocabulary.
- Begin to use vocabulary appropriate to the time period and culture being discussed in works in the arts.
- Use thematic information from contemporary and traditional resources and apply to create new works in the arts.
- Identify forms and patterns in music, i.e. rondo, ABA.

SUPPORTIVE PRACTICE

The teacher will:

- Provide a variety of stories, plays, pieces of music, works of visual art and dance performances for students to review and respond to.
- Facilitate and guide discussions about the places and times represented by works in the arts.
- Discuss the characters in stories, plays and improvised dramas and link them with a particular culture or historic time period using maps, time lines and artifacts.
- Identify differences and similarities between the characters' experiences and the children's.
- Lead students to examine age-appropriate pieces of music in different styles.
- Use cross-curricular resources to assist students in learning about cultural perspectives in the arts.
- Provide age-appropriate examples of how rules of society impacted the social dances of the time.
- Lead a discussion of the historical and cultural context of a work in the arts using appropriate social studies vocabulary.
- Provide social studies and art vocabulary lists for use during discussions about works in the arts.
- Provide resources that help students make connections between artwork discussed and artwork created.
- Provide opportunities for students to listen to and explore music from different time periods and different cultures that have common themes and patterns.

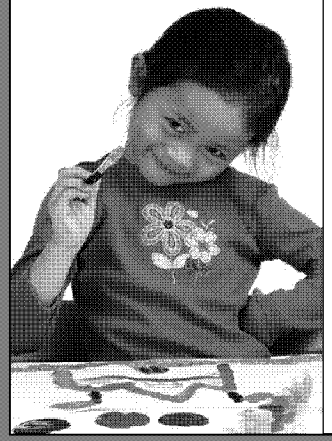
ARTS & HUMANITIES

STANDARD 9.3: CRITICAL RESPONSE

THIRD GRADE STANDARDS:

- Recognize critical processes used in the examination of works in the arts and humanities
- Know that works in the arts can be described by using the arts elements, principles and concepts
- Know classification skills with materials and processes used to create works in the arts
- Explain meanings in the arts and humanities through individual works and the works of others using a fundamental vocabulary of critical response
- Recognize and identify types of critical analysis in the arts and humanities
- Know how to recognize and identify similar and different characteristics among works in the arts
- Know and demonstrate what a critic's position or opinion is related to works in the arts and humanities

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Recognize critical processes (compare and contrast, interpret) used to examine works of art B. Describe works of art using arts elements C. Categorize and classify works in the arts based on the materials and processes used in their creation	**The learner will:** • Use teacher- and self-created criteria for evaluating compositions, exhibitions and performances. • Evaluate one's own and others' compositions, exhibitions and performances and describe what was successful. • Compare and contrast or interpret works in the arts. • Describe specific characteristics of a dramatic performance using appropriate vocabulary. • Identify simple ways in which the elements of a theatrical performance including scenery, props, costumes and acting contribute to the story and theme. • Describe a work in the visual arts using the elements of color, line and shape. • Identify basic ways in which the elements of dance contribute to the meaning or idea of the dance. • Identify different materials used to create works in the visual arts, i.e. clay, canvas, paint. • Identify and know the difference between vocal and instrumental music. • Identify and know the difference between live and recorded performances.	**The teacher will:** • Provide students the opportunity to perform for each other and respond to the performance. • Allow students to create simple improvised performances and critique each other using teacher or student created criteria. • Encourage students to self critique using simple prompts and suggestions for success. • Lead students in discussions about and use graphic organizers to compare and contrast works in the arts. • Lead the class in watching each other's performances and describing the specific characteristics using appropriate vocabulary. • Watch a performance with the class and identify a simple feeling of theme expressed by each of the elements (ex. the scenery looked happy). • Choose works with strong elements of color, line and shape for class discussion. • Encourage student exploration by providing resource materials and a variety of art materials. • Provide numerous opportunities for students to hear and distinguish between vocal, orchestral and chamber music. • Allow students to experience both live and recorded musical, dance and theatrical performances and discuss how the performances are different.



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ARTS & HUMANITIES

STANDARD 9.3: CRITICAL RESPONSE continued

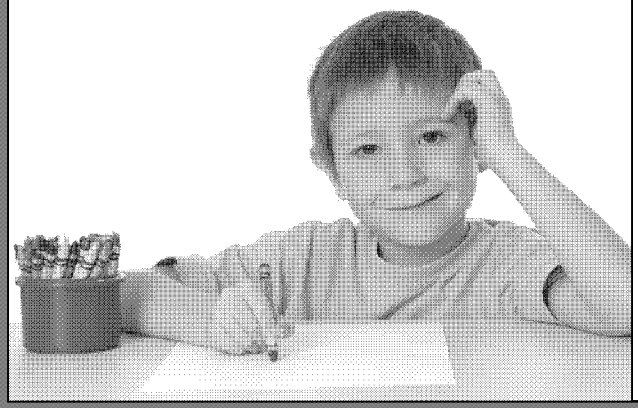
CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
D. Compare and contrast the characteristics of works in the arts	**The learner will:** • Identify and know the differences between a play, a film and a television commercial. • Identify and know the characteristics and purpose of folk songs. • Understand that there are differences between two- and three-dimensional artworks. • Identify basic differences between popular social dances, concert dances and folk dances.	**The teacher will:** • View and discuss examples of a play performance, a movie and a television commercial. • Sing and discuss a variety of folk songs. • Show examples of and lead discussions about paintings, drawings, sculptures and multi-media artworks. • View and discuss examples of social dances, concert dance forms and folk dances.

STANDARD 9.4: AESTHETIC RESPONSE

THIRD GRADE STANDARDS:

- Know how to respond to a philosophical statement about works in the arts and humanities
- Know how to communicate an informed individual opinion about the meaning of works in the arts
- Recognize that the environment of the observer influences individual aesthetic responses to works in the arts
- Recognize that choices made by artists regarding subject matter and themes communicate ideas through works in the arts and humanities

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Understand that there are different opinions about works in the arts B. Communicate an individual opinion about the meaning of works in the arts	**The learner will:** • Examine and discuss his/her own feelings about beauty. • Actively listen to others' opinions about works in the arts. • Watch a performance or view an exhibition and articulate an opinion of its meaning and intent.	**The teacher will:** • Examine illustrations from stories, film clips and/or images of performances and facilitate discussions about what each student finds beautiful or pleasing. • Give personal opinions about the beauty and worth of a work of art. • Allow students to listen to and perform a variety of music and discuss personal feelings about the piece. • Provide a time for students to give personal opinions about beauty and worth of works in the arts. • Provide opportunities for students to participate in a discussion of the meaning and intention of the artists who created specific works in the arts. • Allow students to watch a performance or view an exhibition and share their reactions.



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STANDARD 9.4: AESTHETIC RESPONSE continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
C. Recognize that artists make choices in all areas of the arts	**The learner will:** • Describe specific musical characteristics using appropriate vocabulary (tempo, dynamics, melodic) and describes feelings and images communicated through music. • Respond to selected characteristics of music, including tempo, dynamics, melodic contour and same and different patterns, through purposeful movement. • Describe own choices of voice and movement when creating a specific character to illustrate an emotion or theme. • Recognize that he/she is an artist because of the artistic choices he/she makes while creating works in the arts. • Discuss how an idea or feeling can be expressed in different ways in movement.	**The teacher will:** • Listen to and perform varying pieces of music, taking time to discuss the choices that the composer or performer made in the creation of that music. • Create and perform a character from a story or an abstract representation of an emotion or theme and describe the choices of voice and movement and the intended theme or emotion behind the performance. • Lead the students in creative movement to music based on an emotion or theme and allow them to discuss their choices and intentions. • Make resource materials available which reinforce the importance of artistic choice. • Show dances that are choreographed from the same idea or feeling. Allow students to create and share short dance phrases that are created to express a specific idea or feeling.

FAMILY-SCHOOL-COMMUNITY PARTNERSHIPS

EARLY LEARNING STANDARDS FOR 1ST GRADE

Primary classrooms that foster home-school-community connections assure students' school success. Partnerships that create seamless experiences support children's learning. The link is established when parents and school staff share information about the child, family, home and school culture. The link is extended when community members also support the educational process by sharing resources and supporting ongoing and open communication.

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STANDARD P1: PARENTING

Quality primary programs support families.

SCHOOL
To support children, families and communities the school will:

A. Assist families in accessing community resources (housing, health, nutrition, clothing and safety)

B. Assist families in understanding child development

C. Assist families in establishing home conditions that support children as learners

D. Develop relationships with children and families that are based on trust and respect

E. Demonstrate an understanding of the diversity of family structures, styles and cultural traditions

FAMILY
To support children, families and communities the family can:

- Acquire knowledge and understanding of how to access community resources.
- Acquire knowledge of child development.
- Establish home conditions that support children as learners.
- Engage in school activities to gain a better understanding of school culture.
- Engage in school activities to provide schools with a better understanding of their home culture.

COMMUNITY
To support children, families and communities the community can:

- Provide a variety of information on community resources for families.
- Provide a variety of resources concerning child development.
- Provide a variety of resources concerning the establishment of home conditions that support children as learners.
- Foster relationships that support education among schools, families and community members.
- Offer resources that help schools understand the diversities that exist among children and families.

STANDARD P2: COMMUNICATION

Quality primary programs effectively communicate with families.

SCHOOL
To support children, families and communities the school will.

A. Create an inviting school environment that fosters trust and mutual respect through open dialogue

B. Communicate with families about school goals, programs, assessments, children's progress, curriculum, activities, etc.

C. Promote and provide for communication through a variety of tools and opportunities

D. Provide print and non-print communications that are clear and understandable to all families, including home language translations

E. Obtain ideas from families to improve the design and content of communications

FAMILY
To support children the family can:

- Engage in open dialogue that fosters trust and mutual respect.
- Engage in communications about school goals, programs, assessments, children's progress, curriculum, activities, etc.
- Promote and provide for communication through a variety of tools and opportunities.
- Offer suggestions to improve the design and content of communications between school and home.

COMMUNITY
To support children, families and schools the community can:

- Participate in frequent communication with families and schools.
- Provide a variety of resources to enhance communication between and among home, school and community partners.

STANDARD P3: VOLUNTEERING

Quality primary programs recruit, train, work and involve families as volunteers.

SCHOOL
To support children, families and communities the school will:

A. Expand recruitment, training and involvement of families as volunteers and audience members at the school or in other community locations

B. Invite parents to assist in classroom and school projects, programs and events

FAMILY
To support children the family can:

- Assist administrators, teachers, parents and students as aides, chaperones, lecturers and tutors when possible.
- Assist with classroom and school projects and programs.
- Attend assemblies, award presentations, celebrations, performances, sports events and other events.
- Support school goals and children's learning through volunteering and participating in school activities.

COMMUNITY
To support children, families and schools the community can:

- Offer a variety of resources to encourage parents to serve as volunteers.

STANDARD P4: LEARNING AT HOME

Quality primary programs support in at-home interactive learning activities for children's skill and concept development.

SCHOOL
To support children, families and communities the school will:

A. Emphasize that help at home is to support, encourage and guide children

B. Provide families with a variety of activities for learning in the home to extend skill and concept development

C. Provide information about what children will be learning and doing in primary classrooms

D. Create interactive activities that students share and discuss with others at home

FAMILY
To support children the family can:

- Establish routines for learning in the home.
- Participate with children in interactive learning activities at home to support, encourage and guide their children's development.

COMMUNITY
To support children, families and schools the community can:

- Provide a variety of resources to support schools and families in their role as guides and co-learners of student learning at home.
- Use local community, state and federal printed resources to assist families.

STANDARD P5: DECISION MAKING

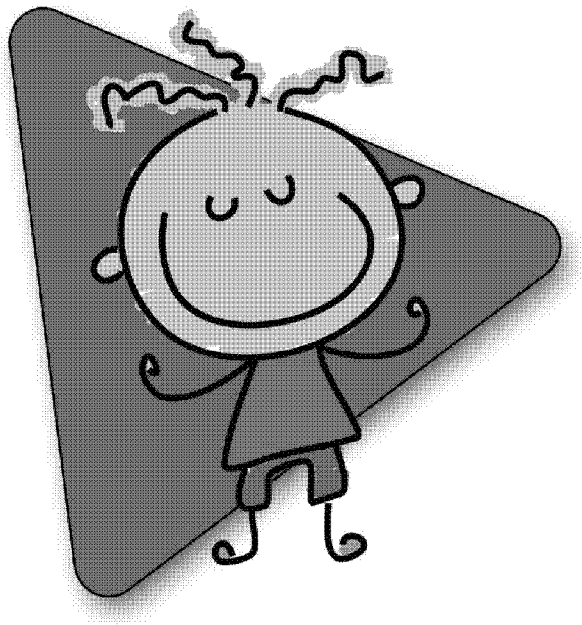
Quality primary programs include families as participants in school decisions, governance and advocacy.

SCHOOL	FAMILY	COMMUNITY
To support children, families and communities the school will:	***To support children the family can:***	***To support children, families and schools the community can.***
A. Encourage involvement through school advisory groups B. Include parent leaders who reflect the diversity of the school population (e.g., ethnic, racial, socio-economic and other groups) in school advisory groups C. Offer training for parents to develop leadership skills D. Promote shared decision making	• Become involved through school advisory groups. • Participate in leadership training. • View decision making as a shared process.	• Provide a variety of resources for families and schools to both encourage and participate as shared decision makers. • Keep families informed of opportunities to be participants in school decisions.

STANDARD P6: COLLABORATING WITH THE COMMUNITY

Quality primary programs help children and families collaborate in their community.

SCHOOL	FAMILY	COMMUNITY
To support children, families and communities the school will:	***To support children the family can:***	***To support children, families and schools the community can:***
A. Contribute to the community through service projects B. Build on community strengths and work collaboratively to address issues that impact the community's educational climate C. Inform all families and learners about community programs and services D. Use community resources for improving curriculum and instruction E. Employ strategies that enable students and families to learn about and contribute to the community	• Contribute to the community through service projects. • Work collaboratively to build on community strengths that address issues that impact the community's educational climate. • Use knowledge of local resources to increase personal skills and talents or to obtain needed services.	• Contribute to students, families and schools through partnerships involving businesses, community agencies, cultural groups, health services, recreation and other groups and programs. • Work collaboratively to build on community strengths that address issues that impact the community's educational climate. • Provide multiple avenues for informing families and students about community programs and services.



HEALTH, SAFETY & PHYSICAL HEALTH

EARLY LEARNING STANDARDS FOR 1ST GRADE

Healthy, active children are better prepared to learn. Their learning is impacted by their health and well-being. First grade students need to learn about their bodies, how their bodies move and the behaviors and skills necessary to protect them and keep them healthy. Instruction for first grade students is focused on developing foundational skills in health, safety and physical education.

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STANDARD 10.1: CONCEPTS OF HEALTH

THIRD GRADE STANDARDS:

- Identify and describe the stages of growth and development
- Identify and know the location and function of the major body organs and systems
- Explain the role of the food guide pyramid in helping people eat a healthy diet
- Know age appropriate drug information
- Identify types and causes of common health problems of children

CONTENT FOR 1ST GRADE

A. Explain what it means to be healthy

B. Choose appropriate ways to handle basic emotions

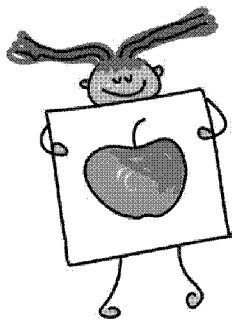
C. Identify and describe ways individuals grow (e.g., physically and emotionally)

D. Understand and accept how we are similar and different

E. Define family and explain how they are alike and different

F. Identify and locate the brain, heart and major bones

G. Begin to develop an understanding of the basic function of the brain, heart and major bones



EXAMPLES

The learner will:

- Distinguish between healthy and unhealthy behaviors.
- Participate in interactive activities that show how people grow and change in body and mind.
- Participate in interactive activities that highlight unique ways people grow and change physically and emotionally.
- Describe ways in which people are the same and different.
- Identify the four basic emotions: happy, sad, angry and afraid.
- Demonstrate healthy ways to express feelings.
- Be able to identify adults in the home, school and community who can help them handle their basic emotions.
- Identify how they are unique.
- Define family.
- Describe how families are alike and different.
- Correctly identify the location of the brain, heart and major bones.
- Describe the basic function of the brain, heart and major bones.

SUPPORTIVE PRACTICE

The teacher will:

- Read fiction and non-fiction that describes how individuals grow and develop.
- Provide interactive activities (e.g., discussions, puppetry and picture cards) that highlight ways individuals grow and develop (physically and emotionally).
- Provide opportunities for students to sort healthy versus unhealthy behaviors.
- Provide interactive ways for children to recognize feelings (e.g., feeling box, emotion charts).
- Provide activities for children to identify adults who care about them.
- Provide activities for children to explore how they are similar and different.
- Provide opportunities and activities for children to visualize how families are unique (e.g., personal drawings, children's literature).
- Provide opportunities for children to interact with peers who are similar and different.
- Create interactive activities (e.g., songs, building models, child-size body drawings) to teach body part recognition and function.
- Engage in daily sensory-motor activities as part of daily routine (use CDs, tapes or self).
- Read non-fiction that names and describes the function of body parts and organs.

CONTINUED...

STANDARD 10.1: CONCEPTS OF HEALTH continued

CONTENT FOR 1ST GRADE

H. Develop an understanding of the importance of healthy eating and the role of food in keeping the body healthy

I. Recognize that there are a variety of foods that can be grouped

J. Develop an understanding of the importance of drinking water to keep the body healthy

K. Recognize that there are drugs/chemicals that can help people and there are drugs that can be harmful

L. Understand that medicines are drugs and that they should only be taken when given by a trusted adult

M. Identify high-risk and low-risk activities related to health

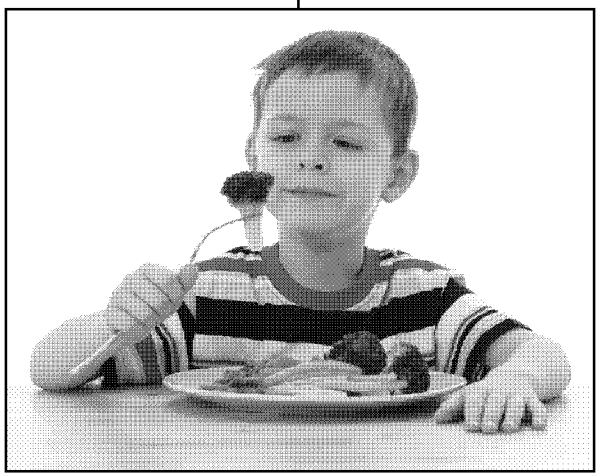
N. Identify age appropriate refusal skills.

O. Identify common childhood illnesses and ways that they are spread

EXAMPLES

The learner will:

- Explain how food provides fuel and energy for the body.
- Sort food cards into categories.
- Classify foods as nutritious or not nutritious.
- Identify nutritious snacks and beverages.
- Sort real food.
- Recognize vegetarian diet can be healthy.
- Identify trusted grown-ups who can give him/her medicine.
- Identify household items that are safe and not safe.
- Identify a trusted adult who can be asked about whether a household item is safe to take.
- Demonstrate basic refusal skills.
- Identify healthy/unhealthy risk-taking behaviors (e.g., smoking, alcohol).
- Identify common childhood illnesses (e.g. colds, pink eye, allergies).
- Know that germs can make someone ill.
- Identify ways that germs can spread.



SUPPORTIVE PRACTICE

The teacher will:

- Read fiction and non-fiction books that focus on food choices and the role of food in keeping one healthy.
- Expose learners to various foods.
- Provide interactive activities using the FDA food guide pyramid to help students understand how foods are grouped and demonstrate how students need to eat a variety of foods.
- Create a classroom environment that supports healthy choices.
- Provide healthy snacks and beverages.
- Provide an assortment of foods.
- Model healthy eating.
- Provide activities in which the child has the opportunity to identify a grown-up at home and at school who can safely administer medicine.
- Provide interactive activity using a chart, common household items and candy in which the children categorize the item as safe or unsafe.
- Facilitate class discussions pertaining to healthy risks (trying out for a sport team) and unhealthy risks (taking someone else's medicine).
- Read literature related to decision making, saying no, healthy choices or risk-taking.
- Use role play situations so the child can develop competence in using basic refusal skills.
- Read a story about a health choice and have the children write, draw or discuss a positive or healthy story ending.
- Read literature related to childhood illness.
- Provide interactive activities that give children the opportunity to experience how germs are spread.

STANDARD 10.2: HEALTHFUL LIVING

THIRD GRADE STANDARDS:

- Identify personal hygiene practices and community helpers that promote health and prevent the spread of disease
- Identify health-related information
- Identify media sources that influence health and safety
- Identify the steps in a decision-making process
- Identify environmental factors that affect health

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Understand that personal health practices/habits affect your health	• Identify, draw or label things that he/she could do to stay healthy.	• Read literature related to personal health practices, preventing illness and community helpers.
B. Identify and use personal health practices/habits	• Identify healthy and unhealthy personal health practices/habits (e.g., the spreading of germs, taking drugs, etc.).	• Create learning centers that focus on healthy hygiene practices (e.g., brushing teeth, flossing teeth).
C. Identify ways to prevent illness through adequate rest, physical activity and healthy foods	• Role-play, with props, people who keep us healthy.	• Create interactive tasks on how to prevent the spread of germs and illness.
D. Identify ways to prevent the spread of communicable diseases (e.g., handwashing, sneezing in elbow, universal precautions)	• Identify ways to prevent the spread of communicable diseases.	• Create classroom environment that practices good disease prevention e.g., handwashing, sneezing in elbow, universal precaution and is accepting of children with any childhood health condition.
E. Identify trusted adults that can help to keep you healthy and safe and can help you make healthful decisions	• Know not to touch others' bodily fluids.	• Provide interactive activities that provide children the opportunity to practice how to prevent the spread of disease, e.g. handwashing, covering mouth while coughing, universal precaution.
F. Know that signs and symbols, e.g. 911, Mr. Yuk, danger symbol (circle with line through it), can help us to stay safe	• Identify health related signs and symbols and tell what they mean and when and where they might see them.	• Provide opportunities and materials for children to role-play with simple props.
G. Understand that your health behaviors are influenced by the media	• Identify different media sources that influence our choices e.g., TV, video, advertisements and commercials.	• Model good health practices/habits (e.g. hand-washing, covering mouth during cough).
		• Use interactive activities in which the children must categorize or sort healthy and unhealthy personal health practices/habits.
		• Have school and community professionals come into the classroom so children can recognize community helpers.
		• Take children on a field trip or invite community health care providers into the classroom to talk about what they do and the tools they use.
		• Provide children with a variety of health related signs and symbols.
		• Provide interactive activities that show how media can influence how we feel about things.

CONTINUED...

STANDARD 10.2: HEALTHFUL LIVING continued

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
H. Recognize that every choice has a consequence	• Explain when and who to ask for help in the decision-making process.	• Read literature related to making decisions and safe choices.
I. Recognize that your health is affected by the choices you make	• Predict and list all possible consequences or outcomes from a choice.	• Create scenarios and have children make the choice and predict the consequences for the character in the scenario.
J. Identify things in the environment that affect our health (e.g., insects, sun, loud noise, weather, tobacco smoke)	• Describe how insects, sun, loud noise, weather and tobacco smoke can affect health.	• Provide interactive activities in which the children are active learners in making choices as a class or as individuals.
	• Describe ways to protect oneself from the identified environmental factors.	• Practice and rehearse what to do during emergency drills.
		• Read literature related to the theme of environment and health.
		• Engage learners in interactive activities matching preventative strategies with environmental factors.

STANDARD 10.3: SAFETY AND INJURY PREVENTION

THIRD GRADE STANDARDS:

- Recognize safe/unsafe practices in the home, school and community
- Recognize emergency situations and explain appropriate responses
- Recognize conflict situations and identify strategies to avoid or resolve
- Identify and use safe practice in physical activity settings

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Know and demonstrate the importance of rules to ensure safety	• Identify the rules.	• Provide student guidelines for the areas that are relevant to their specific location (i.e., city, suburb, rural area).
B. Identify general safety guidelines to follow at home, school or community related to the following areas: • Home: fire safety, pool safety, kitchen safety, drug safety, firearm safety, electrical safety, poison safety • School Safety: fire drills, safe from bullies, safety from strangers, playground safety • Community Safety: aquatic safety, safety from strangers, motor vehicle safety, bicycle safety, bus safety	• Describe how to keep him/herself safe. • Identify and demonstrate safe practices for situations at home, school and community. • Sort behaviors as safe or not safe.	• Model and discuss the importance of safety rules and practices. • Read literature about strangers, bullies and safety rules for public places. • Design interactive tasks that will provide learners opportunities to practice safety rules and behaviors. • Provide opportunities for the student to sort safe and unsafe behaviors.

CONTINUED...

STANDARD 10.3: SAFETY AND INJURY PREVENTION

CONTENT FOR 1ST GRADE

C. Recognize an emergency situation and describe general guidelines for handling it

D. Define conflict

E. Identify ways to resolve or avoid conflict

F. Identify and demonstrate safe practices in physical activities

EXAMPLES

The learner will:

- Identify situations as an emergency or not an emergency.
- Describe appropriate ways to respond to emergencies (e.g., get an adult, call 911, leave the area).
- Appropriately participate in school emergency drill.
- Identify conflict situations.
- Demonstrate how to resolve or avoid conflict in a positive manner.
- Demonstrate appropriate ways to express and deal with emotions and feelings.
  - Share your feelings
  - Don't use put downs
  - Ask for help from a trusted adult
  - Walk away
- Know and demonstrate the difference between safe and unsafe practices.
- Avoid actions that might lead to accidents.
- Follow safe practices in all school areas.
- Utilize safe practices when participating in physical activities.
- Identify safe and unsafe practices that occur on the playground.
- Demonstrate safe practices on playground equipment.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities and props for learners to role play responding to emergencies and first aid situations.
- Provide opportunities for learners to make reminders (magnet, sign) to place near the phone for placing an emergency phone call.
- Read fiction and non-fiction that describes emergency situations, what to do and how to respond safely.
- Read fiction and non-fiction that addresses conflict and/or bullying situations.
- Create home, school and neighborhood scenarios for learners to role play using appropriate strategies to solve conflicts.
- Create a classroom environment that fosters healthy conflict resolution and respect and acceptance for others.
- Model effective communication skills based on respect and acceptance.
- Read fiction and non-fiction that addresses the safety in physical activity.
- Create a classroom and school environment in which all children feel safe and comfortable.
- Have the children help create safety messages for the classroom and playground.

STANDARD 10.4: PHYSICAL ACTIVITY

THIRD GRADE STANDARDS:

- Identify and engage in physical activities that promote physical fitness and health
- Know the positive and negative effects of regular participation in moderate to vigorous physical activities
- Know and recognize changes in body responses during moderate to vigorous physical activity
- Identify likes and dislikes related to participation in physical activities
- Identify reasons why regular participation in physical activities improves motor skills
- Recognize positive and negative interactions of small group activities

CONTENT FOR 1ST GRADE

A. Understand that physical activities are chores such as raking the leaves, walking the dog, shoveling snow and walking to the store or play such as riding your bike, climbing on playground equipment, jumping rope and playing tag, that keep you moving

B. Understand that moving your body by doing chores or playing can help you have strong bones and muscles, strong lungs and a strong heart

C. Understand that being active is one way to be healthy

D. Know that regular participation in physical activity can have positive or negative results

E. Know that moving your body almost every day by doing chores or playing is called regular participation

F. Know that good things that come from being active almost every day include strong bones and muscles, strong lungs, strong heart and having fun with family and friends

G. Know that sometimes when we are not careful bad things such as sore muscles and blisters can happen from being active almost every day

H. Know that the body needs more energy when you are being active

I. Know that the body changes as you use more energy
   - Heart beats faster and harder;
   - Breath faster and heavier; and
   - Feel warm and may even sweat

EXAMPLES

The learner will:

- Identify types of physical activities that promote fitness and health.
- Explain how physical activity helps us be healthy.
- Participate in physical activities that promote fitness and health during outdoor time.
- Keep a calendar of physical activities that promote fitness and health while at home.
- Offer ideas about what it means to be healthy.
- Explain what regular participation means.
- Identify the positive effects of regular participation in physical activity.
- Identify the negative effects of regular participation in physical activity.
- Recognize the effects of moderate to vigorous physical activity on the body.
- Learn to count/monitor their heart rate.
- Learn to monitor breathing rate.
- Participate in activities that will result in body changes.

SUPPORTIVE PRACTICE

The teacher will:

- Provide inside and outside opportunities for learners to engage in physical activities that promote fitness and health.
- Facilitate class discussions that focus on how physical activity improves health.
- Encourage learners to participate in physical activities.
- Read related fiction and non-fiction books.
- Use brainstorming activities to identify what it means to be healthy.
- Integrate physical activities into daily instruction.
- Use brainstorming activities to identify positive and negative effects of regular participation in physical activity.
- Have students use an age appropriate method of monitoring their heart and breathing rate.
- Provide opportunities for children to talk about how their body changed during physical activity.
- Provide activities that will cause body changes to occur.

CONTINUED...

STANDARD 10.4: PHYSICAL ACTIVITY continued

CONTENT FOR 1ST GRADE

J. Know that people like to be active in different ways and that not everyone likes to be active in the same way

K. Understand that some reasons you might like certain activities include they are fun, they make you feel good, you can do with other friends or family and you are good at the activity

L. Understand that some reasons you might not like certain activities include they are hard to do, you need to learn the skills for the activity and you may not understand how to play the activity

M. Know that regular participation in physical activities may help our skills get better, such as bouncing or catching a ball

N. Know that practice may not always help our skills get better if we do not do the skills the right way or our body is not ready to do them

O. Understand how to cooperate and share with others during small group activities

P. Know that cooperating means that you are able to work nicely with the other children and that an important cooperation skill is sharing

Q. Understand that when the teacher is busy working with other students, you must be able to stay on the task (work) that your teacher asked you to complete

R. Understand that when you are on-task you can stay focused and keep working on the job without the teacher directing you

EXAMPLES

The learner will:

- Identify physical activities that you like in school and at home and describe why.
- Identify physical activities that you dislike in school and at home and describe why.
- Participate in a variety of activities in order to determine likes and dislikes.
- Identify why regular participation may help skills improve.
- Recognize why regular participation may not help their skills improve.
- Recognize that practicing motor skills affects their ability to learn and improve their performance.
- Demonstrate the ability to cooperate with different partners during physical activities.
- Identify examples of cooperating and sharing.
- Identify examples of not cooperating or sharing.
- Explain what it means to be on-task.
- Demonstrate the ability to stay on task during a variety of different physical activities.

SUPPORTIVE PRACTICE

The teacher will:

- Provide brainstorming opportunities for identifying likes and dislikes.
- Provide a variety of activities for children to try in order that they can determine likes and dislikes.
- Provide different amounts of time for practicing motor skills and subsequently ask children how short and long practice bouts affect their motor skill performance.
- Provide opportunities for children to talk about how their skills improved.
- Provide opportunities for children to identify reasons why the skill may not have improved.
- Provide opportunities for children to work with several different partners during physical activities.
- Provide opportunities for students to reflect on their ability to stay on task during physical activities.
- Provide opportunities for children to experience cooperation/non-cooperation and sharing and non-sharing.

STANDARD 10.5: CONCEPTS, PRINCIPLES & STRATEGIES OF MOVEMENT

THIRD GRADE STANDARDS:

- Recognize and use fundamental motor skills and movement concepts
- Recognize and describe the concepts of motor skill development using appropriate vocabulary
- Know the function of practice
- Identify and use principles of exercise to improve movement and fitness activities
- Know and describe scientific principles that affect movement and skills using appropriate vocabulary
- Recognize and describe game strategies using appropriate vocabulary

CONTENT FOR 1ST GRADE

A. Understand that there are many ways to move our body such as locomotor, nonlocomotor and manipulative

B. Know and demonstrate locomotor movements such as walk, run, hop, jump, leap, gallop, slide and skip

C. Know and demonstrate nonlocomotor movements such as bend, stretch, push, pull, swing, sway, strain, shake, twist and turn

D. Know and demonstrate manipulatives such as rolling, throwing, catching, kicking and striking

E. Know and demonstrate movement concepts as slow to fast (speed), high to low (levels), forward, backward and sideways (direction) and straight, curved and zigzag (pathways)

F. Know that relationships refer to the ways the individual, while moving, relates with other people and the environment such as over, under, on, off, near, far, in front, behind, through and around

G. Understand that motor skill performance may be different for others even though they are the same age

H. Understand that you are different from every other child your age

- Different abilities;
- Different size and strength; and
- Different movement experiences

EXAMPLES

The learner will:

- Demonstrate fundamental movement skills within a variety of developmentally appropriate games, dance and gymnastic activities.
  - Locomotor
  - Nonlocomotor
  - Manipulative
  - Space Awareness, e.g. personal, general
  - Effort Awareness, e.g. speed, force
  - Relationship Awareness
- Know the correct names of the various movements.
- Participate in various rhythmic activities.
- Accept all teammates and playmates regardless of race, gender, ability, disability or other differences.
- Understand that performance does not depend on gender (i.e., boys' and girls' performance is similar).

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for learners to participate in a variety of motor activities that develop the locomotor, manipulative and nonlocomotor skills in closed practice conditions.
- Provide activities that focus on the movement concepts, e.g. locomoting along different pathways – space awareness; bouncing a ball at different speeds – effort awareness; matching a partner's movement – relationship awareness.
- Create opportunities for learners to participate in a variety of rhythmical, expressive and creative dance experiences and educational gymnastics (tapes, CDs, paint/draw to music).
- Use different types of equipment (long and short handled bats and rackets, varied ball sizes, etc.) in order for children to have the option of choice.
- Provide opportunities for exploration and discovery of the range of possibilities within a skill theme, i.e., ways to toss and catch balls, bean bags and other objects.
- Provide opportunities for students to give feedback to partners (role play positive comments).
- Create an environment in which children feel safe to try new activities.

CONTINUED...

STANDARD 10.5: CONCEPTS, PRINCIPLES & STRATEGIES OF MOVEMENT continued

CONTENT FOR 1ST GRADE

I. Understand that when you first learn a new skill, you may not be very good at using the skill

J. Know that practice and experience make you better at motor skills

K. Understand that when we practice, we repeat the skill over and over and that we must practice the important parts of the skill correctly

L. Understand that critical elements are the important parts of the skill and are cues that help students to learn a skill or to perform better

M. Understand that sometimes a teacher watches you do a skill and then tells you about how you did the skill. The teacher is giving you feedback

N. Understand that feedback lets us know how we are doing on a task and is helpful in improving a skill

O. Know that exercises are special movement activities that help make you strong

P. Understand that we can become stronger by exercising every day

EXAMPLES

The learner will:

- Explain what it means to practice.
- Demonstrate how to practice a skill using repetition.
- Practice motor skills for varying amounts of time.
- Actively engage in practice opportunities during class and outside of school.
- Explain how feedback helps to improve a skill.
- Perform activities based on the critical elements.
- Participate in exercises every day.

SUPPORTIVE PRACTICE

The teacher will:

- Provide many practice opportunities.
- Encourage students to practice skills during class time and outside of class time.
- Design creative practice opportunities that are varied, motivating and novel, therefore, motivating children to continue practicing.
- Provide instruction on the function of practice (tie into first time riding bicycle or playing a specific game).
- Provide opportunities for students to give feedback to partners (role play positive comments).
- Assess student work based on the critical elements of a skill (e.g., through a drawing, student demonstration).
- Create an environment in which children feel safe to try new activities.
- Model activities utilizing critical elements.
- Provide instruction on the principles of exercise (frequency, intensity, length of time) and how exercise affects muscular and bone growth and strength.
- Design learning experiences that focus on each of the principle components of fitness (cardio-respiratory, muscular strength and endurance, flexibility, body composition).
- Use music to motivate children to move for longer periods of time.
- Have children and guardians/families keep an activity calendar of what learners do at home (i.e., How often do I participate in activity?) .
- Encourage students to participate in physical activity outside of school. (Find out who is in sports? Who plays...?).
- Provide opportunities for children to exercise every day.

CONTINUED...

STANDARD 10.5: CONCEPTS, PRINCIPLES & STRATEGIES OF MOVEMENT continued

CONTENT FOR 1ST GRADE

Q. Know that scientific principles are rules that tell you the best way to move your body

R. Understand that knowing the best ways to move your body can make your skill performance better and keep you safe

S. Understand that there are many important things you need to know when playing a game in order to have fun and play safely:

- Jobs of the different game players;
- Where the boundaries are in the game;
- What skills you will be using in the game;
- What object or objects you will be using in the game; and
- Rules of the game

EXAMPLES

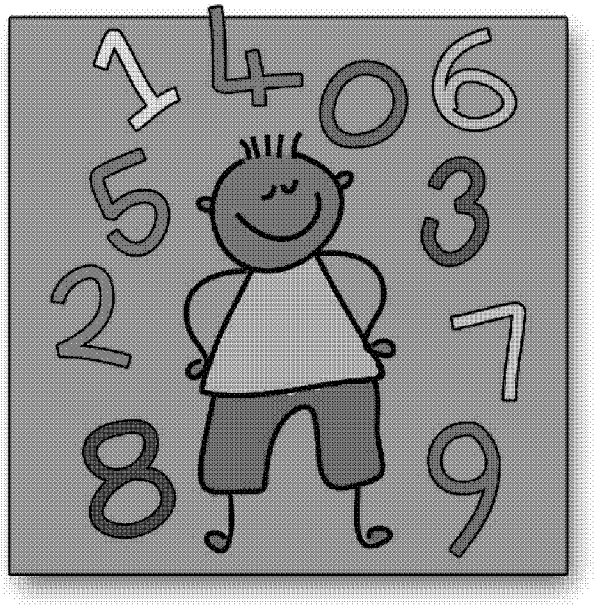
The learner will:

- Demonstrate manipulative skills such as kicking or throwing a ball using varying trajectories (related to gravity).
- Demonstrate the ability to absorb force while catching a variety of different objects while stationary.
- Explain how the rules (scientific principles) can keep your body safe.
- Perform an activity that demonstrates a scientific principle, e.g. gravity, balance, force production, force absorption.
- Participate in games that emphasize one or more of the game components.

SUPPORTIVE PRACTICE

The teacher will:

- Provide developmentally appropriate instruction related to scientific principles, e.g. gravity, balance, force production, force absorption. (Talk to your school physical education instructor.)
- Design developmentally appropriate learning experiences in which children explore gravity, force and balance.
- Provide students critical elements related to scientific principles.
- Provide educational experiences that emphasize cooperative (partner and small group) games.
- Provide educationally appropriate games that involve one or two players and only a few of the game components
- Design educational experiences that emphasize "moving in and to an open space."



LOGICAL MATHEMATICS

EARLY LEARNING STANDARDS FOR 1ST GRADE

Mathematical learning in first grade relies on children's opportunities to be actively engaged while using concrete objects and pictorial/symbolic representations. Students extend their mathematical knowledge and understanding in the areas of numbers, number systems and relationships; computation and estimation; measurement and estimation; mathematical reasoning and connections; mathematical problem solving and communication; statistics and data analysis; probability and predictions; algebra and functions; geometry; trigonometry; and calculus. Teachers facilitate mathematical learning when they promote students to problem solve, reason, prove, communicate, connect and represent.

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STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

THIRD GRADE STANDARDS:

- Count using whole numbers (to 10,000) and by 2's, 3's, 5's, 10's, 25's and 100's
- Use whole numbers and fractions to represent quantities
- Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols
- Use drawings, diagrams or models to show the concept of fraction as part of a whole
- Count, compare and make change using a collection of coins and one-dollar bills
- Apply number patterns (even and odd) and compare values of numbers on the hundred board
- Use concrete objects to count, order and group
- Demonstrate understanding of one-to-one correspondence
- Apply place-value concepts and numeration to counting, ordering and grouping
- Estimate, approximate, round or use exact numbers as appropriate
- Describe the inverse relationship between addition and subtraction
- Demonstrate knowledge of basic facts in four basic operations

CONTENT FOR 1ST GRADE

A. Count using whole numbers to 100 by 1's, 2's, 5's, 10's and 25's

B. Use whole numbers and fractions (halves, thirds and fourths) to represent quantities

C. Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols to 100

D. Use drawings or models to show the concept of a fraction as part of a whole

E. Count, compare and make change up to one dollar using a collection of coins (pennies, nickels, dimes and quarters)

F. Apply number patterns (even and odd) and compare numbers on the hundred chart

G. Use concrete objects to count, order and group to 100

H. Demonstrate an understanding of one-to-one correspondence up to 100

I. Apply place-value concepts and numeration to counting and ordering numbers up to 100

J. Estimate and approximate number quantities in at least a set of ten

K. Recognize the inverse relationship between addition and subtraction

L. Demonstrate knowledge of basic addition and subtraction facts

EXAMPLES

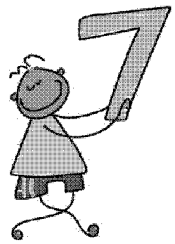
The learner will:

- Count, read and write whole numbers from 1 through 100.
- Skip count by 2's, 5's, 10's and 25's.
- Match the fraction to the corresponding model (concrete and/or pictorially).
- Represent a given number less than or equal to 100 in various ways (e.g. tallies, numeral, tens and ones, addition and subtraction, etc.).
- Identify fractional parts of a region or set.
- Represent a given fraction (halves, thirds and fourths) using drawings or concrete materials.
- Read and write fractions.
- Identify the name and value of pennies, nickels, dimes and quarters.
- Count, compare and record the value of a collection of coins up to one dollar.
- Count coins and make change in real life situations.
- Use different sets of coins to represent the same amount of money (up to one dollar).
- Differentiate between even and odd numbers.
- Order a set of whole numbers from least to greatest or from greatest to least up through 100.
- Count sets of objects to at least 100.
- Count objects using 1-1 correspondence.
- Compare two sets of objects using 1-1 correspondence to determine greater than/less than.
- Match a symbolic representation of numbers to appropriate whole numbers up to 100 (e.g. base-ten blocks).

SUPPORTIVE PRACTICE

The teacher will:

- For each stated skill the teacher will provide and incorporate opportunities in both everyday occurrences and planned, purposeful instruction; model and incorporate appropriate language and vocabulary; supply students with manipulatives (e.g. counters, base ten blocks, pattern blocks, coins, hundred chart, etc.).



STANDARD 2.2: COMPUTATION AND ESTIMATION

THIRD GRADE STANDARDS:

- Apply addition and subtraction in everyday situations using concrete objects
- Solve single- and double- digit addition and subtraction problems with regrouping in vertical form
- Demonstrate concept of multiplication as repeated addition and arrays
- Demonstrate concept of division as repeated subtraction and as sharing
- Use estimation skills to arrive at conclusions
- Determine the reasonableness of calculated answers
- Explain addition and subtraction algorithms with regrouping

CONTENT FOR 1ST GRADE

A. Solve addition and subtraction in everyday situations using concrete objects with one and two digit numbers (no regrouping)

B. Solve addition and subtraction in everyday situations with one and two digit numbers (no regrouping)

C. Determine the sum of the same three one-digit numbers (e.g., 5+5+5)

D. Determine the difference by forming equal groups

E. Make estimates of objects in a set up to and including 100 using groups of ten as a reference and verify estimate

F. Compare estimate with verified answer

G. Explain and describe the process of addition and subtraction

EXAMPLES

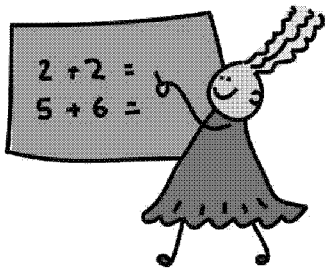
The learner will:

- Use concrete objects, including number lines, to find the solution to addition and subtraction problems with one and two digit numbers (no regrouping).
- Find the solution to addition and subtraction problems with one and two digit numbers (no regrouping).
- Write a number sentence to represent a picture/story problem.
- Determine the sum of the same three addends.
- Understand subtraction as separating sets to form equal groups.
- Form a group of ten and use as a reference to make an estimate.
- Count to verify the estimate.
- Compare estimate with verification.
- Recognize when estimation is or is not reasonable.
- Explore and state the concept of addition and subtraction as the joining and separating of sets.

SUPPORTIVE PRACTICE

The teacher will:

- For each stated skill the teacher will provide and incorporate opportunities in both everyday occurrences and planned, purposeful instruction; model and incorporate appropriate language and vocabulary; supply students with manipulatives (e.g. counters, base ten blocks, etc.).
- Teachers will demonstrate and develop students' abilities to find differences using related addition facts.



STANDARD 2.3: MEASUREMENT AND ESTIMATION

THIRD GRADE STANDARDS:

- Compare measurable characteristics of different objects on the same dimensions (time, temperature, area, length, weight, capacity, and perimeter)
- Determine the measurement of objects with nonstandard and standard units (US customary and metric)
- Determine and compare elapsed times
- Tell time (analog and digital) to the minute
- Determine appropriate unit of measure
- Use concrete objects to determine area and perimeter
- Estimate and verify measurements
- Demonstrate that a single object has different attributes that can be measured in different ways (length, mass/weight, time, area, temperature, capacity, perimeter)

CONTENT FOR 1ST GRADE

A. Compare two objects using direct comparison

B. Estimate, measure and compare the lengths of objects using non-standard units

C. Estimate, measure and compare the lengths of objects using standard units of measure

D. Determine and compare lengths of time

E. Tell time (analog and digital) to the minute

F. Determine appropriate unit of measure

G. Demonstrate that a single object has different attributes that can be measured in different ways (e.g., length, mass/weight, time, area, temperature, capacity, perimeter)

EXAMPLES

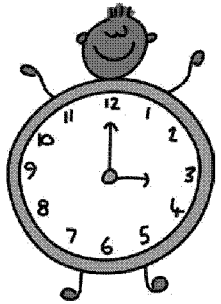
The learner will:

- Collect two objects and compare them by a defined attribute (length, capacity or weight).
- Determine and use an appropriate non standard measuring tool (for example, an appropriate non-standard measuring tool would be a finger to measure the length of a piece of paper, not the length of a half-way). (Crayons, unifix cubes, paper clips.)
- Estimate and measure the lengths and heights of objects using non-standard units.
- Estimate and measure the lengths and heights of objects to the nearest inch.
- Estimate and measure the lengths and heights of objects to the nearest foot using a 12 inch ruler.
- Estimate and measure the length of objects in centimeters using a ruler.
- Estimate and determine the distance around a shape using non-standard units (paper clips) and standard units (inches).
- Estimate, measure and compare the capacities of various containers.
- Compare the capacities of cups, pints and quarts.
- Compare the capacity of containers to one liter.
- Estimate, measure and compare the weights of different objects using a balance scale.
- Compare the weights of objects to one pound.
- Determine the appropriate unit for measuring an object using gram or kilogram.
- Determine temperatures on a thermometer.
- Recognize the divisions of time: morning, afternoon and evening, before and after.

SUPPORTIVE PRACTICE

The teacher will:

- Model, using the appropriate language/vocabulary, the process of comparing objects using a specified attribute and measuring using standard and non-standard tools and units.
- Provide materials/opportunities and support learners in making estimations, determine the appropriate measurement tool and explore and apply understanding of estimation throughout the school day.
- Provide authentic opportunities for measuring such as cooking and mixing simple recipes.
- Encourage and support learners in explaining how they applied their skills during mathematical tasks.



STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

THIRD GRADE STANDARDS:
- Make, check and verify predictions about the quantity, size, and shape of objects and groups of objects
- Use measurements in everyday situations (determine the geography of the school building)

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Make, check and verify predictions about the quantity, size and shape of objects and groups of objects B. Use measurements in everyday situations	**The learner will:** • Make estimates of objects in a set up to and including 100. • Make estimates of quantity and verify by counting. • Sort, classify and order objects by 2 or more attributes including color, size, shape (including two- and three-dimensional geometric shapes) and number properties (odd/even, numbers said when counting by 5s 10s) using standard and non-standard units. • Explain and identify how a set or group of items has been sorted. • Estimate the length or weight of an object. • Select an appropriate unit and/or tool for the attribute being measured. • Compare objects according to length, weight or volume. • Tell time (analog) to the hour and half hour. • Tell time to the nearest 1/2 hour. • Use a ruler to measure to the nearest inch. • Measure objects to the nearest inch or centimeter.	**The teacher will:** • Model, using appropriate vocabulary, the process of estimating and verifying groups of objects. • Create and provide opportunities for learners to make comparisons of objects by at least 2 attributes. • Engage learners in recognizing and applying estimation in everyday situations. • Facilitate classroom discussion to encourage learners to explain how a set of items has been sorted. • Provide opportunities for learners to explore and apply an understanding of estimating and measurement.

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

THIRD GRADE STANDARDS:
- Use appropriate problem solving strategies (guess and check, working backwards)
- Determine when sufficient information is present to solve a problem and explain how to solve a problem
- Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil, and concrete objects

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Use appropriate problem-solving strategies (e.g., make a model, draw a picture, guess and check, working backwards) B. Determine when sufficient information is present to solve a problem and explain how to solve a problem	**The learner will:** • Identify and think about possible solutions to solve daily problems occurring in and out of the classroom. • Determine appropriate strategies to solve various problems. • Utilize the strategies to solve the problems. • Describe the steps necessary to solve a problem. Communicate these steps orally.	**The teacher will:** • Model, using the appropriate language/vocabulary, the process of identifying and solving a problem. • Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems occurring in and out of the classroom. • Create and provide opportunities for learners to engage in problem solving activities.

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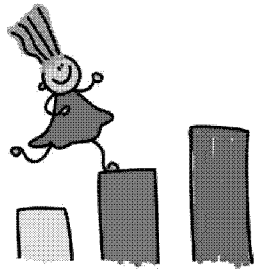
STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
C. Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil and concrete objects	**The learner will:** • Identify the correct operations to solve a word problem. • Analyze problem situations to choose a correct operation. • Invent different strategies and approaches to solve daily problems occurring in and out of the classroom. • Determine what is the best method to solve a single step problem.	**The teacher will:** • Highlight the process versus the product of an activity (give specific examples). • Ask open-ended questions, encourage conversations and create classroom activities that encourage learners to explore a variety of possible solutions (setup situations). • Encourage and support learners to explain their mathematical thinking and work. • Provide opportunities for learners to explore and apply understanding of problem solving throughout the school day. • Provide the students with examples on how to utilize the best method to solve a multiple step problem.

STANDARD 2.6: STATISTICS AND DATA ANALYSIS

THIRD GRADE STANDARDS:
- Gather, organize, and display data using pictures, tallies, charts, bar graphs, and pictographs
- Formulate and answer questions based on data shown on graphs
- Predict the likely number of times a condition will occur based on the analyzed data
- Form and justify an opinion on whether a given statement is reasonable based on a comparison to data

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Formulate and answer questions that can be proven with data (bar graphs, pictographs and/or tally charts) B. Collect, organize and display relevant data to answer questions C. Discuss whether a prediction or statement is likely or unlikely based on a comparison to the data 	**The learner will:** • Participate in classroom graphing activities. • Read and compare data shown on bar graphs, pictographs and/or tally charts (guiding questions may include: How many? How many more? How many less? Equal? Why? What? How do you know?). • Sort and classify objects according to their attributes and organize data about these objects. • Represent data using concrete objects, pictures and graphs. • Discuss why a prediction or statement based on data is either likely or unlikely.	**The teacher will:** • Provide easy to read data sets for the students. • Assist (as needed) learners in reading the data, deducing information, drawing conclusions and applying data to future events/behaviors. • Pose open-ended questions to engage learners in reading the data on a graph. • Provide opportunities for learners to see graphs used in the real world. • Encourage and support learners in explaining how they applied their skills during mathematical work. • Provide opportunities for learners to create and interpret graphs throughout the school day. • Model and verbalize, using language/vocabulary appropriate to the learners, the process of graphing.

STANDARD 2.7: PROBABILITY AND PREDICTIONS

THIRD GRADE STANDARDS:

- Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes
- Design a fair and an unfair spinner
- List or graph the possible results of an experiment
- Analyze data using the concepts of largest, smallest, most often, least often and middle

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. State and explain the likelihood of an event using the terms certain, likely, unlikely or impossible B. Discuss why a spinner is fair or unfair C. Discuss the results of an experiment	**The learner will:** • Determine the likelihood of events occurring. • Example: the teacher flips a coin and the students predict the likelihood of the coin landing "heads up." • When presented with various spinners and activities with the spinners, students discuss why certain spinners are either fair or unfair. • Predict what the results of an experiment will be. • Discuss the results of an experiment for which the teacher has recorded or graphed the results.	**The teacher will:** • Model and verbalize (as needed), using language/vocabulary appropriate to the students, the process of determining the likelihood of an event and/or why a spinner is either fair or unfair. • Explain examples of activities that are most likely to occur at certain times of the year. • Explain/demonstrate the meaning of the words certain, likely, unlikely and impossible. • Facilitate predictions of possible results by referring to previous events. • Encourage and support learners in explaining how they applied their skills during mathematical tasks.

STANDARD 2.8: ALGEBRA AND FUNCTIONS

THIRD GRADE STANDARDS:

- Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number, and geometric patterns
- Use concrete objects and trial and error to solve number sentences and check if solutions are sensible and accurate
- Substitute a missing addend in a number sentence
- Create a story to match a given combination of symbols and numbers
- Use concrete objects and symbols to model the concepts of variables, expressions, equations, and inequalities
- Explain the meaning of solutions and symbols
- Use a table or chart to display information
- Describe and interpret the data shown in tables and charts
- Demonstrate simple function rules
- Analyze simple functions and relationships and locate points on a simple grid

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Recognize and extend patterns based on shape, size, color, sound or number B. Identify the rule for a repeating pattern that could be extended infinitely C. Identify the rule for a number sequence that could be extended infinitely D. Choose the correct operation (addition or subtraction) to solve a story problem	**The learner will:** • Construct patterns with a repeating pattern with concrete objects such as geometric shapes or connecting cubes. • Describe a repeating pattern and be able to extend it beyond the pattern shown. • Describe how patterns are alike. • Create their own repeating pattern and be able to describe the pattern.	**The teacher will:** • Provide a variety of materials for sorting, classifying and creating patterns (connecting cubes, beads, buttons, lids, etc.). • Demonstrate and explain the concept of recognizing, describing, repeating and extending a pattern or sequence.

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STANDARD 2.8: ALGEBRA AND FUNCTIONS continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
E. Write an equation to solve a story problem F. Use concrete objects and trial and error to solve addition or subtraction number sentences and check if solutions are accurate G. Find a missing addend that makes a number sentence true H. Explain how solutions to equations or missing addends are determined I. Identify the missing symbol (+, -, =) that makes a number sentence true	**The learner will:** • Describe and extend a number pattern that is a constant sequence, such as 1,4,7, . . . or 2,4,6, ... • Solve a variety of story problems by first identifying the operation involved. • Use concrete manipulatives and/or draw pictures to determine missing addends. • Progress from the use of manipulative and drawings to use symbols and write equations to solve story problems and equations. • Use a variety of strategies to solve problems involving addition or subtraction. • Provide explanations for the solutions and strategies used in solving story problems and/or equations.	**The teacher will:** • Provide opportunities and support learners in recognizing, describing and extending patterns and sequences. • Demonstrate solving story problems through providing a variety of manipulatives and drawings to solve addition and subtraction story problems. • Demonstrate how story problems can be represented with equations. • Provide meaningful demonstrations to establish the meaning of symbols in equations. • Provide opportunities for students to explain their strategy for solving story problems or equations (missing addends).

STANDARD 2.9: GEOMETRY

THIRD GRADE STANDARDS:

- Name and label geometric shapes in two and three dimensions (circle/sphere, square/cube, triangle/pyramid, rectangle/prism)
- Building geometric shapes using concrete objects (manipulatives)
- Draw two and three dimensional geometric shapes and construct rectangles, squares, and triangles on the geoboard and on graph paper satisfying specific criteria
- Find and describe geometric figures in real life
- Identify and draw lines of symmetry in geometric figures
- Identify symmetry in nature
- Fold paper to demonstrate the reflections about a line
- Show relationships between and among figures using reflections
- Predict how shapes can be changed by combining or dividing them

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Name and label geometric shapes in two and three dimensions (e.g., circle, square, triangle, rectangle, sphere, cube, pyramid and prism) B. Build geometric shapes using concrete objects C. Create two- and three-dimensional shapes D. Find and describe geometric figures in real life E. Identify and draw lines of symmetry in geometric figures	**The learner will:** • Identify two and three-dimensional figures and describe their specific attributes. • Compare, contrast and sort two- and three- dimensional shapes. • Relate faces of three-dimensional figures to two-dimensional shapes. • Identify and create figures that are the same size and same shape (congruent). • Use various materials to draw, build and make two-dimensional and three-dimensional shapes.	**The teacher will:** • Provide an environment rich in geometric design. • Use appropriate manipulatives (i.e. geoboards) and activities to create shapes and form congruent plane figures. • Create a chart with attributes of each object. • Use appropriate manipulatives (i.e. pattern blocks, building blocks, etc.) to allow for exploration and construction of new shapes while engaging the student in dialogue about the attributes of the new shape.

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MATHEMATICS

STANDARD 2.9: GEOMETRY continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
F. Identify lines of symmetry in nature G. Fold paper to demonstrate the reflection of a line H. Show relationships between and among figures using reflections I. Predict how shapes can be changed by combining or dividing them	**The learner will:** • Recognize two-dimensional shapes within other two-dimensional shapes. • Combine two-dimensional shapes to make new shapes. • Draw and label parallelogram, trapezoid and hexagon. • Recognize sides, vertices (angles), corners and curves in two-dimensional shapes. • Name and label two- and three-dimensional shapes. • Recognize and identify two- and three-dimensional shapes in the environment. • Match two- and three-dimensional shapes to two- and three-dimensional shapes in real life. • Identify lines of symmetry in shapes and objects.	**The teacher will:** • Provide opportunities to identify and name the properties of two- and three-dimensional shapes using plane figures and geometric solids. • Use real objects as examples of geometric solids. • Provide opportunities to explore shapes that involves folding and/or drawing lines of symmetry. • Provide opportunities to explore reflections using appropriate manipulatives (i.e. mirrors, graph paper, geoboards). • Provide shapes for exploration.

STANDARD 2.10: TRIGONOMETRY

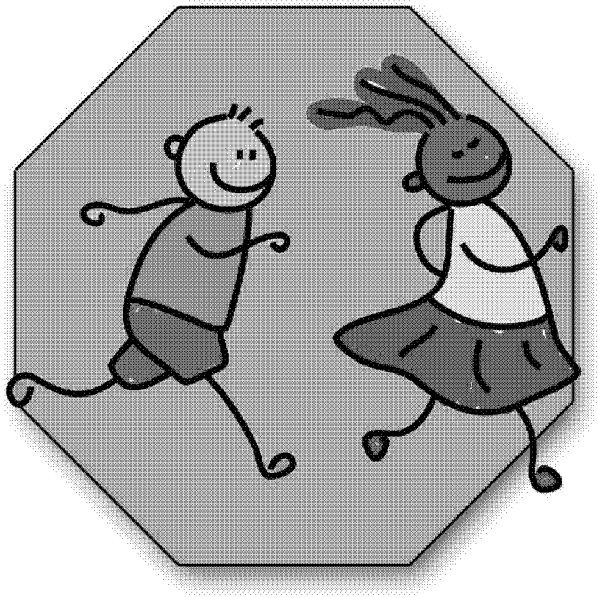
THIRD GRADE STANDARDS:
- Identify right angles in the environment
- Model right angles and right triangles using concrete objects

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify and give examples of corner angles B. Identify a triangle that has one corner. Recognize that a line drawn from one vertex to the opposite vertex in a rectangle or square divides it into two triangles, each with a corner angle	**The learner will:**	**The teacher will:**

STANDARD 2.11: CALCULUS

THIRD GRADE STANDARDS:
- Identify whole number quantities and measurements from least to most and greatest value
- Identify least and greatest values represented in bar graphs and pictographs
- Categorize rates of change as faster and slower
- Continue a pattern of numbers or objects that could be extended infinitely

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Describe how you can get closer and closer to a point or line and not reach or cross it	**The learner will:** • Football penalty activity (if an offense is on the 5 yard line and the defense gets a penalty that equals "half the distance to the end zone" for the offense...will the offense ever cross the end zone if the defense keeps getting penalties? • Approaching a tape 1/2 distance each move.	**The teacher will:**



PERSONAL-SOCIAL

EARLY LEARNING STANDARDS FOR 1ST GRADE

Primary children's social and emotional development is strengthened when they have classroom experiences that promote a sense of autonomy, competence and belonging within an engaging and a responsive environment. Teachers support children's self identity and social competence by modeling respectful interactions and using positive guidance techniques that scaffold the development of self control and problem solving. By encouraging positive approaches to learning teachers allow children to plan and make choices so that school is meaningful to them and they become engaged in life long learning. Research supports that attention to the social and emotional needs of students increases the academic achievement of students, lowers the incidences of disruptive behaviors and improves the quality of relationships surrounding each child.

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PS 2 Develop Self Regulation	42
PS 3 Develop Social Interactions	43
PS 4 Develop Care and Self Reliance	43

STANDARD PS 1: DEVELOP SELF-CONCEPT

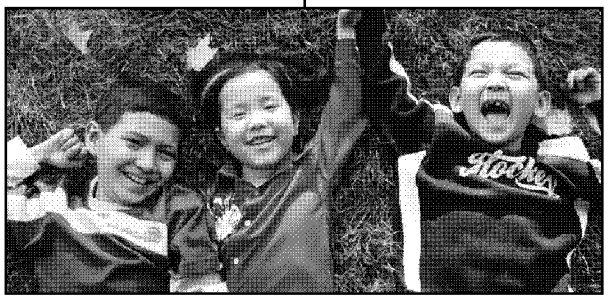
CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Is aware of self and one's own preferences, strengths and challenges B. Show independence in a wide range of activities C. Know and state independent thoughts and feelings D. Attempt new experiences with confidence and independence E. Show pride in accomplishments F. Demonstrate skills related to achieving personal and academic goals G. Describe why school is important in achieving academic goals	**The learner will:** • Verbalize one's own needs, likes, dislikes, strengths and challenges. • Choose activities, select materials and carry out tasks. • Persist in developing self-management skills related to school tasks (papers, projects, library books, etc.). • Express one's own opinion or ideas about a particular topic. • Work independently for increasingly longer time periods. • Describe why school is important in achieving academic goals. • Identify goals for academic success and classroom behavior. • Work with other adults in the school setting. • Initiate the sharing of work and accomplishments with peers and adults at the appropriate times.	**The teacher will:** • Provide a caring, nurturing and accepting environment for learners. • Create an emotional bond with learners. • Refer to the learner by name. • Make a personal connection with each learner. • Display the learner's work at eye level. • Provide, encourage and support opportunities for autonomy and self-direction (centers, job chart). • Provide, encourage and support opportunities for one on one conversation between the children and adults. • Provide, encourage and support opportunities for learners to want to try something new. • Provide encouragement and praise for learners' efforts. • Create an environment that fosters decisions-making, autonomy, self-direction and independence.

STANDARD PS 2: DEVELOP SELF-REGULATION

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify, express and manage feelings B. Tolerate adversity and disappointment C. Understand consequences of own behavior D. Follow rules and routines in classrooms and other settings E. Use materials with purpose, safety and respect F. Focus attention as required by the task G. Manage classroom transitions H. Follow adult directions I. Delay personal gratification until an appropriate time	**The learner will:** • Name a range of feelings (fear, affection, excitement, enthusiasm and disappointment). • Express in different ways how he/she feels (verbal, walk away, drawing, journaling, physical activities, etc.). • Separate feelings from actions. • Control impulsive behavior when frustrated, angry or excited. • Persist in and completing student initiated and/or teacher directed tasks. • Maintain composure when not selected (to answer question, be first in line, play game, etc.). • Use words instead of physical actions when upset. • Move from one task to another efficiently. • Respond to teacher requests or ask clarifying questions about the request. • Understand the logical consequences of one's actions.	**The teacher will:** • Model non-verbal and verbal interactions congruent with feelings. • Model genuine, appropriate emotional responses. • Encourage expression of feelings and support learner in managing those. • Respond to child's non-verbal and verbal cues. • Use logical consequences and guidance practices that support self-control. • Use class meetings to support the development of student self control. • Cue learners so that they can bring their work to an end prior to changing tasks. • Give specific directions with reasonable expectations. • Provide opportunities for the children to express their feelings through play, writing and/or other artistic representation. • Model and coach problem solving and negotiating conflicts with others.

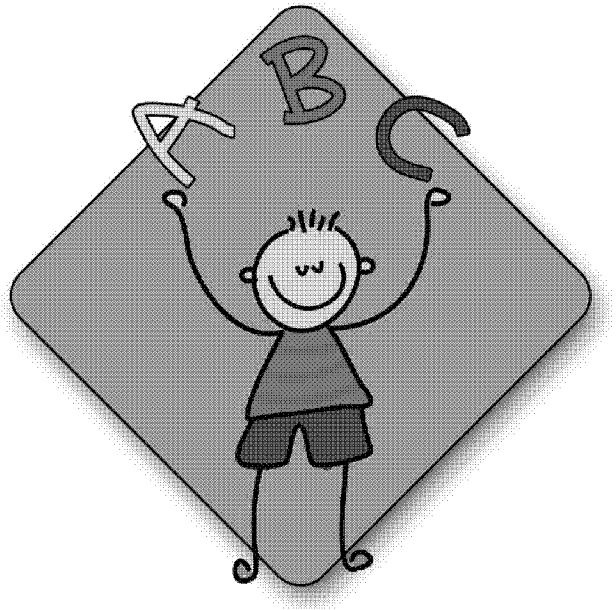
STANDARD PS 3: DEVELOP SOCIAL INTERACTIONS

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Is aware of self and one's own preferences B. Know and state independent thoughts and feelings C. Trust familiar adults and close peers D. Establish and maintain positive relationships with peers E. Respond with empathy by recognizing the feelings and perspectives of others F. Seek help from peers and adults when needed G. Respect the feelings, rights and belongings of others H. Cooperate in small and large group activities I. Identify problems and conflicts commonly experienced by peers J. Show increasing abilities to constructively resolve conflicts with peers K. Show nurturing behaviors through helpfulness to others L. Use listening skills to identify the feelings and perspectives of others	**The learner will:** • Be able to adapt to new adults in the school setting. • Ask for help when needed. • Seek out companionship with other children. • Begin to negotiate conflicts that arise. • Recognize that others may experience situations differently than self. • Re-establish a relationship with others after a conflict. • Use multiple strategies for getting what he/she needs. • Take turns and wait for a turn. • Share materials. • Be aware and sensitive to the wants and needs of others. • Give and receive compliments. • Use please and/or thank you appropriately.	**The teacher will:** • Create caring adult/child relationships. • Using eye contact and body proximity to give children support when needed. • Provide consistency and predictability in daily routines, environment. • Arrange the environment so there is space for learners to work together on activities. • Be available to help children solve conflicts rather than removing the child or the materials. • Provide opportunities and encourage group work or play. • Model nurturing behaviors by acts of kindness and helpfulness to other adults and children. • Provide opportunities to role play and practice new social skills.



STANDARD PS 4: DEVELOP CARE AND SELF-RELIANCE

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Demonstrate responsible behaviors in personal, school and community context B. Contribute to the well being of one's school and community C. Identify and perform roles that contribute to one's classroom D. Follow classroom routines independently E. Recognize situations that are unsafe and behave accordingly	**The learner will:** • Accept and manage assigned classroom jobs. • Stay within safe boundaries and follow school safety rules. • Check in with adults when he/she thinks something is not safe. • Keep track of personal belongings (ie. book-bag, coat, gloves).	**The teacher will:** • Organize the classroom and routines so that children can demonstrate more self reliant behaviors. • Provide a safe environment that encourages active learning.



READING, WRITING, SPEAKING & LISTENING

EARLY LEARNING STANDARDS FOR 1ST GRADE

The Reading, Writing, Speaking and Listening Standards describe what students should know and be able to do to be effective readers and writers of the English language at grades one and two. The standards provide the targets for instruction and student learning that are essential for success in all academic areas, not just language arts classrooms. Because of the unique nature of the language arts, teachers in all areas within a school will use the Reading, Writing, Speaking and Listening Standards. Although the standards are not a curriculum or a prescribed series of activities, school entities will use them to develop a local school curriculum that will meet local students' needs. The three column representation outlines each content standard and provides examples to meet the standard with instructional supporting practices.

Standard	Page
1.1 Learning to Read Independently	45
1.2 Reading Critically in all Content Areas	48
1.3 Reading, Analyzing and Interpreting Literature	49
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1.5 Quality of Writing	51
1.6 Speaking and Listening	53
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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

THIRD GRADE STANDARDS:

- Identify the purposes and types of text (literary, informational) before reading
- Preview the text formats (title, headings, chapters, and table of contents)
- Use knowledge of phonics, word analysis (root words, prefixes and suffixes), syllabication, picture and context clues to decode and understand new words during reading
- Read text using self-monitoring comprehension strategies (predict, revise predictions, reread, use headings, use organization of text, adjust reading rate)
- Acquire a reading vocabulary by identifying and correctly using words, (antonyms, synonyms, categories or words). Use a dictionary when appropriate
- Understand the meaning of and use correctly new vocabulary learned in various subject areas
- Demonstrate after reading understanding and interpretation of both fiction and nonfiction text
- Retell or summarize the major ideas, themes or procedures of the text
- Connect the new information or ideas in the text to know information
- Clarify ideas and understandings through rereading and discussion
- Make responsible assertions about the text by citing evidence from the text
- Demonstrate fluency and comprehension in reading
- Read familiar materials aloud with accuracy
- Self-correct mistakes
- Use appropriate rhythm, flow, meter, and pronunciation
- Read a variety of genres and types of text
- Demonstrate comprehension

CONTENT FOR 1ST GRADE

A. Demonstrate CONCEPT OF PRINT, how print is organized and used in reading and writing tasks

B. Demonstrate PHONEMIC AWARENESS, the ability to hear and manipulate sounds in spoken words

EXAMPLES

The learner will:

- Identify the purpose for reading and writing.
- Identify the parts of a book.
- Use correct book handling skills.
- Display directionality.
- Identify various forms of print.
- Understanding the relationship between print and the spoken word.
- Differentiate between a word and a letter.
- Distinguish initial, medial and final sounds in single-syllable words.
- Distinguish long- and short-vowel sounds in orally stated single-syllable words.
- Orally blend three or more spoken phonemes into recognizable words.
- Orally segment single syllable spoken words into their phonemes.
- Manipulate individual phonemes to create new words through addition, deletion and substitution.
- Identify the number of syllables in a given word.

SUPPORTIVE PRACTICE

The teacher will:

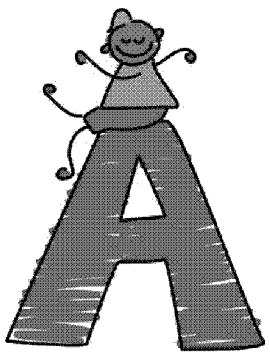
- Engage students in using print to convey meaning (e.g. writing notes, reading directions, signs, books).
- Point out parts of the book (e.g. title, table of contents, authors and illustrators, glossary and index).
- Ensure student mastery of how to hold a book, turn pages one at a time, reading left to right and top to bottom.
- Display and teach using a variety of forms of print (e.g. signs, newspapers, books, labels).
- Provide opportunity for students to write from dictation.
- Demonstrate that sounds are represented by letters, letters make up words, words make up sentences and sentences make up stories.
- Model aloud how to sequentially retell a story (e.g. beginning, middle, end).
- Provide a spoken single-syllable word and ask the learner to identify the initial, medial or final phoneme (sounds) (e.g. What is the beginning sound you hear in the word 'cat'?/c/).

CONTINUED...

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

CONTENT FOR 1ST GRADE

C. Demonstrate knowledge of the ALPHABETIC PRINCIPLE, the ability to associate sounds with letters and use these sounds to form words



EXAMPLES

The learner will:

- Generate the sounds of all the letters and letter patterns, including consonant blends and long- and short-vowel patterns and blend those sounds into recognizable words.
- Demonstrate letter-sound correspondence knowledge to decode unknown and pseudo-words.
- Produce speech sounds associated with all individual letter symbols and letter combinations for diagraphs, blends and *r* controlled vowel(s).
- Encode (spell) three- and four-letter (single-syllable) words with short vowels, final –e spellings, initial and final consonant blends and diagraph.
- Use decoding skills to accurately and fluently read and spell phonetically regular words.
- Decode words from common word families.
- Read common, irregular sight words accurately and fluently.
- Read compound words and contractions.
- Read inflectional forms (e.g., -s, -ed -ing) and root words (e.g. look, looked, looking).
- Reread and self-correct word recognition errors.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for learners to blend and segment phonemes (sounds) in spoken words (e.g. Tell me all the sounds you hear in the word 'cat' /c/ /a/ /t/ and I am going to say a word slowly /c/ /a/ /t/. What word? /cat/).
- Offer spoken word play games that focus on addition, deletion and substitution of sounds in words.
- Ensure mastery of skill acquisition using a phonemic awareness mastery assessment.
- Provide opportunities for the learner to clap out syllables in words and sentences.
- Offer direct, explicit and systematic (sequential) phonics instruction.
- Have strong understanding of linguistics and how it affects reading acquisition in students.
- Use a word wall for instruction and practice of new words.
- Place high frequency words on 3 x 5 cards for practice, review and word recognition games.
- Create word lists for word sorts.
- Provide several opportunities for both reading and writing of newly learned words.
- Utilize intervention strategies to accommodate students experiencing difficulty with letter discrimination skills that are commonly confused (e.g. [e, a, s, c, o]; [b, d, p, o, g, h]; [f, l, t, k, i, h]; [n, m, u, h, r]).
- Teach commonly confused letters far apart from one another (e.g. b, d, p, q).
- Use key words and pictures when introducing sound-spelling relationships.
- Use differentiated instruction to accommodate the students' educational needs.
- Offer multisensory activities to support and practice new skills.
- Provide ongoing progress monitoring to ensure mastery of taught skills.
- Offer decodable text to provide multiple opportunities for practice toward mastery and transfer of phonics skills to connected text.

CONTINUED...

READING, WRITING, SPEAKING AND LISTENING

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

CONTENT FOR 1ST GRADE

D. Demonstrate FLUENCY, the ability to read grade level text orally with accuracy, appropriate rate and expression

E. Demonstrate a rich listening and speaking VOCABULARY, the ability to understand (receptive) and use (expressive) words to acquire and convey meaning

EXAMPLES

The learner will:

- Apply letter-sound (orthographic patterns) knowledge to decode and encode phonetically regular words quickly and accurately in isolation and in context.
- Recognize high frequency and familiar words in isolation and in context.
- Adjust reading rate based on purpose, text difficulty, form and style.
- Recognize and self-correct errors.
- Read a variety of genres.
- Read grade level texts with appropriate rate and expression.
- Answer comprehension questions orally and in writing based on material read independently.
- Understand, learn and use new vocabulary from a variety of content areas.
- Develop vocabulary by listening to and discussing both familiar and conceptually challenging selections read aloud (e.g. Aesop's fables).
- Use context to understand word and sentence meanings.
- Relate vocabulary to prior knowledge.
- Classify conceptual categories of words (e.g. animals, colors, foods).

SUPPORTIVE PRACTICE

The teacher will:

- Model reading aloud with fluency.
- Provide oral support for readers by activities such as choral reading or paired reading.
- Offer plenty of practice opportunities including repeated readings.
- Encourage fluency through phrasing or chunking to aid in comprehension.
- Ask the student to read a passage on his or her grade level and then compare the words correct per minute (WCPM) score to the benchmark standard.
- Use think aloud to share how you, as a fluent reader, are navigating through a piece of text.
- Prompt students to respond to what they read both orally and in print, how it was read and if any improvements are needed to further build fluency.
- Offer decodable text to provide multiple opportunities for practice toward mastery and transfer of phonics skills to connected text.
- Take advantage of student listening and speaking competencies to enhance student vocabulary.
- Use trade books that are read aloud to children as a major source for identifying interesting words and developing conceptual understanding.
- Choose rich and robust vocabulary words that are within the intellectual grasp of the children.
- Use words that can be used in many contexts and in a variety of instructional activities.
- Assist students in connecting new vocabulary to prior knowledge.
- Explore similarities and differences in words, meanings and concepts.
- Introduce vocabulary from narrative and informational text.
- Interactively use a vocabulary word wall to teach, reinforce and encourage the use of new words in oral and written language.
- Directly teach increasingly sophisticated words with examples and non-examples.
- Offer multiple, repeated practice opportunities to use new and previously learned vocabulary.

STANDARD 1.2: READING CRITICALLY IN ALL CONTENT AREAS

THIRD GRADE STANDARDS:

- Read and understand essential content of informational texts and documents in all academic areas
- Differentiate fact from opinion within text
- Distinguish between essential and nonessential information within a text
- Make inferences from text when studying a topic (science, social studies) and draw conclusions based on text
- Analyze text organization and content to derive meaning from text using established criteria
- Use and understand a variety of media and evaluate the quality of material produced
- Use electronic media for research
- Identify techniques used in television and use the knowledge to distinguish between facts and misleading information
- Assess the quality of media projects (script, play, audiotape) that have been developed for a targeted audience
- Produce work in at least one literary genre that follows the conventions of the genre

CONTENT FOR 1ST GRADE

A. Identify, analyze and apply knowledge of the elements of a variety of informational texts to demonstrate an understanding of the information presented

B. Identify a variety of media to gain information (e.g., computer, tape recorder, television and recorded media)

EXAMPLES

The learner will:

- Identify the difference between facts and opinions.
- Identify essential information such as facts, main idea and supporting information from illustrations and text.
- Make predictions about what happens next in a story or process and justify.
- Identify the organizational features (e.g. charts, graphs, captions) of text and indicate connection to the written text.
- Apply comprehension strategies (e.g. graphic organizers, rereading, summarizing) to build understanding.
- Identify type of media to be used for a specific task.

SUPPORTIVE PRACTICE

The teacher will:

- Display examples of fact and opinion in text, identifying characteristics of each.
- Model the distinction between essential and non-essential information.
- Assist students in using prior knowledge to predict and justify what will happen next in a story or process.
- Draw connections between illustrated organization features (e.g. charts, graphs, captions) and the written text.
- Assist students in selecting age and ability-appropriate non-fiction materials to read to begin building a core base of knowledge.
- Model use of a few graphic organizers to build connections and understanding followed by guided practice until students are able to use them purposefully and independently.
- Expose students to a variety of media used to gain information (e.g. computer software, internet, books on tape, television programming, film).

STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE

THIRD GRADE STANDARDS:

- Read and understand works of literature
- Identify literary elements in stories describing characters, setting, and plot
- Identify literary devices in stories (rhyme, rhythm, personification)
- Identify the structures in poetry (pattern books, predictable books, nursery rhymes)
- Identify the structures in drama (dialogue, story enactment, acts, scenes)
- Read and respond to nonfiction and fiction including poetry and drama

CONTENT FOR 1ST GRADE

A. Identify, analyze and apply knowledge of the elements of a variety of fiction and literary texts to demonstrate an understanding of a literary selection

EXAMPLES

The learner will:

- Read and listen to a variety of genres of literature (e.g. poetry, plays, fables, legends, picture books) and participate in guided discussion.
- Distinguish the distinct characteristics and purposes of each genre.
- Retell the main events of a story including characters and setting as well as beginning, middle and end.
- Identify the main topic or essential message of a literary selection.
- Make predictions about what happens next in a story or process and justify.
- Identify the literary devices in rhyme, repetition, rhythm and patterns.
- Identify and complete predictable language patterns (e.g., pattern books, predictable books, nursery rhymes).
- Identify dialogue and story action in plays and stories.
- Connect the reading to self and the world and other literary pieces.
- Select fiction materials to listen to or read based on interest or recommendation.

SUPPORTIVE PRACTICE

The teacher will:

- Display examples a variety of fiction and literary texts (e.g. classroom library, leveled books).
- Read aloud and expose students to a variety of genre.
- Model the distinction between essential and non-essential information.
- Assist students in using prior knowledge to predict and justify what will happen next in a story.
- Lead students to draw connections between illustrations and the written text.
- Assist students in selecting age and ability-appropriate fiction materials to read.
- Model use of a few graphic organizers to build connections and understanding followed by guided practice until students are able to use them purposefully and independently.

READING, WRITING, SPEAKING AND LISTENING

STANDARD 1.4: TYPES OF WRITING

THIRD GRADE STANDARDS:

- Write narrative pieces (stories, poems and plays)
- Include detailed descriptions of people, places, things
- Write informational pieces (descriptions, letters, reports, and instructions) using illustrations when relevant
- Use relevant illustrations
- Include literary elements
- Write an opinion and support it with facts

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Narrative Develop and demonstrate the writing of narrative pieces that include a main idea based on read, imagined or personal events, characters and a sequence of events	• Develop an idea with a beginning, middle and end. • Sequence two or more events. • Include people, places and things in created writing. • Select appropriate illustrations to accompany story.	• Facilitate participation in writing simple stories, poems, rhymes or song lyrics. • Provide daily shared and interactive writing opportunities. • Read published stories to demonstrate use of story elements. • Model the use of a graphic organizer to plan a beginning, middle and end.
Informational Develop and demonstrate the writing of informational pieces that provides information related real-world tasks	• Write informational sentences (e.g., descriptions, definitions, simple instructions) using illustrations when relevant. • Write brief informational descriptions of a real object, person, place or event, using sensory details. • Differentiate between fact and opinion.	• Write in a variety of informational forms (e.g. thank you notes, short letters, rules, labels). • Provide daily shared and interactive writing opportunities. • Read published informational text to demonstrate use of topic and supporting details. • Model the use of a graphic organizer to develop topic and supporting details.
Persuasive Develop and demonstrate persuasive writing that is used for the purpose of influencing the reader	• Draw a picture and use simple text to tell a message (e.g. Say No to Drugs) and why it is important.	• Model and share examples of persuasion found in print and environment. • Engage students in shared and interactive writing opportunities.

READING, WRITING, SPEAKING AND LISTENING

STANDARD 1.5: QUALITY OF WRITING

THIRD GRADE STANDARDS:

- Write with a sharp, distinct focus identifying topic, task, and audience
- Write using well-developed content appropriate for the topic
- Gather and organize information
- Write a series of related sentences or paragraphs with one central idea
- Incorporate details relevant and appropriate to the topic
- Write with controlled and/or subtle organization
- Sustain a logical order
- Include a recognizable beginning, middle, and end
- Write with an awareness of the stylistic aspects of composition
- Use sentences of differing lengths and complexities
- Use descriptive words and action verbs
- Revise writing to improve detail and order by identifying missing information and determining whether ideas follow logically
- Edit writing using the conventions of language
- Spell common, frequently used words correctly
- Use capital letters correctly (first word in sentences, proper nouns, pronoun "I")
- Punctuate correctly (period, exclamation point, question mark, commas in a series)
- Use nouns, pronouns, verbs, adjectives, adverbs, and conjunctions properly
- Use complete sentences (simple, compound, declarative, interrogative, exclamatory, and imperative)
- Present and/or defend written work for publication when appropriate

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Progress through the stages of the writing process (e.g., prewriting, drafting, revising, editing and publishing)	• With assistance, write for different purposes and to a specific audience or person.	• Describing the process and its intended purpose and outcome. • Provide shared and interactive pre-writing opportunities. • Use focus, content, organization, style and conventions to direct instruction in the writing process. • Hold individual conferences with students to guide the writing process.
Prewriting Uses prewriting strategies to generate ideas and formulate a plan	• Generate ideas from multiple sources (e.g. brainstorming, webbing, drawing, group discussion, other activities). • Organize and select a topic for writing.	• Model pre-writing strategies (e.g. think-aloud, listing, graphic organizers).
Drafting Write clear and coherent sentences and paragraphs that develop a central idea	• Maintain a focus on a single idea while including supporting details. • Organize details into a logical sequence that has a beginning, middle and end. • Writes with a variety of well constructed sentences including descriptive words and action verbs. • Use complete, simple declarative, interrogative and exclamatory sentences. • Use descriptive words and verbs in context.	• Model writing that states a feeling or reaction. • Provide opportunities for learners to engage in shared, interactive and independent writing. • Demonstrate the transfer of information from prewriting to the drafting stage. • Offer direct instruction on various sentence types.

CONTINUED...

STANDARD 1.5: QUALITY OF WRITING continued

CONTENT FOR 1ST GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Revising Revise and refine the draft for clarity and effectiveness	• Revise writing to add or eliminate details and correct ideas so a logical order is present. • Create clarity by marking out repetitive details by using a caret and replacing general words with more specific words.	• Provide opportunities for students to engage in shared, interactive and independent revision of writing samples. • Offer cooperative learning opportunities for peers to discuss and improve their writing samples. • Demonstrate examples of marks used in revision and samples of more specific words for those that are general. • Use exemplar writing samples to demonstrate high levels of writing development.
Editing Edit and correct the draft for standard language conventions	• Spell common, frequently used words correctly. • Capitalize the first word of a sentence, names of people and the pronoun "I". • Use proper end punctuation (period, exclamation and question mark). • Use nouns (i.e.. singular and plural), pronouns (e.g. my/mine, his/her) and verbs in writing. • Correctly use common spelling patterns (e.g., onset and rimes, word families, CC, CCVC, CVCC and final -e words). • Use a checklist to ensure that they have properly edited their writing.	• Provide opportunities for students to engage in shared, interactive and independent editing. • Demonstrate use of an editing checklist. • Provide and demonstrate the use of various resources to check for spelling errors (e.g. word wall, picture dictionary, environmental print). • Offer direct, explicit instruction on conventions of print.
Publishing Write a final product for the intended audience	• Produce, illustrate and share a variety of compositions.	• Provide opportunities for students to share their published work with others. • Display published work.
Penmanship Engage in the writing process and write to clearly communicate ideas and experiences in legible print	• Write numbers and uppercase and lowercase letters using left to right sequencing. • Print legibly and space letters, words and sentences appropriately.	• Use a consistent method for demonstrating letter and number formation. • Model appropriate spacing between letters, words and sentences.

STANDARD 1.6: SPEAKING AND LISTENING

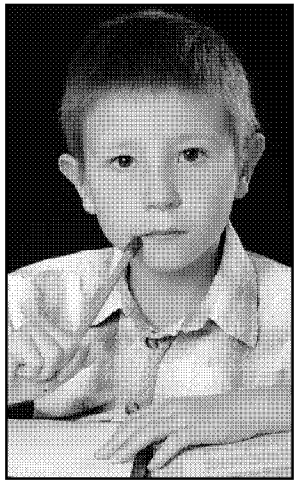
THIRD GRADE STANDARDS:

- Listen to others
- Ask questions as an aid to understanding
- Distinguish fact from opinion
- Listen to a selection of literature (fiction and/or nonfiction)
- Relate it to similar experiences
- Predict what will happen next
- Retell a story in chronological order
- Recognize character and tone
- Identify and define new words and concepts
- Speak using skills appropriate to formal speech situations
- Use appropriate volume
- Pronounce most words accurately
- Demonstrate an awareness of audience
- Contribute to discussions
- Ask relevant questions and respond with appropriate information or opinions to questions asked
- Listen to and acknowledge the contributions of others
- Display appropriate turn-taking behaviors
- Participate in small and large group discussions and presentations
- Participate in everyday conversations
- Present oral readings, short reports, and interviews
- Give simple directions, explanations, and reporting of an emergency
- Use media for learning purposes

CONTENT FOR 1ST GRADE

A. Apply listening and speaking strategies effectively

B. Use electronic media for learning purposes, such as generating a journal or story



EXAMPLES

The learner will:

- Listen to others when they are speaking and demonstrate an understanding of the message.
- Listen attentively and follow directions to perform a task (e.g., multi-step oral directions, solving problems and following rules).
- Ask questions to clarify information.
- Listen to a selection and connect similar experiences to real events.
- Make realistic predictions about the outcomes of simple events and recognize different outcomes are possible.
- Retell stories using basic story grammar and relating the sequence of story events by answering, who, what, when, where, why and how questions.
- Identify character and tone in spoken information.
- Listen in order to identify and use new words and concepts.
- Use correct vocabulary and word usage when speaking.
- Use appropriate volume while initiating answers and conversation.
- Pronounce single and multiple syllable words correctly.
- Use appropriate pace in sentences, rhymes, poetry and questions.
- Interpret expressions, gestures and body language cues from audience.
- Ask and answer relevant questions and share experiences within a group.
- Initiate and respond appropriately to conversations and discussions.

SUPPORTIVE PRACTICE

The teacher will:

- Model appropriate speaking and listening behaviors throughout the school day.
- Verbalize thought processes while listening.
- Provide opportunities for students to demonstrate appropriate public speaking.
- Encourage use of learned vocabulary.
- Demonstrate and instruct students in purposeful listening activities.
- Utilize various media for instruction.
- Model the use of computers and software applications as a means for accessing information.

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

THIRD GRADE STANDARDS:

- Select a topic for research
- Locate information using appropriate sources and strategies
- Locate resources for a particular task (newspapers, dictionary)

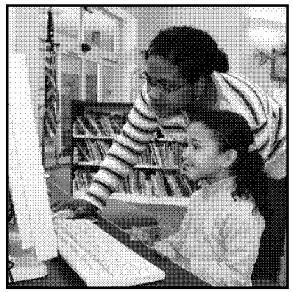
CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Distinguish commonly used words from other languages B. Identify variations in the dialogues of literary characters	**The learner will:** • Use common words from other languages (i.e. count to 10 in Spanish). • Utilize speech bubbles and quotations to differentiate between dialogue and text.	**The teacher will:** • Sing songs using words from other languages, connecting the English and other language term and meaning. • Model various 'accents,' modulations and character voices when reading aloud. • Offer examples of various dialogue presentations.

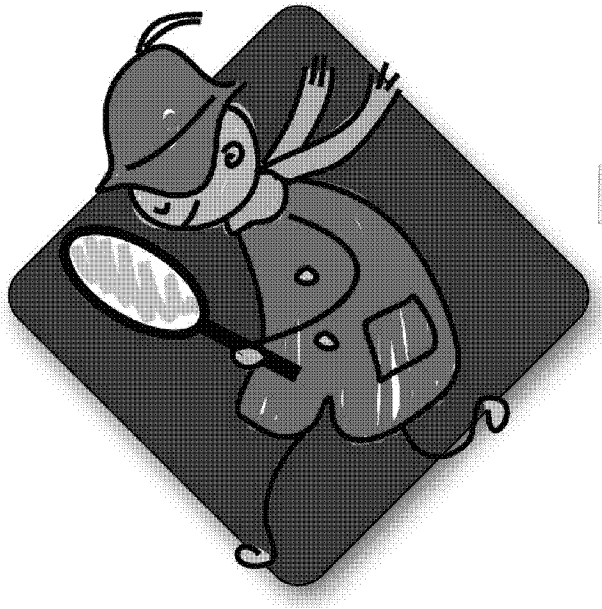
STANDARD 1.8: RESEARCH

THIRD GRADE STANDARDS:

- Select a topic for research
- Locate information using appropriate sources and strategies
- Organize and present the main ideas from research

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Use a systematic process for the collection, processing and presentation of information	**The learner will:** • Select a topic for research. • Differentiate between various sources of information (e.g., dictionaries, newspapers, magazines, electronic media). • Select sources for gathering information (e.g., dictionaries, encyclopedias, observation, electronic media). • Use picture clues, keywords, heading to locate information. • Organize key concepts using a graphic organizer. • Summarize main ideas orally from key facts and concepts. • Write a simple report with a title and at least three facts and supporting details using complete sentences.	**The teacher will:** • Demonstrate the use of the writing process to create a research paper. • Offer a collection of resources for students to use in collecting information.





SCIENCE AND TECHNOLOGY

First graders learn about scientific concepts through active investigation, observation and experimentation of the natural and human-made world. These experiences provide the foundation for abstract and scientific thought, leading to conscientious decision-making and improved problem-solving. Students who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support inquiry about the natural world, the scientific process, principles and technology.

SCIENCE

EARLY LEARNING STANDARDS FOR 1ST GRADE

ENVIRONMENT AND ECOLOGY

First graders learn about environment and ecology through first-hand experiences using the real world as their classroom. Through the integration of environment, science and social studies students understand the interdependence between themselves and their surroundings. Through the use of inquiry investigation, experimentation, place-based education students become environmentally-literate citizens.

The content embedded in this document for science and technology and environment and ecology should be addressed primarily at the introductory level to provide a foundation for proficiency at grades three and four. Each school district will need to determine where each standard area should be addressed in either first or second grade through a comprehensive curriculum alignment process at the district level.

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SCIENCE

STANDARD 3.1: UNIFYING THEMES

FOURTH GRADE STANDARDS:

- Know that natural and human-made objects are made up of parts
- Know models as useful simplifications of objects or processes
- Illustrate patterns that regularly occur and reoccur in nature
- Know that scale is an important attribute of natural and human made objects, events and phenomena
- Recognize change in natural and physical systems

CONTENT FOR 1ST GRADE

A. Know that natural and human-made objects are made up of parts
   - Identify and describe what parts make up a system
   - Identify systems that are natural and human-made

B. Know models as useful simplifications of objects or processes
   - Identify different types of models
   - Apply appropriate simple modeling tools and techniques

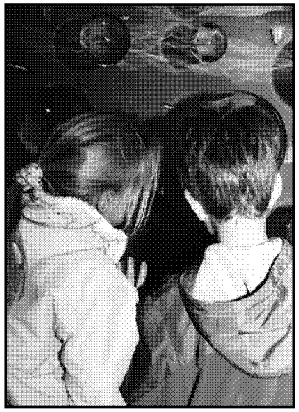
Resources:

- Project Wet, PA Department of Education, Teaching and Learning, Office of Environment and Ecology
- ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor
- Houghton Mifflin, Experience Science Series
- FOSS Modules (New Plants, Air, Measurement and Weather)
- Science Companion, Pearson Scott Foresman, Collecting and Examining Life
- Trade Books (national geographic, content areas, Centennial Press, Scholastic, Dawn Publications, etc.)
- Reading to Learn the Content, Office of Environment and Ecology, PA Department of Education
- Science, Technology, Environment and Ecology Classroom Connection Kit, PA Department of Education (STEEP)
- Project Learning Tree, Office of Environment and Ecology, PA Department of Education

EXAMPLES

The learner will:

- Explore with fraction blocks, puzzles, toy gear sets and other items made of parts.
- Take apart and reassemble simple toys and safe household items to identify the types and uses of the parts.
- Identify the different parts of a plant.
- Understand how a simple system works (e.g., water, agriculture, simple ecosystem, etc.).
- Identify differences in living and non-living systems.
- Sort objects and parts of objects as natural or human-made.
- Explore realistic models of common objects found in the natural world and human-made world (model cars, toys, visible human body, farm play kits, etc.).
- Understand the concept of a simple machine (levers, incline planes, pulley).
- Understand the design of a working model (e.g., bridge, Lincoln Logs, K'nex, wetland, terrarium, aquarium, simple ecosystems, etc.).



SUPPORTIVE PRACTICE

The teacher will:

- Use fraction blocks to explain the parts of the whole.
- Provide opportunities for students to see the relationships of the parts to the whole through the use of toys and common household items.
- Provide visual aids for students as well as actual models (e.g., seeds, plants, fruits, etc.) for identification of plant parts.
- Read fiction and non-fiction trade books as well as provide visuals for students understand of living and non-living systems.
- Provide field experiences or hands-on activities for real life understanding of these differences.
- Provide pictures and examples of natural and human-made objects for students to sort and categorize.
- Use visible human model to show internal body parts.
- Use Kenx, Lincoln logs or Lego parts to construct models of human-made objects.
- Use simple machines to demonstrate and provide simple experiments for students to do to show how simple machines work.
- Provide opportunities for students to design and build natural (wetlands, farms, rotting log) and human-made models.
- Provide hands-on opportunities for students to compare and contrast the similarities and differences in natural patterns.
- Point out more abstract patterns such as day and night and the seasons.
- Introduce the idea that nature occurs in cycles which is a repeating pattern that can be predicted.

CONTINUED...

SCIENCE

STANDARD 3.1: UNIFYING THEMES continued

CONTENT FOR 1ST GRADE

C. Illustrate patterns that regularly occur and reoccur in nature
   - Identify observable patterns that occur in nature
   - Use knowledge of natural patterns to make predictions

D. Know that scale is an important attribute of natural and human-made objects, events and phenomena

E. Recognize change in natural and physical systems
   - Examine and explain change through recording observations
   - Describe the change to objects caused by heat, cold or light

See Science and Technology 3.4

Resources:

- Field trips using the school grounds, the neighborhood, local nature centers or state parks, museums
- Classroom guest who could speak about their careers
- Classroom guest who are experts in the fields of science, technology and environment

EXAMPLES

The learner will:

- Identify natural patterns in leaves, inside shells, coats of animals, flowers, etc.
- Replicate natural patterns using basic classroom craft materials or natural materials found on the ground.
- Understand changes in weather in relationship to patterns and how to predict these changes through seasons.
- Identify patterns that are seen in nature that are used in human-made products (e.g., honeycomb, spirals, leaf patterns, etc.).
- Sequence objects from smallest to largest.
- Understand how rulers, tape measures and yardsticks all measure length.
- Sort common objects as small, medium, large and other descriptive measurements.
- Begin to use common units of standard measurement such as cup, quart, inch, foot, etc.

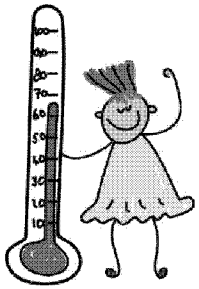
Through the five senses –

- Observe and record change in planted seeds over time.
- Observe changes in the outside temperature.
- Observe and record seasonal change.
- Observe and record change in a deciduous tree from the start of the school year to the end.
- Observe and record the phases of water by the change in ice as it melts, liquid after freezing, steam.
- Participate in simple cooking projects that build understanding of change caused by heating and cooling.
- Place common objects in direct sunlight to observe the change in temperature and color.

SUPPORTIVE PRACTICE

The teacher will:

- Provide objects to compare and contrast for various sizes.
- Provide opportunities for students to measure in the classroom and outside of the classroom various items and make classroom charts for discussion.
- Demonstrate how the use of common units of measurement (different scales – inch, cm, etc.) can represent the length of the same object.
- Explain that changes occur over a period of time.
- Have students record their observations of change over time (e.g., dissolve sugar and water and leave in sun to re-crystallize).
- Have students participate in simple experiments to understand the concepts of heating and melting, etc.
- Demonstrate how temperature affects the preparation of food (e.g., making of fudge).



SCIENCE

STANDARD 3.2: INQUIRY AND DESIGN

FOURTH GRADE STANDARDS:

- Identify and use the nature of scientific and technological knowledge
- Describe objects in the world using the five senses
- Recognize and use the elements of scientific inquiry to solve problems
- Recognize and use the technological design process to solve problems

CONTENT FOR 1ST GRADE

A. Identify and use the nature of scientific and technological knowledge
   - Distinguish between a scientific fact and a belief

B. Describe objects in the world using the five senses
   - Recognize observational descriptors from each of the five senses
   - Use observation to develop a descriptive vocabulary

C. Recognize and use the elements of scientific inquiry to solve problems
   - Generate questions about objects, organisms and/or events that can be answered through investigations
   - Conduct an experiment
   - State a conclusion that is consistent with information

D. Recognize and use the technological design process to solve problems
   - Recognize and explain basic problems
   - Identifying possible solutions and their course of action
   - Try a solution
   - Describing the solution, identifying its impacts and modifying if necessary
   - Showing the steps taken and results

EXAMPLES

The learner will:

- Respond to "what if" questions.
- Engage in teacher-created opportunities to inquire about natural occurrences.
- Distinguish between real and make believe presented in a variety of literature experiences.
- Respond to teacher examples of either a scientific fact or opinion.
- Identify common objects using the five senses.
- Understand qualities of the senses (sight, sound, smell, touch, taste) sight – brightness/color, sound – loudness and pitch, smell – burning/rotting, touch – smooth/rough and taste – sweet/sour).
- Use descriptive sensory vocabulary to identify a variety of natural and human-made objects.
- Observe and participate in simple experiments and investigations.
- Ask questions about observations.
- Predict what might happen next.
- Record results of experiments with other students.
- Ask "what if" questions.
- Record observations, explanations and ideas through multiple forms of representation including drawing, writing, movement and graphs.
- Listen to others' perspectives and opinions.
- Use observations from experiments and investigations to form a conclusion.
- Identify simple problems to solve.
- Suggest possible solutions to everyday problems.
- Raise questions about the possible solutions to determine which may be the best course of actions.
- Test possible solutions.
- Record the steps taken to solve a problem using multiple modes including writing, drawing, movement and discussion.
- Share ideas, problems, solutions and steps taken with others.

SUPPORTIVE PRACTICE

The teacher will:

- Have students engage, explore, explain, extend the learning and evaluate the learning.
- Differentiate for students through examples what is the differences between real and make believe and scientific facts and opinion.
- Provide students with a variety of reading texts on real vs. make believe and have students identify the differences between the real and make believe through reader's theatre.
- Provide multiple experiences for students to be exposed to various stimuli designed to excite their five senses.
- Provide opportunities for student journals to be developed using descriptive sensory vocabulary. (Graphic organizers can be used.)
- Have students describe their least favorite and favorite sensory experience.
- Connect students with the activities being done by using the inquiry process and skills.
- Provide opportunities for students to participate in simple experiments and investigations both in the classroom and out of the classroom.
- Encourage students to ask questions about their observations and predict what might happen (future).
- Model examples of observation skills, journaling and record keeping.
- Facilitate group discussions based on student observations, journals, graphs, writings, etc.
- Model the technological design process first for students.
- Identify simple problems for students to solve. (e.g., make a tower out of news paper, make a strong bridge out of paper, etc.)
- Facilitate group work activities for identified simple problems.

SCIENCE

STANDARD 3.3: BIOLOGICAL SCIENCES

FOURTH GRADE STANDARDS:

- Know the similarities and differences of living things
- Know that living things are made up of parts that have specific functions
- Know that characteristics are inherited and, thus, offspring closely resemble their parents
- Identify changes in living things over time

CONTENT FOR 1ST GRADE

A. Know the similarities and differences of living things
   - Identify life processes of living things
   - Know that some organisms have similar external characteristics and that similarities and differences are related to environmental habitat
   - Describe basic needs of plants and animals

B. Know that living things are made up of parts that have specific functions
   - Know that different parts of a living thing work together to make the organism function

C. Know that characteristics are inherited and, thus, offspring closely resemble their parents
   - Identify physical characteristics that appear in both parents and offspring

D. Identify changes in living things over time (See Environment and Ecology Standard 4.6.C)

See Environment and Ecology Standard 4.6

Resources:

- Pennsylvania Song Birds, PA Game Commission
- Pennsylvania Project Wild, PA Game Commission

EXAMPLES

The learner will:

- Explain that all living things require food, water, shelter and space arranged for survival. (habitat)
- Sort pictures of plants or animals into categories of habitat requirements (food, water, shelter, space).
- Identify common body type characteristics for the animal kingdom (vertebrates – animals with a backbone and invertebrates – animals without a backbone).
- Identify differences in body type between each category.
- Be able to identify the parts of an insect and the parts of a plant.
- Recognize how the different parts of an animal are used for survival.
- Recognize how an animal or plant adapts to their surroundings for survival.
- Observe the different parts of a plant including the roots, stem, leaves and flowers. Make a list that gives the possible functions of each part.
- Compare themselves to their parents. Comparisons should include size, shape and color (hair color, eye color, skin pigmentation, dimples, gender).
- Compare characteristics of animals (size, coloration, gills, feathers, beaks, etc.).
- Compare fossils to living organisms noting similarities and differences.
- Create a model of a timeline and place artifacts throughout the model to simulate what might be found with change over time.

SUPPORTIVE PRACTICE

The teacher will:

- Provide fiction and non-fiction books that depict different habitats and the animals that live there.
- Provide non-fiction books for students to read about different animals (both vertebrates and invertebrates).
- Provide media for students to collect pictures of plants and animals and do murals separating into different habitats.
- Provide hands-on opportunities for students to design an animal using body types and characteristics necessary for survival and predict their habitat.
- Provide diagrams or models of parts of an insect or plants and help students to identify the living organism.
- Use a variety of Pennsylvania species to help students recognize their similarities and differences.
- Using the out-of-doors to demonstrate to students how adaptation helps organisms to survive (e.g., coloration, beaks, gills, wings, etc.).
- Provide fiction and non-fiction books on Pennsylvania animals and plants for student readings, drawing or writings.
- Help students classify shared characteristics between themselves and their parents and discuss the possible reasons for those similarities and differences.
- Give students opportunities to identify similar characteristics among a variety of Pennsylvania animals.
- Provide models of various fossils and allow students to examine their similarities and differences.
- Take students on field trips to local museums where fossils could be viewed.
- Take students on local digs for students to get a first hand opportunity to find fossils.
- Have students create their own archeological model with a clear plastic container filled with play dough representing different years and common items buried in the layers.

SCIENCE

STANDARD 3.4: PHYSICAL SCIENCE, CHEMISTRY AND PHYSICS

FOURTH GRADE STANDARDS:

- Recognize basic concepts about the structure and properties of matter
- Explore basic energy types and sources
- Explore and describe different types of force and motion
- Describe the composition and structure of the universe and the earth's place in it

CONTENT FOR 1ST GRADE

A. Recognize basic concepts about the structure and properties of matter
   - Describe properties of matter
   - Know that combining two or more substances can make new materials with different properties
   - Know different material characteristics

B. Know basic energy types and sources
   - Identify energy forms and examples

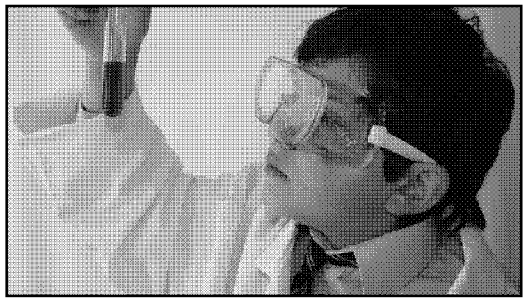
C. Observe and describe different types of force and motion
   - Recognize forces that attract and repel other objects and demonstrate them
   - Describe various types of motions

EXAMPLES

The learner will:

- Understand that all matter has physical properties that can be observed by the five senses.
- Identify the three states of matter (solid, liquid, gas).
- Do simple activities to demonstrate heating, melting, cooling, freezing, mixing, separating.
- Observe various combinations of substances (e.g., ice in water, oil in water, salt in water and baking soda in white vinegar).
- Do experiments to learn how mixtures form using multiple modes including writing, drawing and movement.
- Do simple experiments to understand that air is a mixture of gases and that these gases are a material that spreads out to fill the space it is in (e.g., air bubbles, paper airplanes, spirals, balloons; demonstrate using a burning candle in inverted jar with water, etc.).
- Identify basic examples of different types and sources of energy (mechanical, electrical, magnet).
- Create an electrical circuit.
- Explain how the circuit works.
- Observe the interaction of magnets.
- Describe the motion as push or pull.

Look at 3.1 Unifying Themes for more ideas.



SUPPORTIVE PRACTICE

The teacher will:

- Explain to students that matter is the "stuff that everything is made from."
- Involve students in various hands-on experiments using the five senses asking students: How does it smell? How does it look? How does it taste? How does it feel? How does it sound?
- Provide demonstrations that show that all matter is made of particles and that the closer together the particles are the more dense the matter (floating and sinking).
- Demonstrate turning a liquid to a solid and a solid to a liquid.
- Demonstrate how a mixture is formed (e.g., sand, mud, salad dressing, etc.).
- Work with students to separate a mixture through chromatography and then through the process of evaporation.
- Explain that sometimes a noticeable change is observed when mixing substances. This notable change is a reaction in the mixture.
- Demonstrate and then involve students in simple experiments to show how air takes up space, how air expands or becomes less dense, air pressure, etc.
- Provide students with activities that demonstrate types and sources of energy (magnets, batteries, wires, flash light bulbs, holders and paperclips) and explain how they provide energy.
- Demonstrate with a magnet and/or electricity that force leads to motion.
- Have students design and build a push pull toy.

Look at 3.1 Unifying Themes for more ideas.

SCIENCE

STANDARD 3.5: EARTH SCIENCES

FOURTH GRADE STANDARDS:

- Know basic landforms and earth history
- Know types and uses of earth material
- Know basic weather elements
- Recognize the earth's different water resources

CONTENT FOR 1ST GRADE

A. Know basic landforms and earth history
   - Identify various earth structures through the use of models
   - Identify the composition of soil as weathered rock and decomposed organic remains

See the Environment and Ecology Standard 4.1

B. Know types and uses of earth materials
   - Identify uses of various earth materials (e.g., buildings, highways, fuels, growing plants).

See the Environment and Ecology Standard 4.2

C. Know basic weather elements
   - Identify cloud types
   - Explain how the different seasons affect plants, animals, food availability and daily human life

D. Recognize the earth's different water resources
   - Identify and describe types of fresh and salt-water bodies
   - Identify examples of water in the form of solid, liquid and gas on or near the surface of the earth
   - Explain and illustrate evaporation and condensation

Resources:

- Project Wet, PA Department of Education, Office of Environment and Ecology
- Project Wonders of Wetlands, PA Department of Education, Office of Environment and Ecology
- FOSS (Sand, Stone and Pebbles)
- Food, Land and People, PA Department of Education, Office of Environment and Ecology
- Bottle Biology,.....
- ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor

EXAMPLES

The learner will:

- Observe that water flows downhill.
- Identify local streams, river and lakes.
- Identify oceans and mountains on a map or globe.
- Understand different landforms using models such as watersheds, wetlands, volcanoes, mountains and valleys.
- Understand soil is made up of both organic and inorganic matter.
- Understand that several kinds of soil compose the layers of the Earth's surface.
- Understand what natural resources (renewable and nonrenewable) are and how they can be used.
- Identify and categorize the different uses of earths' natural resources.
- Understand how resources make a difference in our daily lives.
- Through the use of drawings describe one products journey from start to finish.
- Understand the different shapes and appearances of cloud types.
- Understand how different seasons have various temperature ranges.
- Observe through the different seasons, the affects on plants and animals.
- Provide written and oral reports, murals, graphic organizers on the different PA animals and how they adapt to seasonal changes.
- Identify and describe the differences between oceans, rivers, lakes, wetlands and streams through creating pictures, stories and models.
- Participate in hands-on activities to see how water goes through phase change (evaporation, condensation, freezing and melting).

SUPPORTIVE PRACTICE

The teacher will:

- Use models and hands-on activities for group work to create watersheds including local streams, rivers and lakes.
- Help students locate oceans and mountains on either a map or globe.
- Compare the different kinds of soil that compose the Earth's surface.
- Provide small containers for students to make compost and have them observe what happens over a small period of time.
- Provide various kinds of soil samples and using magnifying glasses and small tools have students sort and classify what they find.
- Provide graphics and media on what is a renewable or nonrenewable resource.
- Provide Venn diagrams or comparable graphic organizers to tie multiple resources together.
- Provide examples of how everyday objects are made from the Earth's materials.
- Provide opportunities for students to work in groups to create their own story board of a product from start to finish.
- Explain and show visuals of the four basic clouds types (cumulus, stratus, cirrus and nimbus).
- Explain that all clouds are made of water vapor (tie to water cycle).
- Have students keep a daily record of temperatures throughout the school year.
- Have students use their school site to observe through journals the changes in seasons.
- Provide non-fiction trade books on animals and their adaptations during the different seasonal changes.
- Provide multiple opportunities for students to do reports (written or oral) on different PA animals' adaptations during seasonal changes.
- Read non-fiction stories relating to and identifying what is an ocean, river, etc. and what lives in each.
- Provide materials necessary for students to visually depict the differences between oceans, rivers, lakes, wetlands and streams.

SCIENCE

STANDARD 3.6: TECHNOLOGY EDUCATION

FOURTH GRADE STANDARDS:

- Know that biotechnologies relate to propagating, growing, maintaining, adapting, treating and converting
- Know that information technologies involve encoding, transmitting, receiving, storing, retrieving, and decoding
- Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design

CONTENT FOR 1ST GRADE

A. Know that information technologies involve encoding, transmitting, receiving, storing, retrieving and decoding
   - Identify electronic communication methods that exist in the community
   - Demonstrate the ability to communicate an idea by applying basic sketching and drawing techniques

B. Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design
   - Identify and group a variety of construction tasks
   - Know skills used in construction
   - Identify examples of manufactured goods present in the home and school
   - Identify basic resources needed to produce a manufactured item

Resources:

- International Technology Education Association -CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor
- International Technology Education Association – Technology and Children
- Children's Engineer CD, VA Department of Engineering

EXAMPLES

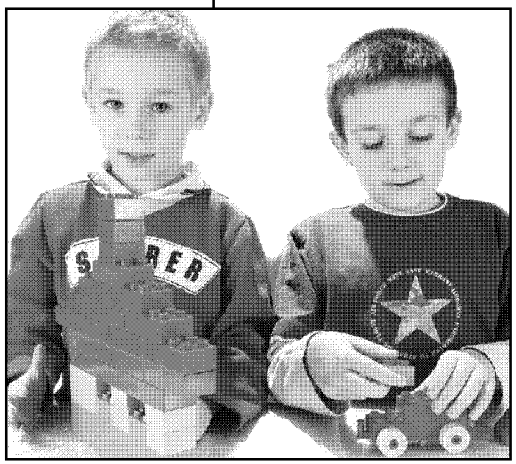
The learner will:

- Identify various forms of electronic communication that they have used or have seen used.
- Demonstrate by writing, drawing, movement and graphs how electronic communications has impacted their lives.
- Sketch or draw a simple object such as a Lego block or simple geometric block shapes (e.g., as a plastic or wooden pyramids, triangles, cylinders, squares, rectangles).
- Identify different types of structures (e.g., houses, factories, shopping centers, sheds, schools, etc.) through visuals or media presentations.
- Identify and list what various jobs are needed to construct a school building.
- Identify by drawing products of technology that can be found in the classroom.
- Label the source of the materials found in the classroom drawing for each product of technology.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate the proper use of various forms of electronic communication (e.g., telephone, computer, Morse code, cellular phone, camera, web-cam, email).
- Provide students with various simple objects to sketch or draw.
- Provide the students with visual aids that depict various types of buildings.
- Assign different career roles to teams of students and have them role play the job (e.g., plumbers, electricians, carpenters, masons, roofer, etc.).
- Guide students on a tour of the classroom pointing out the products of technology and what raw materials were needed for their production.



SCIENCE

STANDARD 3.7: TECHNOLOGICAL DEVICES

FOURTH GRADE STANDARDS:

- Explore the use of basic tools, simple materials and techniques to safely solve problems
- Select appropriate instruments to study materials
- Identify basic computer operations and concepts
- Use basic computer software
- Identify basic computer communications systems

CONTENT FOR 1ST GRADE

A. Explore the use of basic tools, simple materials and techniques to safely solve problems
   - Group tools and machines by their function
   - Select and safely apply appropriate tools and materials to solve simple problems

B. Select appropriate instruments to study materials
   - Develop simple skills to measure, record, cut and fasten
   - Explain appropriate instrument selection for specific tasks

C. Identify basic computer operations and concepts

D. Use basic computer software

E. Identify basic computer communications systems

EXAMPLES

The learner will:

- Understand that tools help humans do work more efficiently.
- Work with a selection of tools and group them by their function (e.g., drawing, cutting, measuring, fastening, magnifying, etc.).
- Understand that tools have specific uses to solve simple problems.
- Work in small groups with an assigned project and identify and safely use the appropriate tools.
- Recognize that a computer is made up of parts that perform different operations (e.g., input, processor and output).
- Draw and identify the different parts of the computer.
- Work with the computer where educationally appropriate.
- Use educational software and be able to manipulate the keyboard or mouse to perform the requested functions.

SUPPORTIVE PRACTICE

The teacher will:

- Provide and demonstrate an assortment of basic tools for the students.
- Assign a selection of tools and have students group them by function.
- Assign each group a project in which the students will have to use the appropriate tool safely.
- Demonstrate the appropriate function of each part of the computer.
- Provide educational drills and/or software to have students become familiar with the functions of the computer.
- Provide a variety of educational software and directed tasks for students to perform on the computer.

STANDARD 3.8: TECHNOLOGY AND HUMAN ENDEAVORS

FOURTH GRADE STANDARDS:

- Know that people select, create and use science and technology and that they are limited by social and physical restraints
- Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life
- Know the pros and cons of possible solutions to scientific and technological problems in society

CONTENT FOR 1ST GRADE

A. Know that people select, create and use science and technology and that they are limited by social and physical restraints
   - Identify interrelationships among technology, people and their world
   - Apply the technological design process to solve a simple problem (See 3.2.D)

B. Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life
   - Identify and distinguish between human needs and wants

EXAMPLES

The learner will:

- Understand the difference between needs and wants in relationship to technology.
- Identify a societal need and engage in the design process to solve the problem.
- Develop an understanding of the role of society in the development and use of technology by having them identify how they get their food, water and shelter.

SUPPORTIVE PRACTICE

The teacher will:

- Prepare a timeline showing the development of different technologies throughout history.
- Identify different society problems and have students engage in solving the problems through the design process.
- Read the Lorax and have the students distinguish between wants and needs.
- Have students work in small groups to identify and classify various technologies that meet human needs for survival.

CONTINUED...

SCIENCE

STANDARD 3.8: TECHNOLOGY AND HUMAN ENDEAVORS continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
C. Know the pros and cons of possible solutions to scientific and technological problems in society **Resources:** • ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor • Food, Land and People, PA Department of Education, Office of Environment and Ecology • The Lorax Book or video by Dr. Seuss	**The learner will:** • List the positive and negative aspects of a product of technology that they use in their daily lives.	**The teacher will:** • Provide examples (visual or models) of technological products that students use in their daily lives and have them create a list of good and bad effects on them or their families.

STANDARD 4.1: WATERSHEDS AND WETLANDS

FOURTH GRADE STANDARDS:
- Identify various types of water environments
- Explain the differences between moving and still water

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE

A. Identify various types of water environments
  • Identify the *lotic* system (e.g., creeks, rivers, streams)
  • Identify the *lentic* system (e.g., ponds, lakes, oceans)
B. Explain differences between moving and still water
  • Identify types of precipitation
  • Explain why some water moves and others do not
 	
Resources:
• Office of Environment and Ecology Website (www.pa3e.ws)
• Project WET (OE&E)
• Project Wonders of Wetlands (OE&E)
• Leaping through Wetlands
• Non-fiction trade Books on ponds, rivers, lakes, streams, oceans, fish, insects, reptile and amphibians, etc.
• Commercial educational kits
• Local and state parks and environmental centers
• Project Wild Aquatic (PA Fish and Boat Commission)
• Project Reptile and Amphibians (PA Fish and Boat Commission)
• Wetlands by Pamela Hickman
	The learner will:
	• Identify a creek, river and stream through pictures and books.
	• Identify a pond, lake and ocean through pictures and books.
	• Explain why water moves or does not move.
	• Participate in outdoor experiences looking at moving and still waters.
	• Participate in experiments that demonstrate types of precipitation (snow, rain, hail).
	• Understand water as a habitat.
	• Be able to identify the differences between a fish, insect and amphibian through either visuals or models of each.
	• Understand the life cycle of living things and be able to put them into sequence.
	• Observe life cycles either in the classroom, on the school grounds or a field experience.
	• Be able to identify easily recognizable plants through pictures, books or field experiences.
		The teacher will:
		• Provide pictures of both still and moving bodies and have the student's compare and contrast.
		• Read non-fiction books that clearly illustrate different water systems.
		• Provide outdoor experiences on school grounds or field trips to recognize the different types of water systems.
		• Provide opportunities for hands-on experiments to illustrate different types of precipitation.
		• Provide opportunities for the students to observe water in the real world and note the differences (snow, rain, sleet).
		• Use non-fiction books to identify fish, insects and amphibians and their habitat.
		• Explain why water is necessary for life.
		• List organisms that have aquatic stages of metamorphosis and describe those stages.
		• Describe the life cycle of organisms that depend upon water.
		• Provide hands-on opportunities in the classroom, on the school grounds or on a field experiences.

CONTINUED...

SCIENCE

STANDARD 4.1: WATERSHEDS AND WETLANDS continued

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE

C. Identify living things found in water environments
  • Identify fish, insects and amphibians that are found in fresh water
  • Identify plants found in fresh water
D. Identify a *wetland* and the plants and animals found there
  • Identify different kinds of wetlands
  • Identify plants and animals found in wetlands
  • Explain wetlands as habitats for plants and animals
 	
Resources:
• Watersheds A Practical Handbook for Healthy Water by Clive Dobson and Gregor Gilpin Beck
• Leapfrogging through Wetlands by Margaret Anderson, Nancy Field and Karen Stephenson
• The Web at Dragonfly Pond by Brian "Fox" Ellis
	The learner will:
	• Be able to identify a swamp, marsh and pond through pictures books or field experiences.
	• Recognize through visuals or field experiences animals that use wetlands as habitat.
	• Use a model of a wetland and how it provides for living things.
	• Be able to identify common types of plants found in wetlands (reeds, cattails, skunk cabbage, etc.) through pictures or field experiences.
		The teacher will:
		• Provide opportunities for the learner to recognize various wetlands like a swamp, marsh and pond through pictures, books and/or field experiences.
		• Help learners understand what a wetland is and how important it is for living systems.
		• Help the learner use a model of a wetland and understand how it provides food, water, shelter and space for animals.
		• Provide pictures or field experiences to help the learner recognize common types of wetland plants.

STANDARD 4.2: RENEWABLE AND NONRENEWABLE RESOURCES

FOURTH GRADE STANDARDS:
- Identify needs of people (basic)
- Identify products derived from natural resources
- Know that some natural resources have limited life spans

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE

A. Identify needs of people
  • Identify plants, animals and water as natural resources
  • Identify how the environment provides for the needs of people
B. Identify products derived from *natural resources*
  • Identify products made from trees
C. Know that some natural resources have limited life spans
  • Identify renewable and nonrenewable resources used in the local community
  • Identify various means of conserving natural resources
	The learner will:
	• Understand what a natural resource is by using books and visuals.
	• Identify plant parts (roots, stems, leaves). Look at seeds, blossoms, fruits, etc. and plants that make food. Learners can use models and pictures.
	• Plant different seeds and record growth patterns based on the needs of the plant and the variables that affect its growth.
	• Be able to identify food and water as natural resources by class discussion on what is needed for survival (water needs, food products, clothes from natural resources).
	• The learner will generate a list of the raw materials used for housing, clothing, transporting, heating, cooking, etc. and put them into renewable or nonrenewable resources.
		The teacher will:
		• Help learners understand the basic needs of food, water, shelter and space.
		• Read non-fiction stories about natural resources.
		• Use pictures of different kinds of natural resources (plants, animals, minerals, nutrients, water, etc.) supplied by the earth and have discussion about each.
		• Use models and scientific equipment (magnifying glasses/ boxes, measuring sticks) to help learners understand plant parts and growth.
		• Take the class on a field trip to a farm, tree plantation, orchard or use the neighborhood or school yard.

CONTINUED...

SCIENCE

STANDARD 4.2: RENEWABLE AND NONRENEWABLE RESOURCES continued

CONTENT FOR 1ST GRADE

D. Identify by-products and their use of natural resources
   - Identify those items that can be *recycled* and those that cannot
   - Identify use of reusable products

See Standard 3.4 also

Resources:
- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree (OE&E)
- Conserving for the Future (OE&E)
- Foss Kit – Trees, Animals Two by Two
- The Budding Botanist, Aims Education Foundation
- Tree House, Lawrence Hall of Science
- Non-fiction Trade Books
- Project Wild (PA Game Commission)
- Project Food, Land and People (OE&E)
- Trade Books
- Recycling and You Video (OE&E)
- US Department of Environmental Protection
- PA Department of Environmental Protection Website (www.dep.state.pa.us)
- Recycling and Your, OE&E
- Energy and You, Project Learning Tree (OE&E)
- CDs from Billy B on photosynthesis, air, energy, soil, water
- The Budding Botanist Investigations with Plants, AIMS Activities
- www.MII.org
- 4-H or Extension Programs

EXAMPLES

The learner will:
- Be able to identify different types of shelter (looking at why different habitats are important for survival).
- Bring in products that are made from trees (paper, toothpicks, rulers, pencils, cards, wrapping paper, coffee filters, lumber, 1x2 or 2x4 lumber, the grain on wooden blocks, etc.) and explain or make a mural of how they are made.
- Bring in from home items they use in their everyday lives and sort what is renewable and what is nonrenewable.
- Create murals or other visuals to illustrate how resources are used in daily routines.
- Read about water, air, rocks, minerals, trees, soil, animals, etc and how they are classified as renewable or nonrenewable.
- Develop a list of ways to conserve resources at both home and school.
- Distinguish between what is recyclable and what is not recyclable and why.
- Look at and sort different everyday items and decide what can be recycled or reused and what cannot be.
- Participate in a classroom-recycling program.
- Read books on the subject.

SUPPORTIVE PRACTICE

The teacher will:
- Help learners develop murals depicting what is needed for survival and where it comes from.
- Hang pictures of all different types of products made from trees around the classroom and have students explain how they are made.
- Use both products made from trees and products made from other materials and have students categorize them into those made from trees and those not made from trees.
- Create a chart of the resources they use in their daily lives distinguishing between renewable and nonrenewable resources.
- Invite local resource people to talk to the students about how their jobs impact local community resources.
- Describe ways of conserving resources they use (e.g., food, water, electricity).
- Read books that deal with different things that come from nature.
- Use CDs to illustrate conservation of resources (e.g., water, energy, soil).
- Use posters and/or charts that show recycling products.
- Provide an assortment of items that the students is familiar with and have them sort which are recyclable, reusable and non-recyclable.
- Set up a recycling program of paper in the classroom.

SCIENCE

STANDARD 4.3: ENVIRONMENTAL HEALTH

FOURTH GRADE STANDARDS:
- Know that plants, animals, and humans are dependent on air and water
- Identify how human actions affect environmental health

CONTENT FOR 1ST GRADE

A. Know that plants, animals and humans are dependent on air and water
   - Know that all living things need air and water to survive
   - Describe potentially dangerous pest controls used in the home
   - Identify actions that can prevent or reduce waste pollution

B. Identify how human actions affect environmental health
   - Identify litter and its effect on the environment

C. Understand that the elements of natural systems are interdependent
   - Identify some of the organisms that live together in an ecosystem

Resources:
- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree, (OE&E)
- Project WET (OE&E)
- Reading to Learn the Content through the Environment and Ecology Standards (OE&E)
- Pest Patrol, Penn State University and OE&E

EXAMPLES

The learner will:
- Understand how important air and water are to every living organism (i.e., humans, animals and plants).
- Observe plant growth either in the classroom or on the school grounds.
- Identify simple pest controls found in the homes or in the school (e.g., bug spray, flea collars, mouse traps, fly swatters).
- Distinguish between pest controls that are good for the environment and those that are not.
- Understand what litter is and why it harms the environment.
- Discuss what should be done with trash.
- Understand their role in not littering and picking up litter when they see it (caution should be taken to explain about toxic or hazards materials).
- Observe micro habitats (trees, under a rock, flower bed, small patch of ground) and list the plants and animals and their needs.

SUPPORTIVE PRACTICE

The teacher will:
- Introduce the word "habitat" and have students read books or use manipulative to classify and sort what is living and what is not.
- Provide plants in the classroom and have students observe their growth based on the amounts of air and water each receive.
- Use the school grounds or local community for class observations of both plants and animals.
- Use the Mr. Yuk program to reinforce dangerous chemicals.
- Arrange for the local county recycling coordinator or the school district maintenance supervisor to visit the classroom room and talk about local and district attempts to keep trash disposed of properly.
- Read related books.
- Read books on different habitats, what lives there and their needs.
- Take a walk and observe all the plant and animal life.

SCIENCE

STANDARD 4.4: AGRICULTURE AND SOCIETY

FOURTH GRADE STANDARDS:

- Know the importance of agriculture to humans
- Identify the role of the sciences in Pennsylvania agriculture

CONTENT FOR 1ST GRADE

A. Know the importance of agriculture to humans
   - Identify people's basic needs
   - Know how people depend on agriculture

B. Identify the role of the sciences in Pennsylvania agriculture
   - Identify common animals found on Pennsylvania farms
   - Identify common plants found on Pennsylvania farms
   - Identify the parts of important agricultural related plants (i.e., corn, soybeans, barley)
   - Identify a fiber product from Pennsylvania farms
   - Identify what plants and animals need to grow

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Non-fiction trade books.
- Videos/CDs on farm animals and plants.
- Disney, Bill Nye and Broom
- Project Food, Land and People (OE&E)
- Pennsylvania Agriculture Supplement (OE&E)
- PA Act 26 Poster (OE&E)
- PA Ag Magazines (OE&E)
  - PA Vegetables
  - PA Soils
  - PA Pigs
- Dig It – Hands on Soil Investigation, National Science Teachers Assoc.
- Critters, AIMS Education Foundation
- Garden Tools for Learning by Environmental Concepts
- How Groundhog's Garden Grew by Lynne Cherry
- www.NSDL.org (science digital library)

EXAMPLES

The learner will:

- Identify what they want and what they need in order to survive (food, water, shelter and space).
- Understand the differences between a want and a need.
- Compare how agriculture influences food, dress, shelter and customs in the area and other areas.
- Read books and look at pictures of animals found on local farms.
- Visit a local farm or see a video on the kinds of crops grown on local farms.
- Examine a plant and identify its parts.
- Identify products that come from a farm and that they use in their everyday lives (a visit to a grocery store or display pictures or non perishables could be taken to a food pantry).
- Through the use of murals, trace one simple product from production to consumption (e.g., chocolate bar, jar of jelly).
- Grow plants in the classroom and provide what it necessary (food, water, air and sun).

SUPPORTIVE PRACTICE

The teacher will:

- Brainstorm with students what they need to survive.
- Read and discuss stories that deal with needs and wants (e.g., The Lorax).
- Provide an assortment of pictures of what people eat, wear, live and do in Pennsylvania and in other familiar areas so students can compare differences and similarities.
- Read books to illustrate what animals live on a local farm.
- Visit a farm or have a guest farmer, extension agent or master gardener talk to the students.
- Use magnifying glasses and other simple tools for students to examine plant parts.
- Help students draw and label the parts of the plant.
- Guide the students from production to consumption of a product.
- Give examples of a fiber product and how we use it (e.g., wool, cotton).
- Invite a person who spins to demonstrate wool-thread-clothes.

SCIENCE

STANDARD 4.5: INTEGRATED PEST MANAGEMENT

FOURTH GRADE STANDARDS:

- Know types of pests
- Explain pest control
- Understand society's need for integrated pest management

CONTENT FOR 1ST GRADE

A. Know types of *Pests*
   - Identify and categorize pests

B. Explain Pest control
   - Know reasons why people control pests
   - Identify chemical labels (e.g., caution, poison, warning)

C. Understand society's need for integrated pest management
   - Identify integrated pest management practices in the home
   - Identify integrated pest management practices outside the home

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Food, Land and People (OE&E)
- Integrated Pest Management: An Exploration Into IPM – Penn State University and OE&E
- Pest Patrol, Penn State University and OE&E
- Ladybugs, Lawrence Hall of Science, GEMS Books
- Creepy Crawlies and the Scientific Method, Fulcrum Publishing
- Market Places of the Mind, Department of Agriculture
- www.agclassroom.org

EXAMPLES

The learner will:

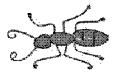
This should be done as a unit in either Grades 1 or 2.

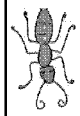
- Understand and be able to explain that pest is a human category rather than a natural category.
- Explore the wide range of organisms that can potentially be pests.
- Compare and contrast the different roles organisms have besides pestering humans.
- Describe how management of a particular organism will depend upon a person's perspective.
- Using local surroundings, record what they see in terms of potential pest and report out in a classroom discussion.
- Define the term pesticide and identify common household pests that chemicals may be used to manage.
- Understand that there are other ways to control pest besides chemical.

SUPPORTIVE PRACTICE

The teacher will:

- Instruct students to choose an organism from a class-generated list of pests. Through drawings show when the animal is a pest and when it is not.
- Take a walk outside and if possible have student use a digital camera or use a journal and draw pictures of animals that could be considered a pest to humans.
- Display and discuss a variety of non-chemical products used to control pest in the home and at school.
- Invite the school district's integrated pest management coordinator to the classroom and have them talk about what the district is doing to control pest.
- Discuss how chemicals used for pest control could be poisonous.





SCIENCE

STANDARD 4.6: ECOSYSTEMS AND THEIR INTERACTIONS

FOURTH GRADE STANDARDS:

- Understand that living things are dependent on nonliving things in the environment for survival
- Understand the concept of cycles

CONTENT FOR 1ST GRADE

A. Understand that living things are dependent on non-living things in the environment for survival
   - Identify and categorize living and non-living things
   - Describe the basic needs of an organism
   - Identify basic needs of a plant and an animal and explain how their needs are met
   - Identify plants and animals with their *habitat* and food sources
   - Understand the components of a food chain
   - Identify a local *ecosystem* and its living and non-living components
   - Identify a simple ecosystem and its living and non-living components
   - Identify common soil textures
   - Identify animals that live underground.

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree (OE&E)
- Project Wild (PA Game Commission)
- Project Wild Aquatic (PA Fish and Boat Commission)
- Wonders of Wetlands (OE&E)
- Fun with Nature Book (1-55971-702-5)
- Reading to Learn the Content to the Environment and Ecology Standards (OE&E)
- Reptiles and Amphibian (PA Fish and Boat Commission)
- Food, Land and People, PDE's Office of Environment and Ecology
- Gems Books
- Trade books – different animals, ecosystems, Magic School Bus books, books on cycles, etc.
- The Soilies Video, OE&E

EXAMPLES

The learner will:

- Give examples of living and non-living things.
- Understand what is meant by an ecosystem.
- Identify different ecosystems (e.g., forest, field, river, pond, wetland, farm).
- Give an example of a local simple ecosystem and list its living and non-living parts.
- Construct a three-component food chain and be able to explain it.
- Understand the meaning of habitat (food, water, shelter and space) and be able to depict an animal in its habitat and how its needs are being met.
- Distinguish between sand, silt and clay.
- Identify animals that live underground (e.g., worms, grubs, beetles, ants, spiders, millipedes, field crickets, slugs).
- Participate in hands-on experiences with animals and their needs.

SUPPORTIVE PRACTICE

The teacher will:

- Use Venn diagram or comparable graphic organizer to identify similarities and differences in living and non-living things.
- Identify the needs of plants and animals.
- Read books on various animals in different habitats and the needs of the animals (e.g., frogs, deer, bat, worm, raccoon, hawk, rabbit, dragonfly and otter).
- Provide the opportunity for students to describe objects in the world around them using the five senses.
- Provide opportunities for the students to compare different ecosystems (river, pond, wetland, forest, farm, field).
- Provide opportunities for the students to select a local simple ecosystem and describe through a visual its living and non-living parts.
- Display common soils (sand, silt and clay) and have students use their sense of touch to distinguish among them.
- Use the school grounds, field trips, aquariums to demonstrate different simple ecosystems.

SCIENCE

STANDARD 4.7: THREATENED, ENDANGERED AND EXTINCT SPECIES

FOURTH GRADE STANDARDS:

- Identify differences in living things
- Know that adaptations are important for survival

CONTENT FOR 1ST GRADE

A. Identify differences in living things
   - Identify characteristics that living things inherit from their parents
   - Explain why each of the four elements in a habitat is essential for survival
   - Identify local plants or animals and describe their habitat

B. Define and understand *extinction*
   - Identify plants and animals that are extinct

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Wildlife of PA Coloring Book (PA Game Commission)
- Wildlife of Pennsylvania CDROM (OE&E)
- Reading to the Content through the Environment and Ecology Standards (OE&E)
- PA Project Wild (PA Game Commission)
- PA Song Birds (PA Game Commission and PA Department of Conservation and Natural Resources)

EXAMPLES

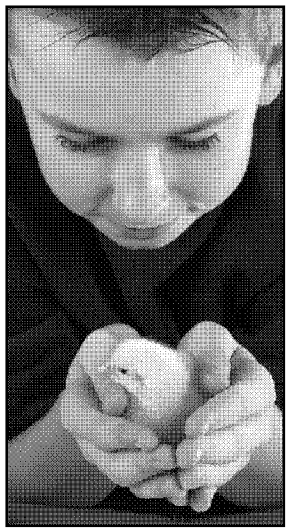
The learner will:

- Understand that living things have like characteristics from their parents (e.g., wings, fins, feathers, scales, skin coloration, beaks, echolocation capabilities, vision).
- Recognize that living things come in different colors, shapes and sizes.
- Understand the parts of a habitat (food, water, shelter, space) and why each is essential for survival.
- Recognize the needs that animals and plants must have are obtained from their habitat.
- Understand that animals and plants must be able to adapt to their surroundings to survive.
- Help students design an animal and provide the opportunity to give it the characteristics it will need to survive in a new ecosystem.
- Understand why certain plants and animals are extinct.
- Understand why certain animals and plants have distinctive characteristics that help them survive.

SUPPORTIVE PRACTICE

The teacher will:

- Read non-fiction trade books on different animals and have students recognize difference in the animals and their habitats.
- Have students classify and sort different animals and plants based on their similarities and differences.
- Take field trips or do school yard work having students identify different species through journaling and drawings.
- Through observation skills have student identify different characteristics needed for survival.
- Use class discussions to help students understand why some animals are now extinct.



SCIENCE

STANDARD 4.8: HUMANS AND THE ENVIRONMENT

FOURTH GRADE STANDARDS:

- Identify the biological requirements of humans
- Explain how human activities may change the environment

CONTENT FOR 1ST GRADE

A. Identify the biological requirements of humans
   - Identify several ways that people use natural resources

B. Explain how human activities may change the environment
   - Identify everyday human activities and how they affect the environment

C. Know the importance of natural resources in daily life
   - Identify items used in daily life that come from natural resources
   - Identify ways to conserve our natural resources

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Wet (OE&E)
- Field trips to State and County Parks
- Local speakers from a variety of agencies, associations, organizations or companies
- Many of the resources throughout this section can be used here.
- Field experiences to a farm, state park, stream and wetland can enhance their understanding of the systems importance to living things.

EXAMPLES

The learner will:

- Compare the difference between wants and needs.
- Describe how different people in the community meet their own needs and wants.
- Read non-fiction books dealing with how people use natural resources.
- Understand how their use of water, electricity, recycling, pest control methods, etc. help to use the earth's resources better.
- Understand through hands-on involvement how gardening can provide for their need for food.

SUPPORTIVE PRACTICE

The teacher will:

- Read non-fiction books that depict how people use natural resources.
- Invite local resource people to talk to the students about their particular role in the environment (e.g., water treatment plant manager, recycling coordinator, pest control company, parks and recreation ranger, forester, game or fish commission education specialist).
- Read books that show how people have used the resource for their very existence.
- Do hands-on projects or activities with the students dealing with water and electric use.
- Assist students in planting a small garden either in the classroom or on the school grounds.
- Take a field trip to sites that will visually enhance the students understanding of how people use the resource (parks, streams, wetlands, etc.).

STANDARD 4.9: ENVIRONMENTAL LAWS AND REGULATIONS

FOURTH GRADE STANDARDS:

- Know that there are laws and regulations for the environment

CONTENT FOR 1ST GRADE

A. Know that there are laws and regulations for the environment
   - Explain how the recycling law impacts the school and home

When teaching Renewable and Nonrenewable Resources (4.2D) incorporate this standard statement.

Resources:

- Local resource personnel
- Recycling Video, PDE's OE&E
- Conserving for the Future, PDE's OE&E

EXAMPLES

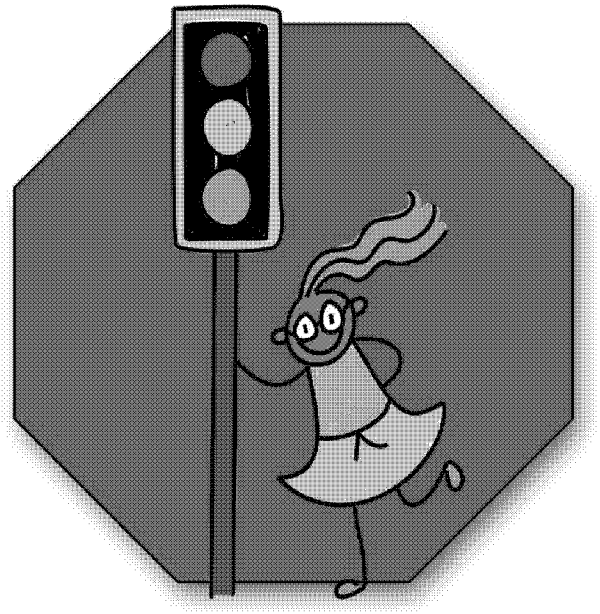
The learner will:

- Explain what they could recycle at home and identify what is recycled at school.

SUPPORTIVE PRACTICE

The teacher will:

- Explain what they could recycle at home and identify what is recycled at school.
- Explain to the students when teaching 4.2D that there is a law that requires recycling in PA.
- Invite the recycling coordinator from either the school district or from the county to talk to the students about recycling and the law.



SOCIAL STUDIES

EARLY LEARNING STANDARDS FOR 1ST GRADE

The foundation for social studies, economics, geography, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and school. As their perception grows, they further expand their understanding of their role in the community, larger democratic society and as a global citizen. Using an interdisciplinary approach, teachers facilitate children's social studies skill development by helping them engage in active, age-appropriate investigations that build knowledge and understanding.

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SOCIAL STUDIES

STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

THIRD GRADE STANDARDS:

- Describe what government is
- Explain the purposes of rules and laws and why they are important in the classroom, school, community, state and nation
- Define the principles and ideals shaping government
- Describe the purpose of the United States Flag, The Pledge of Allegiance and The National Anthem
- Identify framers of documents of governments
- Explain why government is necessary in the classroom, school, community, state and the basic purposes of government in Pennsylvania and the United States
- Explain the importance of respect for the property and the opinions of others
- Identify symbols and political holidays

CONTENT FOR 1ST GRADE

A. Identify the visible roles that government serves

B. Identify the purposes of rules and laws and their importance in the classroom, school, community, state and nation

C. Define the principles and ideals shaping government

D. Describe the purpose of the United States Flag, The Pledge of Allegiance and the National Anthem

E. Identify framers of documents of governments

F. Explain why government is necessary in the classroom, school, community, state and the basic purpose of government in Pennsylvania and the United States

G. Explain the importance of respect for the property and the opinions of others

H. Identify symbols and political holidays

EXAMPLES

The learner will:

- Explain why rules are necessary to keep a community safe.
- Explain that governments are visible in a community through making laws, enforcing laws, gathering taxes and providing services for the common good.
- Explain citizenship, diversity of people and ideas, common good, leadership and patriotism.
- Discuss how symbols are important.
- Discuss the importance of Thomas Jefferson as a framer of the Declaration of Independence.
- Explain why we celebrate The Fourth of July.

SUPPORTIVE PRACTICE

The teacher will:

- Make a list of classroom rules.
- Invite a police officer to speak to the class.
- Invite a local service person to speak to the class.
- Salute the flag and discuss the Pledge of Allegiance.
- Celebrate Constitution Day.

SOCIAL STUDIES

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

THIRD GRADE STANDARDS:

- Identify examples of the rights and responsibilities of citizenship
- Identify personal rights and responsibilities.
- Identify sources of conflict and disagreement and different ways conflicts can be resolved
- Identify the importance of political leadership and public service in the school, community, state and nation
- Describe ways citizens can influence the decisions and actions of government
- Explain the benefits of following rules and laws and the consequences of violating them
- Identify ways to participate in government and civic life

CONTENT FOR 1ST GRADE

A. Identify examples of the rights and responsibilities of citizenship

B. Identify personal rights and responsibilities in the community

C. Identify sources of conflict and disagreement and different ways conflicts can be resolved

D. Identify the importance of political leadership and public service in the school, community, state and nation

E. Describe ways citizens can influence the decisions and actions of government

F. Explain the benefits of following rules and laws and the consequences of violating them

G. Identify ways to participate in government and civic life

EXAMPLES

The learner will:

- Discuss the importance of voting.
- Describe personal responsibilities in the community such as following the laws such as bicycle safety, recycling and wearing a seatbelt.
- Discuss ways to solve problems and disagreements.
- Describe ways to be a leader/role model in the classroom and community.
- Explain how they can influence the actions of government (e.g., letter writing, discussions with school/community leaders).
- Initiate a public service project (e.g., school-wide cleanup, food drive).
- Develop rules and consequences within the classroom.
- Participate in a classroom election.
- Participate in anti-bullying initiatives.

SUPPORTIVE PRACTICE

The teacher will:

- Conduct a mock election.
- Hold classroom meeting to discuss how to resolve problems.
- Create authentic experiences for student to practice being leaders in the community.
- Aid students in writing a letter to the principal and/or community leader.
- Institute a school-wide food drive.
- Guide students in creating a set of classroom rules and consequences.
- Incorporate anti-bullying initiatives into the classroom.

SOCIAL STUDIES

STANDARD 5.3: HOW GOVERNMENT WORKS

THIRD GRADE STANDARDS:

- Identify reasons for rules and laws in the school and community
- Identify services performed by the local, state and national governments
- Identify positions of authority at school and in local, state and national governments
- Explain what an election is
- Explain why being treated fairly is important
- Identify different ways people govern themselves

CONTENT FOR 1ST GRADE

A. Identify reasons for rules and laws in the school and community

B. Identify services performed by the local, state and national governments

C. Identify positions of authority at school and in local, state and national governments

D. Explain what an election is

E. Explain why being treated fairly is important

F. Identify different ways people govern themselves

EXAMPLES

The learner will:

- Explain how rules and laws keep the school and community operating smoothly and safely.
- Identify services provided by government such as law enforcement, firefighters, animal control, hospitals and education.
- Explain the roles of the principal, mayor, governor and president.
- Hold a mock election.
- Discuss the importance of treating others fairly.
- Discuss how advertising influences people.
- Discuss how a classroom is governed like a community.

SUPPORTIVE PRACTICE

The teacher will:

- Invite the principal into the classroom to discuss his/her roles at school.
- Invite local figures (law enforcement, animal control, etc.) to speak to the children about their roles in the community.
- Invite the guidance counselor(s) to class to discuss what it means to treat others fairly.
- Show students various types of advertising and discuss how people are influenced by such advertising.

STANDARD 6.1: ECONOMIC SYSTEMS

THIRD GRADE STANDARDS:

- Describe how individuals, families and communities with limited resources make choices
- Identify local economic activities
  - Employment
  - Output

CONTENT FOR 1ST GRADE

A. Describe how people balance unlimited wants with limited resources

B. Identify local employment/producers
   - Jobs
   - Products/Services

EXAMPLES

The learner will:

- Describe ways in which families spend and save money.
- Discuss reasons why people save money for the future.
- Practice exchanging manipulative money for classroom goods to demonstrate the process of buying and selling.
- Discuss community helpers and describe the services they provide to the community.
- Recognize the similarities and differences in jobs.

SUPPORTIVE PRACTICE

The teacher will:

- Invite community helpers/local business people into the classroom to discuss the services they provide to the community.
- Create experiences (classroom stores) for students to make economic decisions in the classroom.
- Read various trade books describing different community professions.
- Establish classroom jobs.
- Provide field trip opportunities to local businesses.

SOCIAL STUDIES

STANDARD 6.3: SCARCITY OF CHOICE

THIRD GRADE STANDARDS:

- Define scarcity and identify limited resources
- Identify and define wants of different people
- Identify costs and benefits associated with an economic decision
- Explain what is given up when making a choice
- Explain how self-interest influences choice

CONTENT FOR 1ST GRADE

A. Define scarcity and identify limited resources

B. Identify and define wants and needs of different people in relation to limited resources

EXAMPLES

The learner will:

- Discuss scarcity and list various limited resources.
- Describe the difference between wants and needs.
- Create a list of wants and needs.
- Discuss how spending affects our ability to do certain things (i.e. restaurants, movies, shopping).
- Explain what it means to spend wisely.
- Practice saving money.
- Discuss how personal choice influences the decision to buy certain items.

SUPPORTIVE PRACTICE

The teacher will:

- Read books about scarcity and various limited resources.
- Provide pictures that give examples of needs and wants.
- Provide opportunities for learners to gain insight into making wise decisions regarding needs and wants.
- Use graphic organizers to identify wants and needs.
- Create opportunities for learners to practice saving pretend money in the classroom.
- Share reasons why people choose to spend their money certain ways.

STANDARD 6.4: ECONOMIC INTERDEPENDENCE

THIRD GRADE STANDARDS:

- Explain why people trade
- Explain why goods, services and resources come from all over the nation and the world
- Explain why some products are produced locally while others are not

CONTENT FOR 1ST GRADE

A. Explain the process of trading

B. Explain why goods, services and resources come from all over the nation and the world

C. Explain why some products are produced locally while others are not

EXAMPLES

The learner will:

- Discuss the process of trade between two people.
- Discuss the relationship among traders.
- Describe why certain products cannot be produced locally (ex. oranges in PA).

SUPPORTIVE PRACTICE

The teacher will:

- Read various trade books about trade.
- Provide items to trade as part of a Native American/Pilgrim activity.
- Provide various pictures of goods and services that come from all over the nation and world.
- Use KWL charts to discuss why products are produced in certain regions.

SOCIAL STUDIES

STANDARD 6.5: WORK AND EARNINGS

THIRD GRADE STANDARDS:

- Explain why people work to get goods and services
- Identify different occupations
- Describe businesses that provide goods and businesses that provide services
- Define saving and explain why people save

CONTENT FOR 1ST GRADE

A. Explain the various reasons why people work

B. Identify different occupations

C. Describe businesses that provide goods and businesses that provide services

D. Define saving and explain why people save

EXAMPLES

The learner will:

- List reasons why people work.
- Explain the term allowance.
- Match descriptions of work with the correct profession.
- Identify community helpers that provide goods.
- Identify community helpers that provide services.
- Discuss/write about a profession of interest.
- Explain what it means to save.
- Visit a financial institution.

SUPPORTIVE PRACTICE

The teacher will:

- Invite community helpers into the classroom to discuss their occupation.
- Provide pictures and descriptions of different types of employment.
- Provide various pictures of community helpers that provide goods.
- Provide various pictures of community helpers that provide services.
- Provide/display descriptions of various occupations.
- Arrange to visit a local financial institution.

STANDARD 7.1: BASIC GEOGRAPHY LITERACY

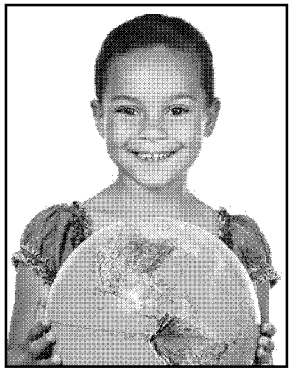
THIRD GRADE STANDARDS:

- Identify geographic tools and their uses
- Identify and locate places and regions

CONTENT FOR 1ST GRADE

A. Identify the following geographic tools: maps, globe, map elements, diagrams, photographs, map keys and cardinal directions

B. Recognize continents and oceans



EXAMPLES

The learner will:

- Explain the characteristics and purposes of different geographic representations.
- Use and make maps to identify and locate familiar places or objects within the neighborhood and community.
- Distinguish between continents and oceans on a world map.

SUPPORTIVE PRACTICE

The teacher will:

- Locate and label specific landforms, countries and bodies of water on maps and globes.
- Provide an opportunity to make authentic maps of classroom, playground, school, house, etc.

SOCIAL STUDIES

STANDARD 7.2: THE PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

THIRD GRADE STANDARDS:

- Identify the physical characteristics of places and regions
- Identify the basic physical processes that affect the physical characteristics of places and regions

CONTENT FOR 1ST GRADE

A. Identify physical characteristics of places, noting physical properties (landforms such as swamps, hills and mountains), weather, climate, vegetation, animals, bodies of water such as creeks, rivers, ponds, lakes and human-made forms such as highways, streets, building and bridges

B. Identify basic processes (e.g. flood, tornado) that affect the physical characteristics of places and regions

EXAMPLES

The learner will:

- Recognize natural and human-made physical characteristics.
- Describe the interactions between people, animals and physical features of their environment.
- Name and describe the characteristics of the four seasons.
- Discuss how extreme physical events effect the environment.

SUPPORTIVE PRACTICE

The teacher will:

- Read books about the rainforests of the world and discuss the rainforest.
- Provide field trips to outdoor destinations to identify and discuss various features of environments and nature.
- Illustrate different characteristics of seasons.
- Read literature about the effects of tornadoes, hurricanes, tsunamis, earthquakes on the environment.

STANDARD 7.3: THE HUMAN CHARACTERISTICS OF PLACES AND REGIONS

THIRD GRADE STANDARDS:

- Identify the human characteristics of places and regions by their population characteristics
- Identify the human characteristics of places and regions by their cultural characteristics
- Identify the human characteristics of places and regions by their settlement characteristics
- Identify the human characteristics of places and regions by their economic activities
- Identify the human characteristics of places and regions by their political activities

CONTENT FOR 1ST GRADE

A. Identify the human characteristics that are affected by places and regions

B. Identify how places and regions are impacted by people

EXAMPLES

The learner will:

- Describe the reasons why people settle in specific regions.
- Describe and list ways people impact the places in which they live.

SUPPORTIVE PRACTICE

The teacher will:

- Discuss the importance of natural resources and how they impact the environment.
- Provide opportunity for Earth Day activities.
- Provide opportunities for students to recycle.
- Establish a school-wide cleanup for Earth Day.
- Allow students to grow and care for plants.
- Discuss the various ways humans impact the places in which they live.

SOCIAL STUDIES

STANDARD 7.4: THE INTERACTION BETWEEN PEOPLE AND PLACES

THIRD GRADE STANDARDS:

- Identify the impacts of physical systems on people
- Identify the impacts of people on physical systems

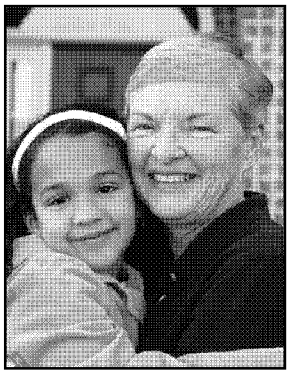
CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify the human characteristics that are affected by physical systems B. Identify how physical systems are impacted by people	**The learner will:** • Discuss how the weather and natural resources impact people (e.g., drought, snowfall, soil quality). • Discuss and create a list of the various things people do to impact the environment (both positively and negatively). • Describe how natural resources help us produce things needed for survival.	**The teacher will:** • Incorporate weather into morning routines and activities. • Use KWL charts to learn more about weather and natural resources. • Provide opportunities to observe the weather and how it impacts lives (recreational choices, clothing choices, etc.). • Provide opportunities for children to plant trees and plants. • Discuss human effects on environment.

STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

THIRD GRADE STANDARDS:

- Understand chronological thinking and distinguish between past, present and future time
- Understand historical research

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Understand chronological thinking and distinguish between past, present and future time B. Understand historical research	**The learner will:** • Develop a timeline of his/her life using photographs, drawings and brief descriptors. • Participate in daily calendar activities and discuss past, present and future events. • Distinguish between fact and opinion. • Appreciate multiple points of view. • Discuss illustrations in historical stories. • Begin to discuss cause/effect in historical events (e.g., Pilgrims' voyage, Martin Luther King, Jr.). • Interview grandparents about events from their childhood. • Listen to various folklore stories.	**The teacher will:** • Create a timeline using a designated topic. • Read non-fiction texts. • Evaluate stories. • Evaluate stories over time. • Provide opportunity to use graphic organizers to show cause and effect. • Visit a senior center or invite a senior citizen to the classroom. • Provide the opportunity to celebrate Grandparents Day. • Read and compare stories.



SOCIAL STUDIES

STANDARD 8.2: PENNSYLVANIA HISTORY

THIRD GRADE STANDARDS:

- Understand the political and cultural contributions of individuals and groups to Pennsylvania history
- Identify and describe primary documents, material artifacts and historic sites important in Pennsylvania history

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Understand the political and cultural contributions of individuals and groups to Pennsylvania history B. Identify and describe primary documents, material artifacts, historic sites important in Pennsylvania history	**The learner will:** • Identify and explain the significance of John Chapman. • Identify the official commonwealth symbols (e.g. tree, bird, dog, insect, flower).	**The teacher will:** • Provide opportunities to celebrate John Chapman's contributions to Pennsylvania history. • Provide KWL charts to discuss historical figures. • Identify and illustrate official symbols of Pennsylvania.

STANDARD 8.3: UNITED STATES HISTORY

THIRD GRADE STANDARDS:

- Identify contributions of individuals and groups to United States history
- Identify and describe primary documents, material artifacts and historic sites important in United States history

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify contributions of individuals and groups to United States history B. Identify and describe primary documents, material artifacts and historic sites important in United States history	**The learner will:** • Identify and explain the political and cultural contributions of Thomas Jefferson, Abraham Lincoln, Franklin Delano Roosevelt, Sacajawea, Martin Luther King, Jr. • Recognize The White House and The Statue of Liberty.	**The teacher will:** • Read trade books and discuss historical figures and identify them on money. • Read literature about symbols of the United States of America.

STANDARD 8.4: WORLD HISTORY

THIRD GRADE STANDARDS:

- Identify historic sites and material artifacts important to world history

CONTENT FOR 1ST GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify historical sites important to world history	**The learner will:** • Identify The Great Pyramids. • Construct pyramids using geometric shapes.	**The teacher will:** • Introduce the pyramids in math through the use of geometric shapes. • Discuss the significance of pyramids to Egyptian civilization. • Provide manipulatives for students to create pyramids.

APPENDIX

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GLOSSARY OF TERMS

FOR EARLY LEARNING STANDARDS FOR 1ST GRADE

APPROACHES TO LEARNING

Change – To cause to be different: *change the spelling of a word.* To give a completely different form or appearance to; transform: *changed the yard into a garden.* To give and receive reciprocally; interchange: *change places.*

Communication – The exchange of thoughts, messages or information, as by speech, signals, writing or behavior. Interpersonal rapport. Communications (*used with a sing. or pl. verb*). The art and technique of using words effectively to impart information or ideas.

Compare – To consider or describe as similar, equal or analogous; liken. To examine in order to note the similarities or differences of.

Confidence – Trust or faith in a person or thing. A trusting relationship: self assurance.

Cooperation – The act or practice of cooperating. The association of persons or businesses for common, usually economic, benefit.

Create – To cause to exist; bring into being. See synonyms at www.answers.com/topic/found found. To give rise to; produce.

Decision Making – Cognitive process leading to the selection of a course of action among alternatives.

Emotions – Emotion, term commonly and loosely used to denote individual, subjective feelings which dictate moods.

Explore – To investigate systematically; examine.

Family – A fundamental social group in society typically consisting of one or two parents and their children. Two or more people who share goals and values, have long-term commitments to one another and reside usually in the same dwelling place. All the members of a household under one roof.

Feeling – Feelings are affective states of consciousness. An affective state of consciousness, such as that resulting from emotions, sentiments or desires: *experienced a feeling of excitement.* An awareness or impression.

Friends – Person whom one knows, likes and trusts. A person whom one knows; an acquaintance.

Friendship – The quality or condition of being friends.

Goals– The purpose toward which an endeavor is directed; an objective.

Investigate – To observe or inquire into in detail; examine systematically.

Predict – To state, tell about or make known in advance, especially on the basis of special knowledge.

Respect – To have a high opinion of admire, consider, esteem, honor, regard, value. *Idioms:* look up to, think highly much well of. See www.answers.com/topic/praise-blame praise/blame. To recognize the worth, quality, importance or magnitude of.

Safe – Secure from danger, harm or evil. Free from danger or injury; unhurt: safe and sound. Free from risk; sure: a safe bet. Affording protection.

Sharing – Sharing is the joint use of a resource. In its narrow sense, it refers to joint or alternating use of an inherently finite good. To divide and parcel out in shares; apportion. To participate in, use, enjoy or experience jointly or in turns.

Thinking – Action of using one's mind to produce thoughts or covert symbolic responses to stimuli.

Trust – Firm reliance on the integrity, ability or character of a person or thing. Custody; care. Something committed into the care of another; charge.

ARTS & HUMANITIES

ART

Color – Specific hues that are visible when light reflects off of an object.

Form – Object with three dimensions (height, width and depth).

Line – A point moving in an identifiable direction.

Shape – Object with two dimensions (height and width), usually defined by a line.

Space – The feeling of depth in an artwork OR the way in which the artist uses the area within the picture plane.

DANCE

Direction – Spatial relation between a dancer and the path along which he/she moves.

Level – High, middle or low ways that the body moves in relation to the floor and ceiling of a performance space.

Locomotor – Movement that takes a dancer from one place to another by moving on feet, hands or other body parts.

Nonlocomotor – Also known as axial movement; movement in which the dancer does not travel, but instead moves in the space around the body.

Phrase – Dance movements that are linked in a single choreographic sequence.

Rhythm – The way that movement is organized within a beat.

Size – A way of making the body small or large.

Shape – A way of making the body look different by changing positions of body parts; some shapes include narrow, wide, angular, curved, symmetrical, asymmetrical.

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GLOSSARY CONTINUED FROM PAGE 83

Space - One of the three elements of dance, relating to the area through which a dancer moves.

Stasis/Stillness - Periods in dance when the body is not moving.

Tempo - Rate of speed of music and movement (fast or slow).

MUSIC

Beat - Steady pulse of music.

Dynamics - Loudness or softness of sound.

Form – the arrangement of smaller sections to make a larger piece of music (ex. AB, ABA, rondo).

Melody - Pattern of tones arranged to make a tune.

Meter - Method of grouping beats within a measure.

Pitch – Highness or lowness of sound.

Rhythm – Pattern of long and short sounds arranged to make music.

Tempo - Rate of speed of sound (fast or slow).

Timbre - quality that makes a sound unique.

THEATRE

Acting - Pretending to be a character and showing that character's feelings and actions.

Actor - A person who acts in a play.

Actions - What the character does to get what they want.

Audience - The person or persons who watch the play.

Character - A person, animal or imaginary object in a play or story.

Drama - Acting out a story or idea.

Intention - What your character wants or wishes for.

Lines - What your character says.

Off stage - The part of the stage or playing space which cannot be seen by the audience.

On stage - The part of the stage or playing space which can be seen by the audience.

Performance - Acting, singing, dancing or creating music which is planned and practiced and finally shared with an audience.

Play - A story written in lines and actions for actors to perform.

Playing Space/Drama Space - a special space in the room where actors practice or perform for others to watch.

Projection - To make your voice louder and easier for an audience to hear.

Rehearsal - Practicing for a performance.

Stage - A special space created to perform plays for an audience.

INTERDISCIPLINARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce.

Aesthetic Criteria – Standards on which to make judgments about the artistic merit of a work of art, derived from cultural and emotional values and cognitive meaning.

Aesthetic response – A philosophical reply to works in the arts.

Artistic choices – Selections made by artists in order to convey meaning.

Arts resource – An outside community asset (e.g., performances, exhibitions, performers, artists).

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form.

Community – A group of people who share a common social, historical, regional or cultural heritage.

Contemporary Technology – Tools, machines or implements emerging and used today for the practice or production of works in the arts.

Context – A set of interrelated background conditions (e.g., social, economic, political) that influence and give meaning to the development and reception of thoughts, ideas or concepts and that define specific cultures and eras.

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis.

Critical Analysis – The process of examining and discussing the effective uses of specific aspects of works in the arts.

Critical Process – The use of sequential examination through comparison, analysis, interpretation, formation and testing of hypothesis and evaluation to form judgments.

Critical Response – The act or process of describing and evaluating the media, processes and meanings of works in the arts and making comparative judgments.

Culture – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing.

Elements – Core components that support the principles of the arts.

Genre – A type or category (e.g., music - opera, oratorio; theater - tragedy, comedy; dance - modern, ballet; visual arts- pastoral, scenes of everyday life).

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment.

Improvisation – Spontaneous creation requiring focus and concentration.

Multimedia – The combined use of media, such as movies, CD-roms, television, radio, print and the internet for entertainment and publicity.

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists.

Principles – Essential assumptions, basic or essential qualities determining intrinsic characteristics.

Style – A distinctive or characteristic manner of expression.

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts.

Timbre – A unique quality of sound.

Traditions – Knowledge, opinions and customs a group feels is so important that members continue to practice it and pass it onto other generations.

Traditional Technology – Tools, machines or implements used for the historical practice or production of works in the arts.

Vocabulary – Age and content appropriate terms used in the instruction of the arts and humanities that demonstrate levels of proficiency as defined in local curriculum.

FAMILY, COMMUNITY

Advocacy – The act of speaking or writing in support of someone or something.

Collaboration – To work cooperatively and respectfully toward a common goal.

Communication – The process in which information is received or transmitted; meaning making.

Respect – To show consideration for.

Trust – A belief or confidence in the honesty, integrity, reliability, justice of another person.

HEALTH AND PHYSICAL EDUCATION STANDARDS

Basic Movement Skills - The building blocks for more advanced sport-specific skills that are used in physical activities. Movement skills are the action words you use in physical education class. The basic movement skills are organized into three groups: locomotor, nonlocomotor and manipulative movements.

Choices - Picking an option from alternatives.

Conflict - A disagreement between two or more people or two or more choices.

Cooperation - An important social skill in which you work together with others for a common goal.

Emergency - a serious situation that occurs without warning and calls for quick action.

Emotions - Specific feelings such as angry, happy, sad, afraid.

Family - A group of people related by blood, adoption, marriage or a desire for mutual support.

Health - A quality of life, which is made up of many parts. How your body feels, how your mind thinks and how you feel about the things that happen to you, how you get along with others, as well as being free of illness or disease.

Physical Activity - Anything you do that requires movement and involves the body or parts of the body.

Practice - Repeating movements and cues to get better at performing skills. Practice helps us to go from inconsistent to consistent.

Motor skills - The body movements/actions used when participating in physical activities.

Movement Concepts - Ideas or activities that describe how a skill is to be performed or how a skill performance can be made more interesting. Examples of movement concepts are space awareness (where the body moves), effort awareness (how the body moves) and relationship awareness (over, under).

Risks - Something that threatens your health and can cause injury, illness or death.

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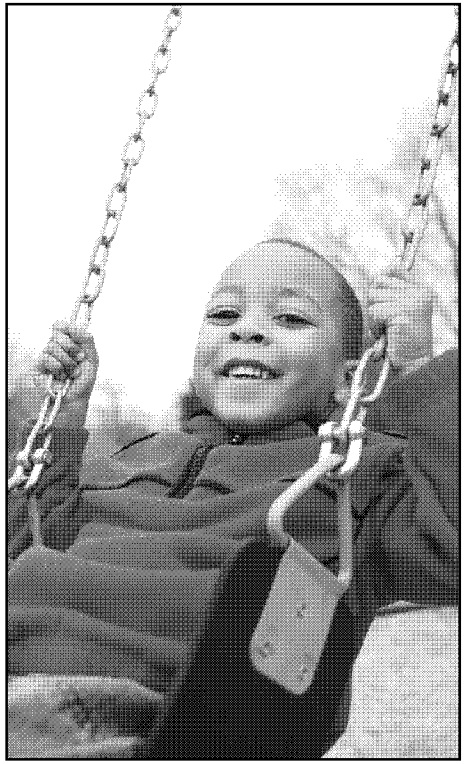


GLOSSARY CONTINUED FROM PAGE 85

MATH

Addend – Any of a group of numbers or terms added together to form a sum.

Addition – To join two ore more numbers (or quantities) to get a total amount (or sum).

Analog Clock – A clock that is not digital.

Array – An orderly arrangement often in rows, columns or a matrix used to show the concept of multiplication.

Attribute – Feature or characteristic.

Bar Graph – A graph that uses bars to show quantities or numbers so they can be easily compared.

Customary Unit of Measurement – A system of weights and measures frequently used in the United States. The basic unit of weight is the pound; the basic unit of capacity is the quart.

Data – Information that is gathered, which is often organized into graphs or charts.

Difference – The amount that remains after one quantity is subtracted from another.

Digit – One of the 10 Arabic number symbols 0 - 9.

Elapsed Time – How long an activity lasts (how much time has gone by from the beginning of an event to another point in time).

Equal – Having the same quantity, degree, value, etc.

Equation – A mathematical statement containing an equals sign to show that two expressions are equal (e.g. 6 + 4 = 10; 2 + 4 = 5 + 1).

Estimate – To form an approximate judgment, opinion or calculation regarding the worth, value, amount, size, weight, etc.

Expanded Form – Involves writing the number in expanded form to show the value of each digit (e.g., 15,629 = 10,000 + 5,000 + 600 + 20 + 9).

Fact Family – The three numbers that make up a fact as well as the inverse of the operation (i.e., 3 + 5 = 8; 5 + 3 = 8; 8 – 5 = 3; 8 – 3 = 5).

Fraction – A number used to name an equal part of a group or a whole.

Geometric Shape – Any shape on a plane or in space.

Inverse Relationship – The opposite (i.e. 2 + 3 = 5, therefore 5 – 3 = 2 and 5 – 2 = 3).

Line of Symmetry – A line of symmetry separates a figure into two congruent halves, each of which is a reflection of the other.

Metric Unit of Measurement – A system of measurement used throughout the world based on factors of 10. It includes measures of length, weight and capacity.

Minus – Involving or noting the act of subtraction.

Non-standard Unit – A unit used to measure something that is not standard (i.e., measuring the length of a book using paper clip-lengths rather than inches).

Number Line – A line on which every point represents a real number.

Number Sentence – A mathematical sentence written in numerals and symbols (e.g. 8 + 6 = 14).

One-One Correspondence – When one and only one element of a second set is assigned to an element of a first set, all elements of the second set are assigned and every element of the first set has an assignment, the mapping is called one-to-one.

Ordinal Numbers – A number indicating position in a series or order (i.e. first, second, etc.).

Pattern – Regularities in situations such as those in nature, events, shapes, designs and sets of numbers (e.g., spirals on pineapples, geometric designs in quilts, the number sequence 3, 6, 9, 12,...).

Pictograph – Graph using pictures to represent quantity.

Place Value – The value of a digit as determined by its position in a number, the name of the place or location of a digit in a number.

Plus – Involving or noting the act of addition.

Predict – To tell what you think will happen.

Problem Solving – Finding ways to reach a goal when no routine path is apparent.

Rectangular Prism – A three-dimensional figure whose sides are all rectangles; a box.

Regrouping – To change the grouping of numbers by separating ones, from tens, from hundreds, etc. and grouping the parts of the numbers with other like values (formerly known as borrowing and carrying).

Repeated Addition – A model for multiplication (e.g., 2 + 2 + 2 = 3 X 2).

Scale – A device used to weigh.

Sequence – A set of ordered quantities (e.g., positive integers).

Solid Figure – A three-dimensional shape with length, width and height.

Solve – To work out the answer to a problem.

Standard Unit – An accepted or approved instance or example of a quantity against which others are judged, measured or compared (e.g. inches, centimeters, feet, meter, quarts, pints, etc.).

Subtraction – To take one quantity away from another.

Sum – The result of adding two or more numbers.

Survey – A method of collecting a sample of data by asking people questions.

Table – Numbers or quantities arranged in rows and columns.

Tally – Using marks to record counting (e.g. 3 = III).

GLOSSARY CONTINUED FROM PAGE 87

Inquiry - A systematic process for using knowledge and skills to acquire and apply new knowledge.

Investigations – to observe or study by close examination and systematic inquiry.

Landforms – Is a feature at or below Earth's surface, e.g., mountains, valleys, rivers, lakes and caves.

Life Cycle – The phases, changes or stages through which an organism passes during its lifetime.

Matter – Anything that has mass and takes up space. Three common states of matter are solid, liquid and gas.

Mass – Is the amount of matter in something.

Mixtures – combination of one or more substances (e.g., ice in water, oil in water, salt in water, baking soda in white vinegar).

Model – to construct or fashion in imitation of a particular object, to design or imitate forms: make a pattern, (e.g., model cars, toys, wetlands, mountains, valleys).

Observations – use of your five senses it is something you notice. Scientist use observation to help them make inferences/guesses.

Opinion – something someone feels or believes. You can not prove as true.

Patterns (regularly occur and reoccur in nature) – These are patterns that repeat in certain order and can be seen in nature like leaf patterns, flower, coats of animals, honeycombs, changes in the moon, etc.

Scale – Relates concepts and ideas to one another by some measurement (e.g., quantitative, numeral, abstract, ideological); provides a measure of size and/or incremental change.

Scientific Facts – true statements about the world.

Senses – Using the five senses of sight, smell, touch, taste and hear to explore the world around us.

Simple Machine – any of various elementary mechanisms formerly considered as the elements of which all machines are composed and including the lever, the wheel and axle, the pulley, the inclined plane, the wedge and the screw.

Soil – A mixture of inorganic minerals (clay, silt and sand), organic materials, water, air and living organisms formed as the result of organic and inorganic processes; top layer of the Earth's crust which supports plants, animals and microorganisms; varies with climate, plant and animal life, time and parent material.

System – A group of related objects that work together to achieve a desired result.

Technological Design – Recognizing the problem, proposing a solution, implementing the solution, evaluating the solution and communicating the problem, deign and solution.

ENVIRONMENT AND ECOLOGY

Ecosystem – the interacting system of a biological community and its non-living environment; also, the place where these interactions occur.

Extinction – the complete elimination of a species from the earth

Fiber – slender, threadlike structure combining with other fibers in the form of weaving, knitting, or otherwise intertwining

Food Chain – the transfer of food energy from organisms in one nutritional level to those in another.

Habitat – an area that provides an animal or plant with adequate food, water, shelter and living space in a suitable arrangement.

Lentic – relating to or living in still water (e.g., lake, pond, swamp)

Lotic – relating to or living in actively moving water. (e.g., river, stream, creek)

Natural Resources – those raw materials supplied by the earth and its processes. Natural resources include nutrients, minerals, water, plants, animals, etc.

Nonrenewable Resources – substances such as oil, gas, coal, copper and gold which, once used, but which cannot be replaced in this geological age.

Pest – is a human constructed rather than a natural category for plants and animals. The term can be applied to almost anything that interferes with humans in their ability to do the things, health issues, farming, etc. It is an undesirable, potentially harmful or noxious organism. (e.g., mouse, mosquitoes, gypsy moth)

Pollution – harmful substances deposited in the air, water or land, leading to a state of dirtiness, impurity or unhealthiness

Recycle – a multi-phased process which includes removal, separation and/or diversion of materials from the waste stream; use of such materials as raw materials for the manufacture of new products and the use of the new product.

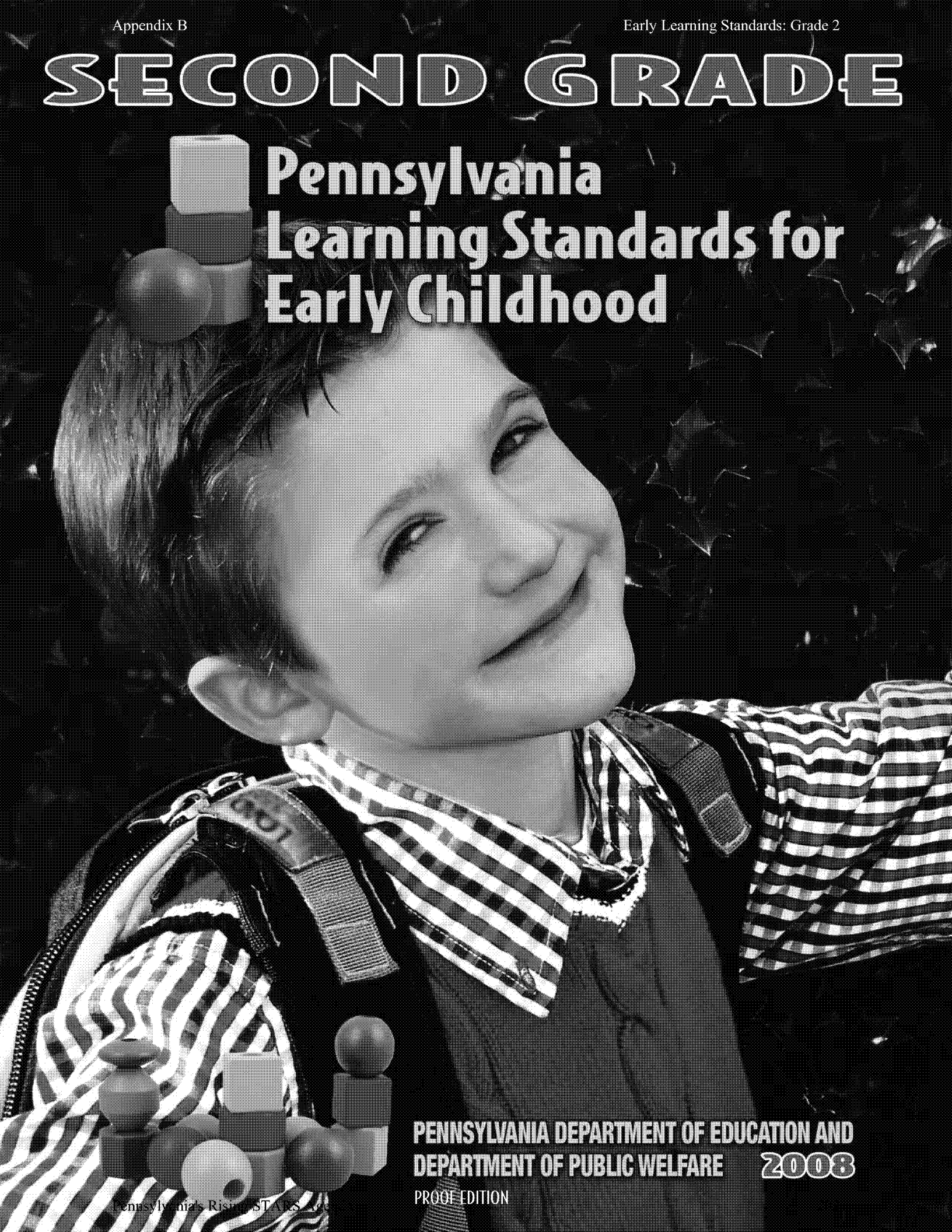
Renewable – a naturally occurring raw material or form of energy which ha the capacity to replenish itself through ecological cycles and sound management practices. The sun, wind, falling water and trees are examples.

Soil – A mixture of inorganic minerals (clay, silt and sand), organic materials, water, air and living organisms formed as the result of organic and inorganic processes; top layer of the Earth's crust which supports plants, animals and microorganisms; varies with climate, plant and animal life, time and parent material.

Watershed – the land area that delivers run-off water and sediment to a major river or stream and its tributaries.

Wetland – lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes).

SECOND GRADE



Pennsylvania Learning Standards for Early Childhood

PENNSYLVANIA DEPARTMENT OF EDUCATION AND DEPARTMENT OF PUBLIC WELFARE 2008

PROOF EDITION

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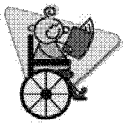

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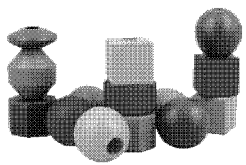

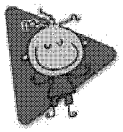

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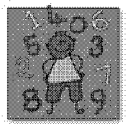

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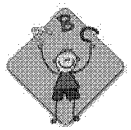

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Pennsylvania's Primary Standards for grade 2 were developed by the Department of Education and Welfare in support of Governor Rendell's commitment to early childhood education. The Primary Standards for grade 2 are meant to guide the development of primary age programs throughout the state. A Task Force consisting of early childhood practitioners, primary teachers, school administrators, policy analysts, researchers and university faculty developed the standards.

INTRODUCTION

The Commonwealth of Pennsylvania has established high academic standards for all students pre-K through grade 12. Research-based standards are the key to laying a strong academic foundation that will provide children with skills necessary to succeed in every phase of their lives.

Standards-based practices maximize student learning by aligning standards for both instruction and assessment in the following ways:

- guiding teachers' deliberate and intentional instructional practice,
- supporting effective classroom environments and
- framing teachers' age-appropriate expectations for their students

A smooth transition from one grade to the next is critical to building solid learning foundations in the primary grades.. Research has shown the value of active learning for both cognitive and social development in these grades. Children learn key skills of literacy, number sense, science and social problem solving both through shared explorations and direct instruction. They best develop their understanding of the world around them and how it relates to them by interacting with materials, other children, their teacher and the community.

Primary classrooms, supported by the use of standards, facilitate children's learning across key curricular areas, emphasizing a variety of rigorous literacy, science (inquiry-based), number sense and social experiences. They provide primary children with opportunities to construct knowledge and meaning through active, hands-on/minds-on exploration in a variety of indoor and outdoor experiences that include large and small group, individual and partner-based instructional practices.

The most effective methods utilized by primary teachers should include explicit instructional language, active engagement with children and differentiated instruction that meets the needs of all learners while supporting high quality expectations.

The learning behaviors that assure school success include:

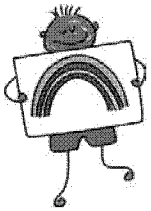
- listening
- participation
- task persistence
- self-regulation
- making choices
- exhibiting self-control
- organization
- cooperation
- collaboration
- respecting the rights, feelings and property of others

Teachers can support children's individualized learning opportunities by providing them with meaningful experiences that engage their interests, abilities and cultures. Teachers who have clear, age-appropriate expectations for children's behavior provide a balance of independence and guidance.

Approaches to Learning

The goal of the primary standards for grades 1 and 2 is to promote the development of a child who has the attributes of: inventiveness, curiosity, persistence, engagement, reasoning, problem solving, responsibility, imagination and creativity. To assist the child in obtaining these attributes, the adult should approach the child's learning through actions that encourage the child to:

Invent	Fantasize	Conceive	Deliberate
Apply	Start	Encounter	Visualize
Adapt	Evaluate	Plan	Confront
Envision	Adjust	Generalize	Lead
Persist	Commit	Inquire	Conclude
Endure	Create	Think	Question
Compare	Analyze	Deduce	Deduct
Predict	Discriminate	Describe	Debate



Classroom environments should stimulate the primary child's curiosity, initiative and inquiry and foster opportunities for adult-student interaction. Classrooms should be organized and structured to support all areas of development through a range of instructional techniques and strategies, be rich in literacy and integrate literacy and numeracy throughout the day. They should provide children with a safe, comfortable atmosphere where they can practice newly acquired skills and build on them to learn new information. The classroom environment should accommodate active and quiet activities. It should offer opportunities for solitary, parallel and group interaction observable by an adult.

In addition to a robust set of standards to guide practice, primary programs should utilize a system of assessment that is valid and reliable, comprehensive, developmentally appropriate and linguistically responsive in order to document a child's growth and development, including the language proficiency of second language learners, in relation to a defined set of standards. The assessment then becomes the mechanism to inform and support instruction.

RATIONALE FOR PERSONAL/SOCIAL LEARNING AND DEVELOPMENT

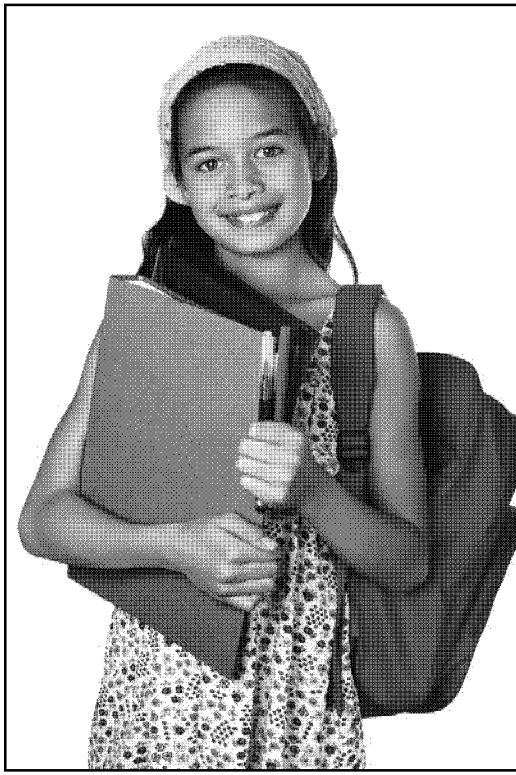
As a child participates in the ongoing classroom routine, the social curriculum supports the academic curriculum. The child who can negotiate interactions with a variety of adults and peers is better equipped to take advantage of the new knowledge base. By following classroom routines and rules, the child moves from whole group to small group to independent work with confidence and efficiency. This provides maximum opportunities for growth and development. By learning to negotiate conflicts and modify his/her behaviors, the child is better served in all environments. These standards provide direction for teachers to enhance this important aspect of learning.

RATIONALE FOR PARTNERSHIPS

The definition of partnership according to Webster is: "one or more persons owning jointly a business and who shares the risks and profits of the company or firm." All citizens in the Commonwealth are stakeholders in how effectively we are educating our youth. The results impact families, communities, law enforcement agencies, social and health agencies, the job market and both local and state government. The obvious responsibility of a formal education has been assigned to the local schools. Children, however, are exposed to many other personal and cultural influences that impact learning. It is crucial to develop a system of communication and contact with the various participants who occupy a role in the development of a child.

Teachers must be trained specifically to understand early childhood development, which is the responsibility of the institutions of higher learning. There should be a strong bond between the colleges and school districts in providing opportunities for student teaching experiences, being cognizant through ongoing dialogue and feedback of what the specific curricular requirements/standards are and how to achieve those standards in a classroom setting. Teachers with a strong background in early childhood education and child development can best provide what children need to grow emotionally, physically and intellectually.

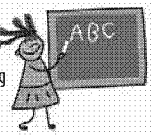
Community leaders and policymakers need to be aware of the importance of early childhood education and the standards for learning. The success of the local education system begins in the early years prior to a child entering the public school system. Local leaders need to understand the diversity of children, yet realize the sense of urgency in assisting and supporting the education of young children.



GUIDING PRINCIPLES

High quality primary programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills and concepts that children need to make steady progress socially, emotionally, physically and cognitively. Outstanding primary programs maintain high expectations for all children using clear performance standards. A continuous cycle of assessment, which is understood by the professional staff and families, must be utilized to track progress and success.

1. All children can learn and deserve the establishment of high expectations that are appropriate for their age and are culturally and technologically appropriate for meeting individual differences.



2. Children learn best through intentionally planned instruction and activities that enable them to construct knowledge through real life connections, peer interactions, meaningful & imaginative experiences and active engagement with the environment.

3. The learning environment for young children stimulates and engages their curiosity about the world around them and meets their physical, emotional and creative needs whereby the children feel safe and secure.

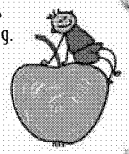
4. Language and literacy (both reading and writing) development is supported and integrated throughout the day in all content areas in the primary grades. Conceptual understandings in content areas and in early literacy are interdependent and have sets of skills that mutually support each other.

5. Children's development and learning is enhanced and supported when their teachers are knowledgeable about early childhood development, educational pedagogy and content. When teachers participate in ongoing opportunities for quality professional development, work with children, families & communities and are intentional in their relationships children benefit.

6. High quality primary programs recognize and provide for a broad spectrum of individual needs in diverse populations of children, which include, but are not limited to: English language learners, children with special needs, and children from diverse cultural backgrounds and socio-economic groups.

7. High quality primary programs are defined by a set of comprehensive standards that maximize children's growth and development that increase their problem-solving abilities across domains.

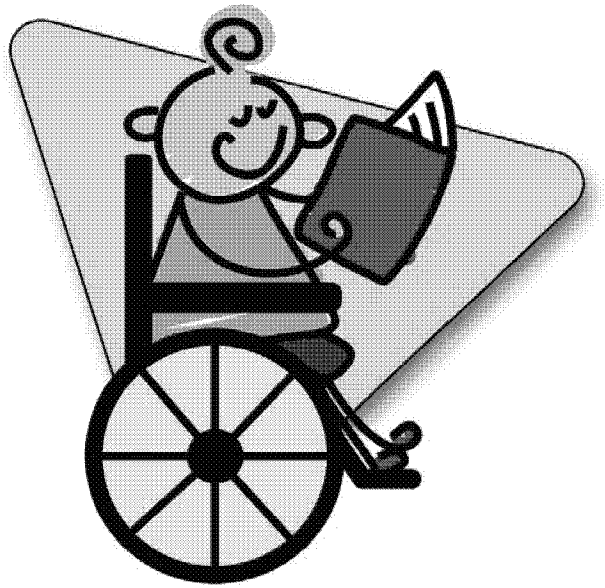
8. High quality primary programs use an appropriate system of assessment that documents children's growth and development in relationship to a defined set of state-mandated standards to guide teaching and learning.



9. Children's development, learning, knowledge and health are enhanced when a strong partnership exists between families, schools and communities.

10. High quality primary programs have a collaborative relationship and ongoing communication to provide smooth transitions (between early care programs and Kindergarten or first and then between first and second grades) for children and families to assure continuity of learning.

**Footnote: Young children with disabilities will meet standards consistent with their individualized education program (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990). English language learners will use the Pennsylvania ELF Standards to gain access to and meet the PA Academic Standards.



APPROACHES TO LEARNING

EARLY LEARNING STANDARDS FOR 2ND GRADE

Children must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help children feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment and enhancing their curiosity and knowledge about the world in which they live.

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APPROACHES TO LEARNING

STANDARD AL 1: DEMONSTRATE INITIATIVE AND CURIOSITY

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
AL 1.1 Participate willingly in various experiences AL 1.2 Express choices/preferences during concrete, immediate, familiar and unfamiliar activities AL 1.3 Demonstrate growing eagerness and satisfaction to discover and discuss a growing range of topics, ideas and tasks AL 1.4 Use multiple strategies and all available senses to explore and learn from the environment AL 1.5 Comment, predict and connect on events or aspects of the environment AL 1.6 Ask questions and seek meaningful information AL 1.7 Initiate social greetings and carry conversations	**The learner will:** • Independently choose to participate in at least 90% of the available learning centers including new experiences. • Independently choose new and different materials to represent different thoughts or feelings. • Express preferences, wants and needs in a manner that is appropriate and consistent. • Participate in preferred and non-preferred activities that match one's developmental strengths, talents and interests. • Initiate group and individual activities of choice within familiar environment. • Join and leave group with ease as a leader or a follower as the situation demands.	**The teacher will:** • Enhance learning centers and group activities to attract child participation and enhance learning. • Provide a classroom with clearly defined interest areas and materials that invite children to explore, discover and create. • Provide a variety of materials, art work, music, drama and photographs to stimulate experiences, knowledge, participation and interests. • Provide genre of reading materials. • Provide varied subject integrated activities in the learning centers. • Provide materials/activities appealing to a variety of senses, learning styles, technology and multiple intelligences for individuals, small groups and larger group experiences. • Ask open-ended and higher level questions to facilitate sharing, engage the listener, seek meaningful information and extend learning.

STANDARD AL 2: DEMONSTRATE ENGAGEMENT AND PERSISTENCE

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
AL 2.1 Demonstrate ability to complete a variety of tasks, activities, projects and experiences AL 2.2 Demonstrate ability to set goals and develop and follow through on plans AL 2.3 Demonstrate ability to maintain focus on a task, question, set of directions or interactions, despite distractions and interruptions AL 2.4 Accept environmental conditions and maintain task orientation in a constructive active environment AL 2.5 Demonstrate the skills necessary for participating in a group or independently AL 2.6 Follow through on redirection and feedback on performance	**The learner will:** • Express choices, initiate, follow through and complete activities and projects. • Find, choose and participate in appropriate, constructive and enjoyable ways to occupy leisure time. • Self-monitor behaviors to adapt to changing situations. • Initiate requests for factual information, stories, games and other learning activities. – Reflect on his/her performances. – Demonstrate how to work cooperatively.	**The teacher will:** • Encourage and praise efforts and facilitate planning and completion. • Encourage and document sequential progress and effort. • Anticipate needs and acknowledge progress both process and product. • Discuss and demonstrate how to work cooperatively. • Acknowledge and fulfill requests of stories, games and other learning activities. – Encourage reflection on progress of performance.

APPROACHES TO LEARNING

STANDARD AL 3: DEMONSTRATE REASONING AND PROBLEM SOLVING

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
AL 3.1 Predict possible outcomes related to cause and effect AL 3.2 Discover and try more than one solution to a question, task or problem AL 3.3 Seek and/or accept assistance from others when encountering a problem AL 3.4 Recognize and solve problems through observation, active exploration, trial and error, interactions and discussions with peers and adults AL 3.5 Respond to other's social cues during group activities AL 3.6 Cooperate with others to accomplish a joint task AL 3.7 Classify, compare and contrast objects, events and experiences AL 3.8 Recognize differing points of view	**The learner will:** • Predict outcomes in stories and in real life situations. • Respond to "what if" questions. • Explain and apply multiple strategies to solve problems. • Talk through a problem using steps to resolution. • Use steps or problem solving when involved in role play and real life situations. • Try to solve problems in conflict situations or seek assistance with conflict resolution when needed. • Negotiate and compromise in order to resolve conflict. • Empathize with those in stressful situations. • Respond in a variety of social situations. • Collaborate with others in problem solving situations. • Use an increasing number of details and more realistic representations in a developmentally appropriate strengths, talents and interests.	**The teacher will:** • Help children learn how to function in a group situation demonstrating how to work cooperatively through sharing and taking turns, working toward a specific goal, dividing responsibilities within a group and solving problems in an acceptable manner. • Provide a variety of materials and situations to support experience with cause and effect and problem solving (ex. Second Step Program). • Recognize children who support others in problem solving. • Teach and use vocabulary related to reasoning and problem solving (ex. If, when, after, before, next, what if, then). • Read stories and utilize role play which include problem solving, helping others and multiple problem solving skills. • Allow children to solve problems independently when possible, but encourage seeking assistance when all avenues have been exhausted and the conflict cannot be resolved peacefully. – Provide role playing situations and/or various technology based resources. • Strategically place learners according their needs. • Offer praise and reinforcement for positive behavior. • Provide opportunities for learners to share concerns or role play real life situations. • Use open-ended questions and hands-on practice to encourage classification, sorting, comparisons and problem solving. • Ask open-ended questions, higher level questions and quality feedback to stimulate and extend representations.

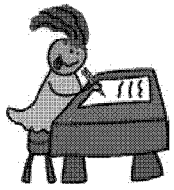
APPROACHES TO LEARNING

STANDARD AL 4: DEMONSTRATE FLEXIBILITY, RISK-TAKING AND RESPONSIBILITY

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
AL 4.1 Differentiate between appropriate and inappropriate risk-taking AL 4.2 Participate in a variety of familiar and unfamiliar AL 4.3 Accept responsibility for learning through active participation verbally or nonverbally AL 4.4 Accept responsibility for one's behavior	• Identify and explain dangerous and inappropriate risk-taking. • Participate in an increasing number of new experiences. • Volunteer and/or participate in discussions and other new learning activities. • Initiate own learning and play experiences. • Offer constructive suggestions to other learners and adults. • Deal with success in a positive way and view challenges as a growing experience. • Accept responsibility for the care of the classroom-school environment. • Begin to improve weak areas. • Accept consequences for choices and decisions when appropriate.	• Ask higher level questions in play situations and while reading stories. • Ask "When", "How", "Why" questions about potentially dangerous situations. • Be accepting of children's willingness or unwillingness to try new experiences. • Pair learners to scaffold skills and experiences. • Assign or designate through learner's volunteerism who is responsible for specific classroom tasks. • Demonstrate an awareness of learners' needs during group activities (role play, discussions). • Allow learners to express their suggestions regarding topics of discussion or material related to course of study. • Offer appropriate feedback for responsible choices. • Assist in guiding learners' choices.

STANDARD AL 5: DEMONSTRATE IMAGINATION, CREATIVITY AND INVENTION

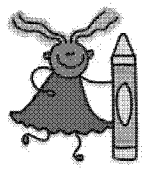
CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
AL 5.1 Initiate tasks and experiences as active leaders when selecting topics with increased flexibility, imagination and ingenuity AL 5.2 Use and connect materials/strategies in uncommon ways to investigate and solve problems	• Use a variety of materials to explore and express ideas and emotions. • Create and utilize props during role play activities. • Describe creative projects including written stories or poems. • Dramatize a variety of roles by reflecting real life situations. • Recognize imagination and creativity in others.	• Provide sufficient amounts of time for creative play and learning center opportunities and environments. • Read or relate stories about real people who display their use of imagination, creativity and design. • Provide a diversity of materials and props in all learning centers and aspects of the environment to stimulate and promote learning, exploration, imagination and creativity. • Allow for diversity, differences and abilities of learners. – Introduce "the arts and humanities" people, places by means of technology and field trips and involving the community. – Teachers will use community resources to demonstrate initiative creativity and invention.



ARTS & HUMANITIES

EARLY LEARNING STANDARDS FOR 2ND GRADE

Arts and humanities are an important component of children's early learning experiences. Children who are given opportunities to develop their imagination through a variety of media are learning to express their individual interests, abilities and knowledge. Children develop their understanding of the world around them and how it relates to them by interacting with materials, other children, their teacher and their community. When they view others' work, children are also learning to appreciate and respect differences in culture and viewpoint.



Arts and humanities influence children's growing competence as creative problem solvers and learners. Primary classrooms, supported by the use of the arts and humanities standards, facilitate children's learning across key curricular areas, emphasizing a variety of rigorous literacy, science (inquiry-based), number sense and social experiences. Instruction in the arts and humanities provide primary children with opportunities to construct knowledge and meaning through active, hands-on/minds-on exploration in a variety of environments using large and small group, individual and partner-based instructional practices.

The Production, Performance and Exhibition standard (9.1) has been separated into disciplines for the purpose of clarity only. The arts educator should continue cross-curricular integration within the scope of the arts.

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ARTS & HUMANITIES

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

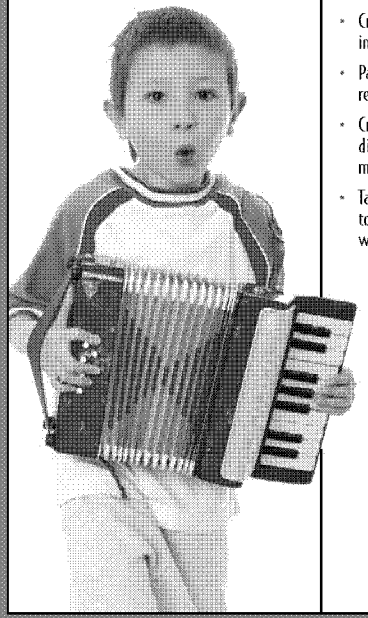
THIRD GRADE STANDARDS:

- Know the elements and principles of each art form to create works in the arts and humanities
- Recognize, know, use and demonstrate a variety of appropriate arts elements and principles to produce, review and revise original works in the arts
- Recognize and use fundamental vocabulary within each of the arts forms
- Use knowledge of varied styles within each art form through a production, performance or exhibition of unique work
- Demonstrate the ability to define objects, express emotions, illustrate an action or relate an experience through creation of works in the arts
- Identify works of others through a performance or exhibition
- Recognize the functions of rehearsals and practice sessions
- Handle materials, equipment and tools safely at work and performance spaces
- Identify arts events that take place in schools and in communities
- Know and use traditional and contemporary technologies for producing, performing and exhibiting works in the arts or the works of others
- Know and use traditional and contemporary technologies for furthering knowledge and understanding in the humanities

CONTENT FOR 2ND GRADE

A. Know and use the elements of shape, direction and rhythm in dance

B. Create and perform dance



EXAMPLES

The learner will:

- Demonstrate different shapes the body can make in movement (i.e. curved, angular).
- Move to various directional cues in space (up, down, side, forward, etc.).
- Begin to perform series of locomotor movements that reflect a given rhythm pattern.
- Create movement phrases or short dances in small groups.
- Participate, record, view and discuss rehearsals and practice sessions.
- Create and perform a dance incorporating different rhythms and tempos of movement.
- Take turns being audience and performer to both watch and perform improvised works.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate different shapes of the body in movement and allow students to copy the shapes and create new ones.
- Demonstrate how different locomotor movements can be combined to create rhythmic patterns.
- Provide opportunities for learners to watch and discuss presentations or videos of dance.
- Provide music with different rhythmic phrases.
- Demonstrate different directions that can be used when moving through space.
- Provide a dedicated place and time to rehearse for performances, record rehearsals and practices and allow students to view the recordings.
- Provide music of various tempos, including music with no meter, for students to improvise and create to.
- Provide opportunities for students to create, rehearse and perform simple improvised and structured dance movements.
- Provide a playing space for performing.

CONTINUED...

ARTS & HUMANITIES

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

CONTENT FOR 2ND GRADE

C. Create and perform music

D. Use the musical elements of timbre, rhythm, volume, intensity, pitch and texture

E. Recognize types (genres) of world music

F. Understand story (scenario), script/text in the theatre arts

EXAMPLES

The learner will:

- Create, perform and notate a variety of music using basic rhythmic and melodic patterns (quarter, eighth, half and whole notes and rests; do, re, mi, sol, la).
- Perform a variety of songs from different cultures and time periods.
- Create and notate sound effects and musical accompaniments for stories.
- Read basic traditional musical notation.
- Create and perform a variety of music using basic rhythmic and melodic patterns (quarter, eighth, half and whole notes and rests; do, re, mi, sol, la).
- Identify timbre, dynamic, intensity and texture changes in pieces of music.
- Explore different regions of the world and identify the music that comes from these places.
- Experience the different instruments and musical customs in world music by participating in drum circles, playing various world instruments, etc.
- Create improvised dramas in groups with dialogue and actions that reflect more complex character relationships, intentions and pursuit of goals.
- Combine sound and motion to create both animate and inanimate objects within complex, concrete or abstract imaginary worlds.
- Analyze story for conflict and character intentions.
- Identify and understand the purpose of voice and body warm-ups as a tool for actors.
- Collaborate in small groups to create original dramas improvised from a theme or story starter line of dialogue.

SUPPORTIVE PRACTICE

The teacher will:

- Provide a variety of music to perform.
- Lead students to explore various types of musical notation.
- Provide materials (books, poems, stories) as inspiration for musical accompaniments.
- Demonstrate effective musical accompaniment for stories.
- Allow students to experiment with musical instruments and voices to create new sounds.
- Model correct traditional musical notation.
- Give students the opportunity to sing and play instruments with varied pieces of music.
- Allow students to write pieces of music using traditional or basic musical notation.
- Provide a variety of listening examples from many cultures and time periods.
- Show students on a map or globe where pieces of music originated.
- Provide students with instruments and experiences related to different world regions.
- Provide simple plot descriptions or story starters and guide the children in creating improvised dramas with clear characters who are pursuing their own personal goals within the framework of the imaginary scenario.
- Lead the group in responding to music or abstract paintings by creating animate or inanimate objects that react to each other in an imaginary world.
- Read aloud plays and stories and lead class discussion to identify relationships between characters, central conflict or problem and the tactics each character uses to pursue their goals.
- Lead the group in voice and body warm-ups using the vocabulary of theatre to explain the reason behind each exercise.

CONTINUED...

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

CONTENT FOR 2ND GRADE

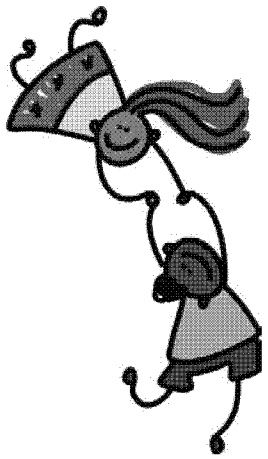
G. Create and perform plays and productions

H. Use collaboration and emphasis in the theatre arts

I. Create and exhibit visual art

J. Know color, shape, line, texture, size/relationship (proportion/scale), pattern (repetition), space and emphasis/focal point in visual art

K. Create works of art based on varied styles within all art forms



EXAMPLES

The learner will:

- Participate in rehearsals and practice sessions to prepare for performances.
- View and discuss recordings of rehearsals and practice sessions.
- Participate in structured improvised dramas which are rehearsed and refined.
- Take turns being audience and performer to both watch and perform works.
- Create work using a variety of media.
- Make choices regarding the presentation of their artwork (matting, size, orientation, location).
- Identify his/her own work and the works of others.
- Explore color through color mixing.
- Define shape through the use of line.
- Use line to simulate observed textures.
- Describe differences in size/relationship between one object and another.
- Identify the focal point in works of art.
- Respond to the works of famous artists by creating personal artwork.
- Know and understand the difference between mime, improvisation, story-telling and plays.
- Demonstrate a basic understanding of mime by creating a simple mimed performance of a daily activity such as brushing one's teeth.
- Demonstrate a basic understanding of storytelling by retelling a story from a picture book using a combination of narration, dialogue, repetitive words and illustrating of actions.
- Write a piece of music or create a dance using specific criteria.

SUPPORTIVE PRACTICE

The teacher will:

- Provide a dedicated place and time to rehearse for performances, record rehearsals and practices and allow students to view the recordings.
- Provide opportunities for students to create, rehearse and perform simple improvised dramas.
- Provide a playing space for performing improvised dramas to be watched by other students.
- Discuss and model appropriate audience behavior.
- Provide opportunities for students to discuss their own works and the works of others.
- Provide space and time for students to display and view their own works and the works of others.
- Provide age-appropriate examples of works that emphasis color, shape, line, texture, proportion/scale, pattern, space and emphasis/focal point.
- Allow students to experiment with materials to create artworks.
- Model the use of artistic elements in personal works.
- Provide prints of famous artworks and facilitate discussions about the qualities of these works.
- Share picture books with strong central conflicts and clear characters and then allow the students to tell the story to the class or to each other using their own words and illustrative actions.
- Model storytelling by performing a story as a storyteller might or inviting a story-teller to perform for the class.
- View a live performance of a play, read a play with the class or view a film of a play.
- Read a simple play script with the class and identify the differences between a script and a story in a book.
- Model the steps used to create music or dance.
- Provide opportunities for students to practice notating music and dance.

CONTINUED...

STANDARD 9.1: PRODUCTION, PERFORMANCE AND EXHIBITION OF DANCE, MUSIC, THEATRE & VISUAL ARTS

CONTENT FOR 2ND GRADE

L. Understand that works in the arts can narrate and inform

M. Create works of art based on the works of other dancers, musicians, actors and visual artists

N. Know and use traditional and contemporary technology in the production and performance of the visual and performing arts

O. Know and recognize the function of rehearsals and practice sessions in dance, music, theatre arts and visual arts

P. Demonstrate safe use of all materials, equipment and tools at work and in performance spaces in dance, music, theatre arts and visual arts

Q. Identify school and community performances and exhibitions relating to the visual and performing arts

EXAMPLES

The learner will:

- Know the difference between a play designed to teach facts and a play designed to communicate a story, emotion or theme.
- Know the difference between folk songs and work songs.
- Identify a piece of program music and discuss its story.
- Recognize stories told through images and movement in works in the arts.
- Rehearse and perform a play from a script.
- Create and perform music or dance in a specific style.
- Create pieces of art inspired by the styles and materials of famous artworks.
- Explore appropriate contemporary technologies to create personal works of art (e.g. digital processing, MIDI software, polymer clay).
- Know and use traditional technologies to create works in the arts (e.g. charcoal, pens, percussion instruments).
- Produce both preliminary and finished works in the arts.
- Identify tools and materials used to create works in the arts.
- Demonstrate the safe and proper use of arts tools and materials.
- Identify and demonstrate the proper cleaning and storage of tools and materials.
- Demonstrate the proper use of musical instruments.
- Demonstrate respect for other dancers' personal movement space and safety.
- Participate as an audience member for school assemblies, performances and exhibitions.
- Identify media outlets that are used to advertise performance and exhibition opportunities.

SUPPORTIVE PRACTICE

The teacher will:

- Read or experience a performance of a play designed to educate the audience and compare and contrast it with a play designed primarily to tell a story or express an emotion or theme.
- Lead students to perform folk and work songs and discuss the differences between the two.
- Play pieces of program music for students and share books based on the music (e.g. The Sorcerer's Apprentice, Carnival of the Animals).
- Allow students to create their own personal works of art and dance based on stories communicated through previously viewed/discussed artworks and dances.
- Allow students to view and discuss famous artworks and explore techniques that are best suited to each work.
- Provide the class with simple scripts to perform for each other or for an open house. Rehearse the script with simple stage movement and an emphasis on voice and movement choices to create a character and pursue a goal.
- Give students the opportunity to experience music and dance in different styles (e.g. pentatonic songs, folk songs and dances).
- Demonstrate the uses of traditional and contemporary technologies to create works in the arts.
- Allow students to explore various technologies to create and perform works of art.
- Provide feedback to students so they see and understand how practice contributes to better work.
- Demonstrate the proper use of equipment.
- Identify which tools, materials and equipment are used in each art form.
- Inform students of proper storage areas and methods.
- Allow ample time for students to clean and store equipment after use.
- Inform students of opportunities to attend performances and exhibitions both in and out of school.
- Model proper audience/participant behavior at school assemblies, performances and exhibitions.

ARTS & HUMANITIES

STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXTS

THIRD GRADE STANDARDS:

- Explain the historical, cultural and social context of an individual work in the arts
- Relate works in the arts chronologically to historical events (e.g., 10,000 B.C. to present)
- Relate works in the arts to varying styles and genre and to the periods in which they were created
- Analyze a work of art from its historical and cultural perspective
- Analyze how historical events and culture impact forms, techniques and purposes of works in the arts (e.g., Gilbert and Sullivan operettas)
- Know and apply appropriate vocabulary used between social studies and the arts and humanities
- Relate works in the arts to geographic regions
- Identify, describe and analyze the work of Pennsylvania Artists in dance, music, theatre and visual arts
- Identify, explain and analyze philosophical beliefs as they relate to works in the arts
- Identify, explain and analyze historical and cultural differences as they relate to works in the arts
- Identify, explain and analyze traditions as they relate to works in the arts
- Identify, explain and analyze common themes, forms and techniques from works in the arts

CONTENT FOR 2ND GRADE

A. Identify the historical and cultural context of an individual work in the arts

B. Know the historical and cultural perspective of a work of art

C. Know how historical events and culture impact forms, techniques and purposes of works in the arts

D. Know and use appropriate vocabulary used between social studies and the arts and humanities

E. Compare and contrast historical and cultural differences as they relate to works in the arts

F. Describe traditions as they relate to works in the arts

G. Identify and discuss common themes, forms and techniques from works in the arts

EXAMPLES

The learner will:

- View and be aware of cultural perspectives represented in artwork, music, stories/folktales and dance performances.
- Notice the differences between ancient cultures and students' lives in works of art by viewing artwork, listening to music, moving or reading/acting out stories.
- Build upon and continue to use vocabulary appropriate to the time period and culture being discussed in works in the arts.
- Choose characteristics in works of art that show differences between cultures (i.e. prehistoric man's clothing as compared to contemporary clothing design, African vs. Middle Eastern drumming styles).
- Discuss how his/her own family traditions are different or similar to other family traditions in other cultures (i.e. Native Americans dinner vs. Modern Family dinner).
- Identify thematic information from contemporary and traditional resources and apply to his/her own works and performances.
- Understand various forms and techniques used in music (e.g. rondo form, musical themes) and apply these to his/her own works.
- Understand how various dances can share common forms or techniques with different end results (i.e. tap dance vs. clogging vs. flamenco dance).

SUPPORTIVE PRACTICE

The teacher will:

- Facilitate and guide class discussions about the place and time represented in works in the arts.
- Build upon cross-curricular social studies resources available to help students learn about cultural perspectives in a work of art.
- Introduce ancient cultures and how historical events of those cultures impact forms, techniques and purposes of works in the arts.
- Continue to provide social studies and art vocabulary word lists for use during art discussions.
- Use guided discussion to help students compare cultural differences as they relate to works in the arts.
- Choose a variety of art, dance, music and theatre examples from various cultures and time periods.
- Show examples of contemporary family traditions as they relate to other family traditions from other cultures and times.
- Provide resources that help students make connections between works in the arts with common forms and themes.
- Allow students to experience and experiment with various sound sources and musical examples.

ARTS & HUMANITIES

STANDARD 9.3: CRITICAL RESPONSE

THIRD GRADE STANDARDS:

- Recognize critical processes used in the examination of works in the arts and humanities
- Know that works in the arts can be described by using the arts elements, principles and concepts
- Know classification skills with materials and processes used to create works in the arts
- Explain meanings in the arts and humanities through individual works and the works of others using a fundamental vocabulary of critical response
- Recognize and identify types of critical analysis in the arts and humanities
- Know how to recognize and identify similar and different characteristics among works in the arts
- Know and demonstrate what a critic's position or opinion is related to works in the arts and humanities

CONTENT FOR 2ND GRADE

A. Recognize critical processes used in the examination of works in the arts and humanities

B. Recognize that works in the arts can be described by using arts elements, principles and concepts

C. Use classification skills to identify materials and processes used to create works in the arts

D. Understand that works in the arts have meaning

E. Identify similar and different characteristics among works in the arts

EXAMPLES

The learner will:

- Form a judgment based on personal reaction to a work in the arts.
- Describe an artwork or performance using basic vocabulary describing the elements of art, dance, music or theatre.
- Know the properties of materials used to create works in the arts.
- Match a material or process with its correct use in creating a work in the arts.
- Identify basic meaning expressed in a work in the arts.
- Recognize common and different themes, materials and techniques used to create works of visual art, music, dance or theatre.

SUPPORTIVE PRACTICE

The teacher will:

- Provide dedicated time for students to express and share their personal opinions about works in the arts.
- Choose arts examples that exhibit the strong use of elements: color, line, shape, space, texture, rhythm, melody, timbre, etc.
- Allow students to respond to works in the arts by writing about, drawing and acting out their thoughts.
- Demonstrate the correct use of materials and processes in creating works in the arts.
- Provide dedicated storage space of materials grouped together by similar properties.
- Provide artistic, theatrical and musical examples that have clear meaning for class performance and discussion.
- Allow students to view and listen to viewpoints expressed by famous artists, dancers, choreographers, composers, musicians, actors and directors about their works.
- Facilitate guided discussion to explore themes.
- Allow students to explore characteristics they have observed (size, subject matter, material, color, movement, volume, etc.).
- Provide examples of works in the arts that exhibit similar characteristics.
- Provide examples of works in the arts that exhibit different characteristics.

STANDARD 9.4: AESTHETIC RESPONSE

THIRD GRADE STANDARDS:

- Know how to respond to a philosophical statement about works in the arts and humanities
- Know how to communicate an informed individual opinion about the meaning of works in the arts
- Recognize that the environment of the observer influences individual aesthetic responses to works in the arts
- Recognize that choices made by artists regarding subject matter and themes communicate ideas through works in the arts and humanities

CONTENT FOR 2ND GRADE

A. Make a philosophical statement about works in the arts and humanities

B. Know how to communicate an informed individual opinion about the meaning of works in the arts

C. Identify the various environments in which observers experience the arts

D. Identify the choices that artists make regarding subject matter and theme

EXAMPLES

The learner will:

- Talk about their experience of a play, story, piece of music, work of art or dance and articulate why they liked or disliked it.
- Experience a live or filmed performance or exhibition and compare and contrast their feelings about beauty with their feelings and/or experience in watching the performance.
- Form an opinion about works in the arts.
- Understand that opinions differ.
- Gather information about specific works of art and be able to communicate facts to support his/her opinion.
- Identify the differences between live and recorded performances.
- Identify the differences between live and virtual/digital art exhibits.
- Experience program music and discuss its themes.
- Listen to music that uses different instruments and voices, including nontraditional sounds. Discuss how the composers' or performers' choices changed the listeners' experience.
- Experiment with found sounds, voices and instruments to create original pieces of music.
- View an artwork or performance and articulate its subject and/or theme.
- Find related themes or subjects in several works in the arts.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for the students to experience live or filmed performances or exhibitions of high quality and then discuss these in terms of the students' aesthetic response (Ex: What about this performance/exhibition seemed beautiful to you? Why?).
- Give students the chance to express individual opinions about various styles and genres in the arts (e.g. museum day, music or dance critics).
- Provide students with reviews written by arts critics and guide them to examine the opinions presented.
- Make available varied works in the arts for student examination and critique.
- Provide opportunities for students to experience the arts in different environments (parades, concerts, recordings, art galleries, virtual art exhibits, etc.).
- Provide a variety of music for classroom listening and discussion.
- Guide students to look at instruments, voices and classroom objects in traditional and nontraditional ways.
- Provide traditional and contemporary examples for students to explore themes and subject matter in works in the arts.
- Facilitate discussions about subject matter and themes in works in the arts.

FAMILY-SCHOOL-COMMUNITY PARTNERSHIPS

EARLY LEARNING STANDARDS FOR 2ND GRADE

Primary classrooms that foster home-school-community connections assure students' school success. Partnerships that create seamless experiences support children's learning. The link is established when parents and school staff share information about the child, family, home **and** school culture. The link is extended when community members also support the educational process by sharing resources and supporting ongoing and open communication.

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STANDARD P1: PARENTING

Quality primary programs support families.

SCHOOL
To support children, families and communities the school will:

A. Assist families in accessing community resources (housing, health, nutrition, clothing and safety)

B. Assist families in understanding child development

C. Assist families in establishing home conditions that support children as learners

D. Develop relationships with children and families that are based on trust and respect

E. Demonstrate an understanding of the diversity of family structures, styles and cultural traditions

FAMILY
To support children the family can:

- Acquire knowledge and understanding of how to access community resources.
- Acquire knowledge of child development.
- Establish home conditions that support children as learners.
- Engage in school activities to gain a better understanding of school culture.
- Engage in school activities to provide schools with a better understanding of their home culture.

COMMUNITY
To support children, families and schools the community can:

- Provide a variety of information on community resources for families.
- Provide a variety of resources concerning child development.
- Provide a variety of resources concerning the establishment of home conditions that support children as learners.
- Foster relationships that support education among schools, families and community members.
- Offer resources that help schools understand the diversities that exist among children and families.

STANDARD P2: COMMUNICATION

Quality primary programs effectively communicate with families.

SCHOOL
To support children, families and communities the school will.

A. Create an inviting school environment that fosters trust and mutual respect through open dialogue

B. Communicate with families about school goals, programs, assessments, children's progress, curriculum, activities, etc.

C. Promote and provide for communication through a variety of tools and opportunities

D. Provide print and non-print communications that are clear and understandable to all families, including home language translations

E. Obtain ideas from families to improve the design and content of communications

FAMILY
To support children the family can:

- Engage in open dialogue that fosters trust and mutual respect.
- Engage in communications about school goals, programs, assessments, children's progress, curriculum, activities, etc.
- Promote and provide for communication through a variety of tools and opportunities.
- Offer suggestions to improve the design and content of communications between school and home.

COMMUNITY
To support children, families and schools the community can:

- Participate in frequent communication with families and schools.
- Provide a variety of resources to enhance communication between and among home, school and community partners.

STANDARD P3: VOLUNTEERING

Quality primary programs recruit, train, work and involve families as volunteers.

SCHOOL
To support children, families and communities the school will:

A. Expand recruitment, training and involvement of families as volunteers and audience members at the school or in other community locations

B. Invite parents to assist in classroom and school projects, programs and events

FAMILY
To support children the family can:

- Assist administrators, teachers, parents and students as aides, chaperones, lecturers and tutors when possible.
- Assist with classroom and school projects and programs.
- Attend assemblies, award presentations, celebrations, performances, sports events and other events.
- Support school goals and children's learning through volunteering and participating in school activities.

COMMUNITY
To support children, families and schools the community can:

- Offer a variety of resources to encourage parents to serve as volunteers.

STANDARD P4: LEARNING AT HOME

Quality primary programs support in at-home interactive learning activities for children's skill and concept development.

SCHOOL
To support children, families and communities the school will:

A. Emphasize that help at home is to support, encourage and guide children

B. Provide families with a variety of activities for learning in the home to extend skill and concept development

C. Provide information about what children will be learning and doing in primary classrooms

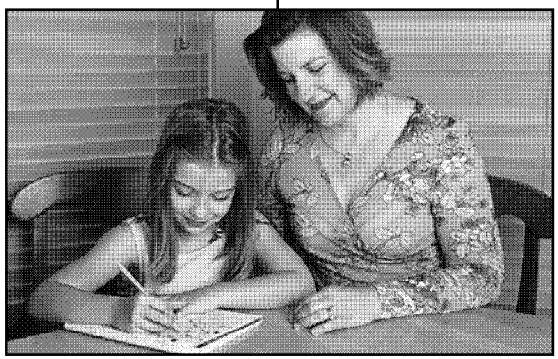
D. Create interactive activities that students share and discuss with others at home

FAMILY
To support children the family can:

- Establish routines for learning in the home.
- Participate with children in interactive learning activities at home to support, encourage and guide their children's development.

COMMUNITY
To support children, families and schools the community can:

- Provide a variety of resources to support schools and families in their role as guides and co-learners of student learning at home.
- Use local community, state and federal printed resources to assist families.



STANDARD P5: DECISION MAKING

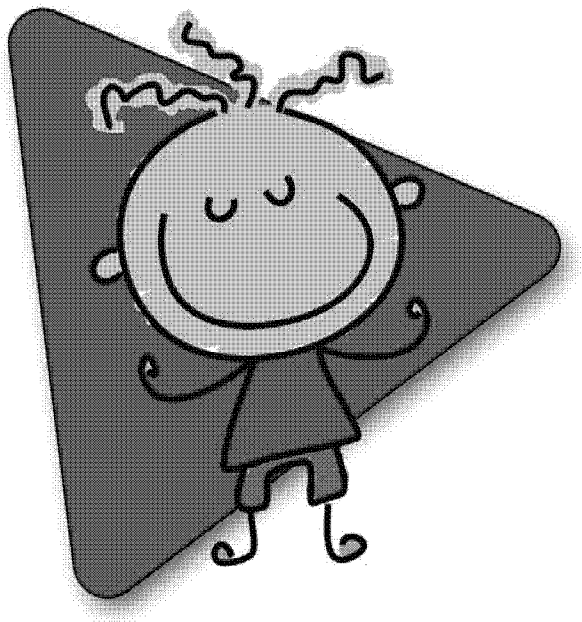
Quality primary programs include families as participants in school decisions, governance and advocacy.

SCHOOL	FAMILY	COMMUNITY
To support children, families and communities the school will:	***To support children the family can:***	***To support children, families and schools the community can.***
A. Encourage involvement through school advisory groups B. Include parent leaders who reflect the diversity of the school population (e.g., ethnic, racial, socio-economic and other groups) in school advisory groups C. Offer training for parents to develop leadership skills D. Promote shared decision making	• Become involved through school advisory groups. • Participate in leadership training. • View decision making as a shared process.	• Provide a variety of resources for families and schools to both encourage and participate as shared decision makers. • Keep families informed of opportunities to be participants in school decisions.

STANDARD P6: COLLABORATING WITH THE COMMUNITY

Quality primary programs help children and families collaborate in their community.

SCHOOL	FAMILY	COMMUNITY
To support children, families and communities the school will:	***To support children the family can:***	***To support children, families and schools the community can:***
A. Contribute to the community through service projects B. Build on community strengths and work collaboratively to address issues that impact the community's educational climate C. Inform all families and learners about community programs and services D. Use community resources for improving curriculum and instruction E. Employ strategies that enable students and families to learn about and contribute to the community	• Contribute to the community through service projects. • Work collaboratively to build on community strengths that address issues that impact the community's educational climate. • Use knowledge of local resources to increase personal skills and talents or to obtain needed services.	• Contribute to students, families and schools through partnerships involving businesses, community agencies, cultural groups, health services, recreation and other groups and programs. • Work collaboratively to build on community strengths that address issues that impact the community's educational climate. • Provide multiple avenues for informing families and students about community programs and services.



HEALTH, SAFETY & PHYSICAL HEALTH

EARLY LEARNING STANDARDS FOR 2ND GRADE

Healthy, active children are better prepared to learn. Their learning is impacted by their health and well-being. Second grade students need to learn about their bodies, how their bodies move and the behaviors and skills necessary to protect them and keep them healthy. Instruction for second grade students is focused on developing foundational skills in health, safety and physical education.

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STANDARD 10.1: CONCEPTS OF HEALTH

THIRD GRADE STANDARDS:

- Identify and describe the stages of growth and development
- Identify and know the location and function of the major body organs and systems
- Explain the role of the food guide pyramid in helping people eat a healthy diet
- Know age appropriate drug information
- Identify types and causes of common health problems of children

CONTENT FOR 2ND GRADE

A. Identify the stages of development: infant, child, teen, adult

B. Make a short term personal health goal and take action to achieve the goal, e.g.
   1. What do I want to do?
   2. What do I need to do it?
   3. Where do I start?
   4. Who can help me?

C. Use basic communication skills, e.g. listening, not speaking when someone else is speaking, basic body language, paraphrasing

D. Effectively communicate wants, needs and feelings

E. Identify and describe ways individuals grow socially, e.g. friendships, family responsibilities

F. Choose appropriate ways to handle basic emotions

G. Demonstrate a basic knowledge of the brain, heart and lungs, major bones and circulatory system (major arteries and veins)

H. Summarize the basic functions of the brain, heart and lungs, major bones and circulatory system (major arteries and veins)

EXAMPLES

The learner will:

- Sequence stages of life through pictures.
- Take action to achieve short term personal goal.
- Demonstrate effective basic communication skills.
- Effectively communicate their wants, needs and feelings.
- Distinguish between healthy and unhealthy behaviors.
- Participate in interactive activities that show how people grow and change physically, emotionally and socially.
- Predict how someone is feeling based on body language and facial expression.
- Identify adults in the home, school and community who can help them with communication skills and goal setting.
- Summarize ways in which family members and friends care for each other.
- Develop personal, appropriate ways to handle emotions.
- Correctly identify the location of the brain, heart and lungs, major bones and circulatory system (major arteries and veins.)
- Construct a model of body parts and organs.

SUPPORTIVE PRACTICE

The teacher will:

- Provide interactive sequencing activities utilizing pictures.
- Walk children through the basic goal setting process so that they can achieve their personal goals.
- Provide interactive activities using children's literature to analyze effective and ineffective listening skills.
- Set scenarios for practicing effective communication and listening skills through children's literature, role play and modeling.
- Have children develop scenarios of times when they are stressed, have them choose appropriate strategies and identify adults who can help them.
- Provide interactive activities, e.g. discussions, puppetry and picture cards that highlight ways individuals grow and develop emotionally and socially.
- Provide opportunities for students to sort healthy versus unhealthy behaviors.
- Provide interactive ways for children to recognize feeling in self and others, e.g. feeling box, emotion charts.
- Provide activities for children to identify adults who care about them.
- Model appropriate expression of feelings.
- Create interactive activities, e.g. songs, building models, child-size body drawings, to teach body part recognition and function.
- Engage in daily sensory-motor activities as part of daily routine (use CDs, tapes or self).
- Construct a model that names and describes body parts and organs.
- Use visual media that focuses on body parts and organs.

CONTINUED...

STANDARD 10.1: CONCEPTS OF HEALTH continued

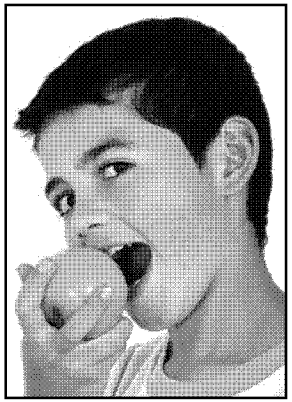
CONTENT FOR 2ND GRADE

I. Describe the concept of balancing energy intake (eating) and energy output (physical activity)

J. Develop an understanding of the importance of eating a variety of foods that are low in fats and sugars

K. Explain the role of the food guide pyramid in helping people eat a healthy diet

L. Describe the short term effects of alcohol and tobacco on various body organs



EXAMPLES

The learner will:

- Explain how food provides fuel and energy for the body and how it must be balanced with physical activity.
- Identify vigorous physical activities.
- Summarize how food choices affect health.
- Classify foods as high or low in fats and sugars.
- Choose nutritious snacks that are low in fats and sugars.
- Monitor own diet for foods that are high in fat and sugar and the number of fruits and vegetables.
- Identify the categories of food in the food guide pyramid.
- Provide examples of a variety of foods in each category.
- Sort food according to the food guide pyramid.
- Explain why he/she should never take a medicine unless it is given by a trusted adult.
- Differentiate between healthy and unhealthy risk-taking behaviors, e.g. smoking, alcohol.
- Identify and illustrate the short term effects of alcohol and tobacco on various body organs.
- Choose a trusted adult who they can ask about whether a household item is safe to take.
- Produce a short role play, poster, rap, cartoon panel demonstrating use of basic refusal skills.

SUPPORTIVE PRACTICE

The teacher will:

- Provide a log for students to monitor food choices.
- Provide opportunities for students to choose vigorous physical activities that can be done by themselves or with their families.
- Read fiction and non-fiction books that focus on food choices and the role of food in keeping one healthy.
- Expose learners to culturally diverse fruits and vegetables.
- Provide interactive activities using the food guide pyramid to help students understand how foods are grouped and demonstrate how students need to eat a variety of foods.
- Create a classroom environment that supports healthy choices.
- Provide healthy snacks and beverages.
- Provide an assortment of foods.
- Provide activities that allow the students to sort food into appropriate categories.
- Facilitate class discussions pertaining to healthy risks and unhealthy risks.
- Read literature related to decision-making, refusal skills, healthy choices or risk-taking.
- Use role play situations so the child can develop competence in using basic refusal skills.
- Model healthy habits.
- Read a story about a health choice and have the children write, draw or discuss a positive or healthy story ending.
- Provide activities in which the child has the opportunity to choose a trusted adult at home or school.
- Provide interactive activities showing the effect of various drugs on the body, e.g. smoking machine.

CONTINUED...

STANDARD 10.1: CONCEPTS OF HEALTH continued

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
M. Identify high-risk and low-risk activities related to health N. Demonstrate age appropriate refusal skills O. Recognize that diseases such as diabetes, asthma and allergies are not communicable P. Connect positive and negative behaviors, e.g. handwashing, sneezing in elbow, universal precautions, with the spread of communicable disease Q. Children need not fear people with chronic conditions	• Identify diseases as communicable or non-communicable. • Recognize that some diseases are caused by heredity or environmental factors, e.g. springtime allergies, food allergies, pet allergies, exercise induced asthma, hereditary diabetes. • Participate in activities that provide interaction with a variety of students. • Identify positive and negative behaviors that influence the spread of communicable diseases.	• Read literature related to getting and being sick. • Create classroom environment that practices good disease prevention, e.g. handwashing, sneezing in elbow, universal precautions and is accepting of children with any childhood health condition. • Provide interactive activities that provide children with the opportunity to identify positive and negative behaviors. • Utilize community materials and resources on chronic diseases. • Facilitate discussions with children about not stigmatizing those with chronic conditions. • Model acceptance of those with chronic

STANDARD 10.2: HEALTHFUL LIVING

THIRD GRADE STANDARDS:

- Identify personal hygiene practices and community helpers that promote health and prevent the spread of disease
- Identify health-related information
- Identify media sources that influence health and safety
- Identify the steps in a decision-making process
- Identify environmental factors that affect health

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Analyze how personal health practices/habits affect our health B. Practice ways to prevent illness through adequate rest, physical activity and healthy foods C. Monitor personal health practices/habits D. Choose people that help to keep us healthy and safe	• Select things that he/she will do to stay healthy. • Monitor healthy and unhealthy personal health practices, e.g. the spreading of germs, taking drugs, using a personal log or journal. • Create a personal health pledge, e.g. pledging to be smoke free, being physically active, eating fruits and vegetables, getting enough sleep. • Choose pertinent people in their lives who will help them be healthy and stay safe. • Practice ways to prevent the spread of communicable diseases, e.g. handwashing, sneezing in elbow, universal precautions.	• Read literature related to personal health practices, preventing illness and community helpers. • Create learning centers that focus on healthy hygiene practices, e.g. brushing teeth, flossing teeth. • Provide interactive activities that provide children the opportunity to practice how to prevent the spread of disease, e.g. handwashing, covering mouth with coughing, universal precautions. • Create interactive tasks on how to prevent the spread of germs and illness. • Provide opportunities and materials for children to role-play with simple props. • Model good health practices, e.g. handwashing, covering mouth during cough. • Use interactive activities in which the children must categorize or sort healthy and unhealthy personal health practices. • Have people that help to keep us healthy and safe such as school and community professionals come into the classroom so children can recognize community helpers.

CONTINUED...

STANDARD 10.2: HEALTHFUL LIVING continued

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
E. Interpret the signs and symbols in a given situation, e.g. swimming, wet floors, street crossing, flashing red lights or others appropriate for area F. Analyze how media influences health behaviors G. Deduce that the media are not always accurate regarding health choices H. Generate possible outcomes and consequences to health related decisions I. Apply the steps of a decision making process to a given scenario J. Understand that trusted adults can help us make healthful decisions K. Analyze things in the environment that affect our personal health, e.g. insects, sun, loud noise, weather, tobacco smoke	• Identify health related signs and symbols and interpret what they mean given the situation. • Identify and explain different media sources that influence our choices, e.g. TV, video, advertisements and commercials. • Document the various media sources, e.g. TV, video, advertisements and commercials, that influence health. • Differentiate between accurate and inaccurate media related to health products and services. • Explain when to ask for help in the decision-making process and select the best adult to help in the specific situation. • Predict and list all possible consequences or outcomes from a choice. • Utilize decision making steps to ensure a healthful outcome. • Choose adults at home and in school that can help him/her make healthful decisions. • Explain how trusted adults can help us make healthful decisions. • Analyze how insects, sun, loud noise, weather and tobacco smoke can affect personal health. • Adopt ways to protect him/her from the identified environmental factors. • Demonstrate effective sun protection: — Slip into long sleeve shirt; — Slap on a hat; and — Slop on sunscreen. • Demonstrate how to effectively prevent and manage tick exposure in wood and tall grass: — Wear light-colored, long sleeve clothing; — Wear socks covering cuffs; — Use insect repellant; and — Full body check by a trusted adult.	• Provide scenarios for children to be able to interpret signs, symbols and meanings. • Invite community health care providers into the classroom to describe what they do and the tools they use. • Post common signs and symbol in the classroom. • Provide interactive activities that show how media can influence how we feel about things. • Provide media, e.g. video clips, magazine ads, for children to differentiate between accurate and inaccurate information. • Provide students with examples of accurate health media, e.g. public health ads. • Read literature related to making decisions and safe choices. • Create scenarios and have children make the choice and predict the consequences for themselves in the scenario. • Provide interactive activities in which the children are active learners in making choices as a class or as individuals. • Model effective decision-making skills. • Practice and rehearse what to do during different types of emergency drills. • Read literature related to the theme of environment and health. • Engage learners in interactive activities matching preventative strategies with environmental factors. • Model effective sun protection. • Model effective tick management exposure.

STANDARD 10.3: SAFETY AND INJURY PREVENTION

THIRD GRADE STANDARDS:

- Recognize safe/unsafe practices in the home, school and community
- Recognize emergency situations and explain appropriate responses
- Recognize conflict situations and identify strategies to avoid or resolve
- Identify and use safe practice in physical activity settings

CONTENT FOR 2ND GRADE

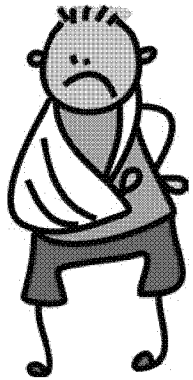
A. Know and demonstrate the importance of rules to ensure safety

B. Identify general safety guidelines to follow at home, school or community related to the following areas:
   - Home: fire safety, pool safety, kitchen safety, drug safety, firearm safety, electrical safety, poison safety
   - School Safety: fire drills, safe from bullies, safety from strangers, playground safety
   - Community Safety: aquatic safety, safety from strangers, motor vehicle safety, bicycle safety, bus safety

C. Recognize an emergency situation and describe general guidelines for handling it

D. Apply conflict resolution strategies to given scenarios

E. Identify and demonstrate safe practices in physical activity



EXAMPLES

The learner will:

- Describe how to keep him/her safe.
- Identify and demonstrate safe practices for situations at home, school and community.
- Distinguish between safe and not safe practices for situations at home, school and community.
- Identify situations as emergency or not an emergency.
- Demonstrate, through role play or personal actions during emergency drills, knowledge of appropriate ways to respond to emergency situations.
- Discuss with their family what to do in a home emergency.
- Demonstrate how to resolve or avoid conflict in a positive manner.
- Select personally appropriate ways to express and deal with emotions and feelings:
  - Share your feelings;
  - Don't use put downs;
  - Ask for help from a trusted adult; and
  - Walk away.
- Know and demonstrate the difference between safe and unsafe practices.
- Avoid actions that might lead to accidents.
- Follow safe practices in all school areas.
- Utilize safe practices when participating in physical activities.
- Identify safe and unsafe practices that occur on the playground.
- Demonstrate safe practices on playground equipment.
- Demonstrate appropriate use of safety equipment, e.g. such as bicycle helmets, knee and elbow pads.
- Participate in the development of classroom and playground rules.

SUPPORTIVE PRACTICE

The teacher will:

- Provide student guidelines for the areas that are relevant to their specific location, i.e. city, suburb, rural area.
- Model and discuss the importance of safety rules and practices.
- Read literature about strangers, bullies and safety rules for public places.
- Design interactive tasks that will provide learners opportunities to practice safety rules and behaviors.
- Provide opportunities and props for learners to role play responding to emergencies and first aid situations.
- Provide opportunities for learners to make reminders (magnet, sign) to place near the phone for placing an emergency phone call.
- Provide opportunities for students to discuss ways to respond to emergency situations with family members.
- Read fiction and non-fiction that addresses conflict and/or bullying situations.
- Create home, school, neighborhood, etc. scenarios for learners to role play using appropriate strategies to solve conflicts.
- Create a classroom environment that fosters healthy conflict resolution and respect and acceptance for others.
- Read fiction and non-fiction that addresses the safety in physical activity.
- Create a classroom and school environment in which all children feel safe and comfortable.
- Encourage children to help develop classroom and playground rules.
- Have the children help create safety messages for the classroom and playground.
- Model how to use playground equipment appropriately and provide students with opportunities to practice using the equipment correctly.

STANDARD 10.4: PHYSICAL ACTIVITY

THIRD GRADE STANDARDS:

- Identify and engage in physical activities that promote physical fitness and health
- Know the positive and negative effects of regular participation in moderate to vigorous physical activities
- Know and recognize changes in body responses during moderate to vigorous physical activity
- Identify likes and dislikes related to participation in physical activities
- Identify reasons why regular participation in physical activities improves motor skills
- Recognize positive and negative interactions of small group activities

CONTENT FOR 2ND GRADE

A. Distinguish between activities that promote health-related fitness and activities that do not develop physical fitness and health

B. Understand that fitness is the ability of your body to work well, feel good and be able to do the things you want to do when doing chores or playing

C. Understand that fitness is made up of several components, e.g. muscular strength and endurance, flexibility, cardio-vascular and body composition

D. Understand that health is made up of several components such as how your body feels, how your mind thinks, how you feel about the things that happen to you and how you get along with others

E. Identify positive and negative effects of regular participation in moderate physical activity

F. Recognize how the body changes when you do moderate to vigorous physical activity such as fast heart rate, heavy or increased breathing, sweating

G. Participate in the Talk Test (talk to a friend) while moving during physical activity

H. Recognize the difficulty of carrying on a conversation while moving during vigorous physical activities

EXAMPLES

The learner will:

- Participate in a variety of fitness activities and determine what specific health-related fitness components each activity promotes.
- Describe what it means to be physically fit.
- Determine what activities promote moderate to vigorous physical activity.
- Identify the components of health and physical fitness.
- Examine personal activity patterns.
- Identify the positive/negative effects of participating in moderate physical activity following an activity session.
- Explain how to change a negative effect into a positive result.
- Describe physical differences felt after participating in moderate to vigorous physical activities, e.g. fast heart rate, heavy or increased breathing, sweating.
- Compare changes that occur in the body for different physical activities.
- Explain the difference between moderate and vigorous physical activity using the Talk Test.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for children to talk about what it means to be physically fit and healthy.
- Design activities that develop specific health-related fitness components, e.g. muscular strength and endurance, flexibility, cardio-respiratory and body composition.
- Assist students in determining how different activities develop different health-related components.
- Have students create an illustration or diagram of the components of health.
- Provide opportunities for students to participate in activities that promote health related fitness.
- Provide moderate physical activity sessions.
- Design interactive sessions in which the children identify negative and positive effects.
- Brainstorm with the class how to change a negative effect into a positive result.
- Provide opportunities for learners to compare and contrast different types of physical activities on their body, e.g. fast heart rate, heavy or increased breathing, sweating.
- Facilitate classroom discussions related to the physiological effects of different types of exercises.
- Provide a way to visually graph or depict their heart rates after participating in different physical activities.

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STANDARD 10.4: PHYSICAL ACTIVITY continued

CONTENT FOR 2ND GRADE

I. Determine what affects an individual's physical activity choices, i.e., likes and dislikes

J. Understand that practice and knowledge of how to correctly do a skill are important in learning motor skills

K. Understand that critical elements are cues that help students to learn a skill or to perform a skill better

L. Understand and identify positive and negative interactions of small group activities

M. Recognize that in games and sports, we must work with other people. How we work with the other people in our group can be positive or negative

EXAMPLES

The learner will:

- Identify what affects physical activity choices, i.e. likes and dislikes.
- Identify and apply the appropriate critical elements to a variety of motor skills.
- Correctly practice the skill using the critical elements.
- Share with a partner one motor skill that he/she would like to improve by practicing.
- Demonstrate the ability to cooperate with others during small group activities.
- Identify positive and negative behaviors after participating in physical activities.

SUPPORTIVE PRACTICE

The teacher will:

- Provide think-pair-share opportunities or small group activities that involve comparing activity choices.
- Provide opportunities for children to identity the critical elements for a variety of motor skills.
- Provide task cards with critical cues and have children observe each other to determine if their peers are demonstrating the critical elements.
- Have children brainstorm motor skills that could improve by practicing using the critical elements.
- Provide opportunities for children to share with a partner.
- Use an assessment tool such as a T-chart to assist students in identifying interactions/ behaviors during and after participating in physical activities.
- Design activities that facilitate partner and small group work.
- Facilitate class discussions highlighting positive group behaviors.

STANDARD 10.5: CONCEPTS, PRINCIPLES & STRATEGIES OF MOVEMENT

THIRD GRADE STANDARDS:

- Recognize and use fundamental motor skills and movement concepts
- Recognize and describe the concepts of motor skill development using appropriate vocabulary
- Know the function of practice
- Identify and use principles of exercise to improve movement and fitness activities
- Know and describe scientific principles that affect movement and skills using appropriate vocabulary
- Recognize and describe game strategies using appropriate vocabulary

CONTENT FOR 2ND GRADE

A. Understand that games, dances and gymnastics are physical activities and all physical activities use fundamental motor skills

B. Recognize that movement concepts give you lots of ideas for different ways to use the fundamental motor skills in different physical activities

C. Understand that many physical activities use combinations of two or more fundamental motor skills/movement concepts

D. Know and demonstrate that correctly practicing a skill can help you become a more skillful mover

E. Recognize that good feedback tells you what you should do when learning "how to do a skill"

F. Know that the best feedback tells you how to change your performance so you can improve

G. Know that practice means repeating movements and cues to get better at performing skills

H. Know that getting better in a skill means to go from inconsistent, not being good at the skill or having to think about the skill, to consistent, being able to do a skill the same way and get the same results without thinking about how to do the skill

EXAMPLES

The learner will:

- Demonstrate fundamental motor skills and movement concepts in games, dance and gymnastics.
- Demonstrate knowledge of the critical elements of the fundamental movement skills.
- Identify basic movement skills he/she needs to be a skillful mover.
- With guidance from the teacher, identify the basic movement concepts he/she needs to learn to become a skillful mover.
- Understand how the movement concepts vary the practice of the fundamental movement skills.
- Practice motor skills while focusing on the critical elements of the skills.
- Use feedback from a peer to improve a motor skill.
- Demonstrate correctly practicing a skill.
- Recognize and describe how feedback helps one become a more skillful mover.
- Engage in teacher-designed practice of fundamental movements using repetition and performance cues.
- Record progress of skill improvement from inconsistent to consistent.

SUPPORTIVE PRACTICE

The teacher will:

- Provide movement experiences that combine the fundamental movement skills and are presented in progressively more open practice conditions, e.g. moving to catch a bean bag, running and kicking a stationary ball, strike a moving object and apply the movement concepts.
- Provide opportunities for children to learn what it means to be a skillful mover.
- Provide learning opportunities that show how movement concepts can help students be skillful movers.
- Have students learn the critical elements of the fundamental movement skills.
- Provide opportunities for students to observe correct performance, e.g. video, photos and to analyze correct motor skill performance, e.g. use a task card with critical elements on it to observe a partner.
- Provide opportunities for students to provide feedback to peers.
- Provide opportunities for students to practice motor skills while focusing on the critical elements.
- Design practice opportunities for fundamental movements using repetition and performance cues.
- Provide ways for students to record progress related to skill improvement.
- Encourage students to practice skills during and outside of class time.
- Design creative practice opportunities that are varied, motivating and novel, therefore, motivating children to continue practicing.
- Provide many practice opportunities.
- Provide instruction on the function of practice. (Tie into first time riding bicycle or playing a specific game.)

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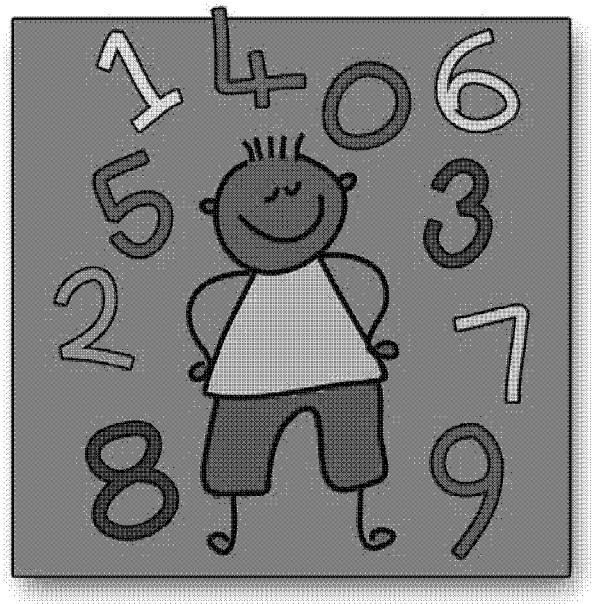
HEALTH, SAFETY AND PHYSICAL EDUCATION

STANDARD 10.5: CONCEPTS, PRINCIPLES & STRATEGIES OF MOVEMENT continued

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
I. Know that the principles of exercise (FITT) are guidelines to help you make good exercise choices. J. Identify and use the principles of exercise (FITT): • F= How often you should exercise • I = How hard you should exercise • T= How long you should exercise • T=What kind of activity you should engage in K. Recognize that it is best to use all four of the letters together when planning to exercise L. Understand that scientific principles affect the performance of movement skills M. Demonstrate space and relationship awareness during game play	• Use the FITT guidelines to become a regular participant in physical activity to improve his/her performance. • Keep a calendar or log of his/her choices in using the FITT principles and the guidelines for regular participation. • Identify the exercise idea represented by each principle of exercise letter. • Demonstrate the ability to absorb force while catching a variety of different objects while on-the-move. • Demonstrate the ability to generate force when performing manipulative skills. • Perform an activity that demonstrates a scientific principle, e.g. gravity, balance, force production, force absorption. • Demonstrate the ability to maintain proper space in relationship to others during game play. • Demonstrate proper positioning in relationship to the game object and other players. • Participate in games that use more complex rules.	• Provide instruction on the principles of exercise, (frequency, intensity, length of time). • Design learning experiences that focus on each of the principle components (cardio-respiratory, muscular strength and endurance, flexibility, body composition). • Provide a calendar or log so the children can record the different principles of exercise. • Use music to motivate children to move for longer periods of time in regards to the principle of exercise – time. • Have children and guardians/families keep activity calendars of what learners do at home such as "How often do I participate in activity?" • Provide developmentally appropriate instruction related to scientific principles. (Talk to your school PE instructor). • Design developmentally appropriate learning experiences in which children explore gravity, force and balance. • Provide students critical elements related to scientific principles. • Provide game play that involves two-four players with emphasis on spatial and relationship awareness. • Play games applying 3-4 rules.



LOGICAL MATHEMATICS

EARLY LEARNING STANDARDS FOR 2ND GRADE

Mathematical learning in second grade relies on children's opportunities to be actively engaged while using concrete objects and pictorial/symbolic representations. Students extend their mathematical knowledge and understanding in the areas of numbers, number systems and relationships; computation and estimation; measurement and estimation; mathematical reasoning and connections; mathematical problem solving and communication; statistics and data analysis; probability and predictions; algebra and functions; geometry; trigonometry; and calculus. Teachers facilitate mathematical learning when they promote students to problem solve, reason, prove, communicate, connect and represent.

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MATHEMATICS

STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

THIRD GRADE STANDARDS:

- Count using whole numbers (to 10,000) and by 2's, 3's, 5's, 10's, 25's and 100's
- Use whole numbers and fractions to represent quantities
- Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols
- Use drawings, diagrams or models to show the concept of fraction as part of a whole
- Count, compare and make change using a collection of coins and one-dollar bills
- Apply number patterns (even and odd) and compare values of numbers on the hundred board
- Use concrete objects to count, order and group
- Demonstrate understanding of one-to-one correspondence
- Apply place-value concepts and numeration to counting, ordering and grouping
- Estimate, approximate, round or use exact numbers as appropriate
- Describe the inverse relationship between addition and subtraction
- Demonstrate knowledge of basic facts in four basic operations

CONTENT FOR 2ND GRADE

A. Count using whole numbers to 1000 by 1's, 2's, 5's, 10's and 25's

B. Use whole numbers and simple fractions to represent quantities

C. Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols to 1000

D. Use drawings or models to show the concept of a fraction as part of a whole

E. Count, compare and make change using a collection of coins and one dollar bills

F. Apply number patterns (even and odd) and compare numbers on the hundred chart

G. Use concrete objects to count, order and group to 1000

H. Demonstrate an understanding of one-to-one correspondence up to 1000

I. Apply place-value concepts and numeration to counting, ordering and grouping numbers up to 1000

J. Estimate and approximate number quantities as groups of ten and 100

K. Describe the inverse relationship between addition and subtraction

L. Demonstrate knowledge of basic addition and subtraction facts

M. Use various models to demonstrate the concept of multiplication

EXAMPLES

The learner will:

- Count, read and write whole numbers from 1 through 100.
- Skip count by 2's, 3's, 5's, 25's and 100's.
- Match the fraction to the corresponding model (concrete and /or pictorially).
- Represent a given number less than or equal to 1000 in various ways (e.g. tallies, numerals, hundreds, tens and ones, addition and subtraction, etc.).
- Identify fractional parts of a region or set.
- Represent a given fraction (sixths, eighths) using drawings or concrete materials.
- Name and state the value of coins up to a half-dollar.
- Count a collection of coins less than $2.00.
- Make change for an amount up to $2.00 with no more than $.99 change.
- Describe strategies for counting money.
- Identify and describe the rule for a pattern.
- Use the rule to extend the pattern.
- Order a set of whole numbers from least to greatest or from greatest to least up to 999.
- Describe when we use ordinal numbers.
- Count objects using one-to-one correspondence up to 999.
- Match a symbolic representation of numbers to appropriate whole numbers up to 999 (ex. using base ten cubes).

SUPPORTIVE PRACTICE

The teacher will:

- For each stated standard provide and incorporate opportunities in everyday occurrences and planned direct instruction; model, the process/skill being presented using appropriate language/vocabulary; create authentic (real life situations) for learners to practice the skill; supply learners with appropriate manipulatives (e.g. uni-fix cubes, counters, pattern blocks, part-to-whole chart, coins etc.) as indicated by the standard.

MATHEMATICS

STANDARD 2.2: COMPUTATION AND ESTIMATION

THIRD GRADE STANDARDS:

- Apply addition and subtraction in everyday situations using concrete objects
- Solve single- and double- digit addition and subtraction problems with regrouping in vertical form
- Demonstrate concept of multiplication as repeated addition and arrays
- Demonstrate concept of division as repeated subtraction and as sharing
- Use estimation skills to arrive at conclusions
- Determine the reasonableness of calculated answers
- Explain addition and subtraction algorithms with regrouping

CONTENT FOR 2ND GRADE

A. Solve addition and subtraction problems in everyday situations with two- and three-digit numbers, with or without regrouping

B. Solve addition problems with 3 two-digit numbers with regrouping

C. Solve subtraction problems with double-digit numbers with regrouping

D. Use repeated addition, arrays and counting by multiples to demonstrate the concept of multiplication

E. Use repeated subtraction and equal sharing to demonstrate the concept of division

F. Make estimations of objects in a set up to 100 and verify the estimation

G. Compare estimation with calculated answer

H. Explain and describe the computation process in regrouping

EXAMPLES

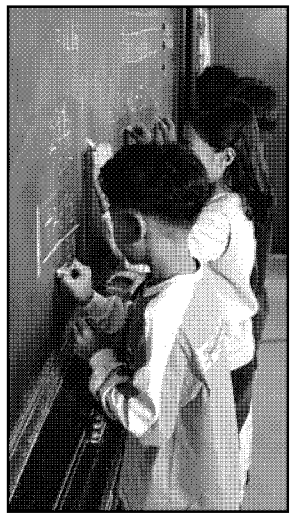
The learner will:

- Find the solution to addition and subtraction problems with two and three-digit numbers.
- Describe when regrouping is necessary.
- Find the solution to addition problems with 3 two-digit numbers with regrouping.
- Find the solution to subtraction problems with double-digit numbers with regrouping.
- Understand multiplication as repeated addition and arrays.
- Understand division as repeated subtraction and sharing.
- Form a group of 100 and use as a reference to make an estimate.
- Count to verify the estimation.
- Compare estimation with verification.
- Recognize when estimation is or is not reasonable.
- Explore and state the concept of regrouping as making a set of ten from 10 ones.

SUPPORTIVE PRACTICE

The teacher will:

- For each stated standard provide and incorporate opportunities in everyday occurrences and planned direct instruction; model, the process/skill being presented using appropriate language/vocabulary; create authentic (real life situations) for learners to practice the skill; supply learners with appropriate manipulatives (e.g. uni-fix cubes, counters, pattern blocks, part-to-whole chart, coins etc.) as indicated by the standard.



STANDARD 2.3: MEASUREMENT AND ESTIMATION

THIRD GRADE STANDARDS:

- Compare measurable characteristics of different objects on the same dimensions (time, temperature, area, length, weight, capacity, and perimeter)
- Determine the measurement of objects with nonstandard and standard units (US customary and metric)
- Determine and compare elapsed times
- Tell time (analog and digital) to the minute
- Determine appropriate unit of measure
- Use concrete objects to determine area and perimeter
- Estimate and verify measurements
- Demonstrate that a single object has different attributes that can be measured in different ways (length, mass/weight, time, area, temperature, capacity, perimeter)

CONTENT FOR 2ND GRADE

A. Compare measurable characteristics of different objects on the same dimensions (time, temperature, area, length, weight, capacity and perimeter)

B. Determine the measurement of objects with non-standard (arm length, crayons, paper clips) and standard units (US customary and metric)

C. Determine and compare elapsed time

D. Tell time (analog and digital) to the minute

E. Determine appropriate unit of measure

F. Use concrete objects to determine area and perimeter

G. Estimate and verify measurements

H. Demonstrate that a single object has different attributes that can be measured in different ways (e.g., length, mass/weight, time, area, temperature, capacity, perimeter)

EXAMPLES

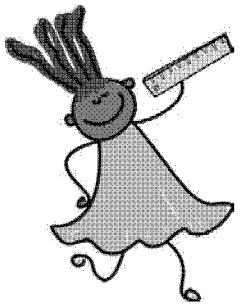
The learner will:

- Collect two objects and compare them by a defined attribute (length, capacity or weight).
- Determine and use an appropriate non-standard measuring tool (crayons, unifix cubes, paper clips).
- Estimate and measure the lengths and heights of objects using non-standard units.
- Estimate and measure the lengths and heights of objects to the nearest inch or feet.
- Estimate and measure the lengths and/or heights of objects in inches, feet or yards using a 12 inch ruler or yardstick.
- Estimate and measure the length of objects in centimeters and meters using a meter stick.
- Estimate and determine the distance around (perimeter) a shape using non-standard units (paper clips) and standard units (inches).
- Estimate, measure and compare and order objects by their capacities using non-standard tools.
- Compare the capacities of cups, pints and quarts.
- Estimate and measure capacity in liters.
- Estimate, measure and compare the weights of different objects using a balance scale.
- Compare and estimate the weights of objects in ounces and pounds.
- Compare and estimate the masses of objects in grams and kilograms.
- Measure, read and write temperatures shown on Fahrenheit and Celsius thermometers.

SUPPORTIVE PRACTICE

The teacher will:

- Model, using the appropriate language/vocabulary, the process of comparing, measuring, estimating, telling time and determining elapsed time.
- Provide materials/opportunities and support learners in estimating and measuring using the appropriate instruments and units.
- Encourage and support learners in explaining how they applied their skills during mathematical tasks.
- Provide opportunities for learners to explore and apply understanding of estimation throughout the school day.



STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

THIRD GRADE STANDARDS:

- Make, check and verify predictions about the quantity, size, and shape of objects and groups of objects
- Use measurements in everyday situations (determine the geography of the school building)

CONTENT FOR 2ND GRADE

A. Make, check and verify predictions about the quantity, size and shape of objects and groups of objects

B. Use measurements in everyday situations

EXAMPLES

The learner will:

- Compare and/or order objects according to length, weight or volume.
- Use the attributes of length, weight and volume to describe objects.
- Estimate measurements of familiar objects using non-standard and standard units.
- Explain and identify how a set or group of items has been sorted.
- Estimate the length and/or weight of an object.
- Select an appropriate unit and/or tool for the attribute being measured in 15 minute intervals.
- Measure objects to the nearest inch using a ruler.

SUPPORTIVE PRACTICE

The teacher will:

- Model, using appropriate vocabulary, the process of comparing and describing groups of objects.
- Engage learners in recognizing and applying estimation in everyday situations.
- Create and provide opportunities for learners to make comparisons of objects by at least 2 attributes.
- Facilitate classroom discussion to encourage learners to explain how a set of items has been sorted.
- Provide opportunities for learners to explore and apply an understanding of estimating and measurement.
- Provide opportunities for learners to exhibit understanding and application of measurement in everyday situations.

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

THIRD GRADE STANDARDS:

- Use appropriate problem solving strategies (guess and check, working backwards)
- Determine when sufficient information is present to solve a problem and explain how to solve a problem
- Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil, and concrete objects

CONTENT FOR 2ND GRADE

A. Use appropriate problem-solving strategies (e.g., make a model, draw a table or picture, working backwards)

B. Determine when sufficient information is present to solve a problem and explain how to solve a problem

EXAMPLES

The learner will:

- Identify and think about possible solutions to solve daily problems occurring in and out of the classroom.
- Create addition word problems.
- Describe the steps necessary to solve a problem. Communicate these steps orally as well as in written form.
- Analyze problems and decide whether to use addition or subtraction.
- Use a variety of strategies to solve/defend problems.
- Explain appropriate process of addition to solve problems (orally/written).

SUPPORTIVE PRACTICE

The teacher will:

- Model, using the appropriate language/vocabulary, the process of identifying and solving a problem.
- Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems occurring in and out of the classroom.
- Highlight the process versus the product of an activity (give specific examples).
- Encourage and support learners to explain their mathematical thinking and work.
- Create and provide opportunities for learners to engage in problem solving activities.

CONTINUED...

STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION continued

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
C. Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil and concrete objects	**The learner will:** • Explain appropriate process of addition to solve problems (orally/written). • Invent different strategies and approaches to solve daily problems occurring in and out of the classroom. • Determine what is the best method to solve a multiple step problem. • Analyze/solve different types of problems using addition and subtraction.	**The teacher will:** • Provide opportunities for learners to explore and apply understanding of problem solving throughout the school day. • Provide the students with examples on how to utilize the best method to solve a multiple step problem • Ask open-ended questions, encourage conversations and create classroom activities that encourage learners to explore a variety of possible solutions (set up situations).

STANDARD 2.6: STATISTICS AND DATA ANALYSIS

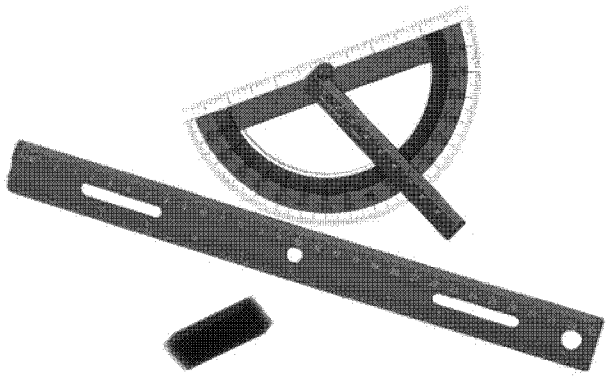
THIRD GRADE STANDARDS:
- Gather, organize, and display data using pictures, tallies, charts, bar graphs, and pictographs
- Formulate and answer questions based on data shown on graphs
- Predict the likely number of times a condition will occur based on the analyzed data
- Form and justify an opinion on whether a given statement is reasonable based on a comparison to data

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Formulate and answer questions that can be proven with data (bar graphs, pictographs, tally charts and/or tables) B. Interpret, construct and draw conclusions from bar graphs, pictographs, tally charts and/or tables C. Form and justify an opinion on whether a given statement is reasonable based on a comparison to data	**The learner will:** • Read and compare data (bar graphs, pictographs, tally charts and/or tables). Use concepts of greatest (maximum) and least (minimum). • Describe features of data such as range (the difference between maximum and minimum values), mode (the "most popular" data values) and median (the middle value observed/the number half way between the two middle values). • Describe parts of the data and the set of data as a whole to determine what trends the data show. • Interpret and construct bar graphs, pictographs and/or tables with scales greater than one as well as tally charts. • Describe the advantages and disadvantages of using bar graphs, pictographs and/or tables with scales greater than one as well as tally charts to represent data. • Analyze data to form an opinion on whether a statement is reasonable or not to justify the opinion.	**The teacher will:** • Provide easy to read data sets for the students. • Assist (as needed) learners in reading and describing the data, deducing information, drawing conclusions and applying data to future events/behaviors. • Pose open-ended questions to engage learners in reading the data on a graph. • Provide opportunities for learners to see graphs used in the real world. • Encourage and support learners in explaining how they applied their skills during mathematical work. • Provide opportunities for learners to create and interpret graphs throughout the school day. • Model and verbalize, using language/vocabulary appropriate to the learners, the process of graphing and analyzing data.

STANDARD 2.7: PROBABILITY AND PREDICTIONS

THIRD GRADE STANDARDS:
- Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes
- Design a fair and an unfair spinner
- List or graph the possible results of an experiment
- Analyze data using the concepts of largest, smallest, most often, least often and middle

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. State and explain the likelihood of an event and recognize that the results of an experiment may not match predicted outcomes B. Design a fair and an unfair spinner C. Record and analyze the results of an experiment	**The learner will:** • Determine the likelihood of events occurring. • Analyze possible reasons why the results of an experiment may not match predicted outcomes. • Create a fair spinner (the spinner should show equal-sized parts), experiment with the spinner, record and analyze the results of their trials. • Create an unfair spinner (the spinner should have unequal-sized parts), experiment with the spinner, record and analyze the results of their trials. • Predict an outcome(s) before conducting an experiment. • Record data from experiments in an organized manner. • Analyze the results of the experiments to determine if the actual results matched his/her prediction.	**The teacher will:** • Model and verbalize (as needed), using language/vocabulary appropriate to the students, the process of predicting outcomes, conducting an experiment and analyzing the results. • Ask guiding questions, as needed, to help students create fair and unfair spinners. • Provide scaffolding, as needed (much support at first, then gradually taking it away), to facilitate student recording and analyzing the results of experiments. • Encourage and support learners in explaining how they applied their skills during mathematical tasks.



MATHEMATICS

STANDARD 2.8: ALGEBRA AND FUNCTIONS

THIRD GRADE STANDARDS:

- Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number, and geometric patterns
- Use concrete objects and trial and error to solve number sentences and check if solutions are sensible and accurate
- Substitute a missing addend in a number sentence
- Create a story to match a given combination of symbols and numbers
- Use concrete objects and symbols to model the concepts of variables, expressions, equations, and inequalities
- Explain the meaning of solutions and symbols
- Use a table or chart to display information
- Describe and interpret the data shown in tables and charts
- Demonstrate simple function rules
- Analyze simple functions and relationships and locate points on a simple grid

CONTENT FOR 2ND GRADE

A. Recognize and extend repeating patterns based on an attribute (size, shape, color) or number

B. Identify/describe the rule for a repeating pattern or number sequence

C. Find a missing element(s) in a pattern of numbers or shapes

D. Choose the correct operation (addition or subtraction) and write an equation to solve a story problem

E. Use concrete objects and other methods to solve addition or subtraction number sentences and check if solutions are accurate

F. Find a missing element that makes an addition or subtraction number sentence true

G. Explain how solutions to equations or missing addends are determined

H. Identify the missing symbol (+, −, =, <, >) that makes a number sentence true

EXAMPLES

The learner will:

- Describe a repeating pattern and be able to extend it beyond the pattern shown.
- Create their own repeating pattern and be able to describe the pattern.
- Extend patterns to find a particular position.
- Solve a variety of story problems by first identifying the operation involved.
- Use concrete manipulatives and/or draw pictures to find a missing number in subtraction or addition sentences.
- Progress from the use of manipulative/drawings to the use of symbols and equations to solve story problems.
- Use a variety of strategies and functions to solve problems involving addition or subtraction.
- Provide explanations for the solutions and strategies used in solving story problems and/or equations.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate and explain the concept of recognizing, describing, repeating and extending a pattern or sequence (start with concrete manipulatives and work toward pictures and number patterns).
- Provide opportunities and support learners in recognizing, describing and extending patterns and sequences.
- Provide opportunities and support learners in recognizing patterns and sequences so missing elements can be filled in and explanations provided.
- Extend a repeating pattern and determine what element will be in a particular position (e.g. the 11th position) if the pattern keeps going.
- Demonstrate solving story problems through modeling the use of multiple strategies.
- Demonstrate how story problems can be represented with equations.
- Provide meaningful demonstrations to establish the meaning of symbols in equations.
- Provide opportunities for students to explain their strategy for solving story problems or equations.

MATHEMATICS

STANDARD 2.9: GEOMETRY

THIRD GRADE STANDARDS:

- Name and label geometric shapes in two and three dimensions (circle/sphere, square/cube, triangle/pyramid, rectangle/prism)
- Building geometric shapes using concrete objects (manipulatives)
- Draw two and three dimensional geometric shapes and construct rectangles, squares, and triangles on the geoboard and on graph paper satisfying specific criteria
- Find and describe geometric figures in real life
- Identify and draw lines of symmetry in geometric figures
- Identify symmetry in nature
- Fold paper to demonstrate the reflections about a line
- Show relationships between and among figures using reflections
- Predict how shapes can be changed by combining or dividing them

CONTENT FOR 2ND GRADE

A. Name and label geometric shapes in two and three dimensions (e.g. circle, sphere, square, cube, triangle, pyramid, rectangle, prism)

B. Build geometric shapes using concrete objects

C. Draw two- and three-dimensional shapes

D. Find and describe geometric figures in real life

E. Identify and draw lines of symmetry in geometric figures

F. Identify symmetry in nature

G. Fold paper to demonstrate the reflections about a line

H. Show relationships between and among figures using reflections

I. Predict how shapes can be changed by combining or dividing them

EXAMPLES

The learner will:

- Recognize and describe two-dimensional shapes by the number of line segments (sides) and vertices (corners).
- Recognize and describe three-dimensional shapes by number of surfaces, edges and vertices.
- Draw and label quadrilaterals, trapezoids, hexagons, pentagons, octagons and rhombuses.
- Describe, classify and sort plane and solid geometric shapes according to the number and shape of faces and the number of sides, edges and/or vertices.
- Construct two- and three-dimensional figures using given materials.
- Compare and contrast plane and solid geometric shapes: circle/sphere, square/cube, triangle/pyramid and rectangle/rectangular prism.
- Recognize and represent geometric shapes and solids in structures in the environment and specify their locations.
- Recognize and represent shapes/solids from different perspectives (e.g. recognizing a cone from all viewpoints).
- Identify and create symmetrical and congruent shapes/solids in the real world.
- Recognize and apply slides(translations), flips (reflections) and turns (rotations).
- Use symmetry to classify shapes.
- Recognize and describe symmetry in nature.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities to identify, label and represent two- and three-dimensional figures.
- Provide opportunities to explore geometric solids and plane figures that enables the learner to create a chart of attributes and properties.
- Provide materials and support as the learner creates various geometric solids (e.g. use blocks to make a rectangular prism).
- Provide a variety of experiences that will allow the learner to compare and contrast plane and solid figures.
- Provide an opportunity to engage in the exploration of the environment (e.g. scavenger hunts for shapes/solids).
- Provide opportunities to locate and describe lines of symmetry.
- Provide the materials (pattern blocks, tangrams) and support for learners to apply transformations of shapes (slides, flips, turns).
- Provide opportunities to observe symmetry in nature.
- Provide materials (graph paper, geoboards) and support as the learner creates a reflection of a shape.
- Provide materials for the learner to find other shapes that can be made from given shapes (e.g. A rectangle and a triangle can make what shapes? What ways can triangles be divided into three triangles?).

MATHEMATICS

STANDARD 2.10: TRIGONOMETRY

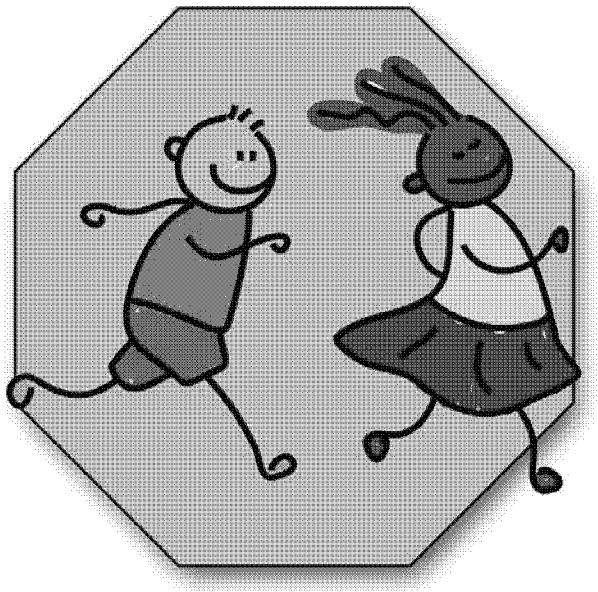
THIRD GRADE STANDARDS:
- Identify right angles in the environment
- Model right angles and right triangles using concrete objects

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Identify and give examples of right angles in real life objects B. Identify a right triangle and right angle	**The learner will:** • Point out right angles in the classroom, hallway, etc.	**The teacher will:** • Introduce the term right angle so that the student understands that it means the same as a corner angle which was mentioned in grade 1.

STANDARD 2.11: CALCULUS

THIRD GRADE STANDARDS:
- Identify whole number quantities and measurements from least to most and greatest value
- Identify least and greatest values represented in bar graphs and pictographs
- Categorize rates of change as faster and slower
- Continue a pattern of numbers or objects that could be extended infinitely

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Describe rates of change as faster and slower using real life situations	**The learner will:** • Describe the rate of change in walking or riding to school.	**The teacher will:** • Requires understanding of teacher.



PERSONAL-SOCIAL

EARLY LEARNING STANDARDS FOR 2ND GRADE

Primary children's social and emotional development is strengthened when they have classroom experiences that promote a sense of autonomy, competence and belonging within an engaging and a responsive environment. Teachers support children's self identity and social competence by modeling respectful interactions and using positive guidance techniques that scaffold the development of self control and problem solving. By encouraging positive approaches to learning, teachers allow children to plan and make choices so that school is meaningful to them and they become engaged in life long learning. Research supports that attention to the social and emotional needs of students increases the academic achievement of students, lowers the incidences of disruptive behaviors and improves the quality of relationships surrounding each child.

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PS 1: Develop Self-Concept	42
PS 2: Develop Self-Regulation	42
PS 3: Develop Social Interactions	43
PS 4: Develop Care and Self-Reliance	43

STANDARD PS 1: DEVELOP SELF-CONCEPT

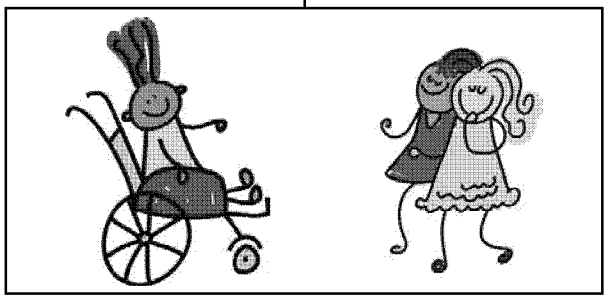
CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Is aware of self and one's own preferences, strengths and challenges B. Show independence in a wide range of activities C. Know and state independent thoughts and feelings D. Attempt new experiences with confidence and independence E. Show pride in accomplishments F. Demonstrate skills related to achieving personal and academic goals G. Describe why school is important in achieving academic goals	• Verbalize ones own needs, likes, dislikes, strengths and challenges. • Choose activities, select materials and carry out tasks. • Persist in developing self-management skills related to school tasks (papers, projects, library books, etc.). • Express one's own opinion or ideas about a particular topic. • Work independently for increasingly longer time periods. • Describe why school is important in achieving academic goals. • Identify goals for academic success and classroom behavior. • Work with other adults in the school setting. • Initiate the sharing of work and accomplishments with peers and adults at the appropriate times.	• Provide a caring, nurturing and accepting environment for learners. • Create an emotional bond with learners. • Refer to the learner by name. • Make a personal connection with each learner. • Display the learner's work at eye level. • Provide, encourage and support opportunities for autonomy and self-direction (centers, job chart). • Provide, encourage and support opportunities for one on one conversation between the children and adults. • Provide, encourage and support opportunities for learners to want to try something new. • Provide encouragement and praise for learners' efforts. • Create an environment that fosters decisions-making, autonomy, self-direction and independence.

STANDARD PS 2: DEVELOP SELF-REGULATION

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify, express and manage feelings B. Tolerate adversity and disappointment C. Understand consequences of own behavior D. Follow rules and routines in classrooms and other settings E. Use materials with purpose, safety and respect F. Focus attention as required by the task G. Manage classroom transitions H. Follow adult directions I. Delay personal gratification until an appropriate time	• Name a range of feelings (fear, affection, excitement, enthusiasm and disappointment). • Express in different ways how he/she feels (verbal, walk away, drawing, journaling, physical activities, etc.). • Separate feelings from actions. • Control impulsive behavior when frustrated, angry or excited. • Persist in and completing student initiated and/or teacher directed tasks. • Maintain composure when not selected (to answer question, be first in line, play game, etc.). • Use words instead of physical actions when upset. • Move from one task to another efficiently. • Respond to teacher requests or ask clarifying questions about the request. • Understand the logical consequences of one's actions.	• Model non-verbal and verbal interactions congruent with feelings. • Model genuine, appropriate emotional responses. • Encourage expression of feelings and support learner in managing those. • Respond to child's non-verbal and verbal cues. • Use logical consequences and guidance practices that support self-control. • Use class meetings to support the development of student self control. • Cue learners so that they can bring their work to an end prior to changing tasks. • Give specific directions with reasonable expectations. • Provide opportunities for the children to express their feelings through play, writing and/or other artistic representation. • Model and coach problem solving and negotiating conflicts with others.

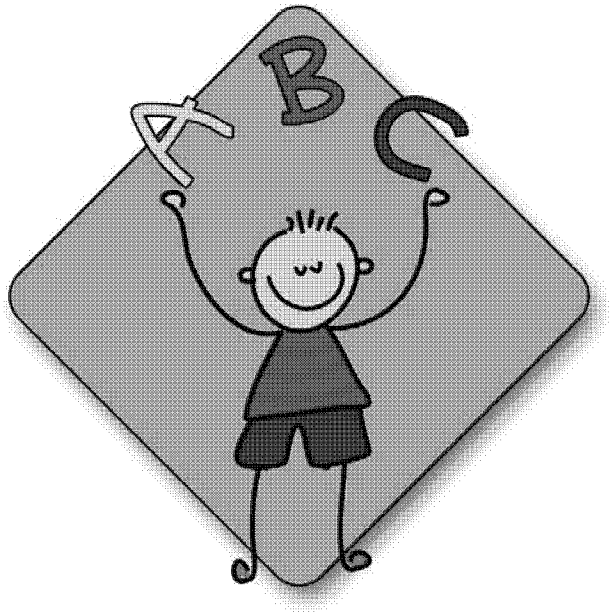
STANDARD PS 3: DEVELOP SOCIAL INTERACTIONS

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Is aware of self and one's own preferences B. Know and state independent thoughts and feelings C. Trust familiar adults and close peers D. Establish and maintain positive relationships with peers E. Respond with empathy by recognizing the feelings and perspectives of others F. Seek help from peers and adults when needed G. Respect the feelings, rights and belongings of others H. Cooperate in small and large group activities I. Identify problems and conflicts commonly experienced by peers J. Show increasing abilities to constructively resolve conflicts with peers K. Show nurturing behaviors through helpfulness to others L. Use listening skills to identify the feelings and perspectives of others	• Be able to adapt to new adults in the school setting. • Ask for help when needed. • Seek out companionship with other children. • Begin to negotiate conflicts that arise. • Recognize that others may experience situations differently than self. • Re-establish a relationship with others after a conflict. • Use multiple strategies for getting what he/she needs. • Take turns and wait for a turn. • Share materials. • Be aware and sensitive to the wants and needs of others. • Give and receive compliments. • Use please and/or thank you appropriately.	• Create caring adult/child relationships. • Using eye contact and body proximity to give children support when needed. • Provide consistency and predictability in daily routines, environment. • Arrange the environment so there is space for learners to work together on activities. • Be available to help children solve conflicts rather than removing the child or the materials. • Provide opportunities and encourage group work or play. • Model nurturing behaviors by acts of kindness and helpfulness to other adults and children. • Provide opportunities to role play and practice new social skills.



STANDARD PS 4: DEVELOP CARE AND SELF-RELIANCE

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Demonstrate responsible behaviors in personal, school and community context B. Contribute to the well being of one's school and community C. Identify and perform roles that contribute to one's classroom D. Follow classroom routines independently E. Recognize situations that are unsafe and behave accordingly	• Accept and manage assigned classroom jobs. • Stay within safe boundaries and follow school safety rules. • Check in with adults when he/she thinks something is not safe. • Keep track of personal belongings (ie. book-bag, coat, gloves).	• Organize the classroom and routines so that children can demonstrate more self reliant behaviors. • Provide a safe environment that encourages active learning.



READING, WRITING, SPEAKING & LISTENING

EARLY LEARNING STANDARDS FOR 2ND GRADE

The Reading, Writing, Speaking and Listening Standards describe what students should know and be able to do to be effective readers and writers of the English language at grades one and two. The standards provide the targets for instruction and student learning that are essential for success in all academic areas, not just language arts classrooms. Because of the unique nature of the language arts, teachers in all areas within a school will use the Reading, Writing, Speaking and Listening Standards. Although the standards are not a curriculum or a prescribed series of activities, school entities will use them to develop a local school curriculum that will meet local students' needs. The three column representation outlines each content standard and provides examples to meet the standard with instructional supporting practices.

Standard	Page
1.1 Learning to Read Independently	45
1.2 Reading Critically in all Content Areas	48
1.3 Reading, Analyzing and Interpreting Literature	49
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1.6 Speaking and Listening	53
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STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

THIRD GRADE STANDARDS:

- Identify the purposes and types of text (literary, informational) before reading
- Preview the text formats (title, headings, chapters, and table of contents)
- Use knowledge of phonics, word analysis (root words, prefixes and suffixes), syllabication, picture and context clues to decode and understand new words during reading
- Read text using self-monitoring comprehension strategies (predict, revise predictions, reread, use headings, use organization of text, adjust reading rate)
- Acquire a reading vocabulary by identifying and correctly using words, (antonyms, synonyms, categories or words). Use a dictionary when appropriate
- Understand the meaning of and use correctly new vocabulary learned in various subject areas
- Demonstrate after reading understanding and interpretation of both fiction and nonfiction text
- Retell or summarize the major ideas, themes or procedures of the text
- Connect the new information or ideas in the text to know information
- Clarify ideas and understandings through rereading and discussion
- Make responsible assertions about the text by citing evidence from the text
- Demonstrate fluency and comprehension in reading
- Read familiar materials aloud with accuracy
- Self-correct mistakes
- Use appropriate rhythm, flow, meter, and pronunciation
- Read a variety of genres and types of text
- Demonstrate comprehension

CONTENT FOR 2ND GRADE

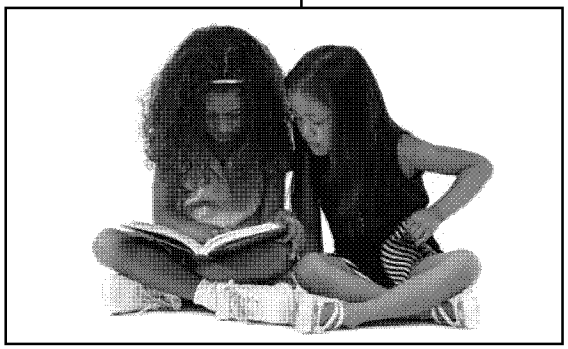
A. Demonstrate CONCEPT of PRINT, how print is organized and used in reading and writing tasks

B. Demonstrate advanced knowledge of the ALPHABETIC PRINCIPLE, the ability to associate sounds with letters and use these sounds to form words.

EXAMPLES

The learner will:

- Identify the purposes and types of text (e.g. literature, information) before reading.
- Use titles, table of contents and chapter headings to locate information in text.
- Recognize and use knowledge of spelling patterns (e.g. vowel diphthongs, vowel teams, consonant blends and digraphs).
- Apply knowledge of basic syllabication rules when reading.
- Identify and spell high frequency words.



SUPPORTIVE PRACTICE

The teacher will:

- Engage students in using print to convey meaning (e.g. writing and reading directions, creating graphs and tables).
- Display and teach using a variety of forms of print (e.g. signs, newspapers, magazines, books).
- Offer direct, explicit and systematic phonics instruction.
- Have strong understanding of linguistics and how it affects reading acquisition in students.
- Have strong understanding of common syllable patterns.
- Use a word wall for instruction and practice of new words.
- Place high frequency words on 3 x 5 cards for practice, review and word recognition games.
- Create word lists for word sorts.
- Provide several opportunities for both reading and writing of newly learned words.
- Adjust the pace of instruction according to students' needs.
- Offer multisensory activities to support and practice new skills.

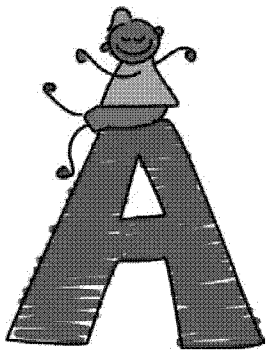
CONTINUED...

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

CONTENT FOR 2ND GRADE

C. Demonstrate FLUENCY, the ability to read grade level text orally with accuracy, appropriate rate and expression

D. Demonstrate a rich listening and speaking VOCABULARY, the ability to understand (receptive) and use (expressive) words to acquire and convey meaning



EXAMPLES

The learner will:

- Decode and encode (spell) single and multisyllabic words in isolation and in text.
- Identify and correctly use regular (e.g. -s, -es, -ies) and irregular (e.g. fly/flies; wife/wives) plurals.
- Recognize common abbreviations (e.g months, days, Mr., Mrs., St.).
- Apply letter-sound and syllable knowledge to decode and encode phonetically regular/irregular words and pseudo-words quickly and accurately in isolation and in context.
- Recognize high frequency and familiar words in isolation and in context.
- Adjust reading rate based on purpose, text difficulty, form and style.
- Recognize and self-correct errors.
- Read a variety of genres.
- Read grade level texts with appropriate rate and expression.
- Answer comprehension questions orally and in writing based on material read independently.
- Understand, learn and use new vocabulary from a variety of content areas (e.g. orally read stories, informational text).
- Develop vocabulary by listening to and discussing both familiar and conceptually challenging selections read aloud.
- Keep a journal of a variety of new words and their meanings.
- Use context to understand word and sentence meanings.
- Relate vocabulary to prior knowledge.
- Identify and correctly use antonyms, synonym and categorization of words.
- Use a dictionary, thesaurus or other resource to confirm the meaning of a word.
- Use context to identify simple multiple-meaning words.
- Display understanding of the meaning of simple affixes (e.g. un-, -ful).

SUPPORTIVE PRACTICE

The teacher will:

- Provide ongoing progress monitoring to ensure mastery of taught skills.
- Use decodable text for multiple opportunities for practice and transfer of phonics skills to text.
- Model reading aloud with fluency.
- Provide oral support for readers by activities such as choral reading, echo reading and/or paired reading.
- Offer plenty of practice opportunities including repeated readings.
- Encourage fluency through phrasing or chunking to aid in comprehension.
- Provide ongoing progress monitoring to ensure mastery of taught skills.
- Use think aloud to share how you, as a fluent reader, are navigating through a piece of text.
- Prompt students to respond to what they read both orally and in print, how it was read and if any improvements are needed to further build fluency.
- Monitor student fluency rates against research-based benchmarks.
- Build a connection between fluency and comprehension.
- Provide decodable text for multiple practice and transfer of phonics skills to text.
- Take advantage of student listening and speaking competencies to enhance student vocabulary.
- Increase word knowledge through systematic rich and robust vocabulary development.
- Chart and display new vocabulary words to reinforce speaking, listening and writing usage.
- Use trade books that are read aloud to children as a major source for identifying interesting words and developing conceptual understanding.
- Choose vocabulary words that are within the intellectual grasp of the children.
- Use words that can be used in many contexts and in a variety of instructional activities.
- Assist students in connecting new vocabulary to prior knowledge.

CONTINUED...

STANDARD 1.1: LEARNING TO READ INDEPENDENTLY continued

CONTENT FOR 2ND GRADE

E. Demonstrate COMPREHENSION, the complex cognitive process involving the intentional interaction between reader and text to convey meaning

EXAMPLES

The learner will:

- Read text using self-monitoring comprehension strategies (e.g., predict, revise predictions, use picture and structural clues, reread and clarify meaning through questioning).
- Identify a text's features (e.g. title, subheading, captions, illustrations) and use them to make predictions and establish a purpose for reading.
- Identify text structures (e.g. compare/contrast, cause/effect and sequence of events) to build understanding.
- Identify and use text graphics, charts, figures and tables to build understanding.
- Determine the author's purpose in text and asks clarifying questions (e.g., why, how) if meaning is unclear.
- Relate prior knowledge to textual information.
- Retell the main idea of simple narrative and informational passages.
- Reread and self-correct word recognition errors to make meaning.
- Connect the reading to self and the world.
- Monitor one's own comprehension.
- Use graphic and semantic organizers.
- Answer questions aimed at finding information found directly in the text, information implied in the text and information inferred from the text.
- Generate questions.
- Use story structure as a guide for understanding.
- Respond to the text using a variety of mediums (dramatization, art forms, writing, oral interaction).
- Respond to and use academic vocabulary.

SUPPORTIVE PRACTICE

The teacher will:

- Explore similarities and differences in words, meanings and concepts.
- Introduce vocabulary from narrative and informational text.
- Promote wide reading.
- Direct teach increasingly sophisticated words with examples and non-examples.
- Offer multiple, repeated practice opportunities to use new and previously taught vocabulary.
- Understand the major factors that influence comprehension.
- Reinforce the use of before, during and after reading strategies by directly explaining the strategy and why it is helpful. Model how to apply the strategy using think aloud. Offer practice applying the strategy with guidance, feedback and assistance until it can be done independently.
- Build both listening and reading comprehension in students.
- Use modeling, think aloud, questioning and other techniques to promote active construction of meaning.
- Teach comprehension strategies (e.g. prediction, revision of predictions, use of picture and text structure clues, reread and clarify meaning through questioning).
- Demonstrate identification of text features and structures (e.g. title, subheadings, captions, illustration, compare/contrast, cause/effect and sequence of events).
- Model a think-aloud of connections between what is being learned and what is already known (e.g. text to text, text to self, text to world).
- Discuss text, features and structure to determine main idea.
- Provide opportunities for the learner to respond to the text using a variety of mediums.
- Directly teach and routinely use academic vocabulary.

READING, WRITING, SPEAKING AND LISTENING

STANDARD 1.2: READING CRITICALLY IN ALL CONTENT AREAS

THIRD GRADE STANDARDS:

- Read and understand essential content of informational texts and documents in all academic areas
- Differentiate fact from opinion within text
- Distinguish between essential and nonessential information within a text
- Make inferences from text when studying a topic (science, social studies) and draw conclusions based on text
- Analyze text organization and content to derive meaning from text using established criteria
- Use and understand a variety of media and evaluate the quality of material produced
- Use electronic media for research
- Identify techniques used in television and use the knowledge to distinguish between facts and misleading information
- Assess the quality of media projects (script, play, audiotape) that have been developed for a targeted audience
- Produce work in at least one literary genre that follows the conventions of the genre

CONTENT FOR 2ND GRADE

A. Identify, analyze and apply knowledge of the elements of a variety of informational texts to demonstrate an understanding of the information presented

B. Identify and use a variety of media to gain information (e.g., computer, tape recorder, television and recorded media)

EXAMPLES

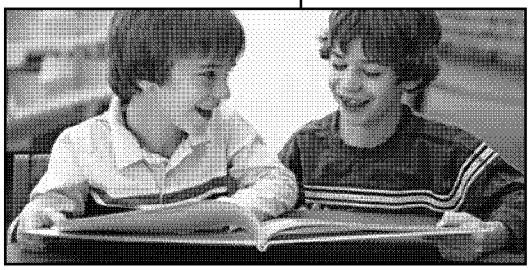
The learner will:

- Identify a text's features (e.g. title, subheading, captions, illustrations) and use them to make predictions and establish a purpose for reading.
- Distinguish fact from opinion.
- Identify essential information such as facts, main idea and supporting information from illustrations and text.
- Make predictions about what happens next in a story or process and justify.
- Interpret and identify the organizational features (e.g. charts, graphs, captions) of text and indicate connection to the written text.
- Apply comprehension strategies (e.g. graphic organizers, rereading, summarizing) to build understanding.
- Make inferences from texts to draw conclusions.
- Identify type of media to be used for a specific task.
- Review different techniques in television programs and evaluate fact from misleading information.
- Use electronic media to gather and report information.

SUPPORTIVE PRACTICE

The teacher will:

- Display examples of fact and opinion in text, identifying characteristics of each.
- Model the distinction between essential and non-essential information.
- Assist students in using prior knowledge to predict and justify what will happen next in a story or process.
- Draw connections between illustrated organization features (e.g. charts, graphs, captions) and the written text.
- Assist students in selecting age and ability-appropriate, non-fiction materials to read to begin building a core base of knowledge.
- Model and provide guided practice in the use of graphic organizers to build connections and organize information.
- Expose students to a variety of media used to gain information (e.g. computer software, internet, books on tape, television programming, film).
- Discuss new media as it becomes available and how it can be used for learning.



READING, WRITING, SPEAKING AND LISTENING

STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE

THIRD GRADE STANDARDS:

- Read and understand works of literature
- Identify literary elements in stories describing characters, setting, and plot
- Identify literary devices in stories (rhyme, rhythm, personification)
- Identify the structures in poetry (pattern books, predictable books, nursery rhymes)
- Identify the structures in drama (dialogue, story enactment, acts, scenes)
- Read and respond to nonfiction and fiction including poetry and drama

CONTENT FOR 2ND GRADE

A. Identify, analyze and apply knowledge of the elements of a variety of fiction and literary texts to demonstrate an understanding of a literary selection

EXAMPLES

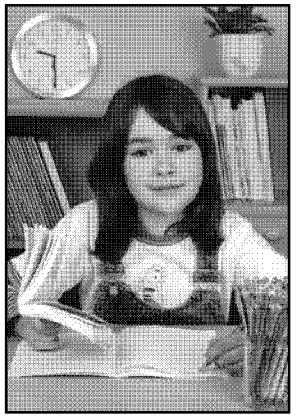
The learner will:

- Read and listen to a variety of genres of literature (e.g. poetry, plays, fables, legends, picture books) and participate in guided discussion.
- Distinguish the distinct characteristics and purposes of each genre.
- Identify and describe the elements of story structure (e.g. setting, plot, character, problem and resolution) in a variety of fiction.
- Retell the main events of a story including beginning, middle and end.
- Identify the main topic or essential message of a literary selection.
- Make predictions about what happens next in a story or process and justify.
- Identify the literary devices in rhyme, repetition, rhythm and patterns.
- Identify and complete predictable language patterns (e.g., pattern books, predictable books, nursery rhymes).
- Identify dialogue and story action in plays and stories.
- Connect the reading text to self, (personal connection), text to world (social connection) and text to text (comparison among multiple texts).
- Select fiction materials to listen to, read and report on based upon interest or recommendation.

SUPPORTIVE PRACTICE

The teacher will:

- Display examples of a variety of fiction and literary texts (e.g. classroom library).
- Read aloud and expose students to a variety of genre.
- Model the distinction between essential and non-essential information.
- Assist students in using prior knowledge to predict and justify what will happen next in a story.
- Lead students to draw connections between illustrations and the written text.
- Assist students in selecting age and ability-appropriate fiction materials to read.
- Model and provide guided practice for the use of a few appropriate graphic organizers to build connections and organize information.
- Model the steps to writing a book report.



STANDARD 1.4: TYPES OF WRITING

THIRD GRADE STANDARDS:

- Write narrative pieces (stories, poems and plays)
- Include detailed descriptions of people, places, things
- Write informational pieces (descriptions, letters, reports, and instructions) using illustrations when relevant
- Use relevant illustrations
- Include literary elements
- Write an opinion and support it with facts

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Narrative Develop and demonstrate the writing of narrative pieces that include a main idea based on read, imagined or personal events, characters and a sequence of events	• Develop an idea with a beginning, middle and end. • Sequence three or more events. • Include people, places and things in created writing. • Select appropriate illustrations to accompany story.	• Facilitate participation in writing simple stories, poems, rhymes or song lyrics. • Provide daily shared and interactive writing opportunities. • Read published stories to demonstrate use of story elements. • Model the use of a graphic organizer to plan a beginning, middle and end.
Informational Develop and demonstrate the writing of informational pieces that provides information related real-world tasks	• Write informational sentences (e.g., descriptions, definitions, simple instructions) using illustrations. • Write informational paragraphs that contain a topic sentence, supporting details and relevant information. • Write informational descriptions of a real object, person, place or event, using sensory details from information gathered from varies media (e.g. internet, books, magazines). • Differentiate between fact and opinion. • Write a brief opinion piece and support the opinion with details.	• Write in a variety of informational forms (e.g. thank you notes, short letters, rules, descriptive directions, graphs/tables). • Provide daily shared and interactive writing opportunities. • Read published informational text to demonstrate use of topic and supporting details. • Model the use of a graphic organizer to develop a topic and supporting details. • Showcase exemplary writing samples of informational text.
Persuasive Develop and demonstrate persuasive writing that is used for the purpose of influencing the reader	• Draw a picture and use text to tell a message (e.g. Don't be a bully!) or to persuade the reader. • Identify and discuss the message offered in a persuasive piece.	• Model and share examples of persuasion found in print and environment. • Provide daily shared and interactive writing opportunities. • Engage students in shared and interactive writing opportunities.

STANDARD 1.5: QUALITY OF WRITING

THIRD GRADE STANDARDS:

- Write with a sharp, distinct focus identifying topic, task, and audience
- Write using well-developed content appropriate for the topic
- Gather and organize information
- Write a series of related sentences or paragraphs with one central idea
- Incorporate details relevant and appropriate to the topic
- Write with controlled and/or subtle organization
- Sustain a logical order
- Include a recognizable beginning, middle, and end
- Write with an awareness of the stylistic aspects of composition
- Use sentences of differing lengths and complexities
- Use descriptive words and action verbs
- Revise writing to improve detail and order by identifying missing information and determining whether ideas follow logically
- Edit writing using the conventions of language
- Spell common, frequently used words correctly
- Use capital letters correctly (first word in sentences, proper nouns, pronoun "I")
- Punctuate correctly (period, exclamation point, question mark, commas in a series)
- Use nouns, pronouns, verbs, adjectives, adverbs, and conjunctions properly
- Use complete sentences (simple, compound, declarative, interrogative, exclamatory, and imperative)
- Present and/or defend written work for publication when appropriate

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Progress through the stages of the writing process (e.g., prewriting, drafting, revising, editing and publishing)	• Write for different purposes and to a specific audience or person.	• Describe the process and its intended purpose and outcome. • Provide shared and interactive pre-writing opportunities. • Use focus, content, organization, style and conventions to direct instruction in the writing process. • Hold individual conferences with students to guide the writing process.
Prewriting Use prewriting strategies to generate ideas and formulate a plan	• Generate ideas from multiple sources and create a plan for writing (e.g. brainstorming, webbing, drawing, group discussion, other activities). • Organize and select a topic for writing. • Determine the purpose for writing a piece (e.g. to entertain, to inform, to communicate).	• Model pre-writing strategies (e.g. think-aloud, listing, graphic organizers). • Engage students in discussion surrounding a focus for writing, generation of ideas and organization to categorize ideas and plan for writing.
Drafting Write clear and coherent sentences and paragraphs that develop a central idea	• Maintain a focus on a single idea while including supporting details. • Organize details into a logical sequence that has a beginning, middle and end. • Write with a variety of well constructed sentences including descriptive words and action verbs. • Use complete, declarative, interrogative and exclamatory sentences. • Use descriptive words and action verbs in context. • Write using a variety of differing sentence lengths and complexities.	• Model writing that states a feeling or reaction. • Provide opportunities for learners to engage in shared, interactive and independent writing. • Demonstrate the transfer of information from prewriting to the drafting stage. • Offer direct instruction on various sentence types. • Offer opportunities to write using varied sentence lengths and complexities.

CONTINUED...

STANDARD 1.5: QUALITY OF WRITING continued

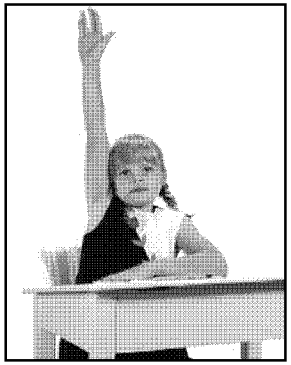
CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
Revising Revise and refine the draft for clarity and effectiveness	• Revise writing to add or eliminate details and correct ideas so a logical order is present. • Create clarity by marking out repetitive details by using a caret and replacing general words with more specific words.	• Provide opportunities for students to engage in shared, interactive and independent revision of writing samples. • Offer cooperative learning opportunities for peers to discuss and improve their writing samples. • Demonstrate examples of marks used in revision and samples of more specific words for those that are general.
Editing Edit and correct the draft for standard language conventions	• Spell common, frequently used words correctly. • Capitalize the first word of a sentence, names of people, proper nouns and the pronoun "I". • Use proper end punctuation (period, exclamation, question mark and commas in a series, in dates, greetings and closings of letters and compound sentences, colons to punctuate time and apostrophes to correctly punctuate contractions). • Use appropriate nouns (i.e., singular and plural), pronouns (e.g. my/mine, his/her, hers), verbs, simple adjectives and adverbs in writing. • Correctly use common spelling patterns (e.g., word families, simple CVC words, regular plurals, simple suffixes and simple prefixes). • Write using subject/verb and noun/pronoun agreement in simple and compound sentences. • Use a checklist to ensure the proper editing of the writing.	• Provide opportunities for students to engage in shared, interactive and independent editing. • Provide and demonstrate the use of various resources to check for spelling errors (e.g. word wall, picture or word dictionary, environmental print, spell check). • Model use of adverb and adjective to enhance meaning. • Offer direct, explicit instruction on editing for meaning, spelling and conventions of print. • Demonstrate use of an editing checklist.
Publishing Write a final product for the intended audience	• Produce, illustrate and share a variety of compositions.	• Provide opportunities for students to share their published work with others. • Display published work.
Penmanship Engage in the writing process and write to clearly communicate ideas and experiences in legible print	• Write numbers and uppercase and lowercase letters using left to right sequencing. • Print legibly and space letters, words, sentences and paragraphs appropriately.	• Use a consistent method for demonstrating proper use of letter and number formation. • Model appropriate spacing between letters, words, sentences and paragraph.

STANDARD 1.6: SPEAKING AND LISTENING

THIRD GRADE STANDARDS:

- Listen to others
- Ask questions as an aid to understanding
- Distinguish fact from opinion
- Listen to a selection of literature (fiction and/or nonfiction)
- Relate it to similar experiences
- Predict what will happen next
- Retell a story in chronological order
- Recognize character and tone
- Identify and define new words and concepts
- Speak using skills appropriate to formal speech situations
- Use appropriate volume
- Pronounce most words accurately
- Demonstrate an awareness of audience
- Contribute to discussions
- Ask relevant questions and respond with appropriate information or opinions to questions asked
- Listen to and acknowledge the contributions of others
- Display appropriate turn-taking behaviors
- Participate in small and large group discussions and presentations
- Participate in everyday conversations
- Present oral readings, short reports, and interviews
- Give simple directions, explanations, and reporting of an emergency
- Use media for learning purposes

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Apply listening and speaking strategies effectively	• Listen to others when they are speaking and demonstrate an understanding of the message. • Listen attentively and follow directions to perform a task (e.g., multi-step oral directions, solving problems and following rules). • Ask questions to clarify information. • Differentiate fact from opinion. • Listen to a selection and connect similar experiences to real events. • Make realistic predictions about the outcomes of simple events and recognize different outcomes are possible. • Retell stories using basic story grammar and relating the sequence of story events by answering, who, what when, where, why and how questions. • Identify character and tone in spoken information. • Listen in order to identify and use new words and concepts. • Use correct vocabulary and word usage when speaking. • Use appropriate volume while initiating answers and conversation. • Pronounce single and multiple syllable words correctly. • Use appropriate pace in sentences, rhymes, poetry and questions. • Interpret expressions, gestures and body language cues from audience. • Ask and answer relevant questions and share experiences within a group	• Model appropriate speaking and listening behaviors throughout the school day. • Verbalize thought processes while listening. • Provide opportunities for students to demonstrate appropriate public speaking. • Encourage use of learned vocabulary. • Demonstrate and instruct students in purposeful listening activities. • Offer examples of fact and opinion in spoken language heard in the environment.



CONTINUED...

STANDARD 1.6: SPEAKING AND LISTENING continued

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
B. Use electronic media for learning purposes, such as generating a journal or story	**The learner will:** • Initiate and respond appropriately to conversations and discussions. • Display appropriate turn-taking behaviors. • Report an emergency. • Recite poems, rhymes, songs and stories. • Utilize different forms of media (e.g., television, radio, film, internet). • Recognize advertisements and explain their purposes.	**The teacher will:** • Utilize various media for instruction. • Model the use of computers and software applications as a means for accessing information.

STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

THIRD GRADE STANDARDS:

- Select a topic for research
- Locate information using appropriate sources and strategies
- Locate resources for a particular task (newspapers, dictionary)

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Distinguish commonly used words from other languages B. Identify variations in the dialogues of literary characters	**The learner will:** • Recognize a word as one other than commonly used in spoken English. • Utilize speech bubbles and quotations to differentiate between dialogue and text.	**The teacher will:** • Model various 'accents,' modulations and character voices when reading aloud. • Offer examples of various dialogue presentations.

STANDARD 1.8: RESEARCH

THIRD GRADE STANDARDS:

- Select a topic for research
- Locate information using appropriate sources and strategies
- Organize and present the main ideas from research

CONTENT FOR 2ND GRADE	EXAMPLES	SUPPORTIVE PRACTICE
A. Use a systematic process for the collection, processing and presentation of information	**The learner will:** • Create a question or topic for research. • Differentiate between various sources of information (e.g., dictionaries, newspapers, magazines, electronic media). • Select sources for gathering information on a specific topic (e.g., dictionaries, encyclopedias, observation, electronic media). • Use picture clues, keywords, headings to locate information. • Organize key concepts using a graphic organizer. • Summarize main ideas orally from key facts and concepts. • Write a simple report with a title and at least three paragraphs that include at least three facts with supporting details using complete sentences.	**The teacher will:** • Demonstrate the use of the writing process to create a research paper. • Offer a collection of resources for students to use in collecting information. • Model a systematic approach to collect, process and present information. • Offer opportunities for the sharing of research. • Showcase exemplary research samples.

SCIENCE AND TECHNOLOGY

Second graders learn about scientific concepts through active investigation, observation and experimentation of the natural and human-made world. These experiences provide the foundation for abstract and scientific thought, leading to conscientious decision-making and improved problem-solving. Students who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support inquiry about the natural world, the scientific process, principles and technology.

SCIENCE

EARLY LEARNING STANDARDS FOR 2ND GRADE

ENVIRONMENT AND ECOLOGY

Second graders learn about environment and ecology through first-hand experiences using the real world as their classroom. Through the integration of environment, science and social studies students understand the interdependence between themselves and their surroundings. Through the use of inquiry investigation, experimentation, place-based education students become environmentally-literate citizens.

The content embedded in this document for science and technology and environment and ecology should be addressed primarily at the introductory level to provide a foundation for proficiency at grades three and four. Each school district will need to determine where each standard area should be addressed in either first or second grade through a comprehensive curriculum alignment process at the district level.

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SCIENCE

STANDARD 3.1: UNIFYING THEMES

FOURTH GRADE STANDARDS:

- Know that natural and human-made objects are made up of parts
- Know models as useful simplications of objects or processes
- Illustrate patterns that regularly occur and reoccur in nature
- Know that scale is an important attribute of natural and human made objects, events and phenomena
- Recognize change in natural and physical systems

CONTENT FOR 2ND GRADE

A. Know that natural and human-made objects are made up of parts
   - Identify and describe what parts make up a system
   - Identify systems that are natural and human-made

B. Know models as useful simplifications of objects or processes
   - Identify different types of models
   - Apply appropriate simple modeling tools and techniques

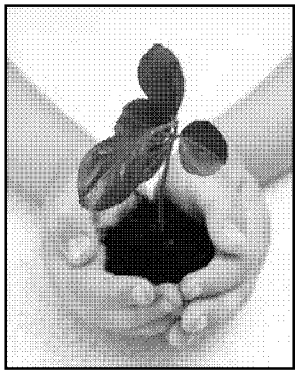
Resources:

- Project Wet, PA Department of Education, Teaching and Learning, Office of Environment and Ecology
- ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor
- Houghton Mifflin, Experience Science Series
- FOSS Modules (New Plants, Air, Measurement and Weather)
- Science Companion, Pearson Scott Foresman, Collecting and Examining Life
- Trade Books (national geographic, content areas, Centennial Press, Scholastic, Dawn Publications, etc.)
- Reading to Learn the Content, Office of Environment and Ecology, PA Department of Education.
- Science, Technology, Environment and Ecology Classroom Connection Kit, PA Department of Education (STEEP)
- Project Learning Tree, Office of Environment and Ecology, PA Department of Education

EXAMPLES

The learner will:

- Explore with fraction blocks, puzzles, toy gear sets and other items made of parts.
- Take apart and reassemble simple toys and safe household items to identify the types and uses of the parts.
- Identify the different parts of a plant.
- Understand how a simple system works (e.g., water, agriculture, simple ecosystem, etc.).
- Identify differences in living and non-living systems.
- Sort objects and parts of objects as natural or human-made.
- Explore realistic models of common objects found in the natural world and human-made world (model cars, toys, visible human body, farm play kits, etc.).
- Understand the concept of a simple machine (levers, incline planes, pulley).
- Understand the design of a working model (e.g., bridge, Lincoln Logs, K'nex, wetland, terrarium, aquarium, simple ecosystems, etc.).



SUPPORTIVE PRACTICE

The teacher will:

- Use fraction blocks to explain the parts of the whole.
- Provide opportunities for students to see the relationships of the parts to the whole through the use of toys and common household items.
- Provide visual aids for students as well as actual models (e.g., seeds, plants, fruits, etc.) for identification of plant parts.
- Read fiction and non-fiction trade books as well as provide visuals for students understand of living and non-living systems.
- Provide field experiences or hands-on activities for real life understanding of these differences.
- Provide pictures and examples of natural and human-made objects for students to sort and categorize.
- Use visible human model to show internal body parts.
- Use K'nex, Lincoln Logs or Lego parts to construct models of human-made objects.
- Use simple machines to demonstrate and provide simple experiments for students to do to show how simple machines work.
- Provide opportunities for students to design and build natural (wetlands, farms, rotting log) and human-made models.
- Provide hands-on opportunities for students to compare and contrast the similarities and differences in natural patterns.
- Point out more abstract patterns such as day and night and the seasons.

CONTINUED...

SCIENCE

STANDARD 3.1: UNIFYING THEMES continued

CONTENT FOR 2ND GRADE

C. Illustrate patterns that regularly occur and reoccur in nature
   - Identify observable patterns that occur in nature
   - Use knowledge of natural patterns to make predictions

D. Know that scale is an important attribute of natural and human-made objects, events and phenomena

E. Recognize change in natural and physical systems
   - Examine and explain change through recording observations
   - Describe the change to objects caused by heat, cold or light

See Science and Technology 3.4

Resources:

- Field trips using the school grounds, the neighborhood, local nature centers or state parks, museums
- Classroom guest who could speak about their careers
- Classroom guest who are experts in the fields of science, technology and environment

EXAMPLES

The learner will:

- Identify natural patterns in leaves, inside shells, coats of animals, flowers, etc.
- Replicate natural patterns using basic classroom craft materials or natural materials found on the ground.
- Understand changes in weather in relationship to patterns and how to predict these changes through seasons.
- Identify patterns that are seen in nature that are used in human-made products (e.g., honeycomb, spirals, leaf patterns, etc.).
- Sequence objects from smallest to largest.
- Understand how rulers, tape measures and yardsticks all measure length.
- Sort common objects as small, medium, large and other descriptive measurements.
- Begin to use common units of standard measurement such as cup, quart, inch, foot, etc.

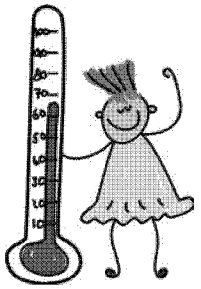
Through the five senses -

- Observe and record change in planted seeds over time.
- Observe changes in the outside temperature.
- Observe and record seasonal change.
- Observe and record change in a deciduous tree from the start of the school year to the end.
- Observe and record the phases of water by the change in ice as it melts, liquid after freezing, steam.
- Participate in simple cooking projects that build understanding of change caused by heating and cooling.
- Place common objects in direct sunlight to observe the change in temperature and color.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for students to look around the school yard or neighborhood to see patterns and shapes.
- Replicate repeating patterns that are found in nature to show how they are used in production of human-made products (weaving, paper making, etc.).
- Provide objects to compare and contrast for various sizes.
- Provide opportunities for students to measure in the classroom and outside of the classroom various items and make classroom charts for discussion.
- Demonstrate how the use of common units of measurement (different scales – inch, cm, etc.) can represent the length of the same object.
- Explain that changes occur over a period of time.
- Have students record their observations of change over time (e.g., dissolve sugar and water and leave in sun to re-crystallize).
- Have students participate in simple experiments to understand the concepts of heating and melting, etc.
- Demonstrate how temperature affects the preparation of food (e.g., making of fudge).



SCIENCE

STANDARD 3.2: INQUIRY AND DESIGN

FOURTH GRADE STANDARDS:

- Identify and use the nature of scientific and technological knowledge
- Describe objects in the world using the five senses
- Recognize and use the elements of scientific inquiry to solve problems
- Recognize and use the technological design process to solve problems

CONTENT FOR 2ND GRADE

A. Identify and use the nature of scientific and technological knowledge
   - Distinguish between a scientific fact and a belief

B. Describe objects in the world using the five senses
   - Recognize observational descriptors from each of the five senses
   - Use observation to develop a descriptive vocabulary

C. Recognize and use the elements of scientific inquiry to solve problems
   - Generate questions about objects, organisms and/or events that can be answered through investigations
   - Conduct an experiment
   - State a conclusion that is consistent with information

D. Recognize and use the technological design process to solve problems
   - Recognize and explain basic problems
   - Identifying possible solutions and their course of action
   - Try a solution
   - Describing the solution, identifying its impacts and modifying if necessary
   - Showing the steps taken and results

EXAMPLES

The learner will:

- Respond to "what if" questions.
- Engage in teacher-created opportunities to inquire about natural occurrences.
- Distinguish between real and make believe presented in a variety of literature experiences.
- Respond to teacher examples of either a scientific fact or opinion.
- Identify common objects using the five senses.
- Understand qualities of the senses (sight, sound, smell, touch, taste) sight – brightness/color, sound – loudness and pitch, smell – burning/rotting, touch – smooth/rough and taste – sweet/sour).
- Use descriptive sensory vocabulary to identify a variety of natural and human-made objects.
- Observe and participate in simple experiments and investigations.
- Ask questions about observations.
- Predict what might happen next.
- Record results of experiments with other students.
- Ask "what if" questions.
- Record observations, explanations and ideas through multiple forms of representation including drawing, writing, movement and graphs.
- Listen to others' perspectives and opinions.
- Use observations from experiments and investigations to form a conclusion.
- Identify simple problems to solve.
- Suggest possible solutions to everyday problems.
- Raise questions about the possible solutions to determine which may be the best course of action.
- Test possible solutions.
- Record the steps taken to solve a problem using multiple modes including writing, drawing, movement and discussion.

SUPPORTIVE PRACTICE

The teacher will:

- Have students engage, explore, explain, extend the learning and evaluate the learning.
- Differentiate for students through examples what is the differences between real and make believe and scientific facts and opinion.
- Provide students with a variety of reading texts on real vs. make believe and have students identify the differences between the real and make believe through reader's theatre.
- Provide multiple experiences for students to be exposed to various stimuli designed to excite their five senses.
- Provide opportunities for student journals to be developed using descriptive sensory vocabulary. (Graphic organizers can be used.)
- Have students describe their least favorite and favorite sensory experience.
- Connect students with the activities being done by using the inquiry process and skills.
- Provide opportunities for students to participate in simple experiments and investigations both in the classroom and out of the classroom.
- Encourage students to ask questions about their observations and predict what might happen (future).
- Model examples of observation skills, journaling and record keeping.
- Facilitate group discussions based on student observations, journals, graphs, writings, etc.
- Model the technological design process first for students.
- Identify simple problems for students to solve. (e.g., make a tower out of news paper, make a strong bridge out of paper, etc.)
- Facilitate group work activities for identified simple problems.

SCIENCE

STANDARD 3.3: BIOLOGICAL SCIENCES

FOURTH GRADE STANDARDS:

- Know the similarities and differences of living things
- Know that living things are made up of parts that have specific functions
- Know that characteristics are inherited and, thus, offspring closely resemble their parents
- Identify changes in living things over time

CONTENT FOR 2ND GRADE

A. Know the similarities and differences of living things
   - Identify life processes of living things
   - Know that some organisms have similar external characteristics and that similarities and differences are related to environmental habitat
   - Describe basic needs of plants and animals

B. Know that living things are made up of parts that have specific functions
   - Know that different parts of a living thing work together to make the organism function

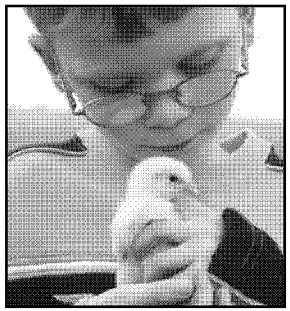
C. Know that characteristics are inherited and, thus, offspring closely resemble their parents
   - Identify physical characteristics that appear in both parents and offspring

D. Identify changes in living things over time (See Environment and Ecology Standard 4.6.C)

See Environment and Ecology Standard 4.6

Resources:

- Pennsylvania Song Birds, PA Game Commission
- Pennsylvania Project Wild, PA Game Commission



EXAMPLES

The learner will:

- Explain that all living things require food, water, shelter and space arranged for survival (habitat).
- Sort pictures of plants or animals into categories of habitat requirements (food, water, shelter, space).
- Identify common body type characteristics for the animal kingdom (vertebrates – animals with a backbone and invertebrates – animals without a backbone).
- Identify differences in body type between each category.
- Be able to identify the parts of an insect and the parts of a plant.
- Recognize how the different parts of an animal are used for survival.
- Recognize how an animal or plant adapts to their surroundings for survival.
- Observe the different parts of a plant, including the roots, stem, leaves and flowers. Make up a list and discuss reasons for the possible function of each part.
- Compare themselves to their parents. Comparisons should include size, shape and color (hair color, eye color, skin pigmentation, dimples, gender).
- Compare characteristics of animals (size, coloration, gills, feathers, beaks, etc.).
- Compare fossils to living organisms noting similarities and differences.
- Create a model of a timeline and place artifacts throughout the model to simulate what might be found with change over time.

SUPPORTIVE PRACTICE

The teacher will:

- Provide fiction and non-fiction books that depict different habitats and the animals that live there.
- Provide non-fiction books for students to read about different animals (both vertebrates and invertebrates).
- Provide media for students to collect pictures of plants and animals and do murals separating into different habitats.
- Provide hands-on opportunities for students to design an animal using body types and characteristics necessary for survival and predict their habitat.
- Provide diagrams or models of parts of an insect or plants and help students to identify the living organism.
- Use a variety of Pennsylvania species to help students recognize their similarities and differences.
- Using the out-of-doors to demonstrate to students how adaptation helps organisms to survive (e.g., coloration, beaks, gills, wings, etc.).
- Provide fiction and non-fiction books on Pennsylvania animals and plants for student readings, drawing or writings.
- Help students classify shared characteristics between themselves and their parents and discuss the possible reasons for those similarities and differences.
- Give students opportunities to identify similar characteristics among a variety of Pennsylvania animals.
- Provide models of various fossils and allow students to examine their similarities and differences.
- Take students on field trips to local museums where fossils could be viewed.
- Take students on local digs for students to get a first hand opportunity to find fossils.
- Have students create their own archeological model with a clear plastic container filled with play dough representing different years and common items buried in the layers.

SCIENCE

STANDARD 3.4: PHYSICAL SCIENCE, CHEMISTRY AND PHYSICS

FOURTH GRADE STANDARDS:

- Recognize basic concepts about the structure and properties of matter
- Explore basic energy types and sources
- Explore and describe different types of force and motion
- Describe the composition and structure of the universe and the earth's place in it

CONTENT FOR 2ND GRADE

A. Recognize basic concepts about the structure and properties of matter
   - Describe properties of matter
   - Know that combining two or more substances can make new materials with different properties
   - Know different material characteristics

B. Know basic energy types and sources
   - Identify energy forms and examples

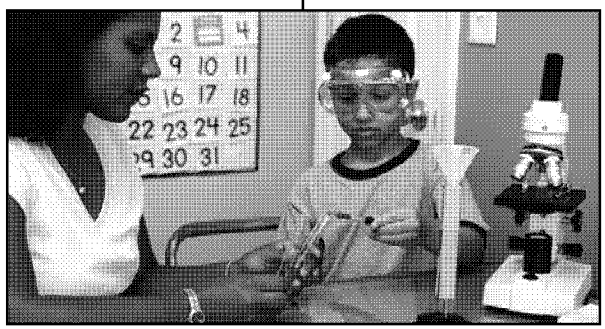
C. Observe and describe different types of force and motion
   - Recognize forces that attract and repel other objects and demonstrate them
   - Describe various types of motions

EXAMPLES

The learner will:

- Understand that all matter has physical properties that can be observed by the five senses.
- Identify the three states of matter (solid, liquid, gas).
- Do simple activities to demonstrate heating, melting, cooling, freezing, mixing, separating.
- Observe various combinations of substances (e.g., ice in water, oil in water, salt in water and baking soda in white vinegar).
- Do experiments to learn how mixtures form using multiple modes including writing, drawing and movement.
- Do simple experiments to understand that air is a mixture of gases and that these gases are a material that spreads out to fill the space it is in (e.g., air bubbles, paper airplanes, spirals, balloons, burning candle in inverted jar with water, etc.).
- Identify basic examples of different types and sources of energy (mechanical, electrical, magnet).
- Create an electrical circuit.
- Explain how the circuit works.
- Observe the interaction of magnets.
- Describe the motion as push or pull.

Look at 3.1 Unifying Themes for more ideas.



SUPPORTIVE PRACTICE

The teacher will:

- Explain to students that matter is the "stuff that everything is made from."
- Involve students in various hands-on experiments using the five senses asking students: How does it smell? How does it look? How does it taste? How does it feel? How does it sound?
- Provide demonstrations that show that all matter is made of particles and that the closer together the particles are the more dense the matter (floating and sinking).
- Demonstrate turning a liquid to a solid and a solid to a liquid.
- Demonstrate how a mixture is formed (e.g., sand, mud, salad dressing, etc.).
- Work with students to separate a mixture through chromatography and then through the process of evaporation.
- Explain that sometimes a noticeable change is observed when mixing substances. This notable change is a reaction in the mixture.
- Demonstrate and then involve students in simple experiments to show how air takes up space, how air expands or becomes less dense, air pressure, etc.
- Provide students with activities that demonstrate types and sources of energy (magnets, batteries, wires, flash light bulbs, holders and paperclips) and explain how they provide energy.
- Demonstrate with a magnet and/or electricity that force leads to motion.
- Have students design and build a push pull toy.

Look at 3.1 Unifying Themes for more ideas.

SCIENCE

STANDARD 3.5: EARTH SCIENCES

FOURTH GRADE STANDARDS:

- Know basic landforms and earth history
- Know types and uses of earth material
- Know basic weather elements
- Recognize the earth's different water resources

CONTENT FOR 2ND GRADE

A. Know basic landforms and earth history
   - Identify various earth structures through the use of models
   - Identify the composition of soil as weathered rock and decomposed organic remains

See the Environment and Ecology Standard 4.1

B. Know types and uses of earth materials
   - Identify uses of various earth materials (e.g., buildings, highways, fuels, growing plants)

See the Environment and Ecology Standard 4.2

C. Know basic weather elements
   - Identify cloud types
   - Explain how the different seasons affect plants, animals, food availability and daily human life

D. Recognize the Earth's different water resources
   - Identify and describe types of fresh and salt-water bodies
   - Identify examples of water in the form of solid, liquid and gas on or near the surface of the earth
   - Explain and illustrate evaporation and condensation

Resources:

- Project Wet, PA Department of Education, Office of Environment and Ecology
- Project Wonders of Wetlands, PA Department of Education, Office of Environment and Ecology
- FOSS (Sand, Stone and Pebbles)
- Food, Land and People, PA Department of Education, Office of Environment and Ecology
- Bottle Biology,.....
- ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor

EXAMPLES

The learner will:

- Observe that water flows downhill.
- Identify local streams, river and lakes.
- Identify oceans and mountains on a map or globe.
- Understand different landforms using models such as watersheds, wetlands, volcanoes, mountains and valleys.
- Understand soil is made up of both organic and inorganic matter.
- Understand that several kinds of soil compose the layers of the Earth's surface.
- Understand what natural resources (renewable and nonrenewable) are and how they can be used.
- Identify and categorize the different uses of earths' natural resources.
- Understand how resources make a difference in our daily lives.
- Through the use of drawings describe one product's journey from start to finish.
- Understand the different shapes and appearances of cloud types.
- Understand how different seasons have various temperature ranges.
- Observe through the different seasons, the affects on plants and animals.
- Provide written and oral reports, murals, graphic organizers on the different PA animals and how they adapt to seasonal changes.
- Identify and describe the differences between oceans, rivers, lakes, wetlands and streams through creating pictures, stories and models.
- Participate in hands-on activities to see how water goes through phase change (evaporation, condensation, freezing and melting).

SUPPORTIVE PRACTICE

The teacher will:

- Use models and hands-on activities for group work to create watersheds including local streams, rivers and lakes.
- Help students locate oceans and mountains on either a map or globe.
- Compare the different kinds of soil that compose the Earth's surface.
- Provide small containers for students to make compost and have them observe what happens over a small period of time.
- Provide various kinds of soil samples and using magnifying glasses and small tools have students sort and classify what they find.
- Provide graphics and media on what is a renewable or nonrenewable resource.
- Provide Venn diagrams or comparable graphic organizers to tie multiple resources together.
- Provide examples of how everyday objects are made from the Earth's materials.
- Provide opportunities for students to work in groups to create their own story board of a product from start to finish.
- Explain and show visuals of the four basic clouds types (cumulus, stratus, cirrus and nimbus).
- Explain that all clouds are made of water vapor (tie to water cycle).
- Have students keep a daily record of temperatures throughout the school year.
- Have students use their school site to observe through journals the changes in seasons.
- Provide non-fiction trade books on animals and their adaptations during the different seasonal changes.
- Provide multiple opportunities for students to do reports (written or oral) on different PA animals' adaptations during seasonal changes.
- Read non-fiction stories relating to and identifying what is an ocean, river, etc. and what lives in each.

SCIENCE

STANDARD 3.6: TECHNOLOGY EDUCATION

FOURTH GRADE STANDARDS:

- Know that biotechnologies relate to propagating, growing, maintaining, adapting, treating and converting
- Know that information technologies involve encoding, transmitting, receiving, storing, retrieving, and decoding
- Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design

CONTENT FOR 2ND GRADE

A. Know that information technologies involve encoding, transmitting, receiving, storing, retrieving and decoding
   - Identify electronic communication methods that exist in the community
   - Demonstrate the ability to communicate an idea by applying basic sketching and drawing techniques

B. Know physical technologies of structural design, analysis and engineering, finance, production, marketing, research and design
   - Identify and group a variety of construction tasks
   - Know skills used in construction
   - Identify examples of manufactured goods present in the home and school
   - Identify basic resources needed to produce a manufactured item

Resources:

- International Technology Education Association –CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor
- International Technology Education Association – Technology and Children
- Children's Engineer CD, VA Department of Engineering

EXAMPLES

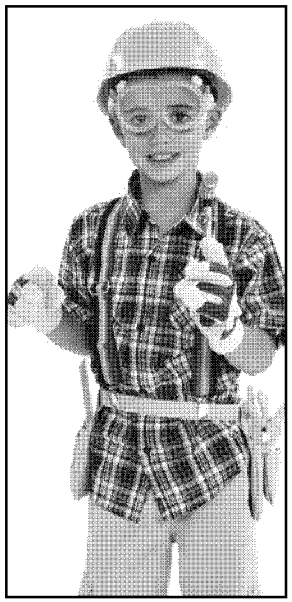
The learner will:

- Identify various forms of electronic communication that they have used or have seen used.
- Demonstrate by writing, drawing, movement and graphs how electronic communications has impacted their lives.
- Sketch or draw a simple object such as a Lego block or simple geometric block shapes (e.g., as a plastic or wooden pyramids, triangles, cylinders, squares, rectangles).
- Identify different types of structures (e.g., houses, factories, shopping centers, sheds, schools, etc.) through visuals or media presentations.
- Identify and list what various jobs are needed to construct a school building.
- Identify by drawing products of technology that can be found in the classroom.
- Label the source of the materials found in the classroom drawing for each product of technology.

SUPPORTIVE PRACTICE

The teacher will:

- Demonstrate the proper use of various forms of electronic communication (e.g., telephone, computer, Morse code, cellular phone, camera, web-cam, email).
- Provide students with various simple objects to sketch or draw.
- Provide the students with visual aids that depict various types of buildings.
- Assign different career roles to teams of students and have them role play the job (e.g., plumbers, electricians, carpenters, masons, roofer, etc.).
- Guide students on a tour of the classroom pointing out the products of technology and what raw materials were needed for their production.



SCIENCE

STANDARD 3.7: TECHNOLOGICAL DEVICES

FOURTH GRADE STANDARDS:

- Explore the use of basic tools, simple materials and techniques to safely solve problems
- Select appropriate instruments to study materials
- Identify basic computer operations and concepts
- Use basic computer software
- Identify basic computer communications systems

CONTENT FOR 2ND GRADE

A. Explore the use of basic tools, simple materials and techniques to safely solve problems
   - Group tools and machines by their function
   - Select and safely apply appropriate tools and materials to solve simple problems

B. Select appropriate instruments to study materials
   - Develop simple skills to measure, record, cut and fasten
   - Explain appropriate instrument selection for specific tasks

C. Identify basic computer operations and concepts

D. Use basic computer software

E. Identify basic computer communications systems

EXAMPLES

The learner will:

- Understand that tools help humans do work more efficiently.
- Work with a selection of tools and group them by their function (e.g., drawing, cutting, measuring, fastening, magnifying, etc.).
- Understand that tools have specific uses to solve simple problems.
- Work in small groups with an assigned project and identify and safely use the appropriate tools.
- Recognize that a computer is made up of parts that perform different operations (e.g., input, processor and output).
- Draw and identify the different parts of the computer.
- Work with the computer where educationally appropriate.
- Use educational software and be able to manipulate the keyboard or mouse to perform the requested functions.

SUPPORTIVE PRACTICE

The teacher will:

- Provide and demonstrate an assortment of basic tools for the students.
- Assign a selection of tools and have students group them by function.
- Assign each group a project in which the students will have to use the appropriate tool safely.
- Demonstrate the appropriate function of each part of the computer.
- Provide educational drills and/or software to have students become familiar with the functions of the computer.
- Provide a variety of educational software and directed task for students to perform on the computer.

STANDARD 3.8: TECHNOLOGY AND HUMAN ENDEAVORS

FOURTH GRADE STANDARDS:

- Know that people select, create and use science and technology and that they are limited by social and physical restraints
- Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life
- Know the pros and cons of possible solutions to scientific and technological problems in society

CONTENT FOR 2ND GRADE

A. Know that people select, create and use science and technology and that they are limited by social and physical restraints
   - Identify interrelationships among technology, people and their world
   - Apply the technological design process to solve a simple problem (See 3.2.D)

B. Know how human ingenuity and technological resources satisfy specific human needs and improve the quality of life
   - Identify and distinguish between human needs and wants

EXAMPLES

The learner will:

- Understand the difference between needs and wants in relationship to technology.
- Identify a societal need and engage in the design process to solve the problem.
- Develop an understanding of the role of society in the development and use of technology by having them identify how they get their food, water and shelter.

SUPPORTIVE PRACTICE

The teacher will:

- Prepare a timeline showing the development of different technologies throughout history.
- Identify different society problems and have students engage in solving the problems through the design process.
- Read the Lorax and have the students distinguish between needs and wants.
- Have students work in small groups to identify and classify various technologies that meet human needs for survival.

CONTINUED...

STANDARD 3.8: TECHNOLOGY AND HUMAN ENDEAVORS continued

CONTENT FOR 2ND GRADE

C. Know the pros and cons of possible solutions to scientific and technological problems in society

Resources:

- ITEA-CATTS EdB Access, Kids Inventing Technology Series Activities, PA Department of Education, Teaching and Learning, Technology Education Advisor
- Food, Land and People, PA Department of Education, Office of Environment and Ecology
- The Lorax Book or video by Dr. Seuss

EXAMPLES

The learner will:

- List the positive and negative aspects of a product of technology that they use in their daily lives.

SUPPORTIVE PRACTICE

The teacher will:

- Provide examples (visual or models) of technological products that students use in their daily lives and have them create a list of good and bad effects on them or their families.

STANDARD 4.1: WATERSHEDS AND WETLANDS

FOURTH GRADE STANDARDS:

- Identify various types of water environments
- Explain the differences between moving and still water

CONTENT FOR 2ND GRADE

A. Identify various types of water environments
   - Identify the *lotic* system (e.g., creeks, rivers, streams)
   - Identify the *lentic* system (e.g., ponds, lakes, oceans)

B. Explain differences between moving and still water
   - Identify types of precipitation
   - Explain why some water moves and others do not

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project WET (OE&E)
- Project Wonders of Wetlands (OE&E)
- Leaping through Wetlands
- Non-fiction trade Books on ponds, rivers, lakes, streams, oceans, fish, insects, reptile, amphibians, etc.
- Commercial educational kits
- Local and state parks and environmental centers
- Project Wild Aquatic (PA Fish and Boat Commission)
- Project Reptile and Amphibians (PA Fish and Boat Commission)
- Wetlands by Pamela Hickman

EXAMPLES

The learner will:

- Identify a creek, river and stream through pictures and books.
- Identify a pond, lake and ocean through pictures and books.
- Explain why water moves or does not move.
- Participate in outdoor experiences looking at moving and still waters.
- Participate in experiments that demonstrate types of precipitation (snow, rain, hail).
- Understand water as a habitat.
- Be able to identify the differences between a fish, insect and amphibian through either visuals or models of each.
- Understand the life cycle of living things and be able to put them into sequence.
- Observe life cycles either in the classroom, on the school grounds or a field experience.
- Be able to identify easily recognizable plants through pictures, books or field experiences.

SUPPORTIVE PRACTICE

The teacher will:

- Provide pictures of both still and moving bodies and have the students compare and contrast.
- Read non-fiction books that clearly illustrate different water systems.
- Provide outdoor experiences on school grounds or field trips to recognize the different types of water systems.
- Provide opportunities for hands-on experiments to illustrate different types of precipitation.
- Provide opportunities for the students to observe water in the real world and note the differences (snow, rain, sleet).
- Use non-fiction books to identify fish, insects and amphibians and their habitat.
- Explain why water is necessary for life.
- List organisms that have aquatic stages of metamorphosis and describe those stages.
- Describe the life cycle of organisms that depend upon water.
- Provide hands-on opportunities in the classroom, on the school grounds or on a field experiences.

CONTINUED...

STANDARD 4.1: WATERSHEDS AND WETLANDS continued

CONTENT FOR 2ND GRADE

C. Identify living things found in water environments
   - Identify fish, insects and amphibians that are found in fresh water
   - Identify plants found in fresh water

D. Identify a *wetland* and the plants and animals found there
   - Identify different kinds of wetlands
   - Identify plants and animals found in wetlands
   - Explain wetlands as habitats for plants and animals

Resources:

- Watersheds A Practical Handbook for Healthy Water by Clive Dobson and Gregor Gilpin Beck
- Leapfrogging through Wetlands by Margaret Anderson, Nancy Field and Karen Stephenson
- The Web at Dragonfly Pond by Brian "Fox" Ellis

EXAMPLES

The learner will:

- Be able to identify a swamp, marsh and pond through pictures books or field experiences.
- Recognize through visuals or field experiences animals that use wetlands as habitat.
- Use a model of a wetland and how it provides for living things.
- Be able to identify common types of plants found in wetlands (reeds, cattails, skunk cabbage, etc.) through pictures or field experiences.

SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for the learner to recognize various wetlands like a swamp, marsh and pond through pictures, books and/or field experiences.
- Help learners understand what a wetland is and how important it is for living systems.
- Help the learner use a model of a wetland and understand how it provides food, water, shelter and space for animals.
- Provide pictures or field experiences to help the learner recognize common types of wetland plants.

STANDARD 4.2: RENEWABLE AND NONRENEWABLE RESOURCES

FOURTH GRADE STANDARDS:

- Identify needs of people (basic)
- Identify products derived from natural resources
- Know that some natural resources have limited life spans

CONTENT FOR 2ND GRADE

A. Identify needs of people
   - Identify plants, animals and water as natural resources
   - Identify how the environment provides for the needs of people

B. Identify products derived from *natural resources*
   - Identify products made from trees

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree (OE&E)
- Conserving for the Future (OE&E)
- Foss Kit – Trees, Animals Two by Two
- The Budding Botanist, Aims Education Foundation
- Tree House, Lawrence Hall of Science
- Non-fiction Trade Books
- Project Wild (PA Game Commission)

EXAMPLES

The learner will:

- Understand what a natural resource is by using books and visuals.
- Identify plant parts (roots, stems, leaves). Look at seeds, blossoms, fruits, etc. and plants that make food. Learners can use models and pictures.
- Plant different seeds and record growth patterns based on the needs of the plant and the variables that affect its growth.
- Be able to identify food and water as natural resources by class discussion on what is needed for survival (water needs, food products, clothes from natural resources).
- The learner will generate a list of the raw materials used for housing, clothing, transporting, heating, cooking, etc. and put them into renewable or nonrenewable resources.

SUPPORTIVE PRACTICE

The teacher will:

- Help learners understand the basic needs of food, water, shelter and space.
- Read non-fiction stories about natural resources.
- Use pictures of different kinds of natural resources (plants, animals, minerals, nutrients, water, etc.) supplied by the earth and have discussion about each.
- Use models and scientific equipment (magnifying glasses/ boxes, measuring sticks) to help learners understand plant parts and growth.
- Take the class on a field trip to a farm, tree plantation, orchard or use the neighborhood or school yard.
- Help learners develop murals depicting what is needed for survival and where it comes from.

CONTINUED...

SCIENCE

STANDARD 4.2: RENEWABLE AND NONRENEWABLE RESOURCES continued

CONTENT FOR 2ND GRADE

C. Know that some natural resources have limited life spans
   - Identify renewable and nonrenewable resources used in the local community
   - Identify various means of conserving natural resources

D. Identify by-products and their use of natural resources
   - Identify those items that can be *recycled* and those that cannot
   - Identify use of reusable products

See Standard 3.4 also

Resources:
- Project Food, Land and People (OE&E)
- Trade Books
- Recycling and You Video (OE&E)
- US Department of Environmental Protection
- PA Department of Environmental Protection Website (www.dep.state.pa.us)
- Recycling and You, OE&E
- Energy and You, Project Learning Tree (OE&E)
- CDs from Billy B on photosynthesis, air, energy, soil, water
- The Budding Botanist Investigations with Plants, AIMS Activities
- www.MII.org
- 4-H or Extension Programs

EXAMPLES

The learner will:
- Be able to identify different types of shelter (looking at why different habitats are important for survival).
- Bring in products that are made from trees (paper, toothpicks, rulers, pencils, cards, wrapping paper, coffee filters, lumber (1x2 or 2x4), wooden blocks – actually look at the grain of the wood – etc. and explain or make a mural of how they are made.
- Bring in from home items they use in their everyday lives and sort what is renewable and what is nonrenewable.
- Create murals or other visuals to illustrate how resources are used in daily routines.
- Read about water, air, rocks, minerals, trees, soil, animals, etc. and how they are classified as renewable or nonrenewable.
- Develop a list of ways to conserve resources at both home and school.
- Distinguish between what is recyclable and what is not recyclable and why.
- Look at and sort different everyday items and decide what can be recycled or reused and what cannot be.
- Participate in a classroom-recycling program.
- Read books on the subject.

SUPPORTIVE PRACTICE

The teacher will:
- Hang pictures of all different types of products made from trees around the classroom and have students explain how they are made.
- Use both products made from tree and products made from other materials and have students categorize them into those made from trees and those not made from trees.
- Create a chart of the resources they use in their daily lives distinguishing between renewable and nonrenewable resources.
- Invite local resource people to talk to the students about how their jobs impact local community resources.
- Describe ways of conserving resources they use (e.g., food, water, electricity).
- Read books that deal with difference things that come from nature.
- Use CDs to illustrate conservation of resources (e.g., water, energy, soil).
- Use posters and/or charts that show recycling products.
- Provide an assortment of items that the students is familiar with and have them sort which are recyclable, reusable and non-recyclable.
- Set up a recycling program of paper in the classroom.

SCIENCE

STANDARD 4.3: ENVIRONMENTAL HEALTH

FOURTH GRADE STANDARDS:
- Know that plants, animals, and humans are dependent on air and water
- Identify how human actions affect environmental health

CONTENT FOR 2ND GRADE

A. Know that plants, animals and humans are dependent on air and water
   - Know that all living things need air and water to survive
   - Describe potentially dangerous pest controls used in the home
   - Identify actions that can prevent or reduce waste pollution

B. Identify how human actions affect environmental health
   - Identify litter and its effect on the environment

C. Understand that the elements of natural systems are interdependent
   - Identify some of the organisms that live together in an ecosystem

Resources:
- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree, (OE&E)
- Project WET (OE&E)
- Reading to Learn the Content through the Environment and Ecology Standards (OE&E)
- Pest Patrol, Penn State University and OE&E

EXAMPLES

The learner will:
- Understand how important air and water are to every living organism (i.e., humans, animals and plants).
- Observe plant growth either in the classroom or on the school grounds.
- Identify simple pest controls found in the homes or in the school (e.g., bug spray, flea collars, mouse traps, fly swatters).
- Distinguish between pest controls that are good for the environment and those that are not.
- Understand what litter is and why it harms the environment.
- Discuss what should be done with trash.
- Understand their role in not littering and picking up litter when they see it (caution should be taken to explain about toxic or hazards materials).
- Observe micro habitats (trees, under a rock, flower bed, small patch of ground) and list the plants and animals and their needs.

SUPPORTIVE PRACTICE

The teacher will:
- Introduce the word "habitat" and have students read books or use manipulative to classify and sort what is living and what is not.
- Provide plants in the classroom and have students observe their growth based on the amounts of air and water each receive.
- Use the school grounds or local community for class observations of both plants and animals.
- Use the Mr. Yuk program to reinforce dangerous chemicals.
- Arrange for the local county recycling coordinator or the school district maintenance supervisor to visit the classroom room and talk about local and district attempts to keep trash disposed of properly.
- Read related books.
- Read books on different habitats, what lives there and their needs.
- Take a walk and observe all the plant and animal life.

SCIENCE

STANDARD 4.4: AGRICULTURE AND SOCIETY

FOURTH GRADE STANDARDS:

- Know the importance of agriculture to humans
- Identify the role of the sciences in Pennsylvania agriculture

CONTENT FOR 2ND GRADE

A. Know the importance of agriculture to humans
   - Identify people's basic needs
   - Know how people depend on agriculture

B. Identify the role of the sciences in Pennsylvania agriculture
   - Identify common animals found on Pennsylvania farms
   - Identify common plants found on Pennsylvania farms
   - Identify the parts of important agricultural related plants (i.e., corn, soybeans, barley)
   - Identify a fiber product from Pennsylvania farms
   - Identify what plants and animals need to grow

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Non-fiction trade books
- Videos/CDs on farm animals and plants
- Disney, Bill Nye and Broom
- Project Food, Land and People (OE&E)
- Pennsylvania Agriculture Supplement (OE&E)
- PA Act 26 Poster (OE&E)
- PA Ag Magazines (OE&E)
  - PA Vegetables
  - PA Soils
  - PA Pigs
- Dig It – Hands on Soil Investigation, National Science Teachers Assoc.
- Critters, AIMS Education Foundation
- Garden Tools for Learning by Environmental Concepts
- How Groundhog's Garden Grew by Lynne Cherry
- www.NSDL.org (science digital library)

EXAMPLES

The learner will:

- Identify what they want and what they need in order to survive (food, water, shelter and space).
- Understand the differences between a want and a need.
- Compare how agriculture influences food, dress, shelter and customs in the area to other areas.
- Read books and look at pictures of animals found on local farms.
- Visit a local farm or see a video on the kinds of crops grown on local farms.
- Examine a plant and identify its parts.
- Identify products that come from a farm and that they use in their everyday lives (a visit to a grocery store or display pictures or non perishables could be taken to a food pantry).
- Through the use of murals, trace one simple product from production to consumption (e.g., chocolate bar, jar of jelly).
- Grow plants in the classroom and provide what it necessary (food, water, air and sun).

SUPPORTIVE PRACTICE

The teacher will:

- Brainstorm with students what they need to survive.
- Read and discuss stories that deal with needs and wants (e.g., The Lorax).
- Provide an assortment of pictures of what people eat, wear, live and do in Pennsylvania and in other familiar areas so students can compare differences and similarities.
- Read books to illustrate what animals live on a local farm.
- Visit a farm or have a guest farmer, extension agent or master gardener talk to the students.
- Use magnifying glasses and other simple tools for students to examine plant parts.
- Help students draw and label the parts of the plant.
- Guide the students from production to consumption of a product.
- Give examples of a fiber product and how we use it (e.g., wool, cotton).
- Invite a person who spins to demonstrate wool-thread-clothes.

SCIENCE

STANDARD 4.5: INTEGRATED PEST MANAGEMENT

FOURTH GRADE STANDARDS:

- Know types of pests
- Explain pest control
- Understand society's need for integrated pest management

CONTENT FOR 2ND GRADE

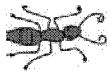
A. Know types of *Pests*
   - Identify and categorize pests

B. Explain Pest control
   - Know reasons why people control pests
   - Identify chemical labels (e.g., caution, poison, warning)

C. Understand society's need for integrated pest management
   - Identify integrated pest management practices in the home
   - Identify integrated pest management practices outside the home

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Food, Land and People (OE&E)
- Integrated Pest Management: An Exploration Into IPM – Penn State University and OE&E
- Pest Patrol, Penn State University and OE&E
- Ladybugs, Lawrence Hall of Science, GEMS Books
- Creepy Crawlies and the Scientific Method, Fulcrum Publishing
- Market Places of the Mind, Department of Agriculture
- www.agclassroom.org



EXAMPLES

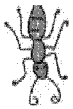
The learner will:

- Understand and be able to explain that pest is a human category rather than a natural category.
- Explore the wide range of organisms that can potentially be pests.
- Compare and contrast the different roles organisms have besides pestering humans.
- Describe how management of a particular organism will depend upon a person's perspective.
- Use local surroundings to record what they see in terms of potential pest and report out in a classroom discussion.
- Define the term pesticide and identify common household pests that chemicals may be used to manage.
- Understand that there are other ways to control pest besides chemical.

SUPPORTIVE PRACTICE

The teacher will:

- Instruct students to choose an organism from a class-generated list of pests.
- Through drawings show when the animal is a pest and when it is not.
- Take a walk outside and if possible have student use a digital camera or use a journal and draw pictures of animals that could be considered a pest to humans.
- Display and discuss a variety of non-chemical products used to control pests in the home and at school.
- Invite the school district's integrated pest management coordinator to the classroom and have them talk about what the district is doing to control pests.
- Discuss how chemicals used for pest control could be poisonous.



SCIENCE

STANDARD 4.6: ECOSYSTEMS AND THEIR INTERACTIONS

FOURTH GRADE STANDARDS:

- Understand that living things are dependent on nonliving things in the environment for survival
- Understand the concept of cycles

CONTENT FOR 2ND GRADE

A. Understand that living things are dependent on non-living things in the environment for survival
   - Identify and categorize living and non-living things
   - Describe the basic needs of an organism
   - Identify basic needs of a plant and an animal and explain how their needs are met
   - Identify plants and animals with their *habitat* and food sources
   - Understand the components of a food chain
   - Identify a local *ecosystem* and its living and non-living components
   - Identify a simple ecosystem and its living and non-living components
   - Identify common soil textures
   - Identify animals that live underground

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Learning Tree (OE&E)
- Project Wild (PA Game Commission)
- Project Wild Aquatic (PA Fish and Boat Commission)
- Wonders of Wetlands (OE&E)
- Fun with Nature Book (1-55971-702-5)
- Reading to Learn the Content to the Environment and Ecology Standards (OE&E)
- Reptiles and Amphibian (PA Fish and Boat Commission)
- Food, Land and People, PDE's Office of Environment and Ecology
- Gems Books
- Trade books – different animals, ecosystems, Magic School Bus books, books on cycles, etc.
- The Soils Video, OE&E

EXAMPLES

The learner will:

- Give examples of living and non-living things.
- Understand what is meant by an ecosystem.
- Identify different ecosystems (e.g., forest, field, river, pond, wetland, farm).
- Give an example of a local simple ecosystem and list its living and non-living parts.
- Construct a three-component food chain and be able to explain it.
- Understand the meaning of habitat (food, water, shelter and space) and be able to depict an animal in its habitat and how its needs are being met.
- Distinguish between sand, silt and clay.
- Identify animals that live underground (e.g., worms, grubs, beetles, ants, spiders, millipedes, field crickets, slugs).
- Participate in hands-on experiences with animals and their needs.

SUPPORTIVE PRACTICE

The teacher will:

- Use Venn diagram or comparable graphic organizer to identify similarities and differences in living and non-living things.
- Identify the needs of plants and animals.
- Read books on various animals in different habitats and the needs of the animals (e.g., frogs, deer, bat, worm, raccoon, hawk, rabbit, dragonfly and otter).
- Provide the opportunity for students to describe objects in the world around them using the five senses.
- Provide opportunities for the students to compare different ecosystems (river, pond, wetland, forest, farm, field).
- Provide opportunities for the students to select a local simple ecosystem and describe through a visual its living and non-living parts.
- Display common soils (sand, silt and clay) and have students use their sense of touch to distinguish among them.
- Use the school grounds, field trips, aquariums to demonstrate different simple ecosystems.

SCIENCE

STANDARD 4.7: THREATENED, ENDANGERED AND EXTINCT SPECIES

FOURTH GRADE STANDARDS:

- Identify differences in living things
- Know that adaptations are important for survival

CONTENT FOR 2ND GRADE

A. Identify differences in living things
   - Identify characteristics that living things inherit from their parents
   - Explain why each of the four elements in a habitat is essential for survival
   - Identify local plants or animals and describe their habitat

B. Define and understand *extinction*
   - Identify plants and animals that are extinct

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Wildlife of PA Coloring Book (PA Game Commission)
- Wildlife of Pennsylvania CDROM (OE&E)
- Reading to the Content through the Environment and Ecology Standards (OE&E)
- PA Project Wild (PA Game Commission)
- PA Song Birds (PA Game Commission) and PA Department of Conservation and Natural Resources

EXAMPLES

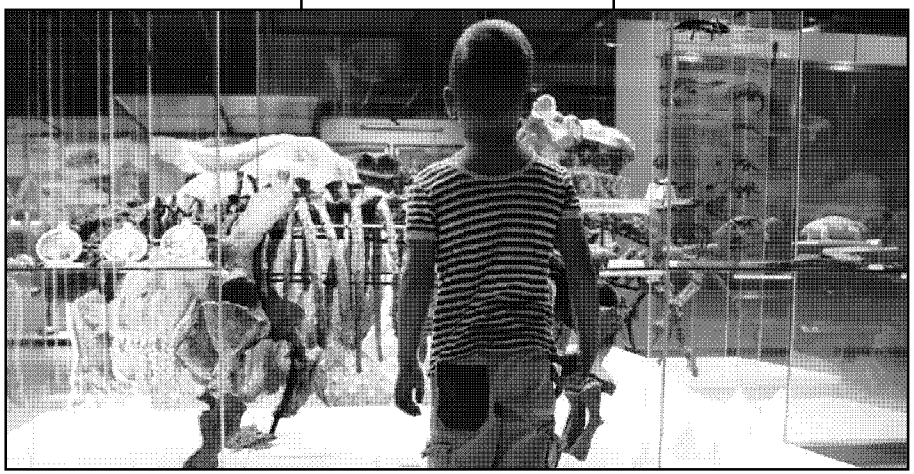
The learner will:

- Understand that living things have like characteristics from their parents (e.g., wings, fins, feathers, scales, skin coloration, beaks, echolocation capabilities, vision).
- Recognize that living things come in different colors, shapes and sizes.
- Understand the parts of a habitat (food, water, shelter, space) and why each is essential for survival.
- Recognize the needs that animals and plants must have are obtained from their habitat.
- Understand that animals and plants must be able to adapt to their surroundings to survive.
- Help students design an animal and provide the opportunity to give it the characteristics it will need to survive in a new ecosystem.
- Understand why certain plants and animals are extinct.
- Understand why certain animals and plants have distinctive characteristics that help them survive.

SUPPORTIVE PRACTICE

The teacher will:

- Read non-fiction trade books on different animals and have students recognize difference in the animals and their habitats.
- Have students classify and sort different animals and plants based on their similarities and differences.
- Take field trips or do school yard work having students identify different species through journaling and drawings.
- Through observation skills have student identify different characteristics needed for survival.
- Use class discussions to help students understand why some animals are now extinct.



SCIENCE

STANDARD 4.8: HUMANS AND THE ENVIRONMENT

FOURTH GRADE STANDARDS:

- Identify the biological requirements of humans
- Explain how human activities may change the environment

CONTENT FOR 2ND GRADE

A. Identify the biological requirements of humans
   - Identify several ways that people use natural resources

B. Explain how human activities may change the environment
   - Identify everyday human activities and how they affect the environment

C. Know the importance of natural resources in daily life
   - Identify items used in daily life that come from natural resources
   - Identify ways to conserve our natural resources

Resources:

- Office of Environment and Ecology Website (www.pa3e.ws)
- Project Wet (OE&E)
- Field trips to State and County Parks
- Local speakers from a variety of agencies, associations, organizations or companies
- Many of the resources throughout this section can be used here
- Field experiences to a farm, state park, stream and wetland can enhance their understanding of the systems importance to living things

EXAMPLES

The learner will:

- Compare the difference between wants and needs.
- Describe how different people in the community meet their own needs and wants.
- Read non-fiction books dealing with how people use natural resources.
- Understand how their use of water, electricity, recycling, pest control methods, etc. help to use the Earth's resources better.
- Understand through hands-on involvement how gardening can provide for their need for food.

SUPPORTIVE PRACTICE

The teacher will:

- Read non-fiction books that depict how people use natural resources.
- Invite local resource people to talk to the students about their particular role in the environment (e.g., water treatment plant manager, recycling coordinator, pest control company, parks and recreation ranger, forester, game or fish commission education specialist).
- Read books that show how people have used the resource for their very existence.
- Do hands-on projects or activities with the students dealing with water and electric use.
- Assist students in planting a small garden either in the classroom or on the school grounds.
- Take a field trip to sites that will visually enhance the students understanding of how people use the resource (parks, streams, wetlands, etc.).

STANDARD 4.9: ENVIRONMENTAL LAWS AND REGULATIONS

FOURTH GRADE STANDARDS:

- Know that there are laws and regulations for the environment

CONTENT FOR 2ND GRADE

A. Know that there are laws and regulations for the environment
   - Explain how the recycling law impacts the school and home

When teaching Renewable and Nonrenewable Resources (4.2D) incorporate this standard statement.

EXAMPLES

The learner will:

- Explain what they could recycle at home and identify what is recycled at school.

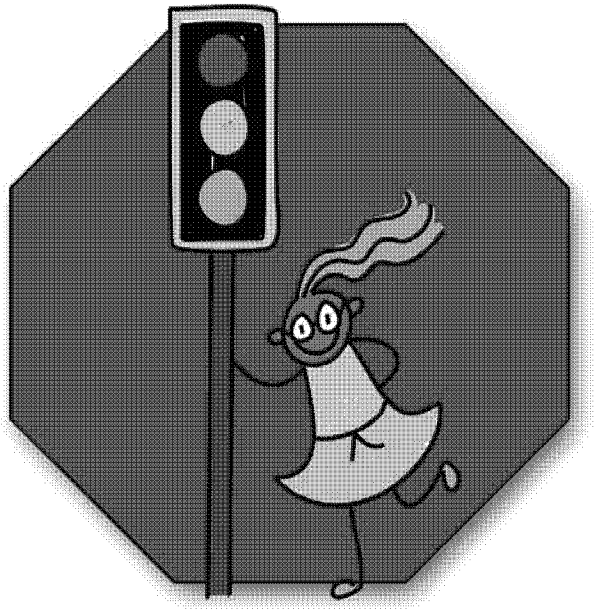
Resources:

- Local resource personnel
- Recycling Video, PDE's OE&E
- Conserving for the Future, PDE's OE&E

SUPPORTIVE PRACTICE

The teacher will:

- Explain what they could recycle at home and identify what is recycled at school.
- Explain to the students when teaching 4.2.D that there is a law that requires recycling in PA.
- Invite the recycling coordinator from either the school district or from the county to talk to the students about recycling and the law.



SOCIAL STUDIES

EARLY LEARNING STANDARDS FOR 2ND GRADE

The foundation for social studies, economics, geography, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and school. As their perception grows, they further expand their understanding of their role in the community, larger democratic society and as a global citizen. Using an interdisciplinary approach, teachers facilitate children's social studies skill development by helping them engage in active, age-appropriate investigations that build knowledge and understanding.

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SOCIAL STUDIES

STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

THIRD GRADE STANDARDS:

- Describe what government is
- Explain the purposes of rules and laws and why they are important in the home, classroom and community
- Define the principles and ideals shaping government
- Identify documents of United States government
- Describe the purpose of the United States Flag, The Pledge of Allegiance and The National Anthem
- Identify framers of documents of governments
- Explain why government is necessary in the classroom, school, community, state and nation and the basic purposes of government in Pennsylvania and the United States
- Explain the importance of respect for the property and the opinions of others
- Identify symbols and political holidays
- Identify portions of famous speeches and writings that reflect the basic principles and ideals of government (e.g., "I have a dream," Reverend Martin Luther King; "One small step for mankind," Neil Armstrong)

CONTENT FOR 2ND GRADE

A. Identify the visible roles that government serves

B. Identify the purpose of rules and laws and their importance in the classroom, school, community, state and nation

C. Define the principles and ideals shaping government

D. Describe the purpose of the United States Flag, The Pledge of Allegiance and the National Anthem

E. Identify framers of the Declaration of Independence

F. Explain why government is necessary in the classroom, school, community, state and the basic purpose of government

G. Explain the importance of respect for the property and the opinions of others

H. Identify symbols and political holidays

I. Identify portions of famous speeches and writings that reflect the basic principles and ideals of government

EXAMPLES

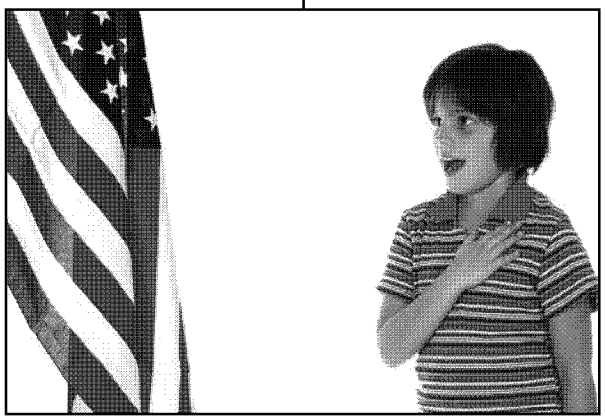
The learner will:

- Explain that governments are visible in a community through making laws, enforcing laws, gathering taxes and providing services for the common good.
- Explain truth, justice and liberty.
- Discuss how symbols are important.
- Discuss the importance of John Hancock, John Adams and Benjamin Franklin as framers of the Declaration of Independence.
- Explain why we celebrate Veterans Day, Memorial Day, Labor Day and Flag Day.
- Discuss the famous speeches: Martin Luther King Jr. "I have a dream...".

SUPPORTIVE PRACTICE

The teacher will:

- Discuss meaning of the Pledge of Allegiance.
- Demonstrate the importance and purpose of school and classroom rules.
- Conduct a mock election during Election Day.
- Discuss the "I Have a Dream" speech.



SOCIAL STUDIES

STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

THIRD GRADE STANDARDS:

- Identify examples of the rights and responsibilities of citizenship
  - Personal rights
  - Political rights
  - Economic rights
  - Personal responsibilities
  - Civic responsibilities
- Identify personal rights and responsibilities
- Identify sources of conflict and disagreement and different ways conflicts can be resolved
- Identify the importance of political leadership and public service in the school, community, state and nation
- Explain the benefits of following rules and laws and the consequences of violating them
- Identify ways to participate in government and civic life

CONTENT FOR 2ND GRADE

A. Identify examples of the rights and responsibilities of citizenship

B. Identify personal rights and responsibilities

C. Identify sources of conflict and disagreement and different ways conflicts can be resolved

D. Identify the importance of political leadership and public service in the school, community, state and nation

E. Describe ways citizens can influence the decisions and actions of government

F. Explain the benefits of following rules and laws and the consequences of violating them

G. Identify ways to participate in government and civic life

EXAMPLES

The learner will:

- Discuss the necessity of voting.
- Discuss personal responsibilities in the community, such as recycling and and following laws like bicycle safety and wearing a seatbelt.
- Use role plays to solve problems and disagreements.
- Demonstrate ways to be a leader/role model in the classroom and community.
- Influence the actions of government through letter writing, discussions with school/community leaders.
- Initiate a public service project (e.g., school-wide cleanup, food drive).
- Develop rules and consequences within the classroom.
- Hold a classroom election.

SUPPORTIVE PRACTICE

The teacher will:

- Discuss school safety.
- Celebrate Constitution Day.
- Conduct food drives or school wide clean up days.

SOCIAL STUDIES

STANDARD 5.3: HOW GOVERNMENT WORKS

THIRD GRADE STANDARDS:

- Identify the elected representative bodies responsible for making local, Pennsylvania and United States laws
- Identify the role of the three branches of government
- Identify reasons for rules and laws in the school and community
- Identify services performed by the local, state and national governments
- Identify positions of authority at school and in local, state and national governments
- Explain what an election is
- Explain why being treated fairly is important
- Identify individual interests and explain ways to influence others
- Identify the role of the media in society
- Identify different ways people govern themselves

CONTENT FOR 2ND GRADE

A. Identify the elected representative bodies responsible for making local, Pennsylvania and United States laws

B. Identify the role of the three branches of government

C. Identify reasons for rules and laws in the school and community

D. Identify services performed by the local, state and national governments

E. Identify positions of authority at school and in local, state and national governments

F. Explain what an election is

G. Explain why being treated fairly is important

H. Identify individual interests and explain ways to influence others

I. Identify the role of the media in society

J. Identify the ways a classroom is structured like a community

EXAMPLES

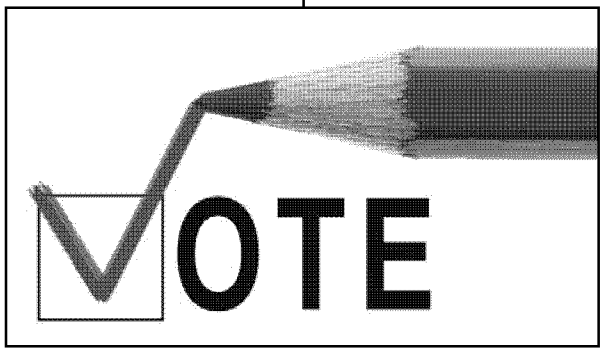
The learner will:

- Discuss the state senate and House of Representatives.
- Discuss the judiciary, executive and legislative branches of government.
- Explain how rules and laws keep the school and community operating smoothly and safely.
- Identify services provided by government such as law enforcement, firefighters, animal control, hospitals and education.
- Hold a mock election.
- Discuss the importance of treating others fairly.
- Discuss how advertising influences people.
- Discuss how a classroom is governed like a community.

SUPPORTIVE PRACTICE

The teacher will:

- Use graphic organizers to discuss the state senate, House of Representatives and branches of government.
- Establish classroom rules and consequences with students.
- Invite local law enforcement in the classroom to discuss their roles in the community.
- Conduct a mock election.
- Provide opportunities for student to role play how to treat others in certain situations.
- Provide classroom jobs.



SOCIAL STUDIES

STANDARD 6.1: ECONOMIC SYSTEMS

THIRD GRADE STANDARDS:

- Describe how individuals, families and communities with limited resources make choices
- Identify local economic activities
  - Employment
  - Output
- Identify examples of local businesses opening, closing, expanding or contracting

CONTENT FOR 2ND GRADE

A. Describe how people balance unlimited wants with limited resources

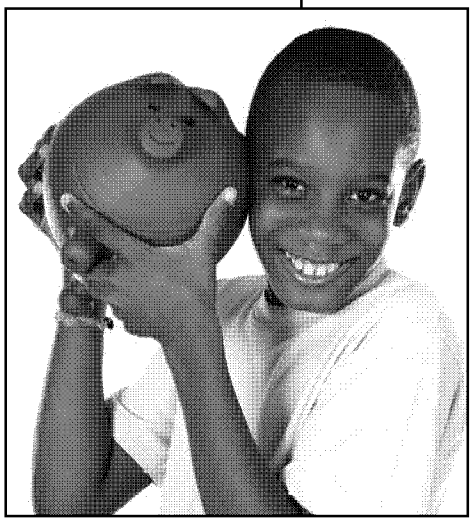
B. Identify local employment/producers
- Jobs
- Products/Services

C. Identify the opening and closing of community businesses

EXAMPLES

The learner will:

- Describe ways in which families spend and save money.
- Identify reasons why people save money for the future.
- Use a given budget to decide how to spend money.
- Practice exchanging manipulative money for classroom goods to demonstrate the process of buying and selling.
- Create a list of various community professions and discuss if the professions provide goods, services or both.
- Create product(s) and sell the products to students with fake money to help discuss profits and losses.
- List community businesses that have recently opened, closed, expanding or contracted.



SUPPORTIVE PRACTICE

The teacher will:

- Invite community helpers/local business people into the classroom to discuss the services they provide to the community.
- Create experiences for students to make economic decisions in the classroom and at learning centers.
- Read various trade books describing different community professions.
- Provide graphic organizers to elicit students' ideas about community professions.
- Establish classroom jobs.
- Provide field trip opportunities to local businesses.
- Have children earn and spend "classroom cash" and help them understand the responsibilities of earning and spending money.
- Discuss and create a grocery list for a family and discuss their needs and wants based on the money they have to spend.
- Discuss any new and recent businesses and why they were brought into the community.

SOCIAL STUDIES

STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENTS

THIRD GRADE STANDARDS:

- Define and identify goods, services, consumers and producers
- Identify ways local businesses compete to get consumers
- Identify and compare means of payment
  - Barter
  - Money
- Identify groups of competing producers in the local area
- Identify who supplies a product and who demands a product
- Define price and identify the prices of different items
- Identify forms of advertising designed to influence personal choice
- Explain why most countries create their own form of money

CONTENT FOR 2ND GRADE

A. Define and identify goods, services, consumers and producers

B. Identify ways local businesses compete to get consumers

C. Identify and compare means of payment
- Money
- Checks
- Credit Cards/Debit Cards

D. Identify similar community businesses

E. Identify who supplies a product and who demands a product

F. Define and compare the price of different items

EXAMPLES

The learner will:

- List various goods and services (ex. toys vs. doctor).
- Discuss how consumers and producers rely on one another.
- Discuss how consumers pay for goods and services through the use of trade and money.
- Compare various competing producers/ businesses (i.e. grocery stories, gas stations, etc.).
- Discuss the relationship between buyer and seller.
- Define the term price.

SUPPORTIVE PRACTICE

The teacher will:

- Provide descriptions of various goods and services for students to compare.
- Use a flow chart to discuss consumer and producer relationships.
- Provide items to trade as part of a Native American/Pilgrim activity.
- Provide play money and checkbooks for each student.
- Give examples of local producers and businesses.
- Provide opportunities for student to role play being buyers and producers.
- Incorporate various items into a math center for students to compare pricing.
- Show examples of advertising designed to influence personal choice.
- Show currency from other countries and place in learning centers.
- Create flow charts to describe everyday items that they use and all the people that put the time and effort into getting the product to them.
- Group students and have them pretend to be advertisers with the same product and have each group create an ad campaign for that product.

SOCIAL STUDIES

STANDARD 6.3: SCARCITY AND CHOICE

THIRD GRADE STANDARDS:

- Define scarcity and identify limited resources
- Identify and define wants of different people
- Identify and define natural, human and capital resources
- Identify costs and benefits associated with an economic decision
- Explain what is given up when making a choice
- Explain how self-interest influences choice

CONTENT FOR 2ND GRADE

A. Define scarcity and identify limited resources

B. Identify and define wants of different people in relation to limited resources

C. Identify and define natural and human resources

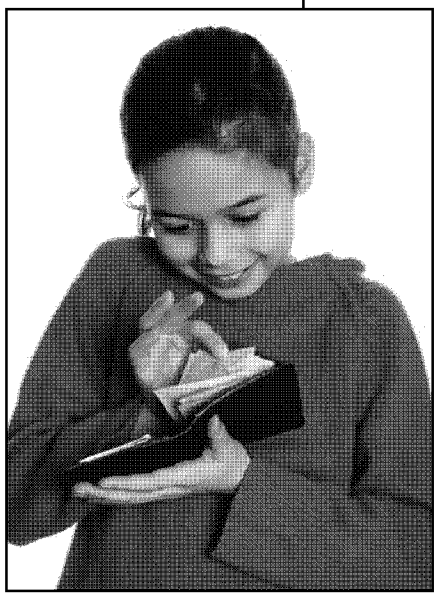
D. Explain what is given up when making a choice

F. Explain how self-interest influences choices

EXAMPLES

The learner will:

- Explain what scarcity means and list various limited resources.
- Understand that needs take precedence over wants.
- Discuss natural resources (water, gas, soil, trees).
- Identify different human resources (familiar workers).
- List the cost of items and discuss the benefits of buying such items.
- Explain what it means to spend wisely.
- Write about how to buy an item.
- Practice saving money.
- Discuss the difference between adult spending verses child spending.



SUPPORTIVE PRACTICE

The teacher will:

- Provide opportunities for learners to gain insight into making wise decisions regarding needs and wants.
- Use graphic organizers to identify wants and needs.
- Give examples of natural and human resources.
- Create opportunities for learners to practice saving pretend money in the classroom.
- Examine reasons why people choose to spend their money certain ways.
- Discuss and compare a list of the teacher's needs and wants to a list of the students' needs and wants.
- Set up a store setting in the classroom and have the students pretend to shop and pay for items.
- Discuss conserving and how little things such as "turning the water off when we brush our teeth" make a difference in the use and possibly scarcity of natural resources.
- Read various "Magic School Bus" books that discuss various resources and how to use them properly.

SOCIAL STUDIES

STANDARD 6.4: ECONOMIC INTERDEPENDENCE

THIRD GRADE STANDARDS:

- Explain why people trade
- Explain why goods, services and resources come from all over the nation and the world
- Identify local resources
  - Natural (renewable, nonrenewable and flow resources)
  - Human
- Explain why some products are produced locally while others are not
- Identify local geographic patterns of economic activities
  - Agriculture
  - Travel and tourism
  - Mining and mineral extraction
  - Manufacturing
  - Wholesale and retail
  - Health services

CONTENT FOR 2ND GRADE

A. Explain why people trade

B. Explain why goods, services and resources come from all over the nation and the world

C. Identify local resources
   - Natural (renewable and nonrenewable)
   - Human

D. Explain why some products are produced locally while others are not

EXAMPLES

The learner will:

- Discuss the process of trade within the United States and between two countries.
- List local resources (natural and human).
- Describe why certain products cannot be produced locally (geographic location, settlement, climate, culture).
- Discuss the reason(s) specific businesses/ industries are located in his or her community.

SUPPORTIVE PRACTICE

The teacher will:

- Explain how different states/countries trade products/services.
- Provide items to trade as part of a Native American/Pilgrim activity.
- Provide descriptions/explanations of why goods and services come from all over the nation and world.
- Use KWL charts to discuss why products are produced in certain regions.
- Use maps to identify where certain products are produced/manufactured.
- Brainstorm local resources and work as a class to categorize them between natural and human.
- Discuss businesses in our area and why some get more economic activity than others.
- Use maps to discuss why specific areas are strong for travel and tourism.

SOCIAL STUDIES

STANDARD 6.5: WORK AND EARNINGS

THIRD GRADE STANDARDS:

- Explain why people work to get goods and services
- Describe businesses that provide goods and businesses that provide services
- Identify different occupations
- Define saving and explain why people save

CONTENT FOR 2ND GRADE

A. Explain why people work to get goods and services

B. Identify different occupations

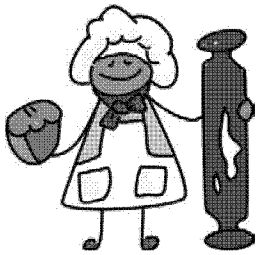
C. Describe businesses that provide goods and businesses that provide services

D. Define saving and explain why people save

EXAMPLES

The learner will:

- List reasons why people work.
- Research and report upon a profession of interest.
- Compare and contrast businesses that provide goods with those that provide services (i.e. restaurants/mail carrier).
- Explain the term entrepreneurship.
- Explain what it means to save.



SUPPORTIVE PRACTICE

The teacher will:

- Invite community helpers into the classroom to discuss their occupation.
- Provide materials for learners to research various occupations.
- Use graphic organizers to discuss businesses that provide goods with businesses that provide services.
- Use a KWL chart to facilitate learners' knowledge of entrepreneurship.
- Give the students examples of items that they may want to "save" for with their money.
- Use a business map of the community to separate a business that provides goods with one that provides services.
- Brainstorm with the students why the teacher might be working and also reasons why their parents work.
- Give each child the opportunity to choose an occupation that they would like to be when they grow up and then have them discuss and write the steps they would take to reach their goal.

STANDARD 7.1: BASIC GEOGRAPHY LITERACY

THIRD GRADE STANDARDS:

- Identify geographic tools and their uses
- Identify and locate places and regions

CONTENT FOR 2ND GRADE

A. Identify the following geographic tools: maps, globe, map elements, diagrams, photographs, map keys and cardinal directions

B. Identify the continents and oceans

EXAMPLES

The learner will:

- Explain the characteristics and purposes of different geographic representations.
- Use and make maps to identify and locate familiar places or objects within the state and country.
- Make a three-dimensional representation of a room in his/her house.
- Name the seven continents and four oceans on a map and globe.

SUPPORTIVE PRACTICE

The teacher will:

- Look at landforms on a map.
- Identify the following on a map: legends, keys and compass rose.
- Provide opportunities for students to use maps to identify familiar places.
- Support learners in constructing a three-dimensional representation of a familiar living space.
- Discuss the continents and oceans.

SOCIAL STUDIES

STANDARD 7.2: THE PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

THIRD GRADE STANDARDS:

- Identify the physical characteristics of places and regions
- Identify the basic physical processes that affect the physical characteristics of places and regions

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify physical characteristics of places, noting physical properties: landforms (swamps, hills and mountains); climate; vegetation; animals; bodies of water (creeks, rivers, ponds, lakes); and human-made forms (highways, streets, buildings and bridges) B. Identify basic processes (e.g. flood, tornado) that affect the physical characteristics of places and regions	• Create a model using physical characteristics such as mountains, rivers, lakes, etc. • Describe the interactions between people, animals and physical features of their environment. • Discuss the earth-sun relationship and how it effects seasons, length of daylight, weather and climate. • Investigate the causes of extreme physical events and describe the effects of such events on the environment.	• Celebrate Earth Day and discuss the environment. • Discuss the seasons as they change during the school year. • Observe and track weather changes. • Read literature about the effects of tornadoes, hurricanes, tsunamis, earthquakes on the environment.

STANDARD 7.3: THE HUMAN CHARACTERISTICS OF PLACES AND REGIONS

THIRD GRADE STANDARDS:

- Identify the human characteristics of places and regions by their population characteristics
- Identify the human characteristics of places and regions by their cultural characteristics
- Identify the human characteristics of places and regions by their settlement characteristics
- Identify the human characteristics of places and regions by their economic activities
- Identify the human characteristics of places and regions by their political activities

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify the human characteristics that are affected by places and regions B. Identify how places and regions are impacted by people	• Describe the reasons why people settle in specific regions. • Describe how people effect the places in which they live.	• Arrange visits to local businesses. • Have fundraisers for local altruistic causes (food banks, etc.). • Establish school/business relationships (ex. monthly projects to be displayed at local businesses).

SOCIAL STUDIES

STANDARD 7.4: THE INTERACTION BETWEEN PEOPLE AND PLACES

THIRD GRADE STANDARDS:

- Identify the impacts of physical systems on people
- Identify the impacts of people on physical systems

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify the human characteristics that are affected by places and regions B. Identify how places and regions are impacted by people	• Describe how the weather and natural resources impact people (e.g., drought, snowfall, soil quality). • Describe the various things people do to impact the environment (both positively and negatively).	• Discuss relevant topics during Earth Day (protecting air, water and land; using natural resources wisely). • Discuss the difference among suburban, urban and rural areas.

STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

THIRD GRADE STANDARDS:

- Understand chronological thinking and distinguish between past, present and future time
- Develop an understanding of historical sources
- Understand historical research

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Understand chronological thinking and distinguish between past, present and future time B. Begin to develop an understanding of historical sources (e.g., author/biography, historical places, events, and artifacts) C. Understand historical research	• Develop a family tree. • Listen to various historical biographies. • Discuss and/or visit historical sites. • Distinguish between fact and opinion. • Appreciate multiple points of view. • Discuss illustrations in historical stories. • Discuss cause/effect in historical events (e.g., westward expansion, Rosa Parks, slavery, etc.). • Interview grandparents about events from their childhood. • Read various folklore stories.	• Model how to create a timeline. • Read biographies in language arts (Helen Keller, etc.). • Visit or take virtual field trips to historical sites. • Discuss the relationship between Pilgrims and Native Americans. • Invite grandparents into the classroom to discuss events from their childhood. • Read folklore, using Johnny Appleseed as a building block for other tales.

SOCIAL STUDIES

STANDARD 8.2: PENNSYLVANIA HISTORY

THIRD GRADE STANDARDS:

- Understand the political and cultural contributions of individuals and groups to Pennsylvania history
- Identify and describe primary documents, material artifacts and historic sites important in Pennsylvania history

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Understand the political and cultural contributions of individuals and groups to Pennsylvania history B. Identify and describe primary documents, material artifacts, historic sites important in Pennsylvania history	• Identify and explain the significance of Betsy Ross. • Identify and explain the significance of William Penn. • Identify and explain the significance of Benjamin Franklin. • Identify the official commonwealth symbols (e.g. tree, bird, dog, insect, flower, fish, animal, keystone state). • Identify the Pennsylvania state flag. • Identify and explain the significance of the Liberty Bell.	• Read literature about William Penn's contribution to Pennsylvania history. • Read literature about Benjamin Franklin. • Provide pictures and descriptions of official commonwealth symbols. • Celebrate Flag Day. • Display the Pennsylvania flag in the classroom. • Read about the Liberty Bell as a symbol of freedom.

STANDARD 8.3: UNITED STATES HISTORY

THIRD GRADE STANDARDS:

- Identify contributions of individuals and groups to United States history
- Identify and describe primary documents, material artifacts and historic sites important in United States history

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify contributions of individuals and groups to United States history B. Identify and describe primary documents, material artifacts and historic sites important in United States history	• Identify and explain the political and/or cultural contributions of John F. Kennedy, Neil Armstrong, Henry Ford, Thomas Edison. • Recognize Mount Rushmore, The Alamo, Golden Gate Bridge and the Empire State Building. • Create an invention and explain how it works. • Examine primary documents and material artifacts.	• Use various publications to discuss Constitution Day. • Discuss Martin Luther King, Jr. during the King Holiday. • Discuss the first landing on the moon. • Discuss how various inventors changed the way of life. • Provide opportunities for students to be inventors. • Provide examples of primary documents and material artifacts for student to examine.

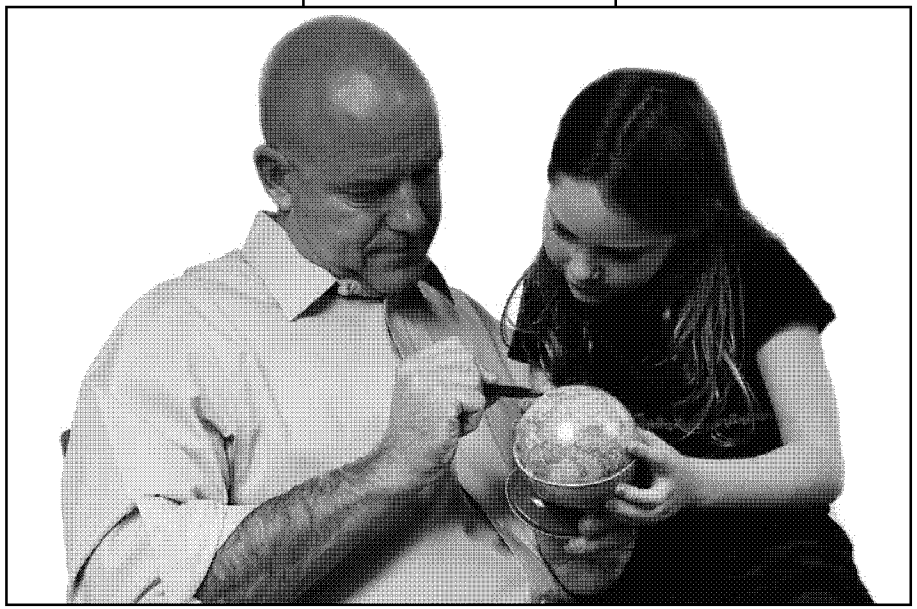
SOCIAL STUDIES

STANDARD 8.4: WORLD HISTORY

THIRD GRADE STANDARDS:

- Identify individuals and groups who have made significant political and cultural contributions to world history
- Identify historic sites and material artifacts important to world history
- Compare similarities and differences between earliest civilizations and life today (e.g., Africa, Egypt; Asia, Babylonia; Americas, Olmec; Europe, Neolithic settlements)
- Identify how conflict and cooperation among social groups and organizations affected world history

CONTENT FOR 2ND GRADE	EXAMPLES **The learner will:**	SUPPORTIVE PRACTICE **The teacher will:**
A. Identify individuals and groups who have made significant political and cultural contributions to world history B. Identify historical sites important to world history C. Compare similarities and differences between earliest civilizations and life today D. Identify how conflict and cooperation among social groups and organizations affected world history	• Identify and explain the significance of King Tut, Fidel Castro, Christopher Columbus. • Report on a significant political or cultural figure. • Identify the Panama Canal on a map. • Identify the similarities/differences between early communications, building structures, transportation and artifacts of everyday life. • Discuss the impact of military conflicts, racial relations, religion and immigration on world history.	• Read trade books about significant political and cultural contributors to world history. • Describe the civil rights movement during the King Holiday. • Read about Christopher Columbus.



APPENDIX

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GLOSSARY OF TERMS

FOR EARLY LEARNING STANDARDS FOR 2ND GRADE

APPROACHES TO LEARNING

Change – To cause to be different: *change the spelling of a word.* To give a completely different form or appearance to; transform: *changed the yard into a garden.* To give and receive reciprocally; interchange: *change places.*

Communication – The exchange of thoughts, messages or information, as by speech, signals, writing or behavior. Interpersonal rapport. Communications (*used with a sing. or pl. verb*). The art and technique of using words effectively to impart information or ideas.

Compare – To consider or describe as similar, equal or analogous; liken. To examine in order to note the similarities or differences of.

Confidence – Trust or faith in a person or thing. A trusting relationship: self assurance.

Cooperation – The act or practice of cooperating. The association of persons or businesses for common, usually economic, benefit.

Create – To cause to exist; bring into being. See synonyms at www.answers.com/topic/found found. To give rise to; produce.

Decision Making – Cognitive process leading to the selection of a course of action among alternatives.

Emotions – Emotion, term commonly and loosely used to denote individual, subjective feelings which dictate moods.

Explore – To investigate systematically; examine.

Family – A fundamental social group in society typically consisting of one or two parents and their children. Two or more people who share goals and values, have long-term commitments to one another and reside usually in the same dwelling place. All the members of a household under one roof.

Feeling – Feelings are affective states of consciousness. An affective state of consciousness, such as that resulting from emotions, sentiments or desires: *experienced a feeling of excitement.* An awareness or impression.

Friends – Person whom one knows, likes and trusts. A person whom one knows; an acquaintance.

Friendship – The quality or condition of being friends.

Goals– The purpose toward which an endeavor is directed; an objective.

Investigate – To observe or inquire into in detail; examine systematically.

Predict – To state, tell about or make known in advance, especially on the basis of special knowledge.

Respect – To have a high opinion of admire, consider, esteem, honor, regard, value. *Idioms:* look up to, think highly much well of. See www.answers.com/topic/praise-blame praise/blame. To recognize the worth, quality, importance or magnitude of.

Safe – Secure from danger, harm or evil. Free from danger or injury; unhurt: safe and sound. Free from risk; sure: a safe bet. Affording protection.

Sharing – Sharing is the joint use of a resource. In its narrow sense, it refers to joint or alternating use of an inherently finite good. To divide and parcel out in shares; apportion. To participate in, use, enjoy or experience jointly or in turns.

Thinking – Action of using one's mind to produce thoughts or covert symbolic responses to stimuli.

Trust – Firm reliance on the integrity, ability or character of a person or thing. Custody; care. Something committed into the care of another; charge.

ARTS & HUMANITIES

ART

Color – Specific hues that are visible when light reflects off of an object.

Form – Object with three dimensions (height, width and depth).

Line – A point moving in an identifiable direction.

Shape – Object with two dimensions (height and width), usually defined by a line.

Space – The feeling of depth in an artwork OR the way in which the artist uses the area within the picture plane.

DANCE

Direction - Spatial relation between a dancer and the path along which he/she moves.

Level - High, middle or low ways that the body moves in relation to the floor and ceiling of a performance space.

Locomotor - Movement that takes a dancer from one place to another by moving on feet, hands or other body parts.

Nonlocomotor - Also known as axial movement; movement in which the dancer does not travel, but instead moves in the space around the body.

Phrase - Dance movements that are linked in a single choreographic sequence.

Rhythm - The way that movement is organized within a beat.

Size - A way of making the body small or large.

Shape - A way of making the body look different by changing positions of body parts; some shapes include narrow, wide, angular, curved, symmetrical, asymmetrical.

CONTINUED...

GLOSSARY CONTINUED FROM PAGE 87

Space - One of the three elements of dance, relating to the area through which a dancer moves.

Stasis/Stillness - Periods in dance when the body is not moving.

Tempo - Rate of speed of music and movement (fast or slow).

MUSIC

Beat - Steady pulse of music.

Dynamics - Loudness or softness of sound.

Form – the arrangement of smaller sections to make a larger piece of music (ex. AB, ABA, rondo).

Melody - Pattern of tones arranged to make a tune.

Meter - Method of grouping beats within a measure.

Pitch – Highness or lowness of sound.

Rhythm – Pattern of long and short sounds arranged to make music.

Tempo - Rate of speed of sound (fast or slow).

Timbre - quality that makes a sound unique.

THEATRE

Acting - Pretending to be a character and showing that character's feelings and actions.

Actor - A person who acts in a play.

Actions - What the character does to get what they want.

Audience - The person or persons who watch the play.

Character - A person, animal or imaginary object in a play or story.

Drama - Acting out a story or idea.

Intention - What your character wants or wishes for.

Lines - What your character says.

Off stage - The part of the stage or playing space which cannot be seen by the audience.

On stage - The part of the stage or playing space which can be seen by the audience.

Performance - Acting, singing, dancing or creating music which is planned and practiced and finally shared with an audience.

Play - A story written in lines and actions for actors to perform.

Playing Space/Drama Space - a special space in the room where actors practice or perform for others to watch.

Projection - To make your voice louder and easier for an audience to hear.

Rehearsal - Practicing for a performance.

Stage - A special space created to perform plays for an audience.

INTERDISCIPLINARY

Aesthetics – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce.

Aesthetic Criteria – Standards on which to make judgments about the artistic merit of a work of art, derived from cultural and emotional values and cognitive meaning.

Aesthetic response – A philosophical reply to works in the arts.

Artistic choices – Selections made by artists in order to convey meaning.

Arts resource – An outside community asset (e.g., performances, exhibitions, performers, artists).

Assess – To analyze and determine the nature and quality of the process/product through means appropriate to the art form.

Community – A group of people who share a common social, historical, regional or cultural heritage.

Contemporary Technology – Tools, machines or implements emerging and used today for the practice or production of works in the arts.

Context – A set of interrelated background conditions (e.g., social, economic, political) that influence and give meaning to the development and reception of thoughts, ideas or concepts and that define specific cultures and eras.

Create – To produce works in the arts using materials, techniques, processes, elements, principles and analysis.

Critical Analysis – The process of examining and discussing the effective uses of specific aspects of works in the arts.

Critical Process – The use of sequential examination through comparison, analysis, interpretation, formation and testing of hypothesis and evaluation to form judgments.

Critical Response – The act or process of describing and evaluating the media, processes and meanings of works in the arts and making comparative judgments.

Culture – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing.

Elements – Core components that support the principles of the arts.

Genre – A type or category (e.g., music - opera, oratorio; theater - tragedy, comedy; dance - modern, ballet; visual arts- pastoral, scenes of everyday life).

Humanities – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment.

Improvisation – Spontaneous creation requiring focus and concentration.

Multimedia – The combined use of media, such as movies, CD-roms, television, radio, print and the internet for entertainment and publicity.

Original Works in the Arts – Dance, music, theatre and visual arts pieces created by performing or visual artists.

Principles – Essential assumptions, basic or essential qualities determining intrinsic characteristics.

Style – A distinctive or characteristic manner of expression.

Technique – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts.

Timbre – A unique quality of sound.

Traditions – Knowledge, opinions and customs a group feels is so important that members continue to practice it and pass it onto other generations.

Traditional Technology – Tools, machines or implements used for the historical practice or production of works in the arts.

Vocabulary – Age and content appropriate terms used in the instruction of the arts and humanities that demonstrate levels of proficiency as defined in local curriculum.

FAMILY, COMMUNITY

Advocacy – The act of speaking or writing in support of someone or something.

Collaboration – To work cooperatively and respectfully toward a common goal.

Communication – The process in which information is received or transmitted; meaning making.

Respect – To show consideration for.

Trust – A belief or confidence in the honesty, integrity, reliability, justice of another person.

HEALTH AND PHYSICAL EDUCATION STANDARDS

Consequence - What happens because of a choice.

Critical Elements - The important pieces of a skill, which help you improve. The critical elements help you to understand the "how to" of the skill.

Decision - Looking at all possible solutions and making a choice.

Energy - The ability to do work.

Feedback - When someone watches you perform a skill and then tells you about your skill performance. Feedback helps you to correct and improve your performance.

Goal - What someone wants to achieve. Achieving the goal takes planning and work. A goal can be short-term or long-term.

Health - How your body feels, how your mind thinks and how you feel about the things that happen to you, how you get along with others as well as being free of illness or disease.

Hygiene practices - Things that we do every day to stay healthy such as dental care, tooth care and washing/bathing.

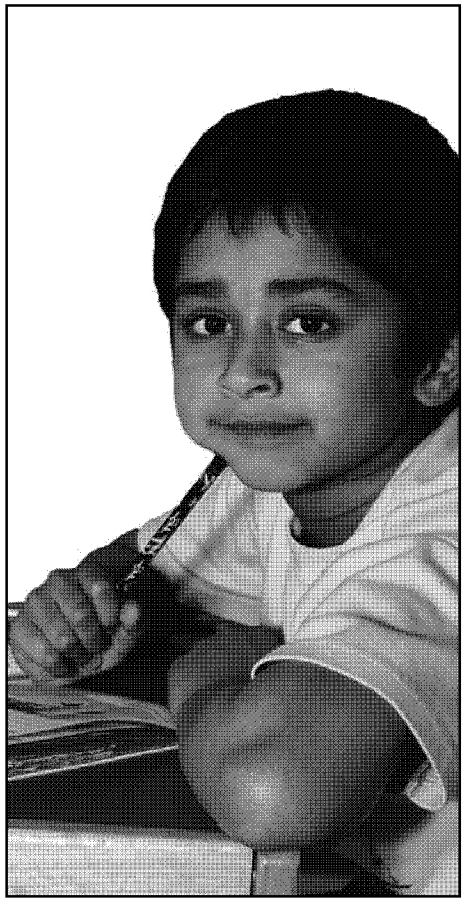
Need - Something that is necessary for sustaining life.

On Task - An important social skill. Staying focused on a task and being able to keep working on the task.

Refusal Skills - Methods a person can use to say no to an action or situation that could damage health status or be violent.

Universal Precautions - A way of protecting oneself from disease such as never touching another person's blood.

Want - Something that we desire.



GLOSSARY CONTINUED FROM PAGE 89

MATH

Addend – Any of a group of numbers or terms added together to form a sum.

Addition – To join two ore more numbers (or quantities) to get a total amount (or sum).

Analog Clock – A clock that is not digital.

Array – An orderly arrangement often in rows, columns or a matrix used to show the concept of multiplication.

Attribute – Feature or characteristic.

Bar Graph – A graph that uses bars to show quantities or numbers so they can be easily compared.

Customary Unit of Measurement – A system of weights and measures frequently used in the United States. The basic unit of weight is the pound; the basic unit of capacity is the quart.

Data – Information that is gathered, which is often organized into graphs or charts.

Difference – The amount that remains after one quantity is subtracted from another.

Digit – One of the 10 Arabic number symbols 0 - 9.

Elapsed Time – How long an activity lasts (how much time has gone by from the beginning of an event to another point in time).

Equal – Having the same quantity, degree, value, etc.

Equation – A mathematical statement containing an equals sign to show that two expressions are equal (e.g. 6 + 4 = 10; 2 + 4 = 5 + 1).

Estimate – To form an approximate judgment, opinion or calculation regarding the worth, value, amount, size, weight, etc.

Expanded Form – Involves writing the number in expanded form to show the value of each digit (e.g., 15,629 = 10,000 + 5,000 + 600 + 20 + 9).

Fact Family – The three numbers that make up a fact as well as the inverse of the operation (i.e., 3 + 5 = 8; 5 + 3 = 8; 8 – 5 = 3; 8 – 3 = 5).

Fraction – A number used to name an equal part of a group or a whole.

Geometric Shape – Any shape on a plane or in space.

Inverse Relationship – The opposite (i.e. 2 + 3 = 5, therefore 5 – 3 = 2 and 5 – 2 = 3).

Line of Symmetry – A line of symmetry separates a figure into two congruent halves, each of which is a reflection of the other.

Metric Unit of Measurement – A system of measurement used throughout the world based on factors of 10. It includes measures of length, weight and capacity.

Minus – Involving or noting the act of subtraction.

Non-standard Unit – A unit used to measure something that is not standard (i.e., measuring the length of a book using paper clip-lengths rather than inches).

Number Line – A line on which every point represents a real number.

Number Sentence – A mathematical sentence written in numerals and symbols (e.g. 8 + 6 = 14).

One-One Correspondence – When one and only one element of a second set is assigned to an element of a first set, all elements of the second set are assigned and every element of the first set has an assignment, the mapping is called one-to-one.

Ordinal Numbers – A number indicating position in a series or order (i.e. first, second, etc.).

Pattern – Regularities in situations such as those in nature, events, shapes, designs and sets of numbers (e.g., spirals on pineapples, geometric designs in quilts, the number sequence 3, 6, 9, 12,...).

Pictograph – Graph using pictures to represent quantity.

Place Value – The value of a digit as determined by its position in a number, the name of the place or location of a digit in a number.

Plus – Involving or noting the act of addition.

Predict – To tell what you think will happen.

Problem Solving – Finding ways to reach a goal when no routine path is apparent.

Rectangular Prism – A three-dimensional figure whose sides are all rectangles; a box.

Regrouping – To change the grouping of numbers by separating ones, from tens, from hundreds, etc. and grouping the parts of the numbers with other like values (formerly known as borrowing and carrying).

Repeated Addition – A model for multiplication (e.g., 2 + 2 + 2 = 3 X 2).

Scale – A device used to weigh.

Sequence – A set of ordered quantities (e.g., positive integers).

Solid Figure – A three-dimensional shape with length, width and height.

Solve – To work out the answer to a problem.

Standard Unit – An accepted or approved instance or example of a quantity against which others are judged, measured or compared (e.g. inches, centimeters, feet, meter, quarts, pints, etc.).

Subtraction – To take one quantity away from another.

Sum – The result of adding two or more numbers.

Survey – A method of collecting a sample of data by asking people questions.

Table – Numbers or quantities arranged in rows and columns.

Tally – Using marks to record counting (e.g. 3 = III).

Three-Dimensional Shape – A shape having length, breadth (or width) and height.

Two-Dimensional Shape – Having two dimensions: length and breadth (or width).

Value – Numerical worth or amount.

Verify – To prove or confirm.

PRIMARY – PERSONAL SOCIAL DEFINITIONS

Self Concept - the idea or mental image one has of oneself and one's strengths, weaknesses, status, etc.; self-image.

Self-Control skills – are necessary to accurately process the information contained in social encounters, to engage in thoughtful social decision making and to be able to approach others in difficult situations without provoking anger or annoyance.

Self Regulation - is used to refer to the many processes individuals use to manage drives and emotions. Therefore, self regulation also embodies the concept of will power. Self Regulation is an extremely important executive function of the brain.

Social and Emotional Competence - is the ability to understand, manage and express the social and emotional aspects of one's life in ways that enable the successful management of life tasks such as leaning, forming relationships, solving everyday problems and adapting to the complex demands of growth and development.

ACADEMIC STANDARDS FOR READING, WRITING, SPEAKING AND LISTENING

Academic Vocabulary – The vocabulary critical to understanding the concepts of the content taught in schools.

Conventions of Print – The proper rules and regulations that provide spelling and literary writings.

CC Words – Common abbreviation for consonant vowel consonant words, (e.g., cat, fan).

Decodable Text – Text in which the vocabulary is controlled based on scientific knowledge of sound-spelling relationships.

Direct, Explicit, Systematic Instruction – A predictable routine of teaching that is organized and have increased student responses. The teacher models and prompts students using cues.

Encode – To change a message into symbols, as encode oral language into writing, encode an idea into words.

Graphic Organizer – A visual representation of concepts that group common characteristics.

High Frequency Words – Words that students know by sight without having to analyze it to pronounce it (e.g., jump, the). Also known as sight words.

Orthographic Patterns – Letter sounds and spelling patterns commonly found in the English language.

Phoneme – The smallest unit of sound that conveys a distinction in meaning, such as /m/ of mat.

Phoneme Addition – Adding a unit of sound to another phoneme, such as /t/ to /a/ to form at.

Phoneme Deletion – Dropping a unit of sound, such as removing /c/ from cat to form at..

Phoneme Substitution – Replacing a spoken sound with another sound, such as changing /f/ to /p/ in fan.

Progress Monitoring – A consistent data collection method that measures individual progress on a specific goal.

Repeated Reading – The reader will read the material more than one time for fluency.

Research-based Benchmarks – Scores that have been tested and normed with students in many different trials.

Sensory Details – Looking at the details using the senses of smell, touch, taste and movement.

Sight Words – Words that students know by sight without having to analyze it to pronounce it (e.g., jump, the). Also know has high frequency words.

Syllabication Rules – Rules that show how a unit of pronunciation is organized around a vowel.

Text to Text – The reader relates the current text material to a previously read text.

Text to Self – The reader relates themselves to what is written in the text.

Text to World – The reader relates world events to what is written in the text.

Think-Aloud – Talking aloud the steps of the process.

Vowel Diphthongs – Two vowels that produce a unique sound (e.g. ou in bought, oy in boy, ow in bow).

Vowel Teams – A vowel spelling that uses two or more letters for a single speech sound.

Word Sorts – Putting words in categories according to their common characteristics (e.g., mat, sat, flat, pat).

SCIENCE AND TECHNOLOGY

Energy – capacity for doing work. Examples include the transformation of sunlight into chemical energy in plants through photosynthesis, the movement of objects (including water) through mechanical energy.

Force - a push or pull which can cause an object to speed up, slow down or change direction.

CONTINUED...

Fossils – a remnant, impression or trace of an organism of past geologic ages that has been preserved in the earth's crust.

Inquiry – A systematic process for using knowledge and skills to acquire and apply new knowledge.

Investigations – to observe or study by close examination and systematic inquiry.

Landforms – Is a feature at or below Earth's surface, e.g., mountains, valleys, rivers, lakes and caves.

Life Cycle – The phases, changes or stages through which an organism passes during its lifetime.

Matter – Anything that has mass and takes up space. Three common states of matter are solid, liquid and gas.

Mass – Is the amount of matter in something.

Mixtures – combination of one or more substances (e.g., ice in water, oil in water, salt in water, baking soda in white vinegar).

Model – to construct or fashion in imitation of a particular object, to design or imitate forms: make a pattern, (e.g., model cars, toys, wetlands, mountains, valleys).

Observations – use of your five senses it is something you notice. Scientist use observation to help them make inferences/guesses.

Opinion – something someone feels or believes. You can not prove as true.

Patterns (regularly occur and reoccur in nature) – These are patterns that repeat in certain order and can be seen in nature like leaf patterns, flower, coats of animals, honeycombs, changes in the moon, etc.

Scale – Relates concepts and ideas to one another by some measurement (e.g., quantitative, numeral, abstract, ideological); provides a measure of size and/or incremental change.

Scientific Facts – true statements about the world.

Senses – Using the five senses of sight, smell, touch, taste and hear to explore the world around us.

Simple Machine – any of various elementary mechanisms formerly considered as the elements of which all machines are composed and including the lever, the wheel and axle, the pulley, the inclined plane, the wedge and the screw.

Soil – A mixture of inorganic minerals (clay, silt and sand), organic materials, water, air and living organisms formed as the result of organic and inorganic processes; top layer of the Earth's crust which supports plants, animals and microorganisms; varies with climate, plant and animal life, time and parent material.

System – A group of related objects that work together to achieve a desired result.

Technological Design – Recognizing the problem, proposing a solution, implementing the solution, evaluating the solution and communicating the problem, deign and solution.

ENVIRONMENT AND ECOLOGY

Ecosystem – the interacting system of a biological community and its non-living environment; also, the place where these interactions occur.

Extinction – the complete elimination of a species from the earth

Fiber – slender, threadlike structure combining with other fibers in the form of weaving, knitting or otherwise intertwining

Food Chain – the transfer of food energy from organisms in one nutritional level to those in another.

Habitat – an area that provides an animal or plant with adequate food, water, shelter and living space in a suitable arrangement.

Lentic – relating to or living in still water (e.g., lake, pond, swamp)

Lotic – relating to or living in actively moving water. (e.g., river, stream, creek)

Natural Resources – those raw materials supplied by the earth and its processes. Natural resources include nutrients, minerals, water, plants, animals, etc.

Nonrenewable Resources – substances such as oil, gas, coal, copper and gold which, once used, but which cannot be replaced in this geological age.

Pest – is a human constructed rather than a natural category for plants and animals. The term can be applied to almost anything that interferes with humans in their ability to do the things, health issues, farming, etc. It is an undesirable, potentially harmful or noxious organism. (e.g., mouse, mosquitoes, gypsy moth)

Pollution – harmful substances deposited in the air, water or land, leading to a state of dirtiness, impurity or unhealthiness

Recycle – a multi-phased process which includes removal, separation and/or diversion of materials from the waste stream; use of such materials as raw materials for the manufacture of new products and the use of the new product.

Renewable – a naturally occurring raw material or form of energy which ha the capacity to replenish itself through ecological cycles and sound management practices. The sun, wind, falling water and trees are examples.

Soil – A mixture of inorganic minerals (clay, silt and sand), organic materials, water, air and living organisms formed as the result of organic and inorganic processes; top layer of the Earth's crust which supports plants, animals and microorganisms; varies with climate, plant and animal life, time and parent material.

Watershed – the land area that delivers run-of water and sediment to a major river or stream and its tributaries.

Wetland – lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes).

Letters of Support from Legislators and Other Stakeholders

Elected Officials' Letters

1. Pennsylvania Representative Matthew E. Baker, 68th Legislative District, Health Committee Chairman
2. Pennsylvania Representative Paul I. Clymer, 145th Legislative District, House Education Committee
3. Pennsylvania Representative Gene DiGirolamo, 18th Legislative District, Human Services Chairman
4. Pennsylvania Senator Patrick M. Browne, 16th Senate District and Representative Phyllis Mundy, 120th District – Early Childhood Education Caucus
5. Pennsylvania Senator Bob Mensch, 24th District, Aging and Youth Chair
6. Pennsylvania Senator Patricia H. Vance, 31st Senate District, Public Health and Welfare Chair
7. Pennsylvania Senator LeAnna M. Washington, 4th Senate District, Montgomery and Philadelphia Counties
8. Pennsylvania Representative Katharine M. Watson, 144th Legislative District, Children and Youth Chair

Business Community Letters

9. Manufacturers' Association of South Central Pennsylvania

Foundation Letters

10. Team Pennsylvania Foundation
11. The Erie Community Foundation (ECF)
12. The Grable Foundation
13. The Heinz Endowments
14. William Penn Foundation

Commonwealth of PA Departments and Agencies

15. Pennsylvania Department of Education, Pennsylvania Migrant Education Program
16. Pennsylvania Department of Health, Bureau of Family Health
17. Pennsylvania Department of Insurance, Bureau of Children's Health Insurance Program (CHIP)
18. Pennsylvania Department of Public Welfare, Office of Mental Health and Substance Abuse Services (OMHSAS)
19. Pennsylvania Office of Child Development and Early Learning, Head Start State Collaboration Office Director

Early Childhood Programs (Birth-K)

20. Beginnings, Incorporated
21. Brightside Academy
22. Creative Learning Environments, Incorporated
23. Cen-Clear Child Services, Incorporated
24. Council of Three Rivers American Indian Center, Incorporated
25. Early Connections
26. Elwyn Early Childhood Services
27. Indiana County Child Day Care Program, Incorporated
28. Lifesteps
29. Northampton County Early Intervention
30. Northern Tier Community Action Corporation
31. Northwest Institute of Research (NWIR)
32. Nurse-Family Partnership
33. Parents as Teachers
34. Penn State Better Kid Care Program
35. SmartKids Child Care and Learning Center, Incorporated
36. The Alliance for Infants and Toddlers
37. Therapeutic Early Intervention Services (TEIS)
38. Westmoreland Community Action
39. Westmoreland County Community College (WCCC) Campus Children's Center

Education Service Agencies (K-12)

40. Dr. Gertrude A. Barber Center, Incorporated
41. Erie City School District
42. Kennett Consolidated School District
43. McKeesport Area School District
44. Pittsburgh School District
45. The School District of Philadelphia
46. Wattsburg Area School District

Regional Education Service Agencies

47. Allegheny Intermediate Unit 3
48. Appalachia Intermediate Unit 8
49. ARIN Intermediate Unit 28
50. Beaver Valley Intermediate Unit 27
51. BLaST Intermediate Unit 17
52. Bucks County Schools Intermediate Unit 22
53. Capital Area Intermediate Unit 15
54. Carbon Lehigh Intermediate Unit 21
55. Central Intermediate Unit 10
56. Central Susquehanna Intermediate Unit 16
57. Chester County Intermediate Unit 24
58. Colonial Intermediate Unit 20 – Dr. Brennan
59. Colonial Intermediate Unit 20 – Becky Eller
60. Delaware County Intermediate Unit 25
61. Intermediate Unit 1
62. Lancaster-Lebanon Intermediate Unit 13 – Good, Jackson and Rieker
63. Lancaster-Lebanon Intermediate Unit 13 – Brenda Hanthorn
64. Lincoln Intermediate Unit 12
65. Luzerne Intermediate Unit 18
66. Midwestern Intermediate Unit 4
67. Northwest Tri-County Intermediate Unit 5 – Johnson and Zibelman
68. Northwest Tri-County Intermediate Unit 5 – Maynard
69. Riverview Intermediate Unit 6
70. Seneca Highlands Intermediate Unit 9
71. Tuscarora Intermediate Unit 11 – Dinardi
72. Tuscarora Intermediate Unit 11 – Merrifield
73. Westmoreland Intermediate Unit 7

Child Care Information Service Agencies

74. Cambria County Child Development Corporation (CCCDC)
75. Child Care Consultants, South Central Regional Key
76. Child Care Information Services of Luzerne County
77. Child Care Information Services of Northampton County
78. Child Care Information Services of Northwest Philadelphia
79. Child Care Information Services of South and West Philadelphia – Caring People Alliance
80. Child Care Information Services of Schuylkill County
81. Community Services for Children (CSC)
82. Delaware County Child Care Information Services
83. Federation Early Learning Services
84. The Philadelphia Parent Child Center, Incorporated

Institutions of Higher Education

85. Chatham University
86. Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College
87. Keystone College

88. Lycoming College
89. Penn State, Department of Educational Psychology, Counseling and Special Education
90. The Pennsylvania State University Capital College
91. Pennsylvania State System of Higher Education (PASSHE)

Community Service and Advocacy Agencies

92. Adventure Time Pediatric Therapy and Learning Center, LLC
93. Alternative Community Resources Program
94. Beaver County Behavioral Health
95. Cameron/Elk Counties Behavioral and Developmental Programs
96. Community Action Program of Lancaster County
97. Delaware County Library System
98. Erie Together
99. Fight Crime, Invest In Kids Pennsylvania (FCIK)
100. Greater Erie Community Action Partnership
101. KenCrest Services
102. KeyStone Research Corporation (KSRC)
103. Kiwanis Pennsylvania District
104. Lawrence County Community Action Partnership
105. Library System of Lancaster County
106. Lycoming Children and Youth Services
107. McKean County Department of Human Services
108. Mercer County Behavioral Health Commission, Incorporated
109. Mission Readiness: Military Leaders for Kids
110. Pennsylvania Association of County Administrators of Mental Health and Development Services (PACA MH/DS)
111. Pennsylvania Statewide Afterschool/Youth Development Network (PSAYDN)
112. Private Industry Council of Westmoreland/Fayette, Incorporated
113. Public Health Management Corporation (PHMC)
114. Rehabilitation & Community Providers Association (RCPA)
115. Schlow Centre Region Library
116. The Arc of Pennsylvania
117. The Children's Hospital of Philadelphia (CHOP) PolicyLab Research Institute
118. The Economy League of Greater Philadelphia
119. Union City Family Support Center
120. United Way of Bucks County
121. United Way of Erie County
122. United Way of Greater Susquehanna Valley
123. United Way of Lackawanna and Wayne Counties
124. United Way of Lancaster County
125. United Way of Pennsylvania
126. United Way of Westmoreland County
127. YWCA of York
128. YWCA of Greater Pittsburgh

Early Learning Intermediary Organizations

129. Bridges to Success for Your Homeless Children
130. Butler County Early Care and Educational Council
131. Delaware Valley Association for the Education of Young Children (DVAEYC)
132. Early Intervention Provider Association of Pennsylvania (EIPA)
133. Education Law Center
134. Pennsylvania American Academy of Pediatrics (PA AAP)
135. Pennsylvania Association for the Education of Young Children (PennAEYC)

136. Pennsylvania Association of Intermediate Units (PAIU)
137. Pennsylvania Child Care Association (PACCA)
138. Pennsylvania Early Learning Council (ELC)
139. Pennsylvania Early Learning Investment Commission (ELIC)
140. Pennsylvania Head Start Association
141. Pennsylvania Partnerships for Children
142. Pennsylvania School Boards Association (PSBA)
143. Pittsburgh Association for the Education of Young Children (PAEYC)
144. Special Education Advisory Panel (SEAP)
145. State Interagency Coordinating Council (SICC)
146. Statewide Coalition of Early Intervention Advocates (EICOA)
147. The Beaver County Local Interagency Coordinating Council/Parents in Partnership
148. The Tender Bridges Advisory Council – BCIU

MATTHEW E. BAKER, MEMBER

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House of Representatives
Commonwealth of Pennsylvania
Harrisburg

CHAIRMAN, HEALTH COMMITTEE
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POLICY COMMITTEE

CAUCUSES
FIREFIGHTERS & EMERGENCY SERVICES
LOCAL TAX REFORM
RURAL HEALTH CARE
SPORTSMEN
TIMBER
DIABETES
LUPUS

APPOINTMENTS
STATE SYSTEM OF HIGHER EDUCATION
BOARD OF GOVERNORS
HEALTH CAREERS LEADERSHIP COUNCIL
CAPITOL PRESERVATION COMMITTEE

October 3, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

I am very happy to have an opportunity to voice my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As chair of the Health Committee, I am very concerned about the health and wellbeing of our young children.

I believe your proposal can improve young children's health, social, emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing this development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Thank you for allowing me to voice my wholehearted support and I wish you the best for a successful application.

Sincerely,

Matthew E. Baker
State Representative
68th Legislative District

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House of Representatives
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COMMITTEES

EDUCATION, REPUBLICAN CHAIRMAN
CAPITOL PRESERVATION, CHAIRMAN
GAMING OVERSIGHT

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October 11, 2013

The Honorable Carolyn Dumaresq
Acting Secretary
Pennsylvania Department of Education
333 Market Street, 10th Floor
Harrisburg, PA 17126

The Honorable Beverly Mackereth
Secretary
Pennsylvania Department of
Public Welfare
333 Health and Welfare Building
Harrisburg, PA 17110

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
Pennsylvania Department of Education
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Acting Secretary Dumaresq, Secretary Mackereth, and Deputy Secretary Minzenberg:

As the Chairman of the House Education Committee, I write to offer my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. It is important to invest in our young children, and I am impressed with the Commonwealth's proposal which is aimed at improving health, social-emotional and academic outcomes for our youngest Pennsylvanians.

If the Commonwealth's application is approved, the grant funding will be used to improve services for young learners, including:

- Establishing and bolstering linkages between early childhood education programs, families, communities and school districts.
- Enhancing and strengthening Pennsylvania's Keystone STARS early childhood quality rating and improvement system.
- Building a superior early education workforce by collaborating with institutions of higher education to better prepare our teachers and by furthering the development of early childhood educators as they advance in their work with infants and toddlers.

I believe the Commonwealth's proposal will make critical investments in our system of early childhood education and will help to better prepare our young children for success in elementary school and beyond. I am hopeful that the application will be successful.

Sincerely,

Paul I. Clymer

PAUL I. CLYMER, Majority Chairman
House Education Committee

PIC/erk

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October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

It is with great enthusiasm I write to you today in support of Pennsylvania's Race to the Top – Early Learning Challenge grant application. As Chairman of the House Human Services Committee, it is both my honor and privilege to encourage the proliferation of standards and practices that will empower and educate our children.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

These are tangible, valuable outcomes that are significantly needed throughout the Commonwealth. I believe it is critical that we invest money where we know for certain we can get results. Early education programs have been proven effective and this application builds on PA's existing system to better prepare our youngest students for school success.

I wish you the very best in your efforts and if I may be of any assistance to you, please do not hesitate to contact my office. Thank you for this innovative and powerful offering.

Best Regards,

Gene DiGirolamo
State Representative
18th Legislative District

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EARLY CHILDHOOD EDUCATION CAUCUS

October 8, 2013

Honorable Carolyn Dumaresq
Acting Secretary
Department of Education
333 Market Street
Harrisburg, PA 17126

Honorable Beverly Mackereth
Acting Secretary
Department of Public Welfare
333 Health & Welfare Building
Harrisburg, PA 17126

Honorable Barbara Minzenberg
Deputy Secretary
Office of Child Development & Early Learning
Department of Education
6th Floor, Harristown #2
Harrisburg, PA 17126

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Sen. Gene Yaw
Rep. Rosita Youngblood

Dear Acting Secretary Dumaresq, Acting Secretary Mackereth, Deputy Secretary Minzenberg:

We would like to express our strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Your proposal will better prepare the Commonwealth's children for school success by building on the existing infrastructure in the Office of Child Development and Early Learning through developing and maintaining a coordinated, high quality, early education system based upon quality programs, accountability, documented positive outcomes for children and a focus on serving children with high-needs.

As co-chairs of the Early Childhood Education Caucus, we believe it is critical that funds be spent wisely and that state agencies are accountable for spending in all areas of the budget. Your proposal measures child outcomes and progress through the developmental and implementation of a kindergarten entry observation tool. This will not only help early childhood educators improve their instruction, but will provide information to parents, community leaders and elected officials about program out-comes.

Building on Pennsylvania's voluntary quality rating improvement system, Keystone Stars, is an important piece of your application as well. Including additional programs in STARS will allow more children, especially those with high needs, to participate in quality early learning programs. This will lead to more children entering kindergarten ready to learn and builds on a program model which is based on standards and accountability.

Senator Patrick Browne & Rep. Phyllis Mundy - Co-Chairs

Finally, the application's focus on teacher effectiveness is crucial. Through collaborations with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, you will make our early educators more effective in their work. This will lead to better child outcomes.

We wish you the best for a successful application. We know your proposal will lead to an extensive positive impact in the early childhood education field, ultimately preparing our youngest Pennsylvanians for school success.

Sincerely,

Patrick M. Browne

PATRICK BROWNE
Senator, 16th District
Commonwealth of PA

Phyllis Mundy

PHYLLIS MUNDY
Representative, 120th District
Commonwealth of PA

24th District
BOB MENSCH

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October 8, 2013

Honorable Beverly Mackereth
Secretary
Department of Public Welfare
333 Health & Welfare Building
Harrisburg, PA 17110

Honorable Carolyn C. Dumaresq
Acting Secretary
Department of Education
333 Market St., Harristown 2
Harrisburg, PA 17126

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Mackereth, Acting Secretary Dumaresq and Deputy Secretary Minzenberg:

As the chairman of the Pennsylvania Senate Aging and Youth Committee, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the

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development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best for a successful application.

Sincerely,

BOB MENSCH
STATE SENATOR, 24th DISTRICT

31ST DISTRICT
PATRICIA H. VANCE

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CAPITOL PRESERVATION COMMITTEE

Senate of Pennsylvania

October 8, 2013

Honorable Beverly Mackereth, Secretary
Department of Public Welfare
333 Health and Welfare Building
Harrisburg, PA 17126

Honorable Carolyn Dumaresq, Acting Secretary
Department of Education
333 Market Street, Harristown 2
Harrisburg, PA 17126

Deputy Secretary Barbara Minzenberg
Office of Child Development and Early Learning
Department of Education
6th Floor, Harristown 2
Harrisburg, PA 17126

Dear Secretary Mackereth, Acting Secretary Dumaresq, and Deputy Secretary Minzenberg:

Your efforts to secure an Early Learning Challenge grant in the Race to the Top competition are to be commended and I fully support your thoughtful application to improve early childhood education.

As the Chairman of the Senate Public Health and Welfare Committee, I am always concerned with the prudent investment of state funds, which are targeted to serve our most vulnerable populations. Through the alignment of pre-kindergarten early learning standards with kindergarten through 12th grade standards, the enhancement of the Standards Aligned System, and the revision of the Keystone STARS tier system, early childhood education providers will have the tools and resources available to them to more proficiently prepare young children for entry into kindergarten.

By improving Pennsylvania's Guiding Families Smoothly website, parents will be afforded easy access to valuable information that may better guide their family, while also encouraging their engagement in the education of their infant, toddler, and/or preschooler. In addition, creating a more secure data collection process will increase the comfort level of parents whose children are enrolled in OCDEL funded programs and therefore increase data accuracy.

It is apparent that this proposal would provide additional tools to both families and providers through the planned initiatives, ultimately benefitting early learners. Best wishes as you endeavor to obtain funding and advance early childhood education in the Commonwealth of Pennsylvania.

Sincerely,

Patricia H. Vance
31st Senatorial District

PHV/csl

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Senate of Pennsylvania

October 3, 2013

The Honorable Beverly Mackereth
Secretary
The Pennsylvania Department of Public Welfare
333 Health and Welfare Building
Harrisburg, Pennsylvania 17120

The Honorable Carolyn Dumaresq
Acting Secretary
The Pennsylvania Department of Education
333 Market Street
Harrisburg, Pennsylvania 17126

The Honorable Barbara Minzenberg
Deputy Secretary
Pennsylvania Department of Education
Office of Child Development and Early Learning
333 Market Street
Harrisburg, Pennsylvania 17126

Dear Secretaries Mackereth and Dumaresq, and Deputy Secretary Minzenberg:

I am writing to express my strong support for the Race to the Top Early Learning Challenge (RTT-ELC) grant from the U.S. Department of Education (USDOE) and Health and Human Services (HHS).

If awarded, this grant Pennsylvania would enhance investments in high quality early learning and development settings. Additionally, it would help Pennsylvania further develop services that can improve young children's health, social emotional and cognitive outcomes; enhance school readiness; help close the school readiness hap that exists between children with high needs and their peers at the time they enter kindergarten; and, increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

All of the major initiatives are worthy of funding by USDOE and HHS. I am extremely pleased to see that included in those major initiatives is a goal to promote access, awareness, and engagement focusing on high quality early learning and increasing access and delivery of high quality professional development.

RTT-ELC Support – Washington
Page 2

In my twenty years in the General Assembly I have fought to increase access, awareness, and engagement in my community and stress the importance of early learning. I firmly believe that our children's love of learning needs to be fostered from an early age, but it should not be done haphazardly. I believe that quality teachers with appropriate training are key cog to fostering our children's learning. If we can invigorate children from an early age with quality teachers, we open them up to endless possibilities.

As Democratic Chair of the Senate Aging and Youth Committee, I am pleased to be able to offer my support for the Office of Child Development and Early Learning's grant application. If I can be of any assistance while considering this grant, please do not hesitate to contact me.

Sincerely,

LeAnna M. Washington
4th Senate District
Montgomery and Philadelphia Counties

I will go where there is no path and I will leave a trail for others to follow

KATHARINE M. WATSON, MEMBER
144th LEGISLATIVE DISTRICT

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October 11, 2013

Beverly Mackereth, Secretary
Department of Public Welfare
333 Health and Welfare Building
Harrisburg, PA 17110-2675

Carolyn C. Dumaresq, Acting Secretary
Department of Education
333 Market Street
Harrisburg, PA 17126

Barbara G. Minzenberg, Deputy Secretary
Office of Child Development & Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Mackereth, Acting Secretary Dumaresq and Deputy Secretary Minzenberg:

I am writing to express my support for the Office of Child Development and Early Learning's Race to the Top Early Learning Challenge grant application.

This grant program is an enormous opportunity for Pennsylvania to make innovative investments in our early childhood education system. The requested $52.5 million will allow our Commonwealth to better engage communities in early childhood education efforts, improve access to professional development opportunities, better assess the needs and progress of our early childhood resources and improve access to high-quality education for our youngest learners.

I wholeheartedly support this application, and I sincerely hope that the U.S. Departments of Education and Health and Human Services will approve the Commonwealth's application.

Sincerely,

Kathy Watson

Kathy Watson, Chairman
Children and Youth Committee
PA House of Representatives

Manufacturers' Association of South Central Pennsylvania

October 3, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Manufacturers' Association, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Manufacturers' Association knows that a quality early learning system, with proven results, will help Pennsylvania's communities attract skilled workers and new businesses, in the same way as a quality K-12 system. Tomorrow's scientists, engineers, and business leaders are starting their school careers today. For the next two decades, they will be learning how to think, act, and compete in the global marketplace. Only a few will make it all the way through. We can increase their odds: by investing in our youngest learners now, we build the workforce and leadership we need to keep America strong.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Michael E. Smeltzer
Executive Director

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Team Pennsylvania
FOUNDATION

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Commonwealth of Pennsylvania

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President &CEO
Moran Industries

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Deputy Secretary Mackereth & Deputy Secretary Minzenberg,

Team Pennsylvania Foundation would like to express our organization's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application because research has shown that providing a high quality education for children at an early age produces significant long-term benefits.

We believe the Office of Child Development and Early Learning will better prepare the Commonwealth's children for school success by building on the existing infrastructure in the Office of Child Development and Early Learning and through developing and maintaining a coordinated, high quality, early education system. This will lead to more children entering kindergarten ready to learn which builds on a program model based on standards and accountability.

This proposal will also build an effective early education workforce. Measuring child outcomes and progress through the development and implementation of a kindergarten entry observation tool will help early childhood educators improve their instruction and will demonstrate progress and results leading to better child outcomes.

Our organization knows that a quality early learning system, with proven results, will help Pennsylvania communities attract skilled workers and new businesses, in the same way a quality K-12 system does. In addition, research has proven that children who participate in high-quality early learning programs have a 44 percent higher graduation rate from high school; will enter the workforce with higher skill levels; and will earn 36 percent more as adults.

A long-time supporter of Pennsylvania's education standards, we strongly feel revising Pre-K early learning standards in all content areas will better align those standards with the state's education standards.

Early education programs are proven to work and we believe this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success while creating a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Sincerely,

(b)(6)

Matt Zieger
President & CEO
Team Pennsylvania Foundation

The Erie Community Foundation

Helping today...Shaping tomorrow

459 West Sixth Street • Erie, Pennsylvania 16507 • ph. 814.454.0843 • fx. 814.456.4965 • www.eriecommunityfoundation.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Vice President of Community Impact at the Erie Community Foundation, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Erie Community Foundation's mission is to improve the quality of life for all in our region by evaluating and addressing community issues, building permanent charitable endowments, and promoting philanthropic and community leadership.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. We fulfill our mission in part by investing financial resources in our community. One of our strategic grant making priorities is to increase access to quality early childhood education and youth development, change our community culture regarding education and increase pathways to meaningful post-secondary education and training opportunities. A successful application like the one you've proposed will better allow us to fulfill our charitable mission.

We wish you the best for a successful application.

(b)(6)

Melana Mears

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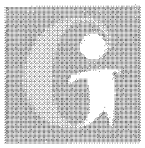

THE GRABLE FOUNDATION
dedicated to improving the lives of children

October 10, 2013

The Honorable Beverly Mackereth, Secretary
The Honorable Carolyn Dumaresq, Secretary
Barbara G. Minzenberg, Deputy Secretary
Office of Child Development and Early Learning
Departments of Education and Public Welfare
333 Market Street
Harrisburg, PA 17126

Dear Secretaries Dumaresq and Mackereth and Deputy Secretary Minzenberg:

I am writing this letter in support of Pennsylvania's Race to the Top-Early Learning Challenge grant. The Grable Foundation is proud to have had a long history of partnership with OCDEL in supporting and developing early childhood efforts in Pennsylvania. Since 2004, Grable has made grants of more than $2,300,000 to support innovative strategies and pilot programs led by the Office of Child Development and Early Learning (OCDEL), and we continue to look for creative partnership opportunities with and alongside OCDEL that forward our shared goal of ensuring a high-quality early education for each young child in Pennsylvania.

The Grable Foundation is pleased to support the initiatives Pennsylvania is planning through the Race to the Top-Early Learning Challenge grant. We enthusiastically support each body of work in the proposal including: the expansion and refinement of the Keystone STARS program; revision and validation of the pre-kindergarten Early Learning Standards; the plan to refine PA's effective comprehensive assessment system; the implementation of approaches to achieve family engagement; the delivery of high quality professional development for the Early Childhood Workforce; the universally available Kindergarten Entry Inventory; and the enhanced early learning data system. These initiatives comprise the Rising STARS Reform agenda and represent a system of interconnected supports which will move our state forward in serving all children, especially those with high needs.

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The Grable Foundation is especially supportive of Pennsylvania's proposal to establish 50 Early Childhood Community Innovation Grants in vulnerable schools within Pennsylvania. These community-based efforts will become breeding grounds for innovative research-based practices in the areas of family engagement, community services and supports, and ECE-school district linkages. ***We would be interested in joining a statewide consortium of foundations that support such efforts in these high-risk areas in Years 2, 3, and 4 of this grant period. We have discussed this concept at length with Dr. Minzenberg and commit to entertaining a proposal for funding, to complement federal Race to the Top – Early Learning Challenge funds, to finance these grants and share the outcomes with other vulnerable communities across Pennsylvania.***

If you would like additional information about The Grable Foundation's commitment to Pennsylvania's young children and to our state's Race to the Top-Early Learning Challenge grant application, please feel free to contact me at kristen@grable.org or at 412-471-4550.

Sincerely,

(b)(6)

Kristen A. Burns
Associate Director

THE HEINZ ENDOWMENTS
HOWARD HEINZ ENDOWMENT • VIRA I. HEINZ ENDOWMENT

October 10, 2013

Secretary Carolyn Dumaresq
Secretary of Education
Harristown Center Building
333 Market Street
10th Floor
Harrisburg, PA 17120

Secretary Beverly Mackereth
Secretary of Welfare
Health and Welfare Building
Forster at Commonwealth Streets
3rd Floor
Harrisburg, PA 17120

The Honorable Barbara G. Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning (OCDEL)
333 Market Street
Harrisburg, PA 17126-0333

Dear Secretaries Dumaresq and Mackereth, and Deputy Secretary Minzenberg:

As the Senior Program Director for the Children, Youth & Families Program of The Heinz Endowments, I am pleased to support Pennsylvania's Race to the Top-Early Learning Challenge grant application. The Heinz Endowments has had a long history of partnering with the Commonwealth of Pennsylvania in developing a system of high quality programs and supports for families and children in Pennsylvania.

In the area of early childhood education, in partnership with the Office of Child Development and Early Learning (OCDEL) and Pennsylvania's philanthropic and corporate sector, we can point to a number of accomplishments, including:

- Building capacity of the Governor's Early Learning Investment Commission (ELIC) which brings together key corporate and civic leadership to raise the visibility about the importance of quality early childhood programs and other supports;
- Development of the PA Promise for Children Campaign;
- Creation of a pooled fund that supported the development of Pennsylvania's Early Learning Standards (Infant/Toddler through 2nd Grade);
- Supporting a key research study that followed 10,001 children throughout PA school districts who were in quality Pre-K Counts settings;
- Development of the English Language Learners Toolkit;
- Supporting the redesign of the ECE professional development system, including incorporating issues of race and culture in ECE settings.

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As a result of The Heinz Endowments grant making to create pilot initiatives in the field of ECE and supporting the research to study the efficacy of a large-scale initiative known as the Early Childhood Initiative (ECI), the ground was set to convince the PA legislature and the Governor to support state financing to begin to bring to scale the state program now known as Pennsylvania's Pre-K Counts Program. Additionally, with support from The Heinz Endowments and the William Penn Foundation, the Early Learning Network, Pennsylvania's award-winning early childhood data management system was developed. An exciting Heinz-funded new initiative, known as Pennsylvania ECE Healthy and Green, is bringing sound environmental practices into early childhood settings.

We are pleased to support the forward momentum Pennsylvania is planning through the Race to the Top-Early Learning Challenge grant. We support the expansion and refinement of the Keystone STARS program; revision and validation of the pre-kindergarten Early Learning Standards; the plan to refine our effective comprehensive assessment system; implementation of approaches to achieve family engagement; the delivery of high quality professional development for the Early Childhood Workforce; the universally available Kindergarten Entry Inventory; and the enhanced early learning data system.

We are particularly enthusiastic about the proposal to establish 50 Early Childhood Community Innovation Grants in vulnerable school districts within Pennsylvania. These community-based efforts will become laboratories for innovative research-based practices in the areas of family engagement; community services and supports; and ECE-school district linkages. We are interested in joining a statewide consortium of funders who support such efforts in these high risk areas in years two, three and four of this grant period. We have discussed this concept at length with Dr. Minzenberg and commit to entertain a proposal to support these grants and share the outcomes with other vulnerable communities across Pennsylvania.

Please let me know if I may provide you with additional information about this exciting public-private partnership on behalf of Pennsylvania's young children and PA's Race to the Top-Early Learning Challenge grant application.

Very sincerely,

(b)(6)

Marge Petruska
Senior Program Director
Children, Youth, and Families Program

MMP/nfg

WILLIAM PENN FOUNDATION

October 8, 2013

The Honorable Beverly Mackereth, Secretary
Department of Public Welfare
Health and Welfare Building
Forster at Commonwealth Streets
Harrisburg, PA 17110-2675

The Honorable Carolyn Dumaresq, Secretary
and
Barbara G. Minzenberg, Deputy Secretary
Department of Public Welfare
333 Market Street
Harrisburg, PA 17126

Dear Secretaries Dumaresq and Mackereth and Deputy Secretary Minzenberg,

Please accept this letter of enthusiastic support for Pennsylvania's Race to the Top-Early Learning Challenge grant proposal. As an institution with a long history of commitment to improving the quality of and access to early childhood care and education, the William Penn Foundation is proud of our continuing partnership with Pennsylvania's Office of Child Development and Early Learning (OCDEL). Together, we have worked to develop high quality early childhood education in Pennsylvania, and we see the Race to the Top-Early Learning Challenge as an important opportunity to build on this history while dramatically improving early care and education services in Pennsylvania.

Support for Pennsylvania's Quality Rating and Improvement System

The William Penn Foundation supports the comprehensive and evidence-based approach to refining the early childhood system of services in Pennsylvania that OCDEL is proposing in its Race to the Top application. Taken together, the proposed initiatives represent an agenda that will move our state forward in educating all children, especially those with high needs.

In order to support efforts to improve Keystone STARS, our Board will be considering a grant to fund research that would inform revisions to the system. We expect to be able to inform OCDEL of the funding decision in early November. The proposed research would take place within the first 12 months of the potential Race to the Top grant period and result in:

1) *A review of existing QRIS systems in other states.*
2) *A survey of Pennsylvania's providers' experience being a part of the STARS system.*
3) *An assessment of the relationship between STAR level and student outcomes.*

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The researcher for this proposed project is Dr. Phil Sirinides from the University of Pennsylvania. This research will guide revisions to the Keystone STARS system, to be implemented in years 2, 3, and 4 of the potential Race to the Top grant period, resulting in stronger outcomes for children.

Support for Innovation in Early Childhood

We are also considering support for OCDEL's proposal to establish 50 Early Childhood Community Innovation Grants in vulnerable school districts within Pennsylvania. These community-based efforts will become laboratories for innovative research-based practices in the areas of family engagement; community services and supports; and ECE-school district linkages. We have discussed this concept with Dr. Minzenberg and will entertain a proposal to support these grants and share the outcomes with other vulnerable communities across Pennsylvania.

Support for Technical Assistance

To further support OCDEL, our Board will also be considering an additional year of funding to continue the BUILD Initiative in Pennsylvania. This work supports OCDEL's efforts to ensure that programs and funding are directed to the highest quality services for children. Pending support from the Board of Directors, this funding would extend through 2014 and would represent over 10 years of commitment from the William Penn Foundation in support of early childhood infrastructure and programming in Pennsylvania.

Should you want any further details, we are happy to provide you with additional information about the dedication of the William Penn Foundation to Pennsylvania's young children and to the state's Race to the Top-Early Learning Challenge grant application.

Very sincerely,

(b)(6)

Helen Davis Picher and Laura Sparks
Interim President Chief Philanthropy Officer

pennsylvania
DEPARTMENT OF EDUCATION

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the, Pennsylvania Migrant Education Program (PA-MEP), we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the PA-MEP assists school districts and charters with improving and coordinating the educational continuity for the children of migratory farm workers who have had their schooling interrupted. In order to prepare the migrant preschool child to be successful in school the PA-MEP offers an in-home program.

The in-home program is offered for preschool age children, ages 3-5 years, who are unable to receive preschool services from other sources. The preschool teachers organize the program by providing standards-based instructional materials and acting as an educational support system for the children and parents. Students are provided with forty-five minutes weekly of one-on-one instruction that is directly related to the child's specific learning needs and aligned with the PA Early Learning Standards. Parents are required to join the learning session so that they may get a better understanding of what their child is learning as well as be able to continue early learning activities throughout the week.

When working with our migrant preschoolers in an in-home teaching environment, our preschool teachers first determine which of the Kindergarten Readiness skills the children are deficient in and how to make the most impact on the child's level of readiness for Kindergarten. The preschool teachers design their instructional lessons and materials in accordance with Pennsylvania's Early Learning (EL) Standards to be sure that they fulfill PDE's directives on Early Childhood Education.

Our preschool teachers use their creativity when linking the EL Standards to their lesson plans for in-home delivery. They make sure the exemplars and specific mastery of skills remain the same as for the more traditional classroom setting. For example, when working on fine motor skills, the preschool teachers bring play dough to an in-home visit so that the child can build the muscles in their hands as per Standard 10.5 Concepts, Principals, and Strategies of Movement: Fine Motor Development.

Since the majority of our migrant families do not have educational toys, manipulatives, or books, our in-home preschool teachers need to provide these families with a solution. One of the ways we help these families is by providing them with weekly learning packets. These packets include brightly colored and laminated reusable hands-on

learning activities and games that incorporate many of the PA Early Learning Standards. Books in Spanish and English are also included in the packets. The best part of this creative approach of linking to the EL Standards is that the teacher gives the parent the tools and the training to be the child's teacher every day. This practice extends the child's learning to much more than one forty-five minute session per week.

Through flexibility and ingenuity on the part of the preschool teacher, the EL Standards are used in creative ways to provide intentional learning opportunities that meet the unique learning needs of our migrant preschool students.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Carmen M. Medina, Chief
Division of Student Services

pennsylvania
DEPARTMENT OF HEALTH

October 4, 2013

Barbara Minzenberg, Ph.D
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of the Department of Health's Bureau of Family Health, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, staff from the Bureau actively participated on the Pennsylvania State Leadership Team, specifically supporting efforts to include children with special health care needs in planning and policies related to early childhood. The Bureau's Special Kids Network continues to be a resource for information and service coordination for families with young children with special health care needs.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Melia D. Belonus
Director
Bureau of Family Health

Department of Health
Pennsylvania's Rising STARS Agenda 278
Health and Welfare Building | Harrisburg, PA 17120 | 717.787.7192 | F 717.772.0323 | www.health.state.pa.us

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Medical Services Analyst for the Pennsylvania Insurance Department, Bureau of CHIP, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, CHIP is committed to providing affordable and accessible healthcare to all children in Pennsylvania.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Ann L. Hale, R.N., B.A
Medical Services Analyst

Bureau of Children's Health Insurance Program (CHIP)
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC WELFARE
OFFICE OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES
BUREAU OF CHILDREN'S BEHAVIORAL HEALTH SERVICES

October 8, 2013

Ms. Carolyn Dumaresq
Acting Secretary of Education
Secretary's Office
333 Market Street
Harrisburg, Pennsylvania 17126

Ms. Beverly Mackereth
Secretary of Public Welfare
Office of the Secretary
625 Forester Street
Health & Welfare Building, Room 333
Harrisburg, Pennsylvania 17105

Ms. Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, Pennsylvania 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Please accept this letter of support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Office of Mental Health and Substance Abuse Services has successfully partnered with OCDEL on numerous initiatives over the years, and we look forward to the opportunity to work with you on this extraordinary RTC-ELC opportunity.

I am especially impressed by the proposed emphasis on improving young children's health, social, emotional and cognitive outcomes. Research clearly shows that this will lead to enhanced school readiness, especially for children with high needs. It will also lead to improved social and emotional development with life-long implications for these children.

We are also supportive of the other components of the proposal, including empowering communities, improving quality, enhancing the Standards Aligned System, addressing workforce development, and improving data based decision making. We wish you the very best for a successful application.

Sincerely,

(b)(6)

Stanley J. Mrozowski, Ph.D.

pennsylvania
OFFICE OF CHILD DEVELOPMENT
AND EARLY LEARNING

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Head Start State Collaboration Office Director for the Commonwealth of Pennsylvania, I am pleased to offer this letter of support for the Race to the Top - Early Learning Challenge grant.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability. Head Start program participation in Keystone STARS will more than double this program year.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Best wishes for a successful application!

(b)(6)

HSSCO Director

Departments of Education and Public Welfare | Bureau of Early Learning Services
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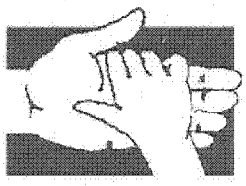
BEGINNINGS, INC.



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Enhancing the development of children and empowering families

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
OCDEL
333 Market Street, 6th Floor
Harrisburg, PA 17126

Beverly Mackereth
Secretary
Department of Public Welfare
PO Box 2675
Harrisburg, PA 17105

Carolyn C. Dumaresq
Secretary
Department of Education
333 Market St.
Harrisburg, PA 17126

Dear Deputy Secretary Minzenberg, , Secretary Mackereth and Secretary Dumaresq:

As the Executive Director of Beginnings, Inc. I would like to express our agency's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Beginnings, Inc. provides early intervention services for children from birth to 3 in Cambria, Somerset and Bedford counties as well as early literacy programming.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Paula Eppley-Newman, Executive Director

Beginnings, Inc. is a 501(c)(3) nonprofit organization, donations to which are tax deductible to the fullest extent permitted by law. The official registration and financial information of Beginnings, Inc. may be obtained from the PA Department of State by calling toll free within Pennsylvania: 1-800-732-0999. Registration does not imply endorsement.

United Way *Beginnings, Inc. is a Member Agency of the United Way of the Laurel Highlands.*

EARLY EDUCATION AND CHILD CARE
Brightside™
ACADEMY

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of Brightside Academy, I would like to express support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Brightside Academy operates forty (40) early childhood education academies across the State of Pennsylvania. We serve approximately 5,000 children each day from 6 weeks to 12 years old. All Brightside Academy facilities participate in Keystone Stars and we are proud of our credentials. Twenty-Six (26) of our Pennsylvania academies are Star 3 or Star 4 with the remaining academies Star 2 working to progress to Star 3.

The Race to the Top Challenge's goal is to move all children into high quality, kindergarten readiness programs which have been demonstrated to improve academic success, graduation rate improvements, social services reductions and career success. As CEO of one of the larger childcare/ early childhood education providers in the State of Pennsylvania, I believe your proposal will improve family demand for quality at the same time create economic and regulatory incentives to providers to increase the access and supply of high quality programs for parents.

Pennsylvania has been a leader in country with Keystone Stars, a tiered quality rating improvement system. As a multi-state provider, I have seen first hand how other states have learned from Pennsylvania's early adoption of a tiered QRIS. I am excited for the children and families of Pennsylvania since your proposed improvements to our system will only accelerate the progress Pennsylvania has made over the years and move us to the top within the United States.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Mark Kehoe
CEO – Brightside Academy

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T: 412-201-5501 · F: 412-201-5502

Early Education Provider

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Creative Learning Environments Inc, I would like to express my organization's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Creative Learning Environments Inc provides Head Start, Pennsylvania Pre-K Counts and Child Care services in the city of Philadelphia's Tacony neighborhood, a high risk population featured in OCDEL's Reach and Risk Report. Creative Learning Environments has acquired a STAR 3 Rating through Pennsylvania's Quality Rating Improvement System, Keystone STARS. Access to quality early childhood programs participating in Keystone STARS; assist the children of Pennsylvania in bridging the achievement gap and promoting school readiness especially among high risk populations.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely

John Jason
Executive Director

Office Address :42 Penns Ct, Aston, PA 19014 Tel 610.459.1482
Center: 4800 Longshore Avenue, Philadelphia, PA 19135 Tel 215.332.2360

CenClear
Since 1980

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Cen-Clear Child Services, Inc. (CenClear), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

CenClear shares OCDEL's vision for enhancing the quality of education for all students. As a 33-year Head Start provider we know first-hand that the opportunity for a high quality education is critical for breaking the cycle of poverty in local communities across our state. We have worked with OCDEL to achieve this end as you expanded state Head Start funding and established the Keystone STARS and Pennsylvania Pre-K Counts programs. As a provider in all three programs, we are able to offer high quality early childhood education and at the same time enhance our working relationship with local school districts to ensure the transition to public school is strengthened and improved.

I believe your proposal will improve young children's health, social emotional and cognitive outcomes, enhance school readiness, and help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten. Further, it is designed to increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on linkages between school districts and the ECE community, family engagement and community connections. The successes of these high need communities will be shared throughout the Commonwealth via toolkits, roadmaps and mentoring.

As a participant in Pennsylvania's tiered quality rating improvement system, Keystone STARS, we know full well that this is a significant piece of your application. Expanding to additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and build on a program model already grounded in standards and accountability.

1633 Philipsburg Bigler Hwy • Philipsburg, PA 16866
Phone: (814) 342-5678 • (800) 525-5437 • Fax: (814) 342-2755
www.CenClear.org

Your proposal also lays the foundation for building an effective early education workforce. By collaborating with institutions of higher education our teachers will be better prepared. Completing the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers will make our early educators more effective in their work. This will inevitably lead to better child outcomes.

In challenging economic times, it is critical to invest limited resources in what we know works. Research repeatedly demonstrates the effectiveness of early education programs and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success. In doing so, it will create a growing pool of skilled workers with the knowledge and competencies needed for our state and nation to remain competitive in the global marketplace.

CenClear looks forward to working with you to implement what I believe will be a successful application.

Sincerely,

(b)(6)

Eugene M. Kephart, D.Ed.
Executive Director

CenClear
Since 1980

1633 Philipsburg Bigler Hwy • Philipsburg, PA 16866 • Phone: (814) 342-5678 • (800) 525-5437 • Fax: (814) 342-2755
www.CenClear.org

Council of Three Rivers American Indian Center Inc.
201 Rochelle Street
Pittsburgh, PA 15210
Phone 412-488-2750 Fax 412-488-7527

Early Head Start

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Early Head Start Director for the Council of Three Rivers American Indian Center (COTRAIC) I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, COTRAIC Early Head Start is working to improve the school readiness outcomes of at-risk infants and toddlers, the very building block years of the early childhood years and our most vulnerable population.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Deborah M. Gallagher, M.Ed.
Early Head Start Director

Corporate Offices
200 West 11th Street
Erie, PA 16501
Ph: 814-874-0144
Fax: 814-874-0147

West Side
420 W 6th St, Ste 101
Erie, PA 16507
Ph: 814-456-5346
Fax: 814-456-8098

City Center
704 State Street
Erie, PA 16501
Ph: 814-456-4576
Fax: 814-456-5307

JEH Garden Apts
730 Tacoma Road
Erie, PA 16511
Ph: 814-454-9713
Fax: 814-454-9713

Harbor Homes
1841 E. 18th Street
Erie, PA 16510
Ph: 814-899-3310
Fax : 814-899-3358

Union City
16380 Route 8
Union City, PA 16438
Ph: 814-438-7016
Fax: 814-438-7620

September 25, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Early Connections would like to express support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

Early Connections is a leading organization in northwestern Pennsylvania for early care and education, providing direct service as well as training and planning leadership for a wide geographic region. Since 1895 Early Connections (formerly known as the YWCA) has served children and families in Erie County. Presently direct service is provided at four inner city sites in the City of Erie and one rural site in Union City. In the direct service programs at two sites children with special needs attend preschool in inclusive classrooms. Early Connections voluntarily participates in Keystone STARS, an initiative to support the continuous quality improvement efforts of early learning programs in Pennsylvania. Early Connections provides Pre-K Counts education programs at three inner city sites in partnership with the Erie School District and at the Union City site in partnership with the Union City Area School District.

I believe your proposal can improve young children's health, impact social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace. We wish you the best for a successful application.

Sincerely,

(b)(6)

Nancy Anne Kalista, Executive Director (dek) Darlene E. Kovacs, Associate Executive Director

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Since 1852

Early Childhood Services
SEEDS
Special Education for Early Developmental Success
4040 Market Street—3rd Floor
Philadelphia, PA 19104
215-921-7164
seeds.elwyn.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Elwyn SEEDS Preschool Early Intervention Program, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Elwyn SEEDS is the MAWA holder responsible for all preschool early intervention services to eligible children between three and five years of age in the city of Philadelphia. Elwyn SEEDS is also a Head Start Partner with the School District of Philadelphia serving eligible children in our Head Start program.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade. The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability. Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes. In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Stephen Shaud
SEEDS Director

Indi Kids

INDIANA COUNTY CHILD DAY CARE PROGRAM, INC.
IUP DAVIS HALL G FLOOR
570 SOUTH 11TH STREET
INDIANA, PA 15705
724-349-1821

September 26, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Indiana County Child Day Care Program, Inc., I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Indiana County Child Day Care Program, Inc., as a NAEYC accredited Keystone Star 4 early care and education provider, is proud to be celebrating our 43rd year of service to Pennsylvania families with children aged six weeks to age 13 years.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, a critical needed improvement, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.
Sincerely,

(b)(6)

Martha A Higgins, Executive Director

naeyc Accredited

UNIVERSITY EARLY CARE & EDUCATION CENTER

HORACE MANN SCHOOL AGE

KEYSTONE STARS Reaching higher for quality early learning

CAMP IQ

TRINITY SCHOOL AGE

United Way

BEN FRANKLIN SCHOOL AGE

HOMER-CENTER SCHOOL AGE

Lifesteps®
Helping Individuals and Families with Life's Changing Needs

Karen Sue Owens
President and
Chief Executive Officer

Providing Care Along Life's Journey Since 1923

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Lifesteps would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Lifesteps' Early Education programs provide childcare, integrated preschool and Pre-K Counts services to children in Butler and Beaver counties. Additionally, we are pleased to have been selected as the new Early Head Start provider in Beaver County.

Lifesteps believes that the proposal promotes children's health with improved social-emotional and cognitive outcomes. It also promotes school readiness and helps to close the gap that exists between children with high needs and their peers at the time they enter kindergarten.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system based on standards and accountability, Keystone STARS is an important piece of your application. Additional provider types in STARS and new standards related to screenings, health and family engagement will allow more children to participate in quality early learning programs and improve child outcomes. More children will enter kindergarten ready to learn.

Your proposal addresses the need to build an effective early education workforce. Collaboration with institutions of higher education and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers will aid our early educators increasing the effectiveness of their work and leading to better child outcomes.

In today's challenging economy, there is a critical need to invest every dollar wisely in substantiated programs. Early education programs are proven and your application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the proficiencies needed for America to stay competitive in the global marketplace.

Our best wishes for a successful application. We look forward to continuing our work together to provide quality services to our youngest Pennsylvania children!

Sincerely,

(b)(6)

Karen Sue Owens
President and Chief Executive Officer

Butler County/Central Office
383 New Castle Road
Butler, PA 16001
(724) 283-1010
(724) 283-4599 FAX

Beaver County
138 Friendship Circle
Beaver, PA 15009
(724) 774-6494
(724) 774-9395 FAX

Armstrong County
215 Northern Avenue
Kittanning, PA 16201
(724) 545-8289
(724) 548-4859 FAX

Indiana County
1455 Church Street
Indiana, PA 15701
(724) 349-1122
(724) 465-6276 FAX

Washington County
2705 Route 136
Eighty-Four, PA 15330
(724) 258-2981
(724) 258-2982 FAX

Allegheny, Greene, Lawrence, Mercer, and Westmoreland Counties
(800) 225-2010 • (724) 283-4599 FAX
www.lifesteps.net
United Way Member in Armstrong, Beaver, Butler, and Indiana Counties
CFC Code: 24712

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Program Specialist for Northampton County Early Intervention, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Early Intervention is a state wide entitlement program that works with children from birth to 5 years old. The children in our program have a delay in one of the 5 areas of development, or a diagnosis that impacts their development. We strive to provide these children with individualized family based therapy in the child's natural environment with a parent or caregiver present. The services provide these families with education on how to assist with their child's developmental delay or diagnosis in everyday routines. The early intervention program also provides support to the family's with community information/referral that they might need.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Northampton Co. EI Program Specialist

NORTHERN TIER COMMUNITY ACTION CORP.

POST OFFICE BOX 389, EMPORIUM, PENNSYLVANIA 15834
TELE.: 814 / 486-1161 • FAX: 814 / 486-0825

KENNETH P. STRAUB
EXECUTIVE DIRECTOR

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Northern Tier Community Action would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, we implement the: Child Care Information Services Initiative, Head Start Program as well as the Child and Adult Care Food Program in the four county area of Cameron, Elk, McKean and Potter. We also operate a Pre K Counts project in Cameron County and the Head Start Supplemental Assistance program for Elk County.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Respectfully Submitted,

(b)(6)

Kenneth P. Straub
Executive Director

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of the Northwest Institute of Research (NWIR), I would like to express the support of my organization for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, NWIR administers the Northwest Regional Key for Pennsylvania's Early Learning Keys to Quality program.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. NWIR believes creating a five STAR system, including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. NWIR supports the full integration of the new Core Knowledge Competencies and strengthening collaborations with institutions of higher education. We believe encouraging ECE staff to continue to progress along the career lattice is critical to better child outcomes and support these efforts in alignment with Governor Corbett's Rising STARS Initiative. Also, completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Joyce A Miller, Ph.D., Chief Executive Officer

3823 West 12th St. • Erie, Pennsylvania 16505 • 814-833-9390 • **www.nwir.org**

October 7, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Program Developer for Pennsylvania's Nurse-Family Partnership initiative I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Nurse-Family Partnership is an approved evidence-based nurse home visiting model that works with first-time at-risk mothers and their children/families from early in pregnancy through the child's second birthday. The NFP model aims to improve pregnancy and birth outcomes, improve child health and development and improve a family's economic self-sufficiency. The long-standing and intensive therapeutic relationship developed by NFP nurse home visitors is proven to help reduce poor birth outcomes, language delays, cognitive impairments and other conditions that prevent children from excelling in school. This experience makes NFP a natural partner in ensuring Pennsylvania children are better prepared to start school and achieve academic excellence.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on Pennsylvania's existing system to better prepare our youngest citizens for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,
(b)(6)

Tara E. Dechert
Regional Program Developer
Nurse-Family Partnership National Service Office

1900 Grant Street, Suite 400 | Denver, CO 80203-4304
303.327.4240 | Fax 303.327.4260 | Toll Free 866.864.5226
www.nursefamilypartnership.org

Parents as Teachers™

September 13, 2013

Office of Child and Early Learning/ Barbara Minzenberg
Deputy Secretary, Office of Child Development and Early Learning
Pennsylvania Departments of Education and Public Welfare
Sixth Floor
333 Market Street
Harrisburg, PA 17126

Dear Deputy Secretary Minzenberg,

As a child's first and most influential teacher, parents recognize that a great deal of effort is required to be a fully engaged parent. Parents as Teachers offers an ***evidence-based home visiting model*** that a) increases children's school readiness and school success, b) increases parent knowledge of early childhood development and improves parenting practices, and c) provides early detection of development delays and health issues.

More than 150,000 families participate annually in Parents as Teachers, a national parent engagement program that builds social and supportive relationships among families. As a result, high needs children enter school on par with more advantaged children and children's developmental delays and health issues are detected and addressed early. Numerous evaluations have shown that Parents as Teachers makes a real difference in the lives of families and children.

In the program year ending June 30, 2013, ***in the state of Pennsylvania more than 8000 families received a combined number of approximately 121,000 home visits.*** While Parents as Teachers is meeting a critical need in serving high needs families, we realize there are many children and families who have not yet been reached, and who would benefit from PAT's model. As you know, Race to the Top stresses the importance of early childhood systems building: through its proven evidence-based, quality-assured and cost-effective approach, Parents as Teachers can provide an integral home visitation component within the broader early childhood system. We encourage you to consider expanding access to Parents as Teachers, and partnering with PAT in strengthening the crucial home visitation and parent engagement aspects of your early childhood system. We believe such a partnership may be of support as you prepare your Race to the Top-Early Learning Challenge (RTTT-ELC) application and determine how to best meet the grant's stated purposes of:

- "demonstrating past commitment to early learning and development" (A)(1) – 20 points
- "increasing the number of low-income and disadvantaged children who have access to high-quality Early Learning and Development programs" (B)(4) – 20 points
- "engaging and supporting families" (C)(3) – 15 points
- "Identifying and addressing health, behavioral, and developmental needs" (C)(4) – 15 points

Parents as Teachers is poised to be a strong partner in your vital systems-building work, and your service to children and families. To discuss further this great opportunity please contact Mike Eggleston at (314) 432-4330 x223 or via email at Michael.eggleston@parentsasteachers.org.

(b)(6)

Scott Hippert
President/CEO
Parents as Teachers

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Founding Director
Mildred Winter

PENNSTATE

Cooperative Extension
Penn State Better Kid Care Program
341 N. Science Park Rd. Suite 208
State College, PA 16803

Fax: (814) 865-7893

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

This letter is to express my support of Pennsylvania's Race to the Top – Early Learning Challenge grant application. As the Director of the Penn State Extension Better Kid Care Program, I provide leadership to the development and delivery of online professional development for early care and education and school-age professionals in Pennsylvania. As such, I am aware of the critical need for a high quality early education workforce. With more than 30,000 Pennsylvania early learning and school-age professionals participating in our online programs, we recognize the need for quality pre-service and in-service education. Your proposal supports the development of an effective early education workforce. Additionally, collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers will make our early educators more effective in their work. This will lead to better child outcomes.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. There is a need for a more inclusive STARS system that allows for additional provider types as well as including new standards related to health, screening and family engagement. This will lead to more children entering kindergarten ready to learn and building on a program model that is based on standards and accountability.

Better Kid Care also is supported by Penn State Cooperative Extension. Extension community-based educators translate research and provide educational programs and resources to early learning and school-age professionals. The proposed ECE Community Innovation grants will support and enhance existing Cooperative Extension educational efforts by empowering local communities to focus on ECE/school district linkages, family engagement and community connections.

I believe your proposal can improve young children's health, social-emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

I am excited about this proposal that will help build on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Sincerely,

(b)(6)

Claudia C. Mincemoyer, Ph.D
Professor and Cooperative Extension Specialist, Child and Youth Development
Director, Penn State Better Kid Care Program

SmartKids Child Care and Learning Center, Inc
161 W. Beau St.
Washington, PA 15301

Phone: 724-229-9110
Fax: 724-229-9114

September 24, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth, and Deputy Secretary Minzenberg:

As the President of SmartKids Child Care and Learning Centers, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, SmartKids has 3 Child Care and Learning Centers. We provide care for children ages infant through 12 years. We have a Summer Program and do before and after services. Our Centers are STAR 4 centers.

I believe your proposal can improve young children's health, social, emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator curriculum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Donna Shriver, President
SmartKids Child Care and Learning Center

Connecting People, Supporting Families, Celebrating Success
The Alliance
for infants and toddlers
Phone: 412.885.6000
Fax: 412.885.1688 • TDD: 412.885.5504

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As a member of the Early Learning Council of PA, the executive director of The Alliance and as a grandmother of a one year old involved in Early Head Start, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, The Alliance is the Service Coordination Unit for Allegheny County's Part C program and an avid supporter of issues that assist children who are consider part of vulnerable populations. Evidence of this is the RWJ Grant we implemented for children whose primary caregiver was at highest risk for depression.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. All this is so critical since the increase of research and literature regarding brain development is an essential part for the early childhood work force today. All of which will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best with your application.

Sincerely,

(b)(6)

Michele Myers-Cepicka
Executive Director

EARLY INTERVENTION PROVIDER

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning (OCDEL)
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Recently we learned you have requested input from the public and providers of care to Pennsylvania's young children regarding the exciting opportunity for Pennsylvania to lead our nation by improving the quality of early learning and development and closing the achievement gap for children with high needs.

We are writing to offer our assistance to you, the State of Pennsylvania. Specifically, we believe our input will increase your likelihood of receiving the RTT-ELC grant award. As the Directors of Therapeutic Early Intervention Services, LP (TEIS Early Intervention), we respectfully submit a summary of our services we provide to children from birth to age three in Allegheny, Westmoreland and Beaver counties.

TEIS Early Intervention has a proven, turnkey model that can be rolled out across all Pennsylvania counties with Early Intervention in order to:

1) Improve the quality of Early Intervention
2) Close the achievement gap for children with high needs
3) Increase the number and percentage of low-income and disadvantaged children in the birth to three age group enrolled in a high quality Early Intervention program
4) Create an integrated high-quality state wide Early Intervention System that supports and develops therapists, impacts more children, and empowers their families most efficiently

The TEIS Early Intervention model addresses the core areas of the grant:

A. **Successful State Systems –** Since becoming a provider in July 1, 2011, we have grown to 52 employees (not independent contractors) including all disciplines, a strong leadership infrastructure and a lean administrative staff. We have impacted over 2370 children and their families.
Using the state-established reimbursement rate, TEIS is able to pay our employees, offer above average benefits, and implement superior ongoing training, mentoring and personal development.
Also, in order to ensure best practices, we have developed and maintained a cutting edge website that provides secure, remote access for our employees and offers support 24/7 to consumers.

B. **High-Quality, Accountable Programs** - TEIS has developed consistent policies and procedures, a proven compliance program resulting in a flawless program audit, and according to our county auditors, their first and only perfect continuing education and clearance audit.

C. **Promoting Early Learning and Development Outcomes for Children** We are engaging and supporting families using a Coaching and Relationship Based Model. TEIS also provides an ongoing annual Battelle training in order to ensure a higher inter-rater reliability within the evaluation system so the right children are qualifying for services.

D. **A Great Early Childhood Education Workforce** – On September 26, 2014, In the Pittsburgh Post-Gazette, TEIS Early Intervention was ranked #1 Top Workplaces by its employees. http://old.post-gazette.com/pg/images/201309/2013topworkplacessmall1200.png . We utilize skilled proficiencies and "living" performance plans to help the workforce reach their fullest potential.

E. **Measuring Outcomes and Progress** – Utilizing the R-Client database, TEIS has shown year to date 2013 a 48.2% discharge rate at or before third birthday for the children they serve.

The proposed grant's purpose is in alignment with TEIS Early Intervention's mission statement and goals. Our mission is to empower all of those whose lives we touch; Employees, children, families and communities...to reach their full potential.

Thank you in advance for your time and consideration. We would love to help you in any way to obtain this grant for Pennsylvania Early Childhood and would be happy to meet with you in Harrisburg to discuss this further.

Please feel free to call if you should have any questions or to better understand how we may help you. My cell phone number is (412)760-0883.

Sincerely,

(b)(6)

Julie Hudak Tara Deringor

3 Parkway Center East ● 2020 Ardmore Blvd., ● Suite 295 ● Forest Hills, PA 15221
412-271-TEIS (8347) ● Fax 1-866-902-6694
www.TEISinc.com www.earlyinterventionsupport.com

Westmoreland Community Action

226 South Maple Avenue
Greensburg, PA 15601
724.834.1260
1.800.816.0022
Fax: 724.838.9563
www.westmorelandca.org
info@westmorelandca.org

October 8, 2011

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of Westmoreland Community Action I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Westmoreland Community Action Administers the Head Start and Early Head Start Programs in Westmoreland County.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

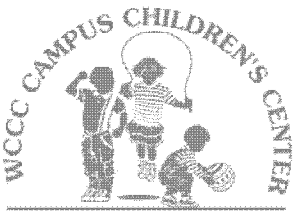
(b)(6)

Tay R. Waltenbaugh
CEO
Westmoreland Community Action

PANO STANDARDS FOR EXCELLENCE

Westmoreland Community Action strengthens communities and families to eliminate poverty.

United Way



145 Pavilion Lane, Youngwood, Pa. 15697

September 24, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the coordinator of Westmoreland County Community College Campus Children's Center we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Campus Children's Center is a STAR four center that provides an excellent early learning opportunity for children of WCCC students, staff and members of the surrounding community.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring. We at WCCC Campus Children's Center believe that family engagement is key for the success of children becoming lifelong learners.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Diane Hendrick M Ed
Coordinator WCCC Campus Children's Center
145 Pavilion Lane
Youngwood, pa. 15697
724-925-4156
hendrickd@wccc.edu

Barber National Institute
Making dreams come true.

Dr. Gertrude A. Barber Center, Inc.
100 Barber Place
Erie, Pennsylvania 16507-1863
814.453.7661
www.BarberInstitute.org

October 4, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Barber National Institute presents this letter in evidence of our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Barber National Institute has more than 60 years of experience providing education and rehabilitation services to individuals with disabilities, including ECE in our private academic preschool and early intervention for infants/toddlers and preschool children and their families. We are also privileged to be an original and current OCDEL Pre-K Counts grantee, a licensed child care facility and participant in Keystone Stars.

We believe this proposal has the potential to improve the social, emotional and cognitive outcomes of young children participating in the Commonwealth's high quality programs. Implementation of proposed actions will also enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will support community collaboration, empowering communities to focus on ECE/school district linkages, family engagement and community connections. The plan to share these community successes through multiple modalities will be essential in carrying the success beyond the immediate participants.

Building on Keystone STARS, Pennsylvania's tiered ECE quality improvement system is an important component of this application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and achieve improved child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Particularly during these difficult economic times, it is critical to invest every dollar in what we know works. Research clearly proves that high quality early education programs do yield many positive outcomes for children, their families, their future schools and the communities. We are pleased to endorse this application which builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers needed for America to remain competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Maureen Barber-Carey, Ed.D.
Executive Vice-President

Kathleen Bastow, M.Ed
Pre-K Counts Director

Nina Wolfarth, BS
Early Care Coordinator

Dr. Gertrude A. Barber Center, Inc. is a member of the family of service providers of the Barber National Institute.

Dr. Jay D. Badams
Superintendent of Schools

Nancy Sadaly
Assistant Superintendent, Academics

Roland P. Taylor
Assistant Superintendent, Finance & Operations

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Robin J. Smith
Secretary

October 8, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As Superintendent of Erie's Public Schools, I would like to express the district's strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, our school system serves as the lead agency for Pre-K Counts here in the City of Erie — partnering with four organizations and impacting more than 240 families each year.

I believe your proposal will improve the health, social emotional and cognitive outcomes and school readiness of young children and help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten. This will also help increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. I am pleased to add my support to this proposal and wish you the best for a successful application.

Sincerely,

(b)(6)

Dr. Jay D. Badams
Superintendent

Erie's Public Schools
148 West 21st Street
Erie, PA 16502-2834
P: 814.874.6000
F: 814.874.6049
www.eriesd.org

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October 4, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As Superintendent of the Kennett Consolidated School District I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Sincerely,

(b)(6)

Barry W. Tomasetti, Ed.D.
Superintendent

Dedicated to our students and their future

McKEESPORT AREA
School District

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Superintendent of McKeesport Area School District, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Yours in Education,

(b)(6)

Timothy M. Gabauer, Ed.D
Superintendent

3590 O'Neil Boulevard, McKeesport, Pennsylvania 15132 • 412-664-3610 • www.mckasd.net

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Linda S. Lane, **Ed.D.,** Superintendent of Schools

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Superintendent of the Pittsburgh Public Schools (PPS), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PPS has operated early childhood programs utilizing Accountability Block Grant, PA Pre-K Counts and Head Start Supplemental Assistance Program state funding. Thanks to this funding, we have been able to provide quality services to over 850 additional preschool children every year.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. I understand that the successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn, a goal that we both share.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Linda S. Lane

THE SCHOOL DISTRICT OF PHILADELPHIA
OFFICE OF THE SUPERINTENDENT
440 N. BROAD STREET, SUITE 301
PHILADELPHIA, PENNSYLVANIA 19130

WILLIAM R. HITE, JR., Ed.D.
SUPERINTENDENT

TELEPHONE (215) 400-4100
FAX (215) 400-4103

October 3, 2013

Dr. Carolyn C. Dumaresq
Acting Secretary of Education
Pennsylvania Department of Education
333 Market Street, 5th Floor
Harrisburg, PA 17126-0333

Beverly Mackereth, Secretary
Department of Public Welfare
H&W Building
625 Forster Street, Room 333
Harrisburg, PA 17120

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The School District of Philadelphia's Office of Early Childhood would like to express its support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, The School District of Philadelphia provides full day pre-kindergarten to more than 8,000 children and full day kindergarten programming to more than 12,000 children in Philadelphia.

We have reviewed the strategies to be implemented through Race to the Top and believe these strategies will improve young children's health, social emotional and cognitive outcomes, enhance school readiness, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. We are especially excited about including new standards related to screenings, health and family engagement which will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

William R. Hite, Jr., Ed.D.

c: David Hardy, Chief Academic Support Officer
Renee Queen-Jackson, Deputy Chief of Early Childhood

Wattsburg Area School District

Wattsburg Area Elementary Center

10780 Wattsburg Road Erie, PA 16509-6422 814 / 824-3400 Fax 814 / 825-0302

Mrs. Audrey A. Coletta
Principal

Mrs. Hillary R. Barboni
Assistant Principal

October 9, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Wattsburg Area School District, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Wattsburg Area School District is committed to early childhood education. We have established partnerships with our local preschool providers and invite them to participate in transition activities, professional development and roundtable meetings. We currently have a YMCA preschool/PreK Counts program and I.U. preschool in our building. We believe that a strong early childhood foundation is very important to the child's future success.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

Audrey A. Coletta
WAEC Principal

Hillary R. Barboni
WAEC Assistant Principal

aiu
Allegheny Intermediate Unit

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Assistant Executive Director for
Organizational Leadership and
Development

Ms. Tammi Kinzel
Acting Chief Financial Officer

October 8, 2013

Carolyn C. Dumaresq, Secretary, Department of Education
Beverly Mackereth, Secretary, Department of Public Welfare
Barbara Minzenberg, Ph.D.,Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth, and Deputy Secretary Minzenberg:

As the Allegheny Intermediate Unit, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Allegheny Intermediate Unit provides quality early childhood services throughout Allegheny County.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Catherine S. Lobaugh
Assistant Executive Director
Early Childhood, Family, and Community Services Division
475 East Waterfront Drive
Homestead, PA 15211

Appalachia Intermediate Unit 8

Dr. Thomas Butler
Executive Director

Educational Programs & Services
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F: (814) 949-0984
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Amy Woomer
Director
(814) 940-0223 x 1372
awoomer@iu08.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Early Intervention program at Appalachia Intermediate Unit 8, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Appalachia Intermediate Unit 8 serves young children with special needs.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Susan Phillips
Early Intervention Supervisor

An Equal Opportunity Employer
It is the policy of Appalachia Intermediate Unit 8 not to discriminate in employment or program services for reasons of race, color, sex, age, religion, national origin or handicapping condition.

ARIN Intermediate Unit
2895 West Pike
Indiana, PA 15701-9769

Regional Education Service Agency
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FAX: 724-463-5315
EMAIL: info@iu28.org
WEB: iu28.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Supervisor of Early Intervention, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, ARIN IU 28 is a direct provider of early intervention services.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Tamara C. Duff, M.Ed.
Supervisor of Early Intervention

(b)(6)

Beaver Valley Intermediate Unit
147 Poplar Avenue, Monaca, PA 15061-2585

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Beaver Valley Intermediate Unit, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, BVIU 27 provides preschool Early Intervention services to eligible young children ages 3-5 in Beaver County and has a strong collaboration with the early childhood community in our county.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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I wish you the best for a successful application.

Sincerely,

(b)(6)

Dr. Eric Rosendale
Executive Director

724-774-7800 www.bviu.org Fax: 724-774-4751

Creating 250,000 Thinkers- Evangelize, Educate and Empower

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P.O. Box 3609
Williamsport, PA 17701
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www.iu17.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Intermediate Unit 17, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you may be aware, our IU provides Early Intervention services for approximately one thousand young children.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

William R. Martens
Executive Director

Barry J. Galasso, Ed. D.
Executive Director

BUCKS COUNTY SCHOOLS
INTERMEDIATE UNIT NO. 22
705 N. SHADY RETREAT ROAD
DOYLESTOWN, PA 18901
215-348-2940
800-770-4822
215-348-3048 FAX

September 30, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Special Education Director, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Bucks County Intermediate Unit #22 is a provider of early childhood services to approximately 2400 children in Bucks County.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely
(b)(6)

Diane Paul
Director of Special Education

DP:als

caiu
educational excellence through leadership, partnership, and innovation

September 27, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Supervisor of the Capital Area Intermediate Unit's Preschool Early Intervention Program, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the CAIU provides early intervention special education and related services children ages 3-5 in Dauphin, Cumberland, Perry and northern York counties on behalf of OCDEL.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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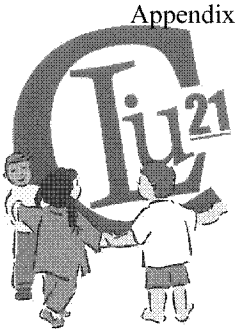
I wish you the best for a successful application.

(b)(6)

Eric S. Bostick
Supervisor, Preschool Early Intervention Program

Capital Area Intermediate Unit 55 Miller Street, Enola, PA 17025-1640 tel 717.732.8400 fax 717.732.8414 tdd 717.732.8422 www.caiu.org



Carbon Lehigh Intermediate Unit #21

4210 Independence Drive
Schnecksville, PA 18078-2580

Elaine E. Eib, Ed.D.
Executive Director

Kimberly A. Talipan
Assistant to the Executive Director

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Fax 610-769-1290
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facebook.com/CarbonLehighIntermediateUnit21 @CLIU21 youtube.com/user/CarbonLehigh

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Carbon Lehigh Intermediate #21- Early Intervention Preschool Supervisor, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, our organization is providing services to children from the ages of 3-5 with a 25% delay in one or more developmental domains. The Carbon Lehigh Intermediate Unit services children in both Carbon and Lehigh Counties. During the school year 2012-13 we served 1900 children with developmental delays in a variety of preschool settings. Those settings include and are not limited to Pre-K Counts Programs, Head Starts, and Child Care settings.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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The Carbon Lehigh Intermediate Unit is an equal opportunity employer and does not discriminate on the basis of race, color, religion, national origin, age, marital status, sex or non-relevant handicap in activities, programs or employment practices. For information regarding civil rights or grievance procedures, contact Ms. Deborah Popson, Section 504 Coordinator, or Mrs. Kim Talipan, Title IX and ADA Coordinator, at the Carbon Lehigh Intermediate Unit, 4210 Independence Drive, Schnecksville PA 18078-2580, 800-223-4821.

If you need any additional information, please feel free to contact me at 610-769-4111. We wish you the best for a successful application.

Sincerely

(b)(6)

Maryalice Grogan
CLIU #21
Early Intervention Supervisor
4210 Independence Dr.
Schnecksville, PA 18078
610-769-4111
groganm@cliu.org

CIU #10
The "Go To" IU
Central Intermediate Unit #10

The "Go To" IU

DR. J. HUGH DWYER
Executive Director

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TOLL FREE: (800) 982-3375
FAX: (814) 342-5137
www.ciu10.org

345 LINK ROAD • WEST DECATUR • PENNSYLVANIA • 16878-8351

September 26, 2013

The Honorable Beverly Mackereth
Secretary
PA Department of Public Welfare
PO Box 2675
Harrisburg, PA 17105-2675

The Honorable Dr. Carolyn Dumaresq
Acting Secretary
PA Department of Education
333 Market Street
Harrisburg, PA 17126

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Central Intermediate Unit # 10 would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Central Intermediate Unit # 10 provides special education services to preschool children in three counties: Centre, Clearfield, and Clinton. Over 90% of the children in our program receive those services in an inclusive early childhood setting. We work collaboratively on a daily basis with the many early childhood providers in our coverage area, and have seen first-hand the positive results of Pennsylvania's foundational work in Early Learning Standards, Keystone Stars, and Pre-K Counts.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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CIU 10
The "Go To" IU
Central Intermediate Unit #10
The "Go To" IU
DR. J. HUGH DWYER
Executive Director
PHONE: (814) 342-0884
TOLL FREE: (800) 982-3375
FAX: (814) 342-5137
www.ciu10.org
345 LINK ROAD • WEST DECATUR • PENNSYLVANIA • 16878-8351

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Dr. J. Hugh Dwyer
Executive Director

(b)(6)

Jennifer Starner
Special Education Director

(b)(6)

Karen M. Krise
Preschool Early Intervention Director

Serving Education in Centre, Clearfield, and Clinton Counties
An Equal Opportunity Employer • Title IX • 1972 Educational Amendment

CENTRAL SUSQUEHANNA
INTERMEDIATE UNIT

90 Lawton Lane
Milton, PA 17847
(570) 523-1155
www.csiu.org

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Special Education and Early Childhood Services for the Central Susquehanna Intermediate Unit (CSIU), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the CSIU is the MAWA for Early Intervention, PreK Counts, and Northumberland County Early Head Start and Head Start classrooms. We

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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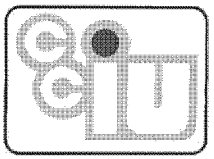
We wish you the best for a successful application.

Sincerely,

(b)(6)

Ricki M. Boyle, Ph.D.
Director
Division of Special Education and Early Childhood Services



An educational service agency

Chester County Intermediate Unit

October 7, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Chester County Intermediate Unit, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Chester County Intermediate Unit provides Special Education services to eligible young children in several Early Childhood Environments throughout Chester County. We work collaboratively and partner with ECE staff to assist young children in accessing the early childhood curriculum alongside their peers.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

(b)(6)

Director of Student Services, CCIU

Educational Service Center, 455 Boot Road, Downingtown, PA 19335
Phone: 484-237-5000 • DeafRelay@cciu.org • FAX: 484-237-5154 • www.cciu.org

COLONIAL INTERMEDIATE UNIT 20
A Regional Service Agency

6 Danforth Drive
Easton, PA 18045-7899

Telephone (610) 515-6403 • FAX (610) 515-6570

Office of the Executive Director

September 26, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Colonial Intermediate Unit 20, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Colonial Intermediate Unit 20 is a provider of Early Intervention Services for children aged 3-5 in Northampton, Monroe, and Pike counties.

I believe your proposal can improve young children's health, social, emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Charlene M. Brennan, D.Ed.
Executive Director

COLONIAL INTERMEDIATE UNIT 20

A Regional Service Agency

6 Danforth Drive
Easton, PA 18045-7899

Telephone (610) 252-5550 FAX (610) 252-5740
Business Office FAX (610) 515-6524
Special Programs FAX (610) 559-7103
Hearing Impaired (610) 252-3786

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Colonial Intermediate Unit #20, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Colonial Intermediate Unit # 20 provides quality early intervention services to preschool children in Northampton, Monroe, and Pike Counties.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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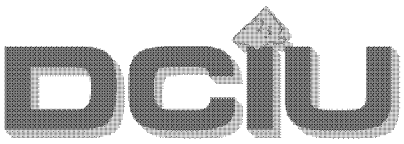
In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Becky Eller, Supervisor of Special Education, Early Intervention Preschool and the
Colonial Intermediate Unit #20 Early Intervention Program and Administration



Delaware County Intermediate Unit
Education Service Center
200 Yale Avenue
Morton, PA 19070-1918

Phone: 610-938-9000
Fax: 610-938-9887

Lawrence J. O'Shea, Ph.D.
Executive Director

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of the Early Intervention program at the Delaware County Intermediate Unit, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Delaware County Intermediate Unit is the MAWA holder for Early Intervention services for 14 of the 15 school districts in Delaware County and provides early intervention services to children in over 230 preschool and head start locations.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best for a successful application.

Sincerely,

Melissa Hance
Director of Early Intervention, DCIU

Charles F. Mahoney III
Executive Director

Fayette-Greene-Washington
INTERMEDIATE UNIT 1
One Intermediate Unit Drive
Coal Center, PA 15423-9642
Telephone 724-938-3241
Fax 724-938-6665
www.iu1.org

October 8, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Intermediate Unit 1, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Intermediate Unit 1 provides Early Childhood services to students in the Counties of Washington, Greene, and Fayette.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Charles F. Mahoney, III.
Executive Director
Intermediate Unit 1

Intermediate Unit 1 does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, ancestry or any other legally protected classification in its educational programs, activities or employment practices.

Lancaster-Lebanon Intermediate Unit 13
IU13
An Education Service Agency

Burle Business Park
1020 New Holland Avenue
Lancaster, PA 17601
717-606-1600
www.iu13.org

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Preschool Early Intervention Supervisors with Lancaster Lebanon IU13, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Lancaster Lebanon IU13 is dedicated to serving eligible young children and their families. OCDEL provides our program with the leadership needed to provide such high quality services.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Kim Good
Program Supervisor

Terry Jackson
Program Supervisor

Ann Rieker
Program Supervisor

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning 333
Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Early Childhood Supervisor form Lancaster Lebanon IU 13, I would like to express my support for Pennsylvania's Race to the Top — Early Learning Challenge grant application. As you know, Lancaster-Lebanon IU 13 provides early childhood programs for 370 Head Start and Pre-K Counts eligible children and their families in Lebanon County through full day center-based programs. This partnership includes programs with community Star 3 and Star 4 child care centers and public school districts. In addition, in partnership with OCDEL, we provide a home-based Early Head Start program for 64 children and families.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on CE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Brenda L. Hanthorn, Ed.D
Early Childhood Supervisor Lancaster-
Lebanon IU 13
1020 New Holland Avenue
Lancaster, PA 17602

Lincoln Intermediate Unit 12
Leadership • Expertise • Innovation

September 25, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Lincoln Intermediate Unit 12, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, LIU 12 is an educational service agency that holds the MAWA for early childhood services in Adams, Franklin and York counties.

I believe your proposal can improve young children's health, social, emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Michael D. Thew, Ed.D.
Executive Director

65 Billerbeck Street P.O. Box 70 New Oxford, PA 17350
Phone: (717) 624-4616 Fax: (717) 624-6519
The Lincoln Intermediate Unit does not discriminate on the basis of race, religion, ancestry, age, sex or disability in employment or provision of services.

LUZERNE INTERMEDIATE UNIT
368 Tioga Avenue
Kingston, Pennsylvania 18704-5117

Dr. Anthony Grieco
Executive Director

Telephone (570) 287-9681
Fax (570) 287-5721
http://www.liu18.org

Gregory Koons
Assistant Executive Director

Dr. FILOMENA COVERT
Curriculum / Instruction

ELIZABETH KROKOS
Special Education

JOSEPH DeLUCCA
Non-Public / Federal and State Programs

RONALD MUSTO
Alternative Learning Center

JAMES GAMBINI
Operational Services

JENNIFER RUNQUIST
Behavioral Health

JOHN J. GORDON
Business Manager

TY YOST
Technology Services and Solutions

October 7, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Luzerne Intermediate Unit #18, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Hazleton Area School District provides services from B-5 in Luzerne County. In the Early Intervention program we offer a full range of services in partnership with other public and private entities. We do this in spite of our service area facing significant health, cultural and economic challenges. We also are fully engaged with public and non-public schools in improving instructional practices and working to raise student achievement, which is especially important in the pre-K to third grade years.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

The Luzerne Intermediate Unit 18 extends equal opportunities to all individuals without discrimination because of race, creed, color, sex, age, national origin, or handicap.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely

(b)(6)

Dr. Anthony Grieco
Executive Director

Midwestern Intermediate Unit IV
453 Maple Street, Grove City, PA 16127 724-458-6700 fax: 724-458-5083 www.miu4.k12.pa.us

September 30, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

On behalf of Midwestern Intermediate Unit IV (MIU IV), I would like to offer support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

As you know, MIU IV provides a much needed service with our Child Care Information Services Program, funded through OCDEL. This helps Lawrence County families by subsidizing child care, referring families to child care facilities, and providing child care consumer education and continuing education seminars for parents and child care providers.

Through our Special Education Department, MIU IV provides comprehensive early intervention programs and services from screening to preschool classroom programs. These programs help children ages 3 to 5 who demonstrate a 25% delay of their chronological age in one or more developmental areas.

Because of the success of such programs, I believe that investing in such early education opportunities helps to shape the foundation for students to find success in school throughout their various phases of child development. The eight initiatives outlined in the RTT-ELC grant application strongly support this process. The initiatives will offer building blocks of success for both school districts and intermediate units so that stronger collaborations may be formed not only between educational entities, but also with those in the surrounding communities.

Please feel free to contact me if MIU IV can provide any support with additional programs or services as part of the RTT-ELC grant requirements. I may be reached at wayde.killmeyer@miu4.org or (724) 458-6700 ext. 1201.

Sincerely,

(b)(6)

Dr. Wayde Killmeyer
Executive Director

NORTHWEST TRI-COUNTY INTERMEDIATE UNIT
252 Waterford Street, Edinboro, Pennsylvania 16412-2315
PHONE 814-734-5610
1-800-677-5610
FAX 814-734-5806
TTD 814-734-1098
http://www.iu5.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Northwest Tri-County Intermediate Unit #5, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, IU#5 provides Early Intervention services to all eligible children in our area except for the City of Erie, who is their own MAWA.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

(b)(6)

Dr. Frederick Johnson
Executive Director
Northwest Tri-County Intermediate Unit #5

Jeffrey B. Zibelman
Director of Early Intervention Services
Northwest Tri-County Intermediate Unit #5

NORTHWEST TRI-COUNTY INTERMEDIATE UNIT
252 Waterford Street, Edinboro, Pennsylvania 16412-2315
PHONE 814-734-5610
1-800-677-5610
FAX 814-734-5806
TTD 814-734-1098
http://www.iu5.org

October 8, 2013

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Northwest Tri-County Intermediate Unit would like to express its support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you are well aware, IU5 plays an active role in the education of young children and is supportive of the possible enhancement of these efforts as we all continue to work together with the best interest of every young child and every family as a priority.

IU5 believes that we all must continue to work together as we strengthen early learning standards in all content areas, promote access to high quality early learning for all, improve young children's health, social, emotional and cognitive outcomes, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade. Through your Race to the Top Early Learning Challenge Grant, we believe the youngest and most needy learners in our tri-county region, as well as those in regions throughout the Commonwealth, will have more promising futures and the investment of our tax dollars state-wide will be maximized.

Continued emphasis in early learning will lead to meaningful collaborations with institutions of higher education and other early learning providers/agencies to better prepare our communities for the future. This has the potential to once again entice promising high school and college students in to the area of pre-school and early childhood education.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest learners for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace. Furthermore, it has been proven that the investment in early childhood education is an investment that pays off over time.

We wish you the best for a successful application.

(b)(6)

Dean C. Maynard
Assistant Executive Director

Riverview Intermediate Unit
270 Mayfield Road
Clarion, PA 16214

Phone: 814-226-7103 or 800-672-7123
Fax: 814-226-4850
www.riu6.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Special Education at Riverview Intermediate Unit, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Riverview Intermediate Unit delivers early intervention students to over 1,000 students across our region.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Joseph Sciullo
Director of Special Education

Providing educational services for the schools of Cameron, Elk, McKean and Potter Counties

Donald E. Wismar, Executive Director
Anita R. Danielson, Assistant to the Executive Director
Kimberly J. DeGolier, Business/Management
Jenny L. Lent, Curriculum/Technology/Resources
James W. Young, Career/Technical Education
James J. Wagner, Special Education
Mark J. Espin, Certification/Information Management/Resources

119 Mechanic Street
PO Box 1566
Smethport, PA 16749
814 · 887 · 5512
FAX 814 · 887 · 2157
www.iu9.org

September 26, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Seneca Highlands Intermediate Unit Nine, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Seneca Highlands Intermediate Unit Nine provides services from B-5 in McKean County and services for ages 3-5 in Elk, Cameron and Potter Counties. In our Early Intervention program, we offer a full range of services in partnership with other public and private entities. We do this in spite of our service area facing significant health, cultural and economic challenges. We also are fully engaged with public and non-public schools in improving instructional practices and working to raise student achievement, which is especially important in the pre-K to third grade years.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Seneca Highlands Intermediate Unit Nine is an Equal Opportunity Employer. For information regarding civil rights or grievance procedures, contact the ECE/ADA Director of Certification/Information Management/Resources at Seneca Highlands Intermediate Unit.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

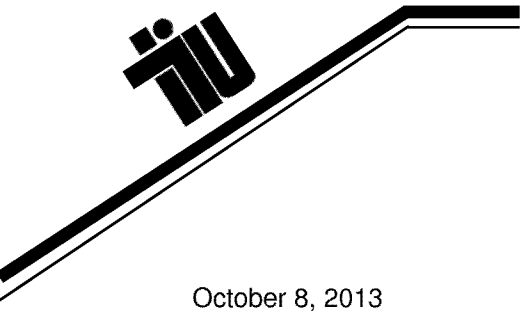
In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven, and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Donald Wismar
Executive Director



Tuscarora Intermediate Unit 11
2527 US Hwy 522 South
McVeytown PA 17051-9717
(814) 542-*2501* • *(*717) 899-7143

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Special Education at the Tuscarora Intermediate Unit 11, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, TIU 11 provides necessary services to children ages 3-5 in four counties and is also the grantee for Head Start, Early Head Start and Pre-K Counts in Juniata County.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sandra A. Dinardi
Director of Special Education

Tuscarora Intermediate Unit 11
2527 US Hwy 522 South
McVeytown PA 17051-9717
(814) 542-*2501* • *(717) 899*-7143

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Supervisor of Special Education at TIU 11, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, TIU 11 holds the MAWA for Early Intervention / preschool services and provides services to children aged three to five in the four counties of Fulton, Mifflin, Juniata and Huntingdon.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Most Sincerely,

(b)(6)

Frances Merrifield
Supervisor of Special Education

WESTMORELAND INTERMEDIATE UNIT
102 EQUITY DRIVE, GREENSBURG, PENNSYLVANIA 15601-7190
PHONE: 724-836-2460

September 27, 2013

The Honorable Beverly Mackereth
Secretary
PA Department of Public Welfare
P.O. Box 2675
Harrisburg, PA 17105-2675

The Honorable Dr. Carolyn Dumaresq
Acting Secretary
PA Department of Education
333 Market Street
Harrisburg, PA 17126

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Westmoreland Intermediate Unit, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, IU 7 is a provider for Early Intervention services. We also work to secure smooth transitions into school-age programs.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Dr. Luanne Matta
Executive Director

Cambria County Child Development Corporation
300 Prave Street
Ebensburg, PA 15931

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Cambria County Child Development Corporation (CCCDC) and the Child Care Information Services of Cambria County, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the mission of CCCDC is to ensure that every child has a rich intellectual, cultural, social and physical development.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

Ronald A. Kikta
Executive Director

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Child Care Consultants, Inc. would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Child Care Consultants is the parent organization serving as the CCIS of York County and the South Central Regional Key. We also serve as a sponsoring organization for the CACFP and are a United Way of York County Partner Agency. In these capacities, we serve thousands of Pennsylvania children and families each year. We are committed to ensuring that all children have access to high quality early childhood education to prepare them for success in school and life. The RTTT application will enable Pennsylvania to provide more services to at-risk children, support the development of a high quality workforce, and encourage collaboration between early childhood education programs and school districts.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In our years of working with OCDEL we have seen how the Keystone STARS program and other initiatives have had a dramatic impact on the early childhood education community in Pennsylvania. We support their efforts to continue to improve our existing systems and programs to ensure that all children have access to high quality early childhood education.

Sincerely

(b)(6)

Christy S. Renjilian
Executive Director

CHILD CARE CONSULTANTS inc.

Supporting Families As They Grow

717.854.CARE
fax: 717.843.4158

CCIS of York County

KEYSTONE STARS
Reaching higher for quality early learning

717.854.3273
fax: 717.848.2167

South Central Regional Key

United Way Partner Agency

Coordinated Child Care

Child Care Information Services of Luzerne County

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of Coordinated Child Care Services of NEPA, Inc, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you may know, Coordinated Child Care Services of NEPA, Inc has been involved in the early learning community since 1989 and currently operates the Child Care Information Service Agencies for Carbon, Luzerne, Monroe, and Wyoming Counties helping families find quality child care providers for their children and assisting with payment through the Subsidized Child Care Program.

My review of Pennsylvania's Race to the Top – Early Learning Challenge grant application leads me to believe that the proposed plan would result in improvement to young children's health, soical, emotional, and cognitive outcomes; and enhance school readiness.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

We also believe that the most important driver of quality child early learning is a well educated and well prepared educator in each classroom. Collaboration with institutions of higher education to better prepare our teachers will help to reach this goal and improve early learning opportunities for Pennsylvania's children.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

John T. Hogan, Executive Director

John T. Hogan, Executive Director
46 South Washington Street • P.O. Box 2631 • Wilkes-Barre, PA 18703-2631
Phone: (570) 822-6500 • 1-800-922-6264 • Fax (570) 822-6510

CHILD CARE INFORMATION SERVICES, INC.
The CCIS of Northampton County
2200 W. Broad Street, Bethlehem, PA 18018-3200
610-419-4500 Toll free 1-866-800-3880 Fax 610-419-3888

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As Executive Director of Child Care Information Services, Inc., the CCIS of Northampton County, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, our organization provides child care subsidies to low-income families in Northampton County and child care resource and referral to all families in our community through funding from OCDEL

It is clear that Pennsylvania's proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Keystone STARS has already made a very positive impact on helping families to choose high quality child care. Building on this tiered quality rating improvement system is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs. This will lead to more children entering kindergarten ready to learn and will enhance a program based on standards and accountability.

It is critical to invest every dollar in what we know works. Early education programs are proven, and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best for a successful application.

Sincerely,
(b)(6)

Elizabeth R. Gilgoff, MSW
Executive Director

Shirley P. Thomas
Director

CCIS
CHILD CARE
INFORMATION SERVICES
NORTHWEST

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear: Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of CCIS of Northwest Philadelphia (CCIS), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the CCIS under the auspices of OCDEL, works to help build foundations for successful early learning and child care experiences for families as well as provide child care funding.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

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We wish you the best for a successful application.

Sincerely,

(b)(6)

Shirley P. Thomas
Director

6350 Greene Street • Ground Floor Suite • Philadelphia, PA 19144
(215) 842-4820 phone • (215) 842-4826 fax • PhiladelphiaChildCare.org

Caring People Alliance
Serving Children & Strengthening Families

Central Office
8 Penn Center
1628 JFK Boulevard, Suite 800
Philadelphia, PA 19103-1728

Tel: 215-545-5230
Fax: 215-545-1358
www.caringpeoplealliance.com
Arlene F. Bell, Esq., President & CEO

October 8, 2013

Barbara Minzenberg, Ph.D
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President and CEO of Caring People Alliance, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Caring People Alliance is a major provider of early childhood education, Pre-K Counts and Head Start services in Southeastern, PA, as well as the operator of the largest Child Care Information Services contract in the Commonwealth.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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BOYS & GIRLS CLUBS CARING PEOPLE ALLIANCE

United Way of Southeastern Pennsylvania

(2)

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely yours,

(b)(6)

Arlene F. Bell, Esq.
President and CEO

CHILD CARE INFORMATION SERVICE OF SCHUYLKILL COUNTY
2335 WEST END AVENUE, POTTSVILLE, PA 17901

Deidre Stanakis **570-624-7950**
CCIS Director **1-800-216-1938**

October 09, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of the Schuylkill County Child Care Information Service, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, CCIS agencies provide families with a wealth of information on quality early learning programs and administer the subsidy program to low income families.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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I wish you the best for a successful application.

Sincerely,

Deidre D Stanakis

CSC
Community Services for Children
Where Early Education Works!™

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO/President of Community Services for Children in Allentown, PA, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Community Services for Children is a multi-faceted organization which serves over 1200 children and their families in Head Start and Early Head Start programming, serves over 900 Keystone Stars child care providers through the Northeast Regional Key, and works with over 4000 children and their families in Lehigh County to provide child care subsidies through the Child Care Information Services.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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We wish you the best for a successful application.

(b)(6)

Jane R. Ervin, CEO/President

PROGRAMS: Head Start/Early Head Start of the Lehigh Valley • PA Pre-K Counts Preschool
Child Care Information Services (CCIS) of Lehigh County • Northeast Regional Key • Early Education Academy • LehighValleyCamps.com

1520 Hanover Ave. • Allentown, PA 18109 • 610-437-6000 • FAX 610-437-6500 • www.cscinc.org

COUNTY OF DELAWARE
DEPARTMENT OF HUMAN SERVICES
Child Care Information Services
110 S. 69th Street, 2nd Floor
Upper Darby, PA 19082
www.co.delaware.pa.us
(484) 461-4875
FAX # (484) 461-4983

Council

Thomas J. McGarrigle
Chairman

Mario J. Civera, Jr.
Vice-Chairman

Colleen P. Morrone
John P. McBlain
David J. White

Joseph T. Dougherty, Director
Department of Human Services
Angelique Hiers, Administrator
Child Care Information Services

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

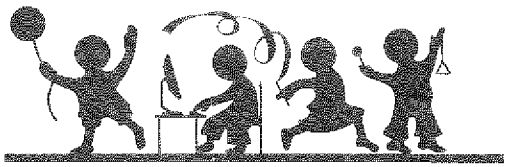
As the Administrator of Child Care Information Services of Delaware County, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Child Care Information Services is a program that provides resource and referral services and subsidy childcare payments for eligible families. We work to educate Parents and the community on key areas your proposal. The link between higher child outcomes and school readiness must be supported. A healthy, nurtured child with an engaged parent that is supported at a quality Early Child Care Program benefits everyone. We need children entering kindergarten ready to learn and building on a program model which is based on standards and accountability. The investment we make ultimately strengthens Pennsylvanian and the nation.

We need to promote community access, awareness and engagement focusing on high quality early learning. Also, empower communities through ECE Community Innovation Grants. We should support and profit from the successes of other proven programs. The use of funding to develop and replica toolkits to share knowledge allows programs to benefit without wasting valuable resources (funds, staff and time).

The proposal to revise Keystone Stars tiered quality rating and improvement system is commended. The inclusion of standards related to screenings, health and family engagement are essential components of the proposal. Early awareness and involvement of the family to address a child's issue is essential to the child's future success. Also the inclusion of preschool, early intervention and school districts as rated providers is a key component. The child's program may differ but the core principles and services should be the same. We need quality early learning programs focusing on the same goals to increase the opportunity to succeed.

We wish you the best for a successful application.

Angelique Hiers
(b)(6)
Administrator
Child Care Information Services
Of Delaware County



Federation Early Learning Services

Celebrating Over 100 Years

Steven Gable, Board Chair
Maddy Malis, President and CEO

CENTRAL ADMINISTRATION
10700 Jamison Avenue
Philadelphia, PA 19116
215-676-7550
Fax: 215-676-9498
www.FELSkids.org

PROGRAMS

Buerger Early Learning Center
Congregation Rodeph Shalom
619 North Broad Street
Philadelphia, PA 19123
267-535-2643

CCIS NORTHEAST
1926 Grant Avenue
Philadelphia, PA 19115
215-333-1560

Kehillah Early Learning Center
2 Chester Road
Wallingford, PA 19086
610-872-0400

Kol Ami Nursery School
8201 High School Road
Elkins Park, PA 19027
215-635-4180

K'tonton School for Young Children
Congregation Beth El - Ner Tamid
715 Paxon Hollow Road
Broomall, PA 19008
610-325-4831

Lassin Early Learning Center
10800 Jamison Avenue
Philadelphia, PA 19116
215-677-7191

Mary Bert Gutman Early Learning Center
7500 West Avenue
Melrose Park, PA 19027
215-635-5570

Samuel Paley Early Learning Center
2199 Strahle Street
Philadelphia, PA 19152
215-725-8930

Terri Lynne Lokoff Early Learning Center
Howard I. Abrams Preschool Program
7002 Butler Pike, Suite 100
Ambler, PA 19002
215-643-0110

October 3, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear and Deputy Secretary Minzenberg:

As the President and CEO of Federation Early Learning Services in Philadelphia and Executive Director of the Child Care Information Services (CCIS) of Philadelphia County – Northeast, we are pleased to support Pennsylvania's Race to the Top – Early Learning Challenge grant application. Federation Early Learning Services is a multi-site, provider of high quality early childhood education programs, with a 100+ year history, serving a thousand children, infants through school age and has also managed the subsidized child care program in Northeast Philadelphia since 1992.

We know from our extensive experience how critical it is that children of all backgrounds be able to access comprehensive high quality early education services that support physical and social emotional health along with high quality learning opportunities if we are to narrow the gap between children of high needs and their peers when they enter kindergarten. We are pleased that Pennsylvania's application addresses these needs in its proposed major initiatives, particularly through the enhancements to the Keystone STARS tiered quality rating improvement system. Including new standards related to screenings, health and family engagement and expanding the programs that can participate in STARS will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes.

We strongly support Pennsylvania's focus on establishing an effective early education workforce. High quality early education cannot occur unless our teachers are well prepared and have opportunity to progress in their professional lives. By engaging institutions of higher education so course content is aligned with Core Knowledge Competencies and by completing the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, early childhood educators will be more effectual in their work and better able to help children realize their potential..

We also applaud the proposed ECE Community Innovation Grants with their focus on ECE and school district linkages, Family Engagement and Community Connections. These will support family and community involvement, critical components to ensuring high quality ECE programs are not only developed but maintained. When parents and communities are knowledgeable of the comprehensive benefits of high quality ECE for all children, in particular the school readiness aspects, the demand for better programs underscores the need to invest in more programs, teacher development, and enhanced assessment systems that identify best practices for optimal child outcomes.

Pennsylvania's application builds on its existing ECE and professional development systems in order to better prepare our youngest Pennsylvanians for school and life success.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Maddy Malis, President and CEO
Federation Early Learning Services

Norma Finkelstein, Executive Director
CCIS of Philadelphia County - Northeast

CC: Carolyn Dumaresq, Education Secretary
Beverly Mackereth, Public Welfare Secretary

KEYSTONE STARS

naeyc Accreditation

United Way
United Way of Southeastern Pennsylvania

In partnership with
Jewish Federation of Greater Philadelphia
One People • One Community • One Federation

THE PHILADELPHIA PPCC
PARENT CHILD CENTER, INC.
Jacqueline M. Green, President & CEO

Sarah Pye-Upshaw
President
Constance Morrow
Secretary
Howard Key
Treasurer
Member
Robert Paul

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Philadelphia Parent Child Center, Inc./CCIS North (PPCC/CCIS North), we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PPCC has been a proponent of early childhood education/services since its inception in 1967. We were one of thirty-six Parent Child Center's established under the Johnson Administration to provide educational, health and nutritional services to 155 low income families with infants and toddlers. Over our 46 year history PPCC has operated a Head Start Program for over 600 children and their families as well as an educationally based child care center. We held the distinction of being Accredited by the National Association for the Education of Young Children (NAEYC) and a Keystone Stars recipient where the focus was on providing quality early childhood education.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those most in need, to participate in quality early learning programs and improve the basic learning skills to succeed in school. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of

2515 Germantown Avenue Philadelphia, PA 19133 TEL: (215) 229-1800 FAX: (215) 229-5860

tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Jacqueline M. Green
President & CEO

chathamUNIVERSITY

October 2, 2013

TO: Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Programs in Infant Mental Health at Chatham University in Pittsburgh, Pennsylvania, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Programs in Infant Mental Health at Chatham University offers three training programs (Certificate, Masters, and MA as a Licensed Professional Counselor) in Infant Mental Health with the purpose of training early childhood professionals in the science or promoting early childhood social-emotional development through high-quality caregiver relationships which is the foundation for health, learning and well-being.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children

CHATHAM COLLEGE FOR WOMEN · COLLEGE FOR GRADUATE STUDIES · COLLEGE FOR CONTINUING AND PROFESSIONAL STUDIES
Woodland Road . . . Pittsburgh, PA 15232 . . . p. 412-365-1100 . . . www.chatham.edu
Founded 1869

chathamUNIVERSITY

entering kindergarten ready to learn and building on a program model that is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Robert Gallen, Ph.D.
Director of Programs in Infant Mental Health
Associate Professor of Psychology
Chatham College
Woodland Road
Pittsburgh, Pennsylvania 15232
rgallen@chatham.edu; (412) 365-1110

FRED ROGERS CENTER
for early learning and children's media
at Saint Vincent College

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth, and Deputy Secretary Minzenberg:

On behalf of the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College in southwestern Pennsylvania, I am writing to express our organization's support for Pennsylvania's 2013 Race to the Top Early Learning Challenge grant application. We have a particular interest in Pennsylvania's plan to promote quality early learning through family engagement, standards-based resources, and professional development. As you know, our work together over the past year on a statewide digital media literacy project addresses all of these areas, drawing in large part from the 2012 National Association for the Education of Young Children-Fred Rogers Center position statement on technology in early childhood programs as well as our Center's online learning community for early literacy and digital media literacy—the Fred Rogers Center Early Learning Environment™. The resources and the research emanating from our current collaboration with you in the digital media literacy project likely will contribute in important ways to initiatives of the Commonwealth's Race to the Top Early Learning Challenge program.

I believe your proposal can improve young children's health, social-emotional, and cognitive outcomes; enhance school readiness; help close the kindergarten readiness gap for children with high needs; and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade. The proposed ECE Community Innovation grants will empower communities to focus on ECE-school district linkages, family engagement, and community connections. Your proposal also will build an effective early education workforce, leading to better child outcomes.

We wish you the best for a successful application, and please know that the Fred Rogers Center will help in any way we can to support the success of your initiatives.

Sincerely,

(b)(6)

Rita Catalano
Executive Director
Fred Rogers Center

300 Fraser Purchase Road Latrobe, PA 15650-2690 724 805.2750 tel 724 805.2761 fax www.fredrogerscenter.org web

Keystone College

One College Green, P.O. Box 50, La Plume, Pennsylvania 18440-0200

Alumni Hall

September 30, 2013

Barbara G. Minzenberg, Ph.D.
Deputy Secretary
Departments of Education and Public Welfare
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17125

Dear Deputy Secretary Minzenberg:

Improving outcomes for young children living in rural areas, ensuring that children at greatest risk receive high-quality services, and creating programs that clearly align valid and reliable standards are just a few of the many effective ways to achieve optimal developmental outcomes for young children, which are critical components for improving and sustaining superior early childhood systems.

Keystone College fully supports Pennsylvania's plan aimed at the development of a pre-service curriculum, which targets enhancing the educational experience through provision of in-depth theoretical knowledge in tandem with strategies for real-world application of theory in practice.

The Pennsylvania Office of Child Development and Early Learning (OCDEL) RTT Early Learning Challenge Grant application is comprehensive in scope and precise in designating the system components to implement an agenda, which will prepare children for school success. Each area addressed effectively aligns a systematic approach for ensuring high quality programming. A focus on collaborating with higher education to improve quality is a key ingredient for goal attainment.

Keystone College has worked with OCDEL to provide input and support on a variety of initiatives, including the redesign of the Core Body of Knowledge; participation in the design of training modules for meeting the needs of Pennsylvania's English Language Learners; active engagement in OCDEL's quality-tiered reimbursement system; Diversity Institute; Gate Opener Project; and Career Development Workforce. These goal-oriented programs have as desired outcomes maintenance of quality, accountable programs that support developmental gains for children and effective professional development for practitioners.

As a member of the Early Learning Committee, I offer my continued commitment, participation and support for the vision OCDEL has designed in the RTT Early Learning Challenge Grant application. It is a vision that will best serve Pennsylvania's children and families.

Sincerely,

(b)(6)

Frances G. Langan, Ed.D.
Professor and Chair
Division of Education

(570) 945-8000 www.keystone.edu

DEPARTMENT
OF EDUCATION

1812 2012
LYCOMING COLLEGE
WILLIAMSPORT, PA 17701-5192

570-321-4010
FAX: 570-321-4389
www.lycoming.edu/education

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Education Department at Lycoming College would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Lycoming College is a four year institution in Williamsport, PA (yes, home of Little League baseball) where we train preschool and early childhood teachers.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

(b)(6)

Amy Rogers, Ph.D. Marisa Macy, Ph.D. Rachel Hickoff-Cresko, Ed.D.

PENNSTATE

Department of Educational Psychology,
Counseling, and Special Education

The Pennsylvania State University
125 CEDAR Building
University Park, PA 16802-3108

Fax: (814) 865-7066
Web site: http://www.ed.psu.edu/educ/epcse

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

I am a faculty member of the College of Education at the Pennsylvania State University who is a director of an Office of Special Education Program (OSEP) teacher preparation-training grant. The grant is to increase highly effective teachers in inclusive settings. I would like to express my very strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. I appreciate the opportunities that have been provided to our master level teachers in early childhood education settings in Pennsylvania. An effective teacher is one who is well trained and has had an opportunity to practice skills with supervision. Our program is dedicated to training highly effective teachers for all children in early childhood settings in Pennsylvania. Pennsylvania's tiered quality rating improvement system and family engagement are just two key pieces of your grant application that will increase and enhance opportunities for all children, especially children with high needs. Increased inclusive settings will also afford more opportunities for pre-service teachers. High quality inclusive settings will be the result of the work accomplished with the support of the Race to the Top funds.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completion of the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers will make our early educators more effective in their work. This will lead to better child outcomes.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

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In tough economic times, it is critical to invest every dollar in what we know works. The support for the efficacy of early childhood education grows steadily. Early education programs are proven, and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Best wishes for a successful application,

Kathleen M. McKinnon, Ph.D.
Associate Professor, Department of Educational Psychology,
Counseling, and Special Education
Director of EI/ECSE teacher preparation grant
203 CEDAR Building
University Park PA, 16801

PENNSTATE Harrisburg

The Pennsylvania State University
Capital College

Human Development and Family Studies Department
Olmstead Building, W314
Middletown, PA 17057

October 8, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As a faculty member in the Human Development Family Studies Department (HDFS) at The Pennsylvania State University and the Chair if the Keystone STARS Advisory Committee, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As a faculty member and researcher, I teach students about the necessity of quality early childhood education. I stress the importance of evidence based programming in all aspects of early care. I believe the Race to the Top grant can be a model for the Commonwealth other states in their commitment to ensuring the needs of young children and their caregivers are adequately met.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

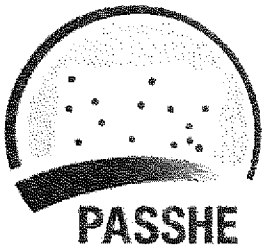
Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education, like Penn State, to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best for a successful application.

(b)(6)

Barbara Carl, Ph.D.
Senior Lecturer
Human Development Family Studies
The Pennsylvania State University, Capital College
bec109@psu.edu



Pennsylvania State System of Higher Education
Office of the Chancellor Dixon University Center 2986 North Second Street Harrisburg, PA 17110-1201
717-720-4000 www.passhe.edu

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretaries Dumaresq, Mackereth, and Deputy Secretary Minzenberg:

As Chancellor of the Pennsylvania State System of Higher Education, I support Pennsylvania's Race to the Top – Early Learning Challenge grant application. With more than 115,000 students, PASSHE is the leading provider of higher education in the Commonwealth and our fourteen universities offer programs in early childhood education.

Your proposal can improve young children's health; social, emotional, and cognitive outcomes; enhance school readiness; help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten; and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement, and community connections. The successes of these high-need communities will be shared via toolkits, roadmaps, and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children—especially those with high needs—to participate in quality early-learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model based on standards and accountability.

Barbara Minzenberg, Ph.D.
October 8, 2013
Page 2

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers, and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven, and this application builds on Pennsylvania's existing system to better prepare our youngest residents for school success and to create a pipeline of workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Frank T. Brogan
Chancellor

October 4, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the owner of Adventure Time Pediatric Therapy and Learning Center, LLC, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Adventure Time Pediatric Therapy and Learning Center, LLC is an outpatient therapy center specializing in pediatric speech, physical, and occupational therapies for children ages birth to 12. All of the therapists at our agency currently provide Early Intervention services in the birth to three program. We envision expansion of our services to include social skills groups, literacy development and kindergarten readiness programs.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Gail I. Donaldson, Owner/Speech Language Pathologist

Cambria County
Corporate Office, Behavioral Health Rehabilitative Services (Wraparound), Outpatient Psychiatric Clinic, Blended Case Management, Peer Support Services
131 Market Street
Johnstown, PA 15901
(814) 535-2277

Juvenile Fire Safety Program, Accountability Enhancement Program
726 Franklin Street
Johnstown, PA 15901
(814) 536-6141

ACRP/St. Michael's School -- Children & Adolescent Partial Hospitalization Program
188 Gilbert Street
Johnstown, PA 15906
(814) 539-7339

ACRP / West End
317 Power Street
Johnstown, PA 15906
Alternative School
(814) 361-2414
Family Based Mental Health Services & The Family Center
(814) 536-1555

ACRP Northern Cambria County Alternative School
280 Beaver St., PO Box 564
Hastings, PA 16646
(814) 247-8192

Ebensburg Office
Outpatient Satellite Office, BHRS (Wraparound)
118 W. High Street
Ebensburg, PA 15931
(814) 472-9330

ACRP Recreation Park
R. 34 Knox Street
Johnstown, PA 15906
814-361-6177

Somerset County
ACRP Somerset County Office
1590 N. Center Avenue
Somerset, PA 15501
(814) 445-1717

Bedford County
ACRP Bedford County Office
3759 Business Rt. 220 N.
Bedford, PA 15522
(814) 623-1212

Blair / Clearfield Counties
ACRP Blair County Office
3010 7th Avenue
Altoona, PA 16602
(814) 942-9425

Frank J. Janakovic
Executive Director

Alternative Community Resource Program
Helping Youth & Families
Est. 1989
ACRP

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Learn Grant Coordinator and the Executive Director of ACRP, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Alternative Community Resource Program, Inc. (ACRP) is a non-profit agency dedicated to meeting the needs of at-risk youth and their families. Every day in our region there are children who struggle with abuse, neglect or psychological and emotional disorders that keep them from living a normal happy life. It is the mission of The Alternative Community Resource Program to respond to the needs of such children and their families. ACRP works as an alternative to placement while providing comprehensive programs and treatment to address emotional, behavioral, and academic issues. At ACRP individuals are afforded the opportunity for personal growth and development regardless of race, color, gender, religion, or sexual orientation. Since 1989 we have upheld our commitment to meeting the needs of the children and families we serve.

Participation in Race to the Top will provide additional resources for Pennsylvania to address the needs of all students, especially those who are economically disadvantages or live in poverty. It will allow Pennsylvania to continue pursuing innovative strategies to improve public education and will provide more opportunities for students in low-achieving schools.

Pennsylvania's Race to the Top Early Learning Challenge funds will bring more childcare centers into the quality rating and improvement system, thus increasing the quality of care that many children experience in the critical years before school. The funds will also assist Pennsylvania in coordinating regulatory agencies and systems of care that can affect our youngest citizens, allowing us to offer a more comprehensive system of care and education during these early years.

With the hard economic times that have hit Pennsylvania, supports for children and their families with high needs have waned and many children from fragile families are currently falling through the cracks. I offer my enthusiastic support for Pennsylvania's Race to the Top Early Learning Challenge application. The plan set forth in this application will substantially increase the school readiness of Pennsylvania's young children and will advance student achievement in Pennsylvania for years to come.

Sincerely,

(b)(6)

Kathryn Porter
LEARN Grant Coordinator

(b)(6)

Frank Janakovic
Executive Director,

(b)(6)

BEAVER COUNTY BEHAVIORAL HEALTH

Board of Commissioners
Tony Amadio, Chairman
Joe Spanik
Charles A. Camp

BEAVER COUNTY BEHAVIORAL HEALTH
1040 Eighth Avenue
Beaver Falls, PA 15010

Gerard Mike, Administrator

724-847-6225 (Admin)
724-847-6229 (Fax)
724-891-2827 (DSU)
724-891-2865 (Fax)
724-847-6220 (D&A)
724-847-6223 (Fax)
1-800-318-8138
www.bcbh.org

October 4, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Beaver County Behavioral Health would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Beaver County Behavioral Health Early Intervention Program provides a family centered coordinated, comprehensive, multi-disciplinary, interagency system of appropriate developmental and support services to meet the needs of eligible infants and toddlers (birth to three) and their families.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Leslie Mine
EI Coordinator
Beaver County Behavioral Health

CAMERON/ELK COUNTIES

BEHAVIORAL AND DEVELOPMENTAL PROGRAMS

94 Hospital Street, 4th Floor
Ridgway, PA 15853

Voice #: 814-772-8016
Fax #: 814-772-8337

October 1st, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Co-Administrators of Cameron/Elk Behavioral & Developmental Programs, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Cameron/Elk Behavioral & Developmental Programs provides Infant/Toddler Early Intervention services to some of our most vulnerable children during the most important time in their lives, the first three years.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Respectfully Submitted,

(b)(6)

Kathleen Kroeger, MSW
Co-Administrator
Cameron-Elk Behavioral & Developmental Programs

Judy Smith
Co-Administrator
Cameron-Elk Behavioral & Developmental Programs

Community Action Program of Lancaster County

601 South Queen Street ♦ P.O. Box 599 ♦ Lancaster, PA 17608-0599

T: 717.299.7301 or 800.732.0018

F: 717.299.9341 ♦ www.caplanc.org

October 11, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Child Care Information Services (CCIS) agency of the Lancaster County Community Action Program, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, CCIS provides Child Care Subsidy to low-income working families. Our mission includes informing families of the importance of electing a quality driven early learning environment. Pennsylvania is blessed to have a system in place which promotes quality education and provides state licensed and certified early learning facilities an opportunity to attain up to a four star rating based on their compliance to the standards. Through the joint efforts of the Departments of Education and Public Welfare establishing one office, the Office of Child Development and Early Learning, their focus is on providing children an opportunity for success. Through this office, Pennsylvania has been a leader in removing barriers for children and improving their opportunity for success in life. Parents now have the opportunity to afford one of the greatest gifts they can give their child – An opportunity for successful future.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

The official registration and financial information of the Community Action Program of Lancaster County, Inc. may be obtained from the Pennsylvania Department of State by calling toll free, within Pennsylvania, 1 (800) 732-0999. Registration does not imply endorsement.

pennsylvania DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT

Helping People - Changing Lives

United Way of Lancaster County

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Ann Louise Brown
Director, Child Care Information Services
Community Action Program of Lancaster County, Pennsylvania

DELAWARE COUNTY LIBRARY SYSTEM
340 N. MIDDLETOWN RD. BLDG. 19
MEDIA, PA 19063
610-891-8622
FAX 610-891-8641
WWW.DELCOLIBRARIES.ORG

Delaware County Library System
David Belanger, Director

Thomas J. McGarrigle,
Chairman
Mario J. Civera, Jr,
Vice Chairman

Colleen P. Morrone
John P. McBlain
David J. White

October 3, 2013

Carolyn C. Dumaresq, Secretary, Department of Education
Beverly Mackereth, Secretary, Department of Public Welfare
Barbara G. Minzenberg, Ph.D., Deputy Secretary, Office of Child Development and Early Learning (OCDEL)

The Delaware County Library System (PA) enthusiastically supports Pennsylvania Department of Education in their goal to make sure that more children, especially at-risk children, enter kindergarten ready to succeed. Our libraries are committed to help DPE inform, engage and support families to ensure this success.

The **Delaware County Library System** (DCLS) is Pennsylvania's second largest federated library system in number of facilities (28) and third largest in service population. DCLS and its 26 member libraries provide free and equal access to information for 558,979 Delaware County residents, 128,565 of whom are children and young adults under the age of 18.

Since 1999, DCLS has provided quality monthly literacy experiences to licensed childcare and Head Start classrooms through our Preschool Outreach services. Twelve of our member libraries are designated **Family Place** libraries which offer a family friendly atmosphere as well as Parent/Child workshops. During the Parent/Child workshops children play with developmentally appropriate toys while the parents meet informally with professionals pertaining to child development. Five of our member libraries have achieved **Preschool Connection** status- a program funded by Commonwealth Libraries to provide training and funds for small public libraries to create family friendly children and library spaces and services.

We are confident that funding from RTT-ELC program will improve the quality of early learning and development programs and close the achievement gap for children in Pennsylvania with high needs. We look forward to partnering with PDE through Commonwealth Libraries to help achieve this goal.

Margie Stern
(b)(6)
Coordinator, Youth Services

ERIE TOGETHER
LEARN • WORK • THRIVE

Steward Team

Jay Badams
City of Erie School District

Rosanne Cheeseman
Times Publishing Company

John Cline
Sunburst Electronics

Jim Dible
Retired Executive

Donna Douglass
Erie Women's Fund

Tom Gamble
Mercyhurst University

David Gibbons
UPMC Hamot

Joseph Giles
Erie County Council

Andy Glass
Erie County Department of Health

Bill Jackson
United Way of Erie County

Johnny Johnson
Retired / Erie Voice

Melanie Johnson
PA Governor's Action Team

Vickie Lampe
PNC Bank

Christina Marsh
Erie Insurance Group

Dean Maynard
NW Tri-County Intermediate Unit

Dale McBrier
Lyndal Enterprises, Inc.

Liz McCormick
McCormick Structural Systems

Rev. Charles Mock
Home Mission Board

Marlene Mosco
PNC Bank

Dave Robinson
Union City Family Support Center

Jake Rouch
Erie Regional Chamber & Growth Partnership

John Rushe
Werle & Rushe Insurance Agency

Joseph Sinnott
City of Erie Mayor's Office

Ron Steele
GECAC

Sheila Sterrett
U.S. Senator Pat Toomey's Office

James Tracy
Girard School District

Sean Wiley
PA State Senate

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

I am writing today to express Erie Together's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Erie Together is a civic-based anti-poverty movement helping scores of individuals and organizations in Erie County work together differently than ever before to make ours a community of opportunity where everyone can learn, work and thrive.

Erie Together's "learn" efforts concentrate on helping more children become successful adults, and we firmly believe that success throughout school is supported by quality early learning experiences. We have specifically focused one of our volunteer action team's efforts on early childhood readiness and success, and our work centers on helping children enter Kindergarten ready to learn, so they can progress satisfactorily, and successfully achieve third grade reading benchmarks.

We believe your proposal can help close the school readiness gap that exists between children with high needs and their peers at the time they enter Kindergarten, and that is very closely aligned with Erie Together's desired outcomes.

Additionally, Erie Together firmly believes that with the right support, all children can succeed no matter what their socioeconomic background. An important key to this is highly-skilled early childhood educators. We believe your proposal will help better prepare those professionals working with the youngest of students, and that this will ultimately lead to better child outcomes.

It is in everyone's best interest to support quality early learning, so that our children have the best chance at success and can ultimately become productive members of our society. Thank you for your leadership, and we wish you the best for a successful application.

Sincerely,

(b)(6)

Mary C. Bula, Project Facilitator

"Working together to make the Erie region a community of opportunity where everyone can learn, work and thrive."
www.ErieTogether.org

FIGHT CRIME: Invest in Kids Pennsylvania

Hundreds of Police Chiefs, Sheriffs, Prosecutors, other Law Enforcement Leaders, and Violence Survivors Preventing Crime and Violence

State Director
Bruce R. Clash

October 8, 2013

The Honorable Carolyn C. Dumaresq, Ed. D.
Acting Secretary of Education
333 Market Street, 10th Floor
Harrisburg, PA 17126

The Honorable Beverly Mackereth
Secretary, Department of Public Welfare
333 Health and Welfare Building
Harrisburg, PA 17110

The Honorable Barbara G. Minzenberg, Ph.D.
Deputy Secretary, Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretaries Dumaresq and Mackereth and Deputy Secretary Minzenberg:

I am writing on behalf of the members of FIGHT CRIME: INVEST IN KIDS *PENNSYLVANIA* to support the Commonwealth of Pennsylvania's Race to the Top - Early Learning Challenge Grant application.

FIGHT CRIME: INVEST IN KIDS *PENNSYLVANIA* is a nonprofit organization of 210 police chiefs, district attorneys, sheriffs and other law enforcement leaders throughout the Commonwealth. Our members know from experience on the front lines of fighting crime and from decades of research that high-quality early learning programs are very powerful crime prevention tools. When children have access to high-quality early care and education beginning at birth, they are far more likely to enter school ready to learn and graduate from high school and far less likely to have early behavioral problems that can lead to juvenile and adult crime. Since 2001, we have been pleased to play an important collaborative role with many organizational partners in educating policymakers about and advocating for strategic investments to help build Pennsylvania's early learning continuum.

The body of research is clear that only high-quality programs—those that are characterized by numerous recognized standards—yield the crime prevention, school readiness and taxpayer savings benefits that are shown to be attainable. We support the Corbett Administration's application, which in part focuses on revising the Keystone STARS tiered quality rating and improvement system; increasing access to and delivery of high-quality professional development, which is a key determinant of program/provider quality; and on refining and validating the Early Learning Outcomes Reporting system to support continued quality improvement.

Thank you for your ongoing work on behalf of Pennsylvania's young children and families and for pursuing a Race to the Top Early Learning Challenge grant to further the tremendous work that has been done already to build Pennsylvania's highly-regarded early learning system.

Sincerely,

(b)(6)

Bruce R. Clash
State Director

105 North Front Street • Suite 305 • Harrisburg, PA 17101 • Phone: (717) 233-1520 • Fax (717) 233-1976 www.fightcrime.org/pa

Helping People. Changing Lives.
Community Action
PARTNERSHIP
AMERICA'S POVERTY FIGHTING NETWORK

Greater Erie Community Action Committee
18 West 9th Street
Erie, Pennsylvania 16501

PHONE: 814.459.4581
FAX: 814.456.0161
www.gecac.org

Ronald A. Steele
Chief Executive Officer

Gwendolyn White
Board Chairman

October 4, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Chief Executive Officer of the Greater Erie Community Action Committee, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Greater Erie Community Action Committee is the Head Start Grantee for Erie County and additionally provides Pre-K Counts programs serving families residing within the Northwestern, North East, Girard and Millcreek School Districts. A total of 859 low income preschool children and families are currently served by our two programs.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Ronald A. Steele
Chief Executive Officer

An Equal Opportunity Employer

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of KenCrest Services, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, KenCrest provides Head Start, Pre-K, Early Intervention (birth-5) and Child Care in Philadelphia and the surrounding counties in Southeastern Pennsylvania. KenCrest has a commitment to create and provide opportunities for all children and their families to be included and fully participate in their communities.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, as well as enhance the opportunities for children with developmental delay and or those at risk to have full access to high quality learning programs.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

As an active participant in the Keystone STARS quality rating system, with six STAR 4 sites and two STAR 3 sites I believe building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

W. James McFalls, CEO

502 W. Germantown Pike - Suite 600
Plymouth Meeting, PA 19462

KSRC
KeyStone Research Corporation
Building Capacity for Performance Excellence

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of KeyStone Research Corporation (KSRC), I would like to express the support of my organization for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, KSRC administers the Assembly, Warehousing, and Distribution center for Pennsylvania's Early Learning Keys to Quality program.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring. KSRC believes it is critical to identify and document successful strategies for family engagement, and will support all efforts to develop a statewide communication plan that brands and markets the importance of high quality early education.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability. KSRC believes in the importance of conducting a research-based validation of the Kindergarten Entry Inventory (KEI) tool and creating a linkage between the KEI and the pre-K -12 Standards Aligned System (SAS).

Your proposal will also build an effective early education workforce. KSRC supports improving Pennsylvania's Learning Management System to enhance and refine the professional development system giving assistance to a high quality workforce. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Tania Bogatova, President

3823 West 12th Street, Erie, PA 16505 Ph: 814-836-9295 Fax:814-836-9615 Email: ksrc@ksrc.biz www.ksrc.biz

Kiwanis
Pennsylvania District

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Pennsylvania District of Kiwanis International, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Kiwanis is a strategic partner of the Pennsylvania Early Learning Investment Commission. As an organization, we are committed to working for quality early learning and development opportunities for all children.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you and Pennsylvania the best for a successful application.

Very truly yours,

Kevin E. Thomas
Executive Director

Lawrence County Community Action Partnership
Changing Lives

724.658.7258
fax 724.658.7664
www.lccap.org
P.O. Box 189 • 241 W. Grant St.
New Castle, PA 16103

Lawrence County Social Services, Inc.
United Community Services, Inc.
Allied Coordinated Transportation Services, Inc. (A.C.T.S.)

September 25, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of **Lawrence County Community Action Partnership**, the Head Start, PA Pre-K Counts, and Learning Tree Child Care & Preschool Program and former LEARN grantee in Lawrence County, I would like to express our agency support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

We believe PA's plan will improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Lawrence County's children are at moderate –high risk for school failure and beyond, as evidenced by the PA Reach and Risk Report. Our at risk children need early learning programs and school districts to continue to work together to improve family engagement in their child's early learning, to create more meaningful transition opportunities, and together foster more community and business support of early learning. The proposed ECE Community Innovation grants will empower Lawrence County to focus on these linkages.

Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Thomas Scott
CEO

Community Action Partnership
Helping People. Changing Lives.

Library System of Lancaster County

October 7, 2013

Carolyn C. Dumaresq, Secretary, Department of Education
Beverly Mackereth, Secretary, Department of Public Welfare
Barbara G. Minzenberg, Ph.D., Deputy Secretary, Office of Child Development and Early Learning (OCDEL)

I am writing to express my support and the support of the Library System of Lancaster County for Office of Child Development and Early Learning submission of an Early Learning Race to the Top Challenge grant, specifically, in support of Promoting Early Learning and Development Outcomes for Children.

The Library System of Lancaster County and the seventeen (17) Local Public Libraries and Bookmobile advocate to improve the lives of our youngest learners, and actively help them succeed in life so that –

All children are healthy and ready to learn;
All children have parents who have the skills to nurture them;
All children have access to age-appropriate resources and learning opportunities;
All children enter school read to learn.

Early literacy is a critical building block to a comprehensive preventive continuum so that all Lancaster's children are successful. For that reason, it is important that we develop and have in place common standards to which we can measure how young children learn reading readiness skills. Public Libraries serve as neutral and well-respected institutions in our communities and as such are in excellent position to inform, engage and support young children and their parents or adult caregivers. Within our libraries, we offer a wide-range of high-quality early learning opportunities. Too, we partner with our local Head Start centers, many daycares and early childhood classrooms throughout the year, and during special campaigns, such as, the One Book Every Young Child. It is absolutely necessary that on a state-wide level we deliver these early learning opportunities with the upmost purpose and with outcomes that positively change a child's life.

Our youngest citizens are a precious resource to this community and we stand ready to do everything in our power to make certain that all our children grow up healthy, loved and ready for all that lies before them. Thank you for the opportunity to support this grant application.

Sincerely,

(b)(6)

(b)(6)

Renee Christiansen, Youth Services Manager
cc: Susan Pannebaker, Youth Services Advisor, Pennsylvania Department of Education/Bureau of Library Development

1866 Colonial Village Lane, Suite 107 Lancaster, PA 17601
(717) 207-0500 Fax: (717) 207-0504
www.lancasterlibraries.org

LYCOMING CHILDREN AND YOUTH SERVICES

200 EAST STREET
SHARWELL BUILDING
WILLIAMSPORT, PENNSYLVANIA 17701-6613

570-326-7895
1-800-525-7938
FAX: 570-326-1348

MARK D. EGLY
Administrator

RICHARD J. SAYLOR
Children's Service Director

October 7, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As Administrator for Lycoming County Children and Youth Services I would like to express my strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. I know first-hand from our work in the child welfare system how important high quality, comprehensive early childhood education is to improving the wellbeing and future of our most at risk children.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

I am especially excited about the proposed ECE Community Innovation grants which will empower communities to focus on ECE/school district linkages, family engagement and community connections. We have used similar family, school and community engagement efforts in Lycoming County to successfully improve child welfare outcomes and believe the same is possible with early childhood education through this initiative.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is also an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes.

A high quality early childhood education experience is so important for many of the children involved in the child welfare system. By ensuring that vulnerable children are adequately prepared and successful in school is one of the most important things we can do to keep future generations out of the child welfare system. This application builds on PA's existing system to better prepare our youngest most at-risk Pennsylvanians.

Respectively,

(b)(6)

Mark D. Egly, Administrator

McKean County Department of Human Services
McKean County Children and Youth Services
17155 Route 6
Smethport, PA 16749
Phone: 814-887-3350 Fax: 814-887-3228

September 30, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the ID Program Director/EI Coordinator, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, McKean DHS is responsible for Birth to Three Early Intervention Services in McKean County.

I believe your proposal can improve young children's health, social emotional, developmental and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs, including those with developmental delays or disabilities, and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Linda Gault
Program Director

Mercer County Behavioral Health Commission, Inc.
Administration/Prevention/Case Management 724-662-1550 Fax: 724-662-1557
Central Intake/Evaluation/Emergency 724-662-2230 Fax:724-662-9292 Emergency: 724-662-2227

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Infant/Toddler Early Intervention Coordinator for the Mercer County Behavioral Health Commission, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the Infant/Toddler Early Intervention program is a program that provides supports and services to children birth to 3 years old and their families.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.
Melissa Hollen, Early Intervention Coordinator
(b)(6)

8406 Sharon-Mercer Road, Mercer, PA 16137 www.mercercountybhc.org

MISSION: READINESS
MILITARY LEADERS FOR KIDS

8 October 2013

The Honorable Carolyn Dumaresq, Ph.D.
Acting Secretary of Education
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126-0333

The Honorable Beverly Mackereth
Secretary of Public Welfare
Pennsylvania Department of Public Welfare
Health and Welfare Building
Harrisburg, PA 17105

Dr. Barbara G. Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
Pennsylvania Departments of Education and Public Welfare
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq; Secretary Mackereth; Deputy Secretary Minzenberg:

MISSION: READINESS is a nonpartisan, national security organization of over 400 retired admirals and generals and other senior military leaders. We have come together to address data from the Department of Defense indicating that 75 percent of all young Americans between the ages of 17 and 24 are unable to join the military, primarily because they have either failed to finish high school, have criminal records, or are physically unfit. We are troubled by the likely impact that this will have on our future military preparedness. Our belief is that a shrinking pool of eligible recruits is a threat to our national security interests.

The retired military leaders of MISSION: READINESS recognize early learning as a tested strategy to help our next generation of Americans achieve personal and career success. National research has shown, time and time again, that participants in high-quality early care and education programs are more likely to graduate from high school and less likely to commit crime. Early learning is therefore key to providing young learners with a foundation for many options in adulthood, including a career in the military should they choose to pursue one.

As you know in the last decade Pennsylvania has gone from one of only nine states in the country not allocating any state funds for quality early care and education to a nationally recognized model consisting of high-quality early learning continuum programs. Programs like Pennsylvania Pre-K Counts, Head Start Supplemental Assistance, Keystone Stars and other components of this continuum are helping tens of thousands of at-risk 3- and 4-year-olds throughout the Commonwealth reach their full potential.

Therefore, it is our pleasure to offer this letter of support for the Commonwealth of Pennsylvania's application for Race to the Top – Early Learning Challenge. We applaud Pennsylvania's application for focusing on further building a high-quality continuum of early learning services by expanding our tiered quality rating improvement system, Keystone STARS and further building an effective early childhood workforce.

As an organization of military leaders, we care deeply about our future military preparedness. We know that continued investments in high-quality early learning continuum programs like those found in Pennsylvania will assist in achieving that goal by getting young Americans the right start in life. A strong commitment today to high-quality early education will keep America strong and safe tomorrow.

Respectfully submitted,

(b)(6)

Stephen L. Doster
Pennsylvania State Director

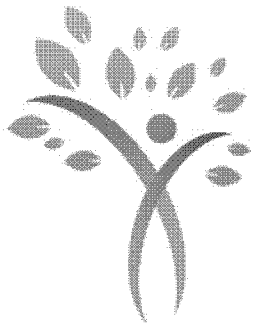
MISSION: READINESS is the nonprofit, nonpartisan national security organization of senior retired military leaders ensuring continued American security and prosperity into the 21st century by calling for smart investments in the upcoming generation of American children.

105 North Front Street, Suite 305
Harrisburg, PA 17101

717.233.1521

MissionReadiness.org

MISSION: READINESS is proud to support the **Pennsylvania National Guard Associations**



PACA MH/DS
PENNSYLVANIA ASSOCIATION OF COUNTY ADMINISTRATORS OF MENTAL HEALTH AND DEVELOPMENTAL SERVICES

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

Pennsylvania Association of County Administrators of Mental Health and Developmental Services (PACA MH/DS) would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. PACA MH/DS represents county administrators who oversee mental health and intellectual disabilities programs, as well as supports coordination organizations which perform the case management function for individuals with intellectual disability (ID) and Behavioral HealthChoices county oversight entities that are responsible for Medicaid-funded managed care for behavioral health services.

We believe the proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

We wish you the best for a successful application.

Best Regards,

Pennsylvania Association of County Administrators
of Mental Health and Developmental Services

AN AFFILIATE OF THE COUNTY COMMISSIONERS ASSOCIATION OF PENNSYLVANIA

PACA MH/DS
17 NORTH FRONT STREET
HARRISBURG, PA 17101-1624

(717) 232-7554 · PHONE
(717) 232-2162 · FAX
WWW.MHDSPA.ORG

pennsylvania statewide afterschool youth development network

October 8, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Pennsylvania Statewide Afterschool/Youth Development Network (PSAYDN) would like to express our enthusiastic support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. PSAYDN is one of the 42 Statewide Afterschool Networks supported with seed funding by the C.S. Mott Foundation. Our mission is to promote sustainable high quality afterschool/youth development programs through advocacy and capacity building so that all of Pennsylvania's children make the successful transition to adulthood. Our focus since our founding nine years ago has been to insure that all of the Commonwealth's children and youth ages 5 to 19 have access to high quality afterschool/youth development expanded learning opportunities in the out-of-school hours including: before and after school ,summer and weekends.

PSAYDN also actively engages in public/private partnerships and collaborations to support a continuum of quality learning and development opportunities from cradle to graduation in Pennsylvania. Essential to this has been the collaboration with the Office of Child Development and Early Learning (OCDEL) through the PA Key in supporting the development of an integrated and coordinated system of program quality improvements and professional development supports for early childhood and school-age programs.

We believe that this proposal could greatly support the overall continuum of opportunities for Pennsylvania's children and youth by improving young children's health, social emotional and cognitive outcomes, enhancing school readiness, helping close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increasing the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed Early Childhood Education (ECE) Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,
(b)(6)

Kathleen (Katy) Conley, Director
PA Statewide Afterschool/Youth Development Network

Pennsylvania Statewide Afterschool/Youth Development Network
275 Grandview Avenue, Suite 200 Camp Hill, PA 17011
(717) 763-1661 Fax (717) 763-2083 www.psaydn.org

Private Industry Council
OF WESTMORELAND/FAYETTE, INC.

Private Industry Council's National Center of Excellence in Early Childhood
Head Start/Early Head Start Program

September 24, 2013

John A. Malone
Chairperson of the Board

Tim Yurcisin
President and CEO

Offices:

Corporate/Greensburg
219 Donohoe Road
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Fax: (724) 437-8159

Uniontown
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Fax: (724) 434-2946

Monessen
1 Wendell Ramey Lane,
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Phone: (724) 684-9000
Ext. 4406

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of the Private Industry Council of Westmoreland/Fayette, Inc. (PIC), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

As you know, PIC is the grantee for the Head Start/Early Head Start of Fayette County, the Head Start of Beaver County and the PA Pre-K Counts Partnership of Fayette. We also head the Early Care & Education Committee in Fayette County and are one of four organizations across the state participating in the Family Engagement Pilot Project. In 2010, our Head Start of Fayette County program was named one of ten National Centers of Excellence. Our Early Childhood Development Division provides high-quality early childhood learning opportunities to some of the most disadvantaged children and families in southwestern Pennsylvania.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Tim Yurcisin
President and CEO

Cc:
Rene Despot
Shujuane Martin
Tami Ozegovich
Terri Campbell

PUBLIC HEALTH management corporation

a nonprofit institute for public health
260 South Broad Street
Philadelphia, PA 19102
215.985.2500 PHONE
215.985.2550 FAX
PHMC.ORG

Denise Chiistian, MD
Chairperson
Richard J. Cohen, Ph.D., FACHE
President and CEO

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President and CEO of Public Health Management Corporation (PHMC) I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. This funding is necessary to elevate Pennsylvania's Early Childhood Education system and the timing is ideal as we have the right leadership and an engaged provider community to ensure success.

PHMC operates over 200 programs to improve service access and outcomes for vulnerable, at-risk, and hard-to-reach populations including: case management; nurse-managed primary care; in and out-patient behavioral and mental health services; parenting education and family therapy. PHMC operates the Southeast Regional Key (SERK) on behalf of PA's Office of Child Development and Early Learning (OCDEL) to administer the tiered quality rating improvement system (QRIS), Keystone STARS. The SERK supports over 1150 family, group and center child care facilities in Philadelphia, Montgomery and Delaware counties via grant making activities and subsidized professional development and technical assistance services.

Building on Keystone STARS is an important piece of your application. Including new standards related to screenings, health and family engagement, enhancing early learning data systems and effective use of assessment systems will increase connections of children and families to the services they need. This will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. In return, more children will enter kindergarten ready to learn.

Early education programs are proven to work. We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Richard J. Cohen, PhD, FACHE
President and CEO

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Rehabilitation and Community Providers Association [RCPA] would like to convey its strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. RCPA is Pennsylvania's largest health and human services organization with over 320 member agencies serving our neighbors in all 67 counties. Our members provide Early Intervention and community based early childhood mental health care, pediatric rehabilitation and autism services as well as specialized day care, pre-school and family support services.

I and our member agencies believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness. This will help close the school readiness gap that exists between children with high needs and their peers. This proposal will enable our communities to address these challenges more effectively and efficiently as children enter kindergarten and will increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade. The proposed Early Childhood Education (ECE) Community Innovation grants will empower communities, especially those facing the greatest challenges to focus on ECE/school district linkages, family engagement and community connections.

Building on Pennsylvania's innovative tiered quality rating improvement system, "Keystone STARS," is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with complex needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better short and long term child outcomes. RCPA recognizes that in tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application

2101 N Front St, Bldg 3, Ste 200 | Harrisburg, PA 17110-1063 | Phone: 717-364-3280 | Fax: 717-364-3287 | www.paproviders.org

builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create future generations of young Pennsylvanians with the skills needed for success in their family, community and workplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Richard S. Edley, PhD
President and Chief Executive Officer

SCHLOW CENTRE REGION LIBRARY
211 South Allen Street, State College, PA 16801 Phone: (814) 237-6236 • Fax: (814) 235-7817 • E-mail: anita@schlowlibrary.org

October 7, 2013

TO: Carolyn C. Dumaresq, Secretary, Department of Education
Beverly Mackereth, Secretary, Department of Public Welfare
Barbara G. Minzenberg,, Ph.D, Deputy Secretary, Office of Child Development and Early Learning (OCDEL)

As Head of Children's Services at Schlow Centre Region Library in State College, PA, I am writing to support Pennsylvania's Race to the Top – Early Learning Challenge Grant application.

Development of common standards and assessments that measure child outcomes and address the behavioral and health needs of young children will be beneficial to families throughout Pennsylvania. The importance of early learning has been widely documented and this grant provides an opportunity to convey this information to parents in a measureable context. This information will help ensure that children across all income levels have a better chance of reaching kindergarten ready and able to learn.

Public libraries already engage and support families through a variety of programs such as developmental screenings and family place programs that connect parents with community resource professionals. Libraries will continue to provide an essential vehicle to engage and inform parents of these additional resources.

Awarding this grant will enable the development of powerful tools to support families and the agencies that are committed to providing the best possible learning environments for young children.

Sincerely,

(b)(6)

Anita Ditz
Head of Children's Services

The Arc
Pennsylvania

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Harrisburg, Pennsylvania 17101
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www.thearcpa.org

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Maureen Cronin
Executive Director

September 24, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

On behalf of The Arc of Pennsylvania, I am writing to provide my strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. The Arc of Pennsylvania is part of the nation's largest cross disability advocacy organization with 34 chapters and 8,000 members in Pennsylvania. Over its 63-year history, the accomplishments of The Arc of PA include the PARC Consent Decree, which resulted in the first-ever right to a free and public education for children with intellectual disabilities. This landmark decision made Pennsylvania a leader in the nation, paving the way for the federal Individuals with Disabilities Education Act (IDEA).

The mission of The Arc of Pennsylvania is to work towards including all children and adults with intellectual and developmental disabilities in every community. Successful inclusion for young children depends on the strength of our early childhood education community. The Office of Child Development and Early Learning has been a leader in building systems that promote inclusion in all early childhood settings. I believe your proposal is exactly what is needed to take Pennsylvania to the next level of dramatically improved child outcomes.

Your proposal addresses the need to improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/ school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

The Arc of Pennsylvania is affiliated with The Arc of the United States and 34 local chapters of The Arc across PA.

Achieve with us.

The Arc
Pennsylvania

Suite 403 – Pennsylvania Place
301 Chestnut Street
Harrisburg, Pennsylvania 17101
(717) 234-2621 • 234-2622 (fax)
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Joshua Stranix – Schuylkill
Gary K. Horner – Allegheny
Kurt Kondrich – Allegheny
Philip Rosenbauer - Butler
Jessica Capitani – Dauphin
Cecilia Lee – Montgomery

Maureen Cronin
Executive Director

The Arc of Pennsylvania is affiliated with The Arc of the United States and 34 local chapters of The Arc across PA.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I look forward to news of your successful application and the expansion of your work in building better outcomes for Pennsylvania's youngest.

Please feel free to contact me if I can provide any additional information and support for your application. We wish you the best for a successful application.

Sincerely,

(b)(6)

Maureen Cronin

Achieve with us.

The Children's Hospital of Philadelphia
RESEARCH INSTITUTE

PolicyLab

October 3, 2013

Office of the Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

PolicyLab at The Children's Hospital of Philadelphia (CHOP) writes to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. PolicyLab is a research and health policy center focused on achieving optimal child health and well-being by informing program and policy change through interdisciplinary research. The clinicians and staff at PolicyLab work closely with primary care providers at CHOP who plays an important role in connecting young children to early childhood programs. PolicyLab is currently part of the CHIPRA Quality Demonstration Grant with the Pennsylvania Department of Public Welfare, and our work in that project focuses on early childhood.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade. The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement, and community connections. The successes of these high need communities will be shared via toolkits, roadmaps, and mentoring.

Your proposal also builds wisely on Pennsylvania's existing tiered quality rating improvement system, Keystone STARS. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven to be a benefit and this application builds on Pennsylvania's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of workers with the skills needed for America to stay competitive in the global marketplace.

We support this effort unequivocally, and wish you the best of luck with the application.

Sincerely,

(b)(6)

Marsha Gerdes, PhD
Senior Psychologist

Kathleen Noonan, JD
Co-Director

David Rubin, MD, MSCE
Co-Director

34TH STREET AND CIVIC CENTER BOULEVARD • CHOP NORTH, ROOM 1528 • PHILADELPHIA, PA 19104 • 215-590-1000 • WWW.RESEARCH.CHOP.EDU/POLICYLAB

October 3, 2013

Dear Dr. Minzenberg,

I am writing in support of the Race to the Top Early Learning Challenge grant application prepared by the Pennsylvania Office of Child Development and Early Learning (OCDEL). The Economy League of Greater Philadelphia is part of a coalition led by the United Way of Greater Philadelphia and Southern New Jersey and including the Delaware Valley Association for the Education of Young Children, Public Citizens for Children and Youth, Public Health Management Corporation, that has undertaken a campaign supporting the adoption of OCDEL's Kindergarten Entry Inventory (KEI) and promoting its use in the Greater Philadelphia region of the state. This campaign is generously supported by the Robert Wood Johnson Foundation and PNC Bank.

OCDEL has developed a strong assessment tool and data management plan that

- provides policy makers and other key constituents with a retrospective look at the early childhood experience of PA's young children, edifying professional development and program design;
- assists kindergarten teachers in planning and delivery of standards-based instruction. Teachers will understand what children know and are able to do within the first 45 days of kindergarten entry and, through the Pre-K-12 Standards Aligned System (SAS), gain access to pertinent standards, curricula, instructional strategies, assessment, materials and resources to best meet the needs of the children they serve; and
- provides reports at an individual child, classroom, building, and school district levels so that parents, teachers, building principals, superintendents, and policymakers may be aware of the status of children and edify our practices.

In addition to helping the state continue improving the quality of early childhood care and learning, aligning standards from pre-K to third grade, and engaging parents and other community leaders, a RTTT Early Learning grant would allow OCDEL to offer the KEI to all local education agencies at no cost. This is a key component of getting school districts to adopt this important tool.

Thank you for your time and consideration.

Sincerely,

(b)(6)

Sharon Easterling
Executive Director
Delaware Valley Association for the Education of Young Children

(b)(6)

Steven T. Wray
Executive Director
Economy League of Greater Philadelphia

(b)(6)

Donna Cooper
Executive Director
Public Citizens for Children and Youth

(b)(6)

Diane Castelbuono
Vice President for Community Impact
United Way of Greater Philadelphia and Southern New Jersey

(b)(6)

Francine Axler
Managing Director, Center for Data Innovation
Public Health Management Corporation

Union City Family Support Center

38 North Main Street • Union City, Pennsylvania 16438
Phone: 814/ 438-7550 • Fax: 814/ 438-9400 • www.unioncityfamilies.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Union City Family Support Center I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, our Center provides a range of supports to at-risk families and children in the rural Southeast region of Erie County including the evidence-based Parents as Teachers home visiting program for families with children prenatal to K-entry.

Much of our effort is focused on developing a culture of educational engagement within the families we serve. Family engagement is key to the success of children in school, and a commitment to such engagement begins at the earliest point, ideally during the preschool years.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Dave Robinson
Executive Director
Union City Family Support Center

United Way of Bucks County
413 Hood Blvd. • Fairless Hills, PA 19030
215.949.1660 • fax 215.949.0373
Upper Bucks 215.538.1266
Central Bucks 215.348.4810

www.uwbucks.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of United Way of Bucks County's Success By 6 Imitative, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, UW Bucks is committed to the support of quality early learning for ALL children in Bucks County and helping our young children be ready to succeed in school and in life.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the world.

We wish you the best for a successful application.

(b)(6)

Patricia Stern Smallacombe, Ph.D.
Sr. Vice President, Community Impact

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October 2, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

I am writing to express United Way of Erie County's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. We are long-standing supporters of quality early learning programs, as well as the sponsor of Success By 6 in Erie County. Two areas addressed by this grant are of particular interest to us.

Promote community access, awareness, and engagement focusing on high quality early learning. Since success in school is supported by quality early experiences, increasing access, awareness, and engagement will provide more children with these experiences and will increase opportunities for young learners, particularly those at risk of school failure.

Revise Pre-kindergarten early learning standards in all content areas to fully align with PA education standards. Just as health care improves when there is continuity of care, learning experiences will also benefit from continuity. The ELS (Early Learning Standards) are being reviewed with an eye toward linking them to current learning standards and to the Core Curriculum, so that children move smoothly from one level of learning to the next. This is supported by Constructivist theory, which demonstrates that new learning builds on linkages with prior learning.

We also believe your efforts to build on Pennsylvania's tiered quality rating improvement system (Keystone STARS) and also create an effective early education workforce are critical to achieving the goals of the grant.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Bill Jackson
President

LIVE UNITED™

335 Market Street, Suite 2
Sunbury, PA 17801
PH: 570-998-0993
FX: 570-286-4581

www.gsvuw.org

Greater Susquehanna Valley
United Way

September 30, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President and Chief Executive Officer of Greater Susquehanna Valley United Way, and on behalf of our entire Board of Directors, we wholeheartedly support the application for Pennsylvania's Race to the Top-Early Learning Challenge grant application.

For twelve years our United Way has been in the forefront in the area of quality early childhood education (ECE) and this work is prominent among the six main issues we focus on in the communities we serve. Our overreaching goal, much like the many programs you champion, is to ensure that every child has access to a quality early childhood learning experience. Working towards achieving that goal, our local Early Learning Investment Committee, the ECE Team of Union/Snyder Counties and the ECE Coalition of Northumberland County are doing the following:

- Working to remove the barriers that prevent children who would benefit from early childhood education from attending programs as well as encouraging and creating alliances in the community that would remove barriers.
- Promoting the importance of ECE in the community so that it is viewed as essential to a child's education and development.
- Creating partnerships with area community groups, hospitals, doctors, the media etc. that will help interact with parents of young at-risk children, to educate the parents about the need to develop literacy skills in their children and highlight the importance and availability of quality early childhood programs in our communities.

The Early Challenge grant application proposal that you are submitting was discussed at our last Greater Susquehanna Valley United Way Board meeting and a resolution was passed in supporting your efforts on behalf of the children and citizens of Pennsylvania including the proposed ECE Community Innovation Grants and Keystone STARS enhancements.

Thank you for the work all of you are doing on behalf of the children and families here in the Commonwealth of Pennsylvania.

Sincerely,

(b)(6)

Keri Albright
President and CEO

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Scranton, Pennsylvania 18501-0526
Phone: 570.343.1267 • Fax: 570.969.2977
www.uwlc.net

PO Box 328
Waymart, Pennsylvania 18472

United Way of
Lackawanna and Wayne Counties

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of the United Way of Lackawanna & Wayne Counties I would like to express our agency's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the United Way of Lackawanna & Wayne Counties has supported early childhood through our Success By 6 program for the past nine years and continues to be highly invested in supporting the youngest members of our community through quality early learning initiatives.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

Our early learning community is currently in the process of completing a self-assessment. Your proposed ECE Community Innovation grants will enable communities such as ours to focus on ECE/school district linkages, family engagement and community connections, all essential components to effectively supporting children and families in our community.

Your initiative to revise Pre-kindergarten early learning standards in all content areas to fully align with PA education standards demonstrates validity and reliability of PA's Early Learning Standards. Enhancing the Standards Aligned System to offer tools on the pre-kindergarten to third grade levels for standards aligned curriculum, instruction, assessment, materials and resources, and safe schools is necessary and will certainly lead to better third grade outcomes.

Your proposal will strengthen and enhance the Pre-kindergarten -12 connection, a vital component to early learning success. A Kindergarten Entry Inventory that is offered to all local education agencies and is validated through research and which creates a linkage between the pre-K -12 Standards Aligned System is a valuable tool.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Gary Drapek, President

LIVE UNITED™

The official registration and financial information of the United Way of Lackawanna and Wayne Counties may be obtained from the Pennsylvania Department of State by calling toll free, in Pennsylvania, 1(800)732.0999. Registration does not imply endorsement.

United Way
of Lancaster County

630 Janet Avenue
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fax +1.717.394.6118

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of United Way of Lancaster County, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. United Way's Education priority area focuses on connecting individuals, organizations, and community resources in order to strengthen families and help people of all ages achieve success in school and in life. As you are well aware, quality early care and education proves to be a direct indicator of success in school and in life. United Way of Lancaster County aspires to see every child enter kindergarten ready to learn. United Way's Success by Six is committed to providing opportunities to support children and families, so that children enter kindergarten with the greatest chances for success.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of

PENNSYLVANIA 2-1-1 Powered by United Way

tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely

(b)(6)

Patrick Jinks, President
United Way of Lancaster County

Our Mission is to assist and champion the efforts of local United Ways, provide statewide leadership on critical issues, and cultivate partnerships beneficial to the United Way system in Pennsylvania.

United Way of Pennsylvania

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of the United Way of Pennsylvania, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, United Way of Pennsylvania and our members are committed to quality early childhood education for the Commonwealth's children.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

United Way of Pennsylvania♦909 Green Street♦Harrisburg, PA 17102♦Phone: 717-238-7365♦Fax: 717-238-7414♦E-mail: info@uwp.org

We wish you the best for a successful application.

Sincerely

(b)(6)

Anthony L. Ross, President
United Way of Pennsylvania

United Way
of Westmoreland County

1011 Old Salem Road, Suite 101
Greensburg, PA 15601
tel: 724.834.7170
fax: 724.834.7245
unitedway4u.org

LIVE UNITED
United Way

September 26, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Director of Education for the United Way of Westmoreland County, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, The United Way of Westmoreland County strives to enrich academic and social development for all youth so they are ready for work and life.

Thousands of children in Westmoreland County are being prepared for success in kindergarten through United Way's School Readiness that funds a wide range of programs to orient new students, parents, early care providers, teachers and administrators to the needs and programs that help children arrive ready to learn. Through this effort, the United Way promotes not only early care and education, but also after-school programs, vision screenings, and helps to increase graduation rates in Westmoreland and Fayette counties. This effort and others address the critical needs around helping children and youth succeed.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. All of which extend our mission of "*improving lives by mobilizing the caring power of communities*".

Building on Pennsylvania's quality rating improvement system, Keystone STARS, is an important piece of your application. Working closely with county childcare providers, I see, first-hand, the importance of including new standards related to screenings, health and family engagement that will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes.

We wish you the best for a successful application,

(b)(6)

Janice S. Gebicki
jan@unitedway4u.org
Director of Education
United Way of Westmoreland County
1011 Old Salem Road, Suite 101 Greensburg, PA 15601
p: 724.834.7170 x.19 f: 724.834.7245

MISSION: To improve lives by mobilizing the caring power of communities

"The official registration and financial information of United Way of Westmoreland County may be obtained from the PA Department of State by calling toll free, within PA 1-800-732-0999. Registration does not imply endorsement."
United Way of Westmoreland County is a 501(c)(3) tax-exempt charitable organization and does not provide goods or services as whole or partial consideration for any contribution.

PANO STANDARDS FOR EXCELLENCE

eliminating racism
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October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Chief Program Officer of YWCA York, would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, YWCA York is a participating member of Keystone Stars initiative, earning a 4 star at the majority of our locations. Our organization is also a proud participant in Pre K Counts with a program serving nearly 70 children in York City. Currently serving 98% children on subsidy, our program is committed to the success of poverty level youth.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Ruby F Martin, M.Ed

Chief Program Officer, YWCA York

for every woman

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Magdeline E. Jensen Chief Executive Officer

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September 24, 2013, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the CEO of the YWCA of Greater Pittsburgh, I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Since 1869 the YWCA has served as a champion for women's and girl's rights. Our mission is guided by the vision of social and racial justice. Supporting low income working families in securing quality early care and learning for their children, assuring that life sustaining resources are available and accessible for all families and, reducing the social and financial barriers families encounter daily are in the forefront of our organizations goals.

I believe the Race to the Top proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness as well ashelp close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of the proposal. Including additional provider types in STARS and including new standards related to screenings, health, and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

The Race to the Top proposal also builds an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Magdeline E. Jensen
Chief Executive Officer

Bridges to Success for Young Homeless Children

September 27, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Carolyn Dumaresq
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Beverly Mackereth
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

RE: *Support for the Application of Pennsylvania's Office of Child Development and Early Learning for the Race to the Top Challenge*

On behalf of the Bridges Collaborative, we write this letter in support of the application of the Pennsylvania's Office of Child Development and Early Learning (OCDEL) for the Race to the Top Challenge because we believe that OCDEL is in the best position to invest in high quality early learning opportunities that will truly make a difference in the health, social skills and school readiness of Pennsylvania's most vulnerable children. We urge you to grant OCDEL's application and let our children race to the top!

Bridges is a network of early childhood and homeless advocates that works to address the lack of education access for these young children. According to OCDEL, more than 40 percent of Pennsylvania's homeless children are under the age of six. Bridges is improving access for young children and their families to quality early childhood services. Our support for this application comes from our broad base of members with extensive knowledge and experience about the importance of access to high quality learning opportunities for all children.

We are confident that OCDEL's proposed work will build a stronger, more effective early childhood work force and help create a path from cradle to college where all Pennsylvania children are reading at grade three, graduating from high school, and going on to live productive and independent lives as contributing members of their communities.

We are particularly pleased that the proposal includes innovation grants that will support and enhance community-level work to build bridges across communities with early childhood education programs and other social service systems that serve the needs of young children and families, particularly those most vulnerable children with disabilities, English as a second language, children in foster care and those experiencing homelessness.

In these difficult economic times, it important that federal and state governments invest in what we know works – and there is little doubt that a strong early childhood education works for children, families, communities, and countries. We urge you to grant the application of PA OCDEL. Thank you for your time and consideration.

Respectfully submitted on behalf of the
The Bridges Collaborative
By:

(b)(6)

Joan C. Eichner, MPA, MPH
Children's Policy Director
University of Pittsburgh Office of Child Development
412-244-5310

Butler County
EARLY CARE & EDUCATION COUNCIL
"Helping children grow up healthy, safe, and ready to learn."

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

On behalf of the *Butler County Early Care & Education Council (ECEC)*, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

As you know, the *Butler County Early Care & Education Council (ECEC)* is a community collaboration of over 70 individuals and organizations that are committed to improving school readiness. Our team represents early education programs, public and private schools, social service agencies, businesses, and families.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, and help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten.

The proposed ECE Community Innovation grants will empower select communities to focus on ECE/school district linkages, family engagement and community connections. We would encourage that this strategy be expanded in the future and implemented on a statewide level.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is also an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will encourage additional early learning providers to further evaluate the quality of their program, increasing the likelihood that more children will receive high quality services. Collaboration with institutions of higher education and adding focus to the professional development of Infant/Toddler teachers will help to build a more effective early education workforce.

It is critical to support early education programs *and communities* in providing high quality learning experiences for our youngest children. This application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Julie Thumma
Coordinator, Butler County ECEC
Lifesteps

Judy Zuzack
Chairman, Butler County ECEC
Children's Creative Learning Center

Contact Information

Julie Thumma, Coordinator
Lifesteps, Inc.
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Judy Zuzack, Chairperson
BC3/Children's Creative Learning Center
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Butler, PA 16002
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Family Engagement
Judy Zuzack, Chairperson
BC3/Children's Creative Learning Center

School Connections
Lisa Ringer, Chairperson
SRU/SGA Preschool & Child Car

Community Partnerships and Resource Development
Vacant, Chairperson

The Butler County Early Care and Education Council is made possible through the support of community partnerships, and is administered by Lifesteps, Inc.

October 3, 2013

Barbara Minzenberg
Deputy Secretary
Office of Child Development and Early Learning
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126-0333

Dear Secretary Minzenberg,

The Regional Leadership Council (RLC) for the Southeast Regional Key (SERK) met on September 19, and reviewed OCDEL's proposal for the Race to the Top Early Learning Challenge. We are supportive of the measures included in this plan and are particularly excited by the emphasis on the development of a data infrastructure that supports ongoing impact assessment for both individual providers and OCDEL initiatives. Several members would like to offer some additional thoughts for consideration.

The RLC believes that the current plan does not adequately address issues related to parent demand for high quality care. We believe that, while Pennsylvania has been successful in defining and supporting high quality, we have not developed strong community demand for these services. Parent demand is critical to encouraging program participation at high levels and ensuring that quality can be supported without continued public investments. The RLC recommends that OCDEL incorporate both policy changes and impact demand as well as education and outreach efforts to support this.

From a policy perspective, the RLC recommends that OCDEL consider an incremental plan to ensure that state and federal subsidy funds only be used in quality facilities (STAR 2, 3, and 4). We realize that this will have a dramatic impact on providers in the state and would caution that the plan be responsibly implemented over several years. It is important for Pennsylvania to establish a date in the future when this requirement will become effective and provide clear paths for providers to reach this goal. By clearly articulating the goal and supportive services that correspond to it, OCDEL can monitor the relationship between increasingly rigorous requirements for quality and the increase in supply of quality services to ensure that there is an alignment.

The voice of early childhood education
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Along with altering OCDEL policy related to demand, OCDEL needs to focus resources on parent education and outreach. These resources need to go beyond the scope of the LEARN efforts and include broad community marketing and messaging, and specific referral services for parents. We encourage Pennsylvania to invest in a state-wide social marketing campaign to promote the benefits of high quality early childhood education and, specifically, its impact on kindergarten readiness. Simultaneously, Pennsylvania needs to invest in referral resources to ensure that every parent seeking early care and education services receives clear, timely, and appropriate information about the services for which they are eligible, the importance of quality and school readiness, and ways to engage these services.

Thank you for your consideration of our feedback. We look forward to reading Pennsylvania's proposal and supporting the implementation of the plan if successful.

Sincerely,

Members of the SERK Regional Leadership Council

(b)(6)

Sharon Easterling, Delaware Valley Association for the Education of Young Children (DVAEYC)
Mark Kehoe, Brightside Academy
Maddy Malis, Federation Early Learning Services (FELS)
Lola Rooney, Philadelphia Freedom YMCA
Sharon Neilson, Woodland Academy, Greater Philadelphia Health Action, Inc.
Carmen Gatti, Montgomery Early Learning Centers (MELC)
Wendy-Anne Roberts Johnson, Philadelphia Out of School Time Project, PHMC
Allison Anderson Acevedo, United Way of Greater Philadelphia and Southern New Jersey

EIPA

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of the Early Intervention Provider's Association of PA (EIPA), I would like to express my full support and that of our members for Pennsylvania's Race to the Top–Early Learning Challenge grant application. The mission of EIPA is to bring together and represent Early Intervention providers in order to promote and enhance the scope and quality of services provided to children and families. We support communication and partnership with all stakeholders within the Early Intervention system. Many of our members serve on statewide organizations through OCDEL.

Our 0-3-providers face many challenges and these families sometimes require significant supports beyond the education of their child. I believe your proposal can improve young children's health and social emotional outcomes, which will enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our future teachers and therapists to work with children in all facets of early childhood would be most beneficial through the development of tiered criteria for teachers working with infants and toddlers, hereby making early educators more effective in their work with children and families.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's quality system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Deborah Uram, M.S. CCC/SLP
President
Early Intervention Providers Association of PA

Education Law Center

Executive Director
Rhonda Brownstein

Pittsburgh Director
Nancy A. Hubley, Esq.

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September 27, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Carolyn Dumaresq
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Beverly Mackereth
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

RE: *Support for the Application of Pennsylvania's Office of Child Development and Early Learning for the Race to the Top Challenge*

On behalf of the Education Law Center (ELC), we write this letter in support of the application of the Pennsylvania's Office of Child Development and Early Learning (OCDEL) for the Race to the Top Challenge because we believe that OCDEL is in the best position to invest in high quality early learning opportunities that will truly make a difference in the health, social skills and school readiness of Pennsylvania's most vulnerable children.

ELC (www.elc-pa.org) is a statewide nonprofit legal advocacy organization dedicated to ensuring that all of Pennsylvania's children, including its most vulnerable, have access to a quality public education. Our support for this application comes from over three decades of extensive legal, legislative and systemic work to improve access to early childhood programs, supports and services.

We are confident that OCDEL's proposed work will strengthen and support quality early learning opportunities for all children. OCDEL is also committed to building a stronger, more effective early childhood work force. This combination will help create a path from cradle to college where all Pennsylvania children read at grade three, graduate from high school, and go on to live productive lives as contributing members of their communities.

We are particularly pleased that the proposal includes innovation grants that will support and enhance community-level work to build bridges across communities with early childhood education programs and other social service systems that serve the needs of young children and families. In these difficult economic times, it important that federal and state governments invest in what we know works – and there is little doubt that a strong early childhood education works for children, families, communities, and countries.

We urge you to grant the application of PA OCDEL. Thank you for your time and consideration.

Respectfully submitted,

(b)(6)

/Rhonda Brownstein
Executive Director

Nancy A. Hubley
Pittsburgh Director

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

Pennsylvania Chapter

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Email: syunghans@paaap.org

October 1, 2013

Carolyn C. Dumaresq, Secretary, Department of Education
Beverly Mackereth, Secretary, Department of Public Welfare
Barbara G. Minzenberg, Ph.D., Deputy Secretary, Office of Child Development and Early Learning (OCDEL)

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As President of the Pennsylvania Chapter of the American Academy of Pediatrics (PA AAP), and Pediatric Advisors of the PA AAP Early Childhood Education Linkage System (ECELS), we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. PA AAP ECELS and many of the other PA AAP programs provide advocacy and support to all the programs encompassed in the Departments of Public Welfare and Education. PA AAP ECELS has been a statewide professional development initiative for 25 years, supporting the work of the Office of Child Development and Early Learning since its inception with state, federal and private funding. We believe your proposal can improve young children's health, social emotional and cognitive outcomes We are eager to engage pediatric professional expertise in this endeavor.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. PA AAP fully expects communities will identify a need for collaboration with early childhood services and medical and dental home services. PA AAP ECELS will support efforts to improve these connections, thus promoting safe and healthy early care and education environments, communication of children's health needs and increases in immunization rates.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including new standards related to screenings, health and family engagement will improve child outcomes. PA AAP ECELS is presently engaged in a federal grant to evaluate infant and toddler quality improvements in a small number of Pennsylvania child care centers, based upon the national best practice resource for out of home child care, Caring For Our Children, third edition. The results from this project will be evidence for ECELS' recommendations for the content of health and safety standards recommended for Pennsylvania's tiered quality rating system written in Section B of the Race to the Top grant proposal.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Allen Nussbaum, MD – President Beth DelConte, MD – Pediatric Advisor to ECELS

(b)(6)

Susan Aronson, MD – Pediatric Advisor to ECELS

Pennsylvania Association for the Education of Young Children
333 Market Street First Floor Harrisburg, PA 17101
Phone: 717-525-9853
Web address: www.pennaeyc.org

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

October 8, 2013

Re: Race To the Top Letter of Support Pennsylvania Association for the Education of Young Children (PennAEYC)

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As an Early Learning Intermediary Organization with over 5,400 individual members, The Pennsylvania Association for the Education of Young Children (PennAEYC) strongly supports the Office of Child Development and Early Learning's efforts to submit an application for the Race To The Top – Early Learning Challenge. PennAEYC not only speaks on behalf of our Board of Directors but also on behalf of our 13 local AEYC affiliates and 2 regional chapters. Those affiliates and chapters include: Bucks County AEYC, Capital Area AEYC, Central Region AEYC, Central Susquehanna AEYC, Delaware Valley AEYC, East Penn AEYC, Lancaster Area AEYC, Lebanon Valley AEYC, Lehigh Valley AEYC, Monroe County AEYC, Pittsburgh Area AEYC, Northeast AEYC, Northern4 PennAEYC, Northwest PennAEYC, and York Area AEYC.

PennAEYC represents all NAEYC members living in Pennsylvania. Current membership is more than 5,400 early childhood educators and supporters throughout the state. Our members live all across Pennsylvania and include center-based practitioners and directors; home-based practitioners; educators in the Kindergarten through 3rd grades; and educators and students in higher education institutions.

Over the past twelve years Pennsylvania has made great strides in providing quality early learning opportunities. We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring. PennAEYC's 15 local community affiliate chapters will be an effective partner of support in this work.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Many of our members are an integral part of this workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. Our higher education instructors and students will welcome the opportunity to collaborate and benefit directly from this area of focus.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

(b)(6)

Jodi Askins
Executive Director
PennAEYC

PAIU Pennsylvania Association of Intermediate Units

September 25, 2013

The Honorable Beverly Mackereth
Secretary
PA Department of Public Welfare
P.O. Box 2675
Harrisburg, PA 17105-2675

The Honorable Dr. Carolyn Dumaresq
Acting Secretary
PA Department of Education
333 Market Street
Harrisburg, PA 17126

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

On behalf of Pennsylvania's 29 intermediate units (IUs), I want to express the Pennsylvania Association of Intermediate Unit's support for Pennsylvania's Race to the Top – Early Learning Challenge grant application.

Pennsylvania's intermediate units are regional educational service agencies that support communities, schools, educators and students in every corner of the Commonwealth. Most IUs serve the Commonwealth's contracted regional providers of pre-school Early Intervention programs which serve tens of thousands of children with disabilities. IUs also operate child care and Head Start programs, and all IUs are fully engaged with public and non-public schools in improving instructional practice and working to raise student achievement, which is especially important in the pre-K to third grade years.

IUs have long built connections between community providers, schools and families. We believe that the proposed ECE Community Innovation grants will support those connections by empowering communities to focus on ECE/school district linkages, family engagement and stronger community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

IUs have partnered with the Commonwealth in building strong data system in and across school entities, and in helping educators learn how to use data to improve instruction and raise achievement. Your proposed use of Race to the Top – Early Learning Challenge funds to enhance the work we have started in Pennsylvania will be tremendously impactful.

Your proposal will also bring much needed resources to Pennsylvania to support high quality professional development for early learning educators. IUs have long worked in K-12 schools providing training on standards and utilizing the state's learning management system. Enhancing and extending that work to early learning educators is the right thing to do and will go a long way to raising student achievement.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Thomas E. Gluck
Executive Director

PACCA
Pennsylvania Child Care Association
20 Erford Road • Suite 302 • Lemoyne, PA 17043
Phone: (717) 657-9000 • Fax: (717) 657-0959 • Toll Free: (888) 296-1917
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October 8, 2013

Carolyn C. Dumaresq, Ed.D.
Acting Secretary of Education
333 Market Street
Harrisburg, PA 17126-0333

Beverly Mackereth
Secretary of Public Welfare
P.O. Box 2675
Harrisburg PA 17105-2675

Barbara Minzenberg, Ph.D.
333 Market Street, 6th Floor
Harrisburg, PA 17126-0333

Subject: Race to the Top – Early Learning Challenge

Dear Secretaries Dumaresq, Mackereth and Deputy Secretary Minzenberg,

The Pennsylvania Child Care Association (PACCA), a statewide 501c3 non-profit organization, exists to be a strong and effective voice for quality early care and education (ECE) programs, and to give leadership and support to those organizations that assist the ECE community, families, and children in the Commonwealth of Pennsylvania. The association sits on the Early Learning Council, as well as other committees and task forces, and has long been an active partner in establishing programs, policies and procedures that support children and their families.

PACCA's leaders and members share a commitment to providing quality child development and early learning opportunities to children in regulated out of home child care programs across the Commonwealth. Our members are devoted to assuring that the children in their care are happy and successful, and develop to their full potential as students, future employees, and citizens. The vast majority of our members operate child care centers that voluntarily participate in the Keystone STARS Quality Rating and Improvement System and over 38% of current Pennsylvania Pre-K Counts grantees are PACCA members.

Pennsylvania's Race To The Top, Early Learning Challenge Grant application offers many opportunities to build on one of Pennsylvania's greatest strengths -- engaging the early learning community in partnership. The ECE Community Grants will recognize the unique needs of children, families, and communities, as well as the diversity of the network needed to ensure all children are prepared to enter kindergarten ready to be successful learners. This network is also strengthened by creating a common language of quality grounded in the Keystone STARS standards for all early learning systems – child care, Head Start and through this proposal preschool, early intervention and school districts.

The Race to the Top, Early Learning Challenge grant is a tremendous opportunity for Pennsylvania to refine our efforts and take the next steps forward. We support Pennsylvania's application and wish you success.

Sincerely,

(b)(6)

Diane P. Barber
Director

the FredRogers company
The legacy lives on.

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the President of The Fred Rogers Company, I have been proud to serve as Co-Chair of the Early Learning Council, the Statewide Advisory Council for Early Childhood Education in Pennsylvania. I am writing to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, The Fred Rogers Company is dedicated to fully maximizing the potential of every young child.

As a member of The Pittsburgh Board of Public Education, I know first hand of the importance of a quality early childhood presence in a child's future education. A strong foundation helps a child attain maximum academic success in school and educational success leads to success in one's life's work.

Pennsylvania's Race to the Top-Early Learning Challenge proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Pennsylvania's proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace. I wish you all the best for a successful application.

Sincerely,
(b)(6)
(b)(6)

William H. Isler
President, The Fred Rogers Company

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pennsylvania
EARLY LEARNING
INVESTMENT COMMISSION

Business Leaders Supporting
Quality Early Childhood Education

October 8, 2013

Carolyn C. Dumaresq
Secretary, Department of Education

Beverly Mackereth
Secretary, Department of Public Welfare

Barbara Minzenberg, Ph.D.
Deputy Secretary, Office of Child Development and Early Learning

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Co-Chairs of the Governor's **Pennsylvania Early Learning Investment Commission** (ELIC), we would like to express the Commission's strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. Please see the attached list of ELIC members in support of your application. The ELIC is a committed group of 76 business leaders from across the Commonwealth, focused on securing support for public investment in early learning.

We believe your proposal will better prepare the Commonwealth's children for school success by developing and maintaining a system based upon quality programs, accountability, and documented positive outcomes for children with a focus on serving children with high-needs. Specifically, including additional provider types in the tiered quality rating improvement system, Keystone STARS, will allow more children to participate in quality early learning programs. Your proposal will also build an effective early education workforce by collaborating with institutions of higher education to better prepare our teachers to work with young children.

The Commission knows that a quality early learning system with proven results will help Pennsylvania communities attract and retain skilled workers and new businesses in the same way a quality K-12 system does. Investing in early childhood programs can assist in developing productive, globally competitive workers by increasing the percentage of students who graduate from high school and enroll in higher education programs. This is important because two-thirds of jobs today require workers to have some post-secondary education. In fact, research has proven that children who participate in high-quality early learning programs show an increase in high school graduation rates by 31% and an increase in college attendance by 80%; will earn 36 percent more as adults; and will enter the workforce with higher skill levels.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

Sincerely,

(b)(6)

Peter J. Danchak
President - Northeast Pennsylvania
PNC Bank
Co-chair, Early Learning
Investment Commission

Lloyd Lamm
Regional Banking Executive, Capital Region
First National Bank of Pennsylvania
Co-chair, Early Learning
Investment Commission

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PENNSYLVANIA HEAD START ASSOCIATION
PARENTS, STAFF, ADMINISTRATORS AND FRIENDS AFFILIATED FOR CHILDREN
Bill Huebner – *Board President* **Blair Hyatt** - *Executive Director*

October 5, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretaries Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg

The Pennsylvania Head Start Association (PHSA) would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PHSA represents the over 35,000 children and their families that participate in Head Start every year in Pennsylvania. Our members include the hard working staff and administrators of these programs.

I believe the proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and builds a program model based on standards and accountability.

The proposal will also help develop a more effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and the completion the of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers will make our early educators more effective in their work.

PHSA offers both our support for the application and appreciation for your hard work.

Respectfully,

(b)(6)

Blair Hyatt
Executive Director
Pennsylvania Head Start Association

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Email: stateoffice@paheadstart.org or visit us on the web at www.paheadstart.org

PENNSYLVANIA
PARTNERSHIPS
FOR CHILDREN

116 Pine Street, Suite 430
Harrisburg, PA 17101-1244

September 25, 2013

Barbara Minzenberg, Ph.D., Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

On behalf of Pennsylvania Partnerships for Children (PPC), I would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PPC is a statewide, independent, non-partisan and non-profit children's advocacy organization. Our early learning work focuses on giving at-risk children the strong start they need for school success through high-quality child care, pre-kindergarten and evidence-based home visiting programs.

PPC is pleased to see concepts included in the grant application focused on improving outcomes for at-risk children. Conducting an evaluation of the commonwealth's quality rating improvement system, Keystone STARS, to determine which standards are most critical to ensuring child care quality and positive child outcomes is a smart approach. Keystone STARS was established over a decade ago and it is time for this type of review to occur. The evaluation will be used to inform the Keystone STARS standards revision process noted in the application. This will ensure the focus is on STARS standards that lead to high-quality programs, which ultimately help prepare children for school. Sixty-two percent of the children receiving child care subsidies are attending a Keystone STARS program so this effort will surely lead to more positive outcomes for at-risk children.

PPC also works to make sure children have health insurance and access to care which meets their needs. The application includes establishing better connections between early learning and children's health care, recognizing the significant time children spend with early learning providers and that these settings should be used as a means to improve children's physical and behavioral health. The proposal cites linking uninsured children entering the early learning system to health coverage, as well as new Keystone STARS standards related to screenings and health. This work will lead to more at-risk children accessing health coverage and care, improving child outcomes.

Finally, the application includes requiring a kindergarten entry inventory for the lowest-performing elementary schools and those in need of improvement. Focusing on these schools will help identify at-risk students and determine interventions that must be implemented to improve student achievement. Also, making it available at no-cost to all local education agencies in Pennsylvania allows schools, teachers and communities to use the inventory information to understand children's aggregate status and gear their efforts to making improvements in instruction and policy to benefit children.

In tough economic times, it is critical to invest every dollar in what we know works. This application will lead to more at-risk children being better prepared for success in school and beyond.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Joan L. Benso
President and CEO

717-236-5680 • 800-257-2030 • www.papartnerships.org

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Pennsylvania School Boards Association (PSBA), I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PSBA has a rich history of advocating for the success of public schooling for children across the Commonwealth.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

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Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,

(b)(6)

Nathan Mains

P.O. Box 2042, Mechanicsburg, PA 17055
(717) 506-2450 (800) 932-0588 Fax: (717) 506-2451 www.psba.org

paeyc

The Voice of Early Childhood

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Executive Director of the Pittsburgh Association for the Education of Young Children (PAEYC), representing over 1400 early childhood professionals and families, I would like to express my support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, PAEYC provides critical professional development and technical assistance to assist early childhood programs in their quest to continuous quality improvement through Keystone STARS, and ultimately better child outcomes.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model that is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education, to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

I wish you the best for a successful application.

Sincerely,

(b)(6)

Michelle Figlar
Executive Director

5604 Solway Street, Pittsburgh, PA 15217 412.421.3889 www.paeyc.org

Special Education Advisory Panel

Commonwealth of Pennsylvania
Pennsylvania Department of Education

October 8, 2013

Honorable Carolyn C. Dumaresq
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126

Beverly D. Mackereth
Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Barbara Minzenberg
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Pennsylvania Special Education Advisory Panel (SEAP), we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the SEAP is designated by the Individuals with Disabilities Education Act to provide policy guidance with respect to special education and related services for children with disabilities in Pennsylvania.

I believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering

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717-541-4960 • Toll Free 800-360-7282 • Fax 717-541-4968 • TTY 800-654-5984

kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application

Respectfully submitted,

(b)(6)

Robyn L. Oplinger
Chair, SEAP

Bernard Miller
Vice-Chair, SEAP

Commonwealth of Pennsylvania
EARLY INTERVENTION INTERAGENCY COORDINATING COUNCIL

October 3, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Chair of the SICC (Governor's Advisory Council for Early Intervention) and on behalf of SICC members we would like to express our strong support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know the PA SICC is a Governor-appointed council that advises and assists the Departments of Health, Education and Public Welfare to ensure that a comprehensive delivery system of integrated early intervention programs and services is available in Pennsylvania to all eligible infants, toddlers and young children and their families. The SICC vision for early intervention is a system that supports, not supplants, the family's responsibility of caring for their children and supports all children as active participants in the community as children first, not disability first, with attention to necessary adaptations. The SICC supports the concept of inclusion for all children. .

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring. Family engagement and community connections are critical for the success of all children.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace. This early investment ALWAYS yields positive returns for all citizens.

We wish you the best for a successful application.

Sincerely

(b)(6)

Kurt Kondrich, Chair
State Interagency Coordinating Council
640 Aljo Drive, Pittsburgh, PA 15241

Statewide Coalition of Early Intervention Advocates

September 27, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Carolyn Dumaresq
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Beverly Mackereth
Secretary
Office of Child Development
and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 1712

RE: *Support for the Application of Pennsylvania's Office of Child Development and Early Learning for the Race to the Top Challenge*

On behalf of the Statewide Coalition of Early Intervention Advocates (EICOA) we write this letter in support of the application of the Pennsylvania's Office of Child Development and Early Learning (OCDEL) for the Race to the Top Challenge because we believe that OCDEL is in the best position to invest in high quality early learning opportunities that will truly make a difference in the health, social skills and school readiness of Pennsylvania's most vulnerable children. We urge you to grant OCDEL's application and let our children race to the top!

EICOA is a statewide group of parents, advocates, providers and other professionals whose mission is to ensure that Pennsylvania's youngest children have access to high quality early intervention programs and services, including early childhood education. We have over 100 members and have been meeting monthly for over ten years with legal support and technical assistance from the Education Law Center. Our remarks are based on the extensive knowledge and experience of our members and reflect our shared comments and concerns.

We believe this proposal will make our early educators more effective in their work by: collaborating with institutions of higher education to better prepare our teachers; and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers.

The proposed community innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring. Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is also an important piece of the application. Including additional provider types in STARS and new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

We are confident that OCDEL's proposed work will improve young children's health, social-emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten, and help create a path from cradle to college where all Pennsylvania children are able to read and do mathematics at grade level by the end of third grade, graduate from high school, and go on to live productive and independent lives as contributing members of their communities.

Respectfully submitted,

(b)(6)

Julie Hladio
Co-Chair

Kurt Kondrich
Co-Chair

October 1, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

As the Local Interagency Coordinating Council/Parents in Partnership of Beaver County, we would like to express our support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, the LICC's are committed to engaging families and providers in activities which promote the development of quality early childhood programs in early intervention.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely,
The Beaver County LICC/Parents in Partnership

Barry J. Galasso, Ed. D.
Executive Director

Bucks County Schools
Intermediate Unit #22
705 N. Shady Retreat Road
Doylestown, PA 18901
215-348-2940
800-770-4822

October 8, 2013

Barbara Minzenberg, Ph.D.
Deputy Secretary
Office of Child Development and Early Learning
333 Market Street, 6th Floor
Harrisburg, PA 17126

Dear Secretary Dumaresq, Secretary Mackereth and Deputy Secretary Minzenberg:

The Tender Bridges Advisory Council of the Bucks County would like to express support for Pennsylvania's Race to the Top – Early Learning Challenge grant application. As you know, Tender Bridges is a collaboration between early childhood educators and kindergarten/first grade programs in the Bucks County School Districts. The Bucks County IU #22 hosts the Council, which has been in place for over 10 years.

We believe your proposal can improve young children's health, social emotional and cognitive outcomes, enhance school readiness, help close the school readiness gap that exists between children with high needs and their peers at the time they enter kindergarten and increase the percentage of children who are able to read and do mathematics at grade level by the end of third grade.

The proposed ECE Community Innovation grants will empower communities to focus on ECE/school district linkages, family engagement and community connections. The successes of these high need communities will be shared via toolkits, roadmaps and mentoring.

Building on Pennsylvania's tiered quality rating improvement system, Keystone STARS, is an important piece of your application. Including additional provider types in STARS and including new standards related to screenings, health and family engagement will allow more children, especially those with high needs, to participate in quality early learning programs and improve child outcomes. This will lead to more children entering kindergarten ready to learn and building on a program model, which is based on standards and accountability.

Your proposal will also build an effective early education workforce. Collaboration with institutions of higher education to better prepare our teachers and completing the development of the early childhood educator continuum through the development of tiered criteria for teachers working with infants and toddlers, will make our early educators more effective in their work. This will lead to better child outcomes.

In tough economic times, it is critical to invest every dollar in what we know works. Early education programs are proven and this application builds on PA's existing system to better prepare our youngest Pennsylvanians for school success and to create a pipeline of skilled workers with the skills needed for America to stay competitive in the global marketplace.

We wish you the best for a successful application.

Sincerely, (b)(6) (b)(6)

The Tender Bridges Advisory Council Chairs

Edwina Frasca-Stuart, Director of Teaching, Learning, & Staff Development
Sarah J. Shoffler, Early Childhood Specialist, Preschool Early Intervention

"Our Children...Their Future...Bucks County IU"

MOUs and Exhibits

This section of the Appendix includes the following documents:

- MOU between the Department of Education and Department of Public Welfare, which designates the Office of Child Development and Early Learning (OCDEL) as the "Lead Agency".
- Department of Education Exhibit
- Department of Public Welfare Exhibit
- MOU between the Departments of Education and Public Welfare, on OCDEL's behalf, and the Department of Health.
- Department of Health Exhibit
- MOU between the Departments of Education and Public Welfare, on OCDEL's behalf, and the Early Learning Council, PA's State Advisory Council on Early Childhood Education and Care
- Early Learning Council Exhibit

OCDEL is an office within both Pennsylvania's Department of Education (PDE) and Department of Public Welfare (DPW). Thus, it cannot enter into MOUs with its parent state agencies. However, to the extent that both PDE and DPW administer programs outside of OCDEL, that are involved with this application, they are entering into a joint MOU as participating agencies under the leadership of OCDEL. In addition, PDE and DPW, on OCDEL's behalf, are also jointly entering into MOUs with other participating agencies. The programs and offices of the lead agency and participating agencies that will cooperate and collaborate with OCDEL in performing grant activities are listed below.

OCDEL as the Lead Agency, OCDEL is responsible for administering and supervising the following required programs. Therefore, a MOU is not needed with another entity in relation to these programs.

- CCDF
- Section 619 of Part B of IDEA
- Part C of IDEA
- State-funded preschool through the PA Pre-K Counts and Head Start Supplemental Programs
- Home visiting through the Nurse Family Partnership Program and the Maternal, Infant and Early Childhood Home Visiting Program
- Head Start State Collaboration Grant
- Child care licensing

Department of Education is the "state education agency" and is responsible for administering and supervising the following required programs:

- State-funded preschool
- Title 1 of the ESEA

Department of Health is responsible for administering and supervising the following required programs:

- Home visiting
- Title V Maternal and Child Care Block Grant

Department of Public Welfare will participate in the implementation of the grant proposal through several of its offices, including:
Office of Children, Youth and Families (child welfare)
Office of Administration's Bureau of Information Systems (information technology support)
Office of Mental Health and Substance Abuse Services

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is entered into by and between the Department of Education (Participating State Agency) and the Department of Public Welfare (Participating State Agency).

Whereas, the purpose of this agreement is to establish a framework of collaboration, as well as articulate specific roles and responsibilities in support of the State in its implementation of an approved Race to the Top-Early Learning Challenge grant project.

Whereas, the Office of Child Development and Early Learning (OCDEL), which is an office in the Departments of Education and Public Welfare, will serve as the "Lead Agency" for the Race to the Top-Early Learning Challenge grant project.

Whereas, Sections 501 and 502 of the Administrative Code of 1929 (71P.S.§§181 and 182) require Commonwealth departments and agencies to coordinate their work and activities with other Commonwealth departments and agencies.

I. GENERAL PROVISONS

1) This MOU is not intended to create, and does not create, any contractual rights or obligations with respect to other entities.
2) The Departments of Education and Public Welfare agree to submit any unresolved disputes to the Office of General Counsel for final resolution.

II. PAYMENT

The Department of Public Welfare, on OCDEL's behalf, as the Participating State Agency which will receive the grant funds, should a grant be awarded, shall timely transfer the portion of funds designated for the Department of Education in the State Plan during the course of the project period, in accordance with the Department of Education's scope of work, as identified in Exhibit I, and with the Budget included in section VIII of the State Plan, through a Notification of Subgrant.

III. ASSURANCES

The Department of Education and Department of Public Welfare hereby certify and represent that they:

1) Agree to be Participating State Agencies and will implement those portions of the State Plan indicated in Exhibit I, if the State application is funded;
2) Agree to use, to the extent applicable and consistent with the State Plan and Exhibit I:
   (a) A set of statewide Early Learning and Development Standards;
   (b) A set of statewide Program Standards;
   (c) A statewide Tiered Quality Rating and Improvement System; and
   (d) A statewide Workforce Knowledge and Competency Framework and progression of credentials.

3) Have all requisite power and authority to execute and fulfill the terms of this MOU;

4) Are familiar with the State's Race to the Top-Early Learning Challenge grant application and are supportive of and committed to working on all applicable portions of the State Plan;

5) Will provide a Final Scope of Work only if the State's application is funded and will do so in a timely fashion but no later than 90 days after a grant is awarded; and will describe the

Departments of Education and Public Welfare's specific goals, activities, timelines, budgets, and key personnel ("Participating State Agency Plan") in a manner that is consistent with the Preliminary Scope of Work (Exhibit I), with the Budget included in section VIII of the State Plan (including existing funds, if any, that the Participating State Agencies' are using for activities and services that help achieve the outcomes of the State Plan); and

6) Will comply with all of the terms of the Race to the Top-Early Learning Challenge Grant, this agreement, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Race to the Top-Early Learning Challenge program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99), and the suspension and debarment regulations in 2 CFR Part 3485.

IV. PROJECT ADMINISTRATION

A. DEPARTMENTS OF EDUCATION AND PUBLIC WELFARE RESPONSIBILITIES

In assisting the Lead Agency in implementing the tasks and activities described in the State's Race to the Top-Early Learning Challenge grant application, the Departments of Education and Public Welfare will:

1) Implement the Participating State Agencies' Scopes of Work as identified in the Exhibit I of this agreement;
2) Abide by the governance structure outlined in the State Plan;
3) Abide by the Budgets included in section VIII of the State Plan (including the existing funds from Federal, State, private and local sources, if any, that the Departments of Education and Public Welfare are using to achieve the outcomes in the RTT-ELC State Plan);
4) Actively participate in all relevant meetings or other events that are organized or sponsored by the State, by the U.S. Department of Education ("ED"), or by the U.S. Department of Health and Human Services ("HHS");
5) Post to any Web site specified by the State, ED, or HHS, in a timely manner, all non-proprietary products and lessons learned or developed using Federal funds awarded under the RTT-ELC grant;
6) Participate, as requested, in any evaluations of this grant conducted by the State, ED, or HHS;
7) Be responsive to State, ED, or HHS requests for project information including on the status of the project, project implementation, outcomes, and any problems anticipated or encountered, consistent with applicable local, State and Federal privacy laws.

B. OCDEL RESPONSIBILITIES

In assisting the Departments of Education and Public Welfare in implementing their tasks and activities described in the State's Race to the Top-Early Learning Challenge application, OCDEL will:

1) Work collaboratively with, and support the Departments of Education and Public Welfare in carrying out their Scopes of Work, as identified in Exhibit I of this agreement;
2) Provide feedback on the Departments of Education and Public Welfare's status updates, any interim reports, and project plans and products;
3) Keep the Departments of Education and Public Welfare informed of the status of the State's Race to the Top-Early Learning Challenge grant project and seek input from the Departments of Education and Public Welfare, where applicable, through the governance structure outlined in the State Plan;
4) Facilitate coordination across all participating state agencies, including the Departments of Education and Public Welfare, as necessary to implement the State Plan; and
5) Identify sources of technical assistance for the project.

C. JOINT RESPONSIBILITIES

1) OCDEL and the Departments of Education and Public Welfare will each appoint a key contact person for the Race to the Top-Early Learning Challenge grant.
2) These key contacts from OCDEL and the Departments of Education and Public Welfare will maintain frequent communication to facilitate cooperation under this MOU, consistent with the State Plan and governance structure.
3) OCDEL and Department of Education and Public Welfare personnel will work together to determine appropriate timelines for project updates and status reports throughout the grant period.
4) OCDEL and Department of Education and Public Welfare personnel will negotiate in good faith toward achieving the overall goals of the State's Race to the Top-Early Learning Challenge grant, including when the State Plan requires modifications that affect the Departments of Education and Public Welfare, or when the Departments of Education and Public Welfare's Scopes of Work require modifications.

D. STATE RECOURSE IN THE EVENT OF THE DEPARTMENTS OF EDUCATION AND/OR PUBLIC WELFARE FAILURE TO PERFORM

If OCDEL determines that the Departments of Education and/or Public Welfare are not meeting their goals, timelines, budget, or annual targets, or is in some other way not fulfilling applicable requirements, OCDEL will take appropriate enforcement action, which will include resolving disagreements between the OCDEL and the Departments of Education and Public Welfare by submitting unresolved disputes to the Office of General Counsel, or initiating such enforcement measures as are available to OCDEL, under applicable Federal law.

V. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, in consultation with ED.

VI. DURATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a Race to the Top- Early Learning Challenge grant is received by the State, ending upon the expiration of the Race to the Top- Early Learning Challenge grant project period.

VII. SIGNATURES

Authorized Representative of OCDEL:

(b)(6) Ph.D. October 7, 2013

Signature Date

BARBARA G. MINZENBERG DEPUTY SECRETARY

Print Name Title

Authorized Representative of the DEPARTMENT OF EDUCATION:

(b)(6) 10/8/13

Signature Date

Carolyn C. Dumaress Acting Secretary

Print Name Title

EXHIBIT I – PARTICIPATING STATE AGENCY SCOPE OF WORK

Pennsylvania Department of Public Welfare

The Department of Public Welfare hereby agrees to participate in the State Plan, as described in the State's application, and more specifically commits to undertake the tasks and activities described in detail below.

Selection Criterion	Participating Party	Type of Participation
(A)(3)	• Office of Children, Youth and Families • Office of Mental Health and Substance Abuse Services	Support the transition work of the ECE Community Innovation Zones to build stronger relationships between early childhood programs and K-12 schools.
(B)(1)	• Office of Children, Youth and Families	1. Continue partnership with OCDEL to provide oversight over county children and youth agencies to ensure they place foster children in Keystone STARS programs, if available. 2. Continue advising and approving curriculum for OCDEL related to child abuse mandatory reporter training for practitioners.
(B)(2)	• Office of Administration's Bureau of Information Systems and / or Information Technology Vendor	Participate in developing and implementing the PELICAN Keys to Quality system upgrade.
(C)(1)	• Office of Mental Health and Substance Abuse Services • Office of Children, Youth and Families	Develop Infant Toddler Learning Standards for Early Childhood.
(C)(2)	• Office of Children, Youth and Families	Support and promote use of the Comprehensive Assessment System to provide standards-based, data-driven instructional practice and continuous program improvements in early learning settings.
(C)(4)	• Office of Children, Youth and Families • Office of Mental Health and Substance Abuse Services	Promote and provide resources to connect community systems that support strong partnerships. 1. Review and revise our Early Learning and TQRIS (Keystone STARS) Family engagement standards. 2. The development of coordinated, comprehensive efforts within local communities. 3. Expand the Early Learning GPS (Guiding Parents Smoothly).
(D)(2)	• Office of Administration's Bureau of Information Systems and / or Information	Participate in developing and implementing the Early Childhood Workforce registry PELICAN linkage.

Selection Criterion	Participating Party	Type of Participation
	Technology Vendor	
(E)(2) and (B)(1)/ (B)(5)	1. • Office of Administration's Bureau of Information Systems and / or Bureau of Financial Operations 2, 3 and 4. • Office of Administration's Bureau of Information Systems and Information Technology Vendors 5. • Office of General Counsel	1. Support and oversee, as needed and appropriate, procurement of information technology services. 2. Participate in developing and producing provider data reports for informed decision making. 3. Use assessment and other administrative data to support data-driven reporting. 4. Participate in developing and implementing PELICAN system upgrades related to data collection efforts for the parent and provider data-driven decision-making projects. 5. Ensure compliance with applicable privacy laws.
(CP)(4)	• Office of Mental Health and Substance Abuse Services	Advise OCDEL and PDE Office of Elementary and Secondary Education on content development for Governor's Institutes to support implementation of social and emotional standards.

(b)(6)

October 9, 2013

Signature *(Authorized Representative of Lead Agency)* Date

(b)(6)

10/15/2013

Signature *(Authorized Representative of Participating State Agency)* Date

EXHIBIT I – PARTICIPATING STATE AGENCY SCOPE OF WORK

Pennsylvania Department of Education

The Department of Education hereby agrees to participate in the State Plan, as described in the State's application, and more specifically commits to undertake the tasks and activities described in detail below.

Selection Criterion	Participating Party	Type of Participation
(A)(3)	• Office of Elementary and Secondary Education	Support the transition work of the ECE Community Innovation Zones to build stronger relationships between early childhood programs and K-12 schools.
(B)(2)	• Office of Elementary and Secondary Education	Support and promote the voluntary participation of additional programs in Keystone STARS to ensure more children, especially those with high-needs, are participating in high-quality early learning programs.
(B)(4)	• Office of Elementary and Secondary Education	Support and promote the voluntary participation of additional programs in Keystone STARS to ensure more children, especially those with high-needs, are participating in high-quality early learning programs.
(C)(1)	1. • Office of Elementary and Secondary Education 2. • Office of Elementary and Secondary Education Information Technology Vendor 3. • Office of Post-Secondary and Higher Education	1. Develop Infant Toddler Learning Standards for Early Childhood. 2. Develop Executive Function Skill Standards for Grades 1 and 2 and embed into the Standards Aligned System (SAS) portal. 3. Print and disseminate Infant/Toddler, Pre-Kindergarten, and Kindergarten Learning Standards for Early Childhood. Develop both asynchronous training modules and Professional Development Instructor Institute (PDII) to inform all programs of standards revisions with a focus on intentional implementation.
(C)(2)	• Office of Post-Secondary and Higher Education • Office of Elementary and Secondary Education	Support and promote use of the Comprehensive Assessment System to provide standards-based, data-driven instructional practice and continuous program improvements in PK classrooms.
(C)(4)	1 and 2. • Office of Elementary and Secondary Education 2 and 3.	Promote and provide resources to connect community systems that support strong partnerships. 1. Review and Revise our Early Learning and

Selection Criterion	Participating Party	Type of Participation
	• Office of Commonwealth Libraries 3. • Office of Elementary and Secondary Education • Office of Postsecondary and Higher Education, including Family Literacy Program • Office of Administration (Food and Nutrition)	TQRIS (Keystone STARS) standards. 2. The development of coordinated, comprehensive efforts within local communities. 3. Expand the Early Learning GPS (Guiding Parents Smoothly).
(D)(1)	• Office of Postsecondary and Higher Education • Office of Elementary and Secondary Education	Refine and improve upon Pennsylvania's Workforce Competency Framework and progression of credentials at all levels with a particular focus on those working with Children with High Needs by: 1. Collaborating with colleges and universities on credential and certificate coursework for Infant-Toddler professionals, Peer Mentors, and technical assistance consultants and aligned to revised core competencies. In particular courses relevant to cultural, linguistic and ability diversity. 2. Support OCDEL in defining, creating and implementing a progression of credentials along the Career Lattice including exploration of expanding Alternate Pathways. 3. Continue to serve on various OCDEL advisory committees. 4. Participate in the development and dissemination of workforce communication plan, aimed at eliminating barriers and challenges encountered by early childhood educators in understanding and accessing coursework and workforce initiatives to progress along the career lattice.
(D)(2)	1 and 2. • Office of Postsecondary and Higher Education 2. • Information technology staff 3. • Information technology vendor	1. Support OCDEL in outreach and recruitment of postsecondary institution participation in the Rising STARS Tuition Assistance Program. 2. Ensure high quality professional development by supporting OCDEL in the development and implementation of a consumer rating system for professional development and an approval system for technology-based professional development. 3. Partnering with OCDEL to align the Early

Selection Criterion	Participating Party	Type of Participation
		Childhood workforce database with the K-12 workforce database.
(E)(2)	1 and 2. • Office of Elementary and Secondary Education • Office of Elementary and Secondary Education Information Technology Vendor and / or Information Technology Staff 2 and 3. • State Longitudinal Data System Unit and / or Information Technology Staff 4. • Office of General Counsel	1. Support and provide guidance on using various data elements (including child outcome data and kindergarten entry checklist) to prepare tools for providers and teachers that inform and improve instruction, programs and services. 2. Support use of kindergarten outcome data and other data collection efforts for generating provider and state level reports. 3. Facilitate exchange of kindergarten entry and third grade state standardized test results for data driven reporting. 4. Ensure compliance with applicable privacy laws.
(CP)(2)	• Division of Food and Nutrition	Participate in joint planning related to monitoring and communications around Child Adult Care Food Program in Early Learning and Development Programs
(CP)(4)	1, 2 and 3. • Office of Elementary and Secondary Education 1. • Office of Post-Secondary and Higher Education	1. Partner in development and implementation of Governor's Institutes. 2. Facilitate use of Standards Aligned System portal to implement Professional Learning Communities with Governor Institute participants. 3. Facilitate use of Standards Aligned System portal to share resources developed at Governor's Institutes.

(b)(6) October 7, 2013

Signature *(Authorized Representative of Lead Agency)* Date

(b)(6) 10/8/13

Signature *(Authorized Representative of Participating State Agency)* Date

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is entered into by and between the Departments of Education and Public Welfare, on the Office of Child Development and Early Learning's (OCDEL) behalf, and the Department of Health.

Whereas, Sections 501 and 502 of the Administrative Code of 1929 (71P.S.§§181 and 182) require Commonwealth departments and agencies to coordinate their work and activities with other Commonwealth departments and agencies.

Whereas, the Office of Child Development and Early Learning (OCDEL), which is an office in the Departments of Education and Public Welfare, will serve as the "Lead Agency" for the Race to the Top-Early Learning Challenge grant project.

Whereas, the purpose of this agreement is to establish a framework of collaboration, as well as articulate specific roles and responsibilities in support of the State in its implementation of an approved Race to the Top-Early Learning Challenge grant project.

I. GENERAL PROVISONS

1) This MOU is not intended to create, and does not create, any contractual rights or obligations with respect to other entities.
2) The Departments of Education and Public Welfare and the Department of Health agree to submit any unresolved disputes to the Office of General Counsel for final resolution.

II. ASSURANCES

The Department of Health hereby certifies and represents that it:
1) Agrees to be a Participating State Agency and will implement those portions of the State Plan indicated in Exhibit I, if the State application is funded;
2) Agrees to use, to the extent applicable and consistent with the State Plan and Exhibit I:
   (a) A set of statewide Early Learning and Development Standards;
   (b) A set of statewide Program Standards;
   (c) A statewide Tiered Quality Rating and Improvement System; and
   (d) A statewide Workforce Knowledge and Competency Framework and progression of credentials.

3) Has all requisite power and authority to execute and fulfill the terms of this MOU;

4) Is familiar with the State's Race to the Top-Early Learning Challenge grant application and is supportive of and committed to working on all applicable portions of the State Plan;

5) Will provide a Final Scope of Work only if the State's application is funded and will do so in a timely fashion but no later than 90 days after a grant is awarded; and will describe the Department of Health's specific goals, activities, timelines, budgets, and key personnel ("Participating State Agency Plan") in a manner that is consistent with the Preliminary Scope of Work (Exhibit I), with the Budget included in section VIII of the State Plan (including existing funds, if any, that the Department of Health is using for activities and services that help achieve the outcomes of the State Plan; and

6) Will comply with all of the terms of the Race to the Top-Early Learning Challenge Grant, this agreement, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Race to the Top-Early Learning Challenge program, and the

applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99), and the suspension and debarment regulations in 2 CFR Part 3485.

III. PROJECT ADMINISTRATION

A. DEPARTMENT OF HEALTH RESPONSIBILITIES

In assisting OCDEL in implementing the tasks and activities described in the State's Race to the Top-Early Learning Challenge grant application, the Department of Health will:

1) Implement the Department of Health's Scope of Work as identified in the Exhibit I of this agreement;
2) Abide by the governance structure outlined in the State Plan;
3) Abide by the Department of Health's Budget included in section VIII of the State Plan (including the existing funds from Federal, State, private and local sources, if any, that the Department of Health is using to achieve the outcomes in the RTT-ELC State Plan);
4) Actively participate in all relevant meetings or other events that are organized or sponsored by the State, by the U.S. Department of Education ("ED"), or by the U.S. Department of Health and Human Services ("HHS");
5) Post to any Web site specified by the State, ED, or HHS, in a timely manner, all non-proprietary products and lessons learned or developed using Federal funds awarded under the RTT-ELC grant;
6) Participate, as requested, in any evaluations of this grant conducted by the State, ED, or HHS;
7) Be responsive to State, ED, or HHS requests for project information including on the status of the project, project implementation, outcomes, and any problems anticipated or encountered, consistent with applicable local, State and Federal privacy laws.

B. OCDEL RESPONSIBILITIES

In assisting the Department of Health in implementing their tasks and activities described in the State's Race to the Top-Early Learning Challenge application, the OCDEL will:

1) Work collaboratively with, and support the Department of Health in carrying out the Department of Health's Scope of Work, as identified in Exhibit I of this agreement;
2) Provide feedback on the Department of Health's status updates, any interim reports, and project plans and products;
3) Keep the Department of Health informed of the status of the State's Race to the Top-Early Learning Challenge grant project and seek input from the Department of Health, where applicable, through the governance structure outlined in the State Plan;
4) Facilitate coordination across all Participating State Agencies, including the Department of Health, as necessary to implement the State Plan; and
5) Identify sources of technical assistance for the project.

C. JOINT RESPONSIBILITIES

1) OCDEL and the Department of Health will each appoint a key contact person for the Race to the Top-Early Learning Challenge grant.
2) These key contacts from OCDEL and the Department of Health will maintain frequent communication to facilitate cooperation under this MOU, consistent with the State Plan and governance structure.
3) OCDEL and Department of Health personnel will work together to determine appropriate timelines for project updates and status reports throughout the grant period.
4) OCDEL and Department of Health personnel will negotiate in good faith toward achieving the overall goals of the State's Race to the Top-Early Learning Challenge grant, including when the State Plan requires modifications that affect the Participating State Agency, or when the Participating State Agency's Scope of Work requires modifications.

D. STATE RECOURSE IN THE EVENT OF PARTICIPATING STATE AGENCY'S FAILURE TO PERFORM

If OCDEL determines that the Department of Health is not meeting its goals, timelines, or annual targets, or is in some other way not fulfilling applicable requirements, OCDEL will take appropriate enforcement action, through the Departments of Education and Public Welfare, which will include resolving disagreements between OCDEL and the Department of Health by submitting unresolved disputes to the Office of General Counsel, or initiating such enforcement measures as are available to OCDEL, under applicable Federal law.

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, in consultation with ED.

V. DURATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a Race to the Top- Early Learning Challenge grant is received by the State, ending upon the expiration of the Race to the Top- Early Learning Challenge grant project period.

VI. SIGNATURES

Authorized Representative of OCDEL:

(b)(6) Ph. A. October 7, 2013

Signature Date

BARBARA G MINZENBERG, DEPUTY SECRETARY

Print Name Title

Authorized Representative of the DEPARTMENT OF HEALTH:

(b)(6) 10/15/13

Signature Date

TERRI MATLO CFO

Print Name Title

Authorized Representative of the DEPARTMENT OF EDUCATION:

(b)(6) 10-8-13

Signature Date

Carolyn C Dumaresq Acting Secretary

Print Name Title

Authorized Representative of the DEPARTMENT OF PUBLIC WELFARE:

(b)(6) 10/9/13

Signature Date

David R. Boyd Director of Management

Print Name Title

Authorized Representative of the GOVERNOR'S OFFICE OF GENERAL COUNSEL:

(b)(6) 10/15/13

Signature Date

(b)(6) Deputy General Counsel

Print Name Title

Authorized Representative of the OFFICE OF GENERAL COUNSEL, DEPARTMENT OF EDUCATION:

(b)(6) 10/7/13

Signature Date

Ernest N. Helling Assistant Chief Counsel

Print Name Title

Authorized Representative of the OFFICE OF GENERAL COUNSEL, DEPARTMENT OF PUBLIC WELFARE:

(b)(6) 10/8/13

Signature Date

Matthew D. Stauffer 10/8/13

Print Name Title

Authorized Representative of the OFFICE OF GENERAL COUNSEL, DEPARTMENT OF HEALTH:

(b)(6) 10/10/13

Signature Date

Douglas A. Snyder Assistant Counsel

Print Name Title

EXHIBIT I – PARTICIPATING STATE AGENCY SCOPE OF WORK

Pennsylvania Department of Health

The Participating State Agency hereby agrees to participate in the State Plan, as described in the State's application, and more specifically commits to undertake the tasks and activities described in detail below.

Selection Criterion	Participating Party	Type of Participation
(A)(3) (including CP5)	#1 • Bureau of Health Promotion and Risk Reduction # 2, 3, 4 • Bureau of Family Health, including home visiting program and Title V Maternal and Child Health Service Block Grant	Consult with OCDEL on the following: 1. Keystone Kids Go – Obesity Prevention Initiative 2. PA ECE Healthy and Green– Foundation funded environmentally-friendly initiative 3. On ground support of child care programs with health issues. 4. Home visiting partnership
(B)(1) (including CP2)	• Bureau of Health Promotion and Risk Reduction	Advise OCDEL on Keystone STARS standards related to health promotion practices.
(C)(1)	• Bureau of Communicable Diseases	Participate in the development of Infant Toddler Learning Standards for Early Childhood.
(C)(2)	• Bureau of Family Health	1. Participate in development of plan to track and promote follow up of developmental, behavioral, and health screening. 2. Support and participate in plan for tracking and follow up of developmental, behavioral, and health screening.
(C)(4)	• Bureau of Family Health, including the home visiting program, Title V Maternal and Child Health Service Block Grant • WIC Program	Promote and provide resources to connect community systems that support strong partnerships. 1. Review and Revise our Early Learning and TQRIS (Keystone STARS) Family Engagement standards. 2. The development of coordinated, comprehensive efforts within local communities. 3. Support and promote the design of family and community web-based resources and tools in accordance with the Governor Corbett's Healthy PA Initiative

(D)(2)	• Bureau of Health Promotion and Risk Reduction	Advise OCDEL on health promotion practices to include in Keystone STARS professional development packages.
(CP)(2)	• Bureau of Health Promotion and Risk Reduction	Participate in joint planning meetings around any opportunities for monitoring and communications.

(b)(6) 15.2013

Signature *(Authorized Representative of Lead Agency)* Date

(b)(6) 10/15/13

Signature *(Authorized Representative of Participating State Agency)* Date

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) is entered into by and between the Departments of Education and Public Welfare, on the Office of Child Development and Early Learning's (OCDEL) behalf, and the Early Learning Council (ELC).

Whereas, Sections 501 and 502 of the Administrative Code of 1929 (71P.S.§§181 and 182) require Commonwealth departments and agencies to coordinate their work and activities with other Commonwealth departments and agencies.

Whereas, the Office of Child Development and Early Learning (OCDEL), which is an office in the Departments of Education and Public Welfare, will serve as the "Lead Agency" for the Race to the Top-Early Learning Challenge grant project.

Whereas, the Early Learning Council is Pennsylvania's State Advisory Council on Early Childhood Education and Care and was established by Governor's Executive Order 2008-07.

Whereas, the purpose of this agreement is to establish a framework of collaboration, as well as articulate specific roles and responsibilities in support of the State in its implementation of an approved Race to the Top-Early Learning Challenge grant project.

I. GENERAL PROVISONS

1) This MOU is not intended to create, and does not create, any contractual rights or obligations with respect to other entities.
2) OCDEL and the ELC agree to submit any unresolved disputes to the Office of General Counsel for final resolution.

II. ASSURANCES

The ELC hereby certifies and represents that it:

1) Agrees to be a Participating State Agency and will implement those portions of the State Plan indicated in Exhibit I, if the State application is funded;

2) Agrees to use, to the extent applicable and consistent with the State Plan and Exhibit I:
   (a) A set of statewide Early Learning and Development Standards;
   (b) A set of statewide Program Standards;
   (c) A statewide Tiered Quality Rating and Improvement System; and
   (d) A statewide Workforce Knowledge and Competency Framework and progression of credentials.

3) Has all requisite power and authority to execute and fulfill the terms of this MOU;

4) Is familiar with the State's Race to the Top-Early Learning Challenge grant application and is supportive of and committed to working on all applicable portions of the State Plan;

5) Will provide a Final Scope of Work only if the State's application is funded and will do so in a timely fashion but no later than 90 days after a grant is awarded; and will describe the ELC's specific goals, activities, timelines, budgets, and key personnel ("Participating State Agency Plan") in a manner that is consistent with the Preliminary Scope of Work (Exhibit I), with the Budget included in section VIII of the State Plan (including existing funds, if any, that the ELC is using for activities and services that help achieve the outcomes of the State Plan; and

6) Will comply with all of the terms of the Race to the Top-Early Learning Challenge Grant, this agreement, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Race to the Top-Early Learning Challenge program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99), and the suspension and debarment regulations in 2 CFR Part 3485.

III. PROJECT ADMINISTRATION

A. ELC RESPONSIBILITIES

In assisting OCDEL in implementing the tasks and activities described in the State's Race to the Top-Early Learning Challenge grant application, the ELC will:
1) Implement the ELC's Scope of Work as identified in the Exhibit I of this agreement;
2) Abide by the governance structure outlined in the State Plan;
3) Abide by the Budgets included in section VIII of the State Plan (including the existing funds from Federal, State, private and local sources, if any, that the ELC is using to achieve the outcomes in the RTT-ELC State Plan);
4) Actively participate in all relevant meetings or other events that are organized or sponsored by the State, by the U.S. Department of Education ("ED"), or by the U.S. Department of Health and Human Services ("HHS");
5) Post to any Web site specified by the State, ED, or HHS, in a timely manner, all non-proprietary products and lessons learned or developed using Federal funds awarded under the RTT-ELC grant;
6) Participate, as requested, in any evaluations of this grant conducted by the State, ED, or HHS;
7) Be responsive to State, ED, or HHS requests for project information including on the status of the project, project implementation, outcomes, and any problems anticipated or encountered, consistent with applicable local, State and Federal privacy laws.

B. OCDEL RESPONSIBILITIES

In assisting the ELC in implementing their tasks and activities described in the State's Race to the Top-Early Learning Challenge application, OCDEL will:
1) Work collaboratively with, and support the ELC in carrying out the ELC's Scope of Work, as identified in Exhibit I of this agreement;
2) Provide feedback on the ELC's status updates, any interim reports, and project plans and products;
3) Keep the ELC informed of the status of the State's Race to the Top-Early Learning Challenge grant project and seek input from the ELC, where applicable, through the governance structure outlined in the State Plan;
4) Facilitate coordination across all Participating State Agencies, including the ELC, as necessary to implement the State Plan; and
5) Identify sources of technical assistance for the project.

C. JOINT RESPONSIBILITIES

1) OCDEL and the ELC will each appoint a key contact person for the Race to the Top-Early Learning Challenge grant.
2) These key contacts from OCDEL and the ELC will maintain frequent communication to facilitate cooperation under this MOU, consistent with the State Plan and governance structure.
3) OCDEL and ELC contacts will work together to determine appropriate timelines for project updates and status reports throughout the grant period.
4) OCDEL and ELC contacts will negotiate in good faith toward achieving the overall goals of the State's Race to the Top-Early Learning Challenge grant, including when the State Plan

requires modifications that affect the ELC, or when the ELC's Scope of Work requires modifications.

D. STATE RECOURSE IN THE EVENT OF THE ELC'S FAILURE TO PERFORM

If OCDEL determines that the ELC is not meeting its goals, timelines, or annual targets, or is in some other way not fulfilling applicable requirements, OCDEL will take appropriate enforcement action, through the Departments of Education and Public Welfare, which will include resolving disagreements between OCDEL and the ELC by submitting unresolved disputes to the Office of General Counsel, or initiating such enforcement measures as are available to OCDEL, under applicable Federal law.

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, in consultation with ED.

V. DURATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a Race to the Top- Early Learning Challenge grant is received by the State, ending upon the expiration of the Race to the Top- Early Learning Challenge grant project period.

VI. SIGNATURES

Authorized Representative of OCDEL:

(b)(6) October 7 2013

Signature Date

BARBARA G. MINZENBERG DEPUTY SECRETARY

Print Name Title

Authorized Representative of the ELC:

Please See Attached Page

Signature Date

Print Name Title

Authorized Representative of the DEPARTMENT OF EDUCATION:

(b)(6) 10-8-13

Signature Date

Carolyn C Dumaresq Acting Secretary

Print Name Title

Authorized Representative of the DEPARTMENT OF PUBLIC WELFARE:

(b)(6) 10/9/13

Signature Date

Daniel R. Boyce Director of Procurement

Print Name Title

Authorized Representative of the GOVERNOR'S OFFICE OF GENERAL COUNSEL:

(b)(6) 10/15/13

Signature Date

Shawn E. Smith Deputy General Counsel

Print Name Title

Authorized Representative of the OFFICE OF GENERAL COUNSEL, DEPARTMENT OF EDUCATION:

(b)(6) 10/7/13

Signature Date

Ernest N. Helling Assistant Chief Counsel

Print Name Title

Authorized Representative of the OFFICE OF GENERAL COUNSEL, DEPARTMENT OF PUBLIC WELFARE:

(b)(6) 10/8/13

Signature Date

Matthew D. Stauffer Assistant Counsel

Print Name Title

requires modifications that affect the ELC, or when the ELC's Scope of Work requires modifications.

D. STATE RECOURSE IN THE EVENT OF THE ELC'S FAILURE TO PERFORM

If OCDEL determines that the ELC is not meeting its goals, timelines, or annual targets, or is in some other way not fulfilling applicable requirements, OCDEL will take appropriate enforcement action, through the Departments of Education and Public Welfare, which will include resolving disagreements between OCDEL and the ELC by submitting unresolved disputes to the Office of General Counsel, or initiating such enforcement measures as are available to OCDEL, under applicable Federal law.

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties involved, in consultation with ED.

V. DURATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a Race to the Top- Early Learning Challenge grant is received by the State, ending upon the expiration of the Race to the Top- Early Learning Challenge grant project period.

VI. SIGNATURES

Authorized Representative of OCDEL:

_____
Signature Date

_____
Print Name Title

Authorized Representative of the ELC:

William H. Issler 10/9/2013
Signature Date

(b)(6) Co-Chair ELC
Print Name Title

Authorized Representative of the DEPARTMENT OF EDUCATION:

_____
Signature Date

_____
Print Name Title

Authorized Representative of the DEPARTMENT OF PUBLIC WELFARE:

_____
Signature Date

EXHIBIT I – PARTICIPATING STATE AGENCY SCOPE OF WORK

Pennsylvania Early Learning Council (ELC)

The Participating State Agency hereby agrees to participate in the State Plan, as described in the State's application, and more specifically commits to undertake the tasks and activities described in detail below.

Selection Criterion	Participating Party	Statement of Work
(A)(3)	• PA Early Learning Council (ELC), Pennsylvania's State Advisory Council on Early Childhood Education and Care (SAC)	1. Continue to serve as an advisory entity to PA's Governor through OCDEL, PDE and DPW on early learning programs, as required by Executive Order (EO) 2008-07 which established the ELC in PA. 2. Serve as the advisory entity on the State Plan in this application. 3. Hold ad hoc subcommittee meetings as necessary to provide OCDEL recommendations on specific proposals in the grant application.
(B)(1)	• PA ELC	1. Continue public support of Keystone STARS. Many ELC members were involved in the development of Keystone STARS and continue to serve on the Keystone STARS Advisory Committee. 2. Support PA's approach to including more high-needs children into Keystone STARS, through expanding the programs which may participate. This aligns with the EO which requires the ELC to ensure that children with special needs are properly supported by early childhood education programs.
(C)(1)	• PA ELC	Continue to support the use of high quality, aligned common early learning standards. This aligns with the EO, which requires the ELC to make recommendations for improvements in early learning standards.
(C)(2)	• PA ELC	Support and promote use of the Comprehensive Assessment System to provide standards-based, data-driven instructional practice and continuous program improvements in early learning settings.
(C)(4)	• PA ELC	Support OCDEL's dissemination of effective family engagement strategies and promotion of the Early Learning GPS (Guiding Parents Smoothly). This aligns with the EO, which requires the ELC to develop improved communications strategies with families.
(D)(1)	• PA ELC	Support the early childhood education field in the use of high quality, common standards for practitioners. This aligns with the EO, which requires the ELC to develop recommendations for

Selection Criterion	Participating Party	Statement of Work
		professional development and career advancement plans for early childhood educators.
(D)(2)	• PA ELC	Support OCDEL in developing recommendations for promoting the Rising STARS Tuition Assistance Program.
(E)(1)	• PA ELC	Support kindergarten entry assessment. This aligns with the EO, which requires the ELC to assure the development of a sound continuum from and between early childhood education programs and K-12 education.
(E)(2)	• PA ELC	1. Support OCDEL outcomes reporting project 2. Support the continued development and refinement of PELICAN Early Learning Network. 3. Support the development and implementation of PELICAN system upgrades related to data collection efforts for the parent and provider data-driven decision-making projects. This aligns with the EO, which includes providing input to the development of the Early Learning Network.
(CP)(4)	• PA ELC	1. Support P-3 collaborations and efforts. 2. Promote Governor Institutes.

(b)(6)

October 8, 2013

Signature *(Authorized Representative of Lead Agency)* Date

(b)(6)

10/9/2013

Signature *(Authorized Representative of Participating State Agency)* Date

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS

Center Performance Standards for FY 2013-2014

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Center Performance Standards for FY 2013-2014

Preamble

Keystone STARS: Reaching Higher for Quality Early Learning

The Keystone STARS program was initiated in 2002 as a multifaceted approach to improving programs that serve young children in Pennsylvania. Research-based Performance Standards form the bedrock of this quality improvement program. The standards are guided by the principle that quality early learning is a foundation for children's success, and investment in the early care and education of Pennsylvania's children is an investment in the future. Therefore, the Keystone STARS Performance Standards reflect research-based indicators to improve outcomes for children. The standards are organized into four STAR levels that build upon each other in order to support continuous quality improvement. When a program meets the Performance Standards for a STAR level, they receive the mark of quality, a STAR designation. A Keystone STARS designation informs families that the director and staff are committed to enhancing quality for the children and families in their program.

Pennsylvania Early Learning Keys to Quality Vision and Mission

Vision: All Pennsylvania families will have access to high quality care and education for their children, fostering successful futures in school and in life.

Mission: To create a comprehensive quality improvement system in which all early learning programs and practitioners are encouraged and supported to improve child outcomes. Improvements in programming are designed to increase the capacity to support children's learning and development; increase educational attainment among practitioners; enhance professional skills and competencies in support of children's learning and development.

Acknowledgements

The Pennsylvania Departments of Public Welfare and Education, Office of Child Development & Early Learning, would like to thank the diverse group of programs, practitioners, Regional Keys staff and partners, and early learning stakeholders from across the State who continue to share their vision and constructive ideas in crafting an indicator based quality improvement system to improve outcomes for children in Pennsylvania. Their honest discussion of how the PA Early Learning Keys to Quality is working locally and their constructive feedback to proposed improvements continues to be invaluable to this process.

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Center Performance Standards for FY 2013-2014

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How to Interpret the Performance Standards Grid

Each STAR level builds on the previous level. Unless otherwise specified, each successive level includes all items in the previous level. Please note that there is important information housed in the footnotes throughout the document and in the STARS Worksheets. For copies of the STARS Worksheets, please contact your Regional Key. Good, Better, Best: Pennsylvania's Continuous Quality Improvement Guide to Best Practices is an optional tool that can be used by STARS Specialists/Managers, STARS Designators, and practitioners to determine at what quality point in the spectrum a program is meeting a Keystone STARS standard. Additional information is available at http://www.pakeys.org/pages/starsDocs.aspx or by contacting your Regional Key.

Enrollment in the Keystone STARS program

Facilities that do not meet the STAR 1 Performance Standards, yet wish to begin the process of continuous quality improvement may enroll in Keystone STARS by contacting the Regional Key. By enrolling in Keystone STARS it affords facilities access to resources that will assist facilities in working toward a STAR level.

To enroll in Keystone STARS, a facility must meet the following STARS Performance Standards:

- Facility holds and posts a current DPW Certificate of Compliance.
- Complete the Keystone STARS Site Environment Checklist.
- Director completes the STARS Orientation.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
General	Must maintain Regular Certificate of Compliance and/or meet program standards.[1]	Must meet all standards for STAR 1 and maintain Regular Certificate of Compliance.	Must meet all standards for STAR 1 and 2 and maintain Regular Certificate of Compliance.	Must meet all standards for STAR 1, 2, and 3 and maintain Regular Certificate of Compliance.
Director Qualifications[2]	**Complete professional development on the Core Body of Knowledge/ Professional Development Record (CBK/PDR) and Foundations of the Environment Rating Scale (ERS).**	1. Complete professional development on Continuous Quality Improvement (CQI), the Facility Professional Development Plan (FPDP), and the Learning Standards[3]. **2. Complete professional development in the ERS scales appropriate to age groups in the facility.** 3. Attend child abuse mandated reporter professional development that reflects the most current laws in Pennsylvania.	1. Complete STARS Orientation Part 2. 2. Level V or above on the Career Lattice.	Level VI or above on the Career Lattice.
Director Development[4]		1. Annual professional development plan is developed based on needs identified in the Professional Development Record (PDR).[5] 2. Annually participate in 1 professional growth and development activity. 3. 15 annual clock hours of professional development based on the PDR, including the Director's section.	1. Annually participate in 2 professional growth and development activities. 2. 21 annual clock hours of professional development based on the PDR, including the Director's section. 3. Complete the PA Director's Credential.[6]	***1. Annually participate in 3 professional growth and development activities.*** ***2. 27 annual clock hours of professional development based on the PDR, including the Director's section.***

[1] Facilities must maintain DPW Regulations and/or Head Start Performance Standards according to whichever apply to the site.
[2] Refer to the Career Lattice in the appendix.
[3] Refer to the STARS Worksheets for School Age (SACC) for clarifications regarding the SACC requirements.
[4] Refer to the STARS Worksheets for additional information on professional growth and development activities, as well as annual clock hours.
[5] Head Start sites may use a comparable tool in place of the Professional Development Record (PDR).

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Staff Qualifications[7]		1. New Staff Orientation[8] completed by all aides and new staff within 90 days of start of employment. 2. 50% of Teachers/Group Supervisors (GS) at Level V or above on Career Lattice; 50% of Assistant Teachers/ Assistant Group Supervisors (AGS) at Level II or above on Career Lattice; and 100% of Aides at Level I or above on Career Lattice.	100% of Teachers/Group Supervisors (GS) at Level V or above on Career Lattice; 75% of Assistant Teachers/ Assistant Group Supervisors (AGS) at Level III or above and 25% of Assistant Teachers/Assistant Group Supervisors (AGS) at Level IV or above on Career Lattice; and 25% of Aides at Level II or above on Career Lattice.	100% of Teachers/Group Supervisors (GS) at Level V or above and 50% of Teachers/Group Supervisors (GS) at Level VI or above on Career Lattice; 50% of Assistant Teachers/Assistant Group Supervisors (AGS) at Level IV or above and 25% of Assistant Teachers/ Assistant Group Supervisors (AGS) at Level V or above on Career Lattice; and 50% of Aides at Level II or above on Career Lattice.

[6] To assist a facility with director turnover, this standard may be extended for 2½ years from the directorship start date, if director enrolls in PA Director's Credential and develops an action plan for completion within 2½ years. This is for maintaining a current STAR level only. Please refer to Regional Key for further information.

[7] Refer to the Career Lattice in the appendix. Refer to the STARS Worksheets for School Age (SACC) for clarification regarding the SACC requirements.

[8] New Staff Orientation can be provided using the OCDEL-approved Better Kid Care video series **or** 15 hours of documented topics outlined by *Caring for Our Children 3rd ed., Section 1.4.2*. If the Better Kid Care videos offered are not utilized, documentation is required of PQAS approved professional development (including course title, hours, and instructor name/signature) that has been cross-walked to the *Caring for Our Children* topic areas.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Staff Development[9]		1. Annual professional development plan is developed for each staff member based on needs identified in the Professional Development Record (PDR) and documented on the Professional Development plan in the PDR. 2. 12 annual clock hours of professional development, based on PDR, taken by each staff member.[10] 3. One staff member from each classroom must have current pediatric first aid certification. 4. All staff must have two hours of health and safety professional development annually.[11] 5. All staff must attend at least two hours of professional development annually on child observation, inclusive practices, and/or ERS.[12]	1. For each Teacher/ Assistant Teacher[13], 18 annual clock hours of professional development based on PDR[14]; each Aide 12 total hours based on PDR. 2. Annually, all staff involved in 1 professional growth and development activity. 3. All staff must have current pediatric first aid certification. 4. Teachers/Assistant Teachers must attend at least two hours of professional development annually on curriculum, program or child assessment, the age-appropriate Learning Standards and/or ERS.[16]	***1. For each Teacher/ Assistant Teacher, 24 annual clock hours of professional development based on PDR[15]; each Aide 15 clock hours based on PDR.*** ***2. Annually, all staff involved in 2 professional growth and development activities.***

[9] Refer to the STARS Worksheets for additional information on professional growth and development activities, as well as annual clock hours
[10] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 6 annual clock hours.
[11] Refer to the STARS Worksheets for courses that are acceptable.
[12] Refer to the STARS Worksheets for more information on selecting appropriate professional development opportunity.
[13] The terms "Teacher" and "Assistant Teacher" are equivalent to "Group Supervisor (GS)" and "Assistant Group Supervisor (AGS)," respectively.
[14] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 9 annual clock hours.
[15] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 12 annual clock hours.

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Child Observation/ Curriculum/ Assessment	Site obtains and maintains copies of the appropriate Learning Standards for all age groups in the program.	1. A developmentally appropriate screening of the child is completed and shared with family within 45 days[16] of program entry. 2. Learning Standards are used as a resource for staff in classroom planning and documentation of children's learning. 3. Provider selects an OCDEL approved assessment tool.	***1. All demographic information, including child, program and staff information, is recorded timely and accuracy is maintained in the Early Learning Network (ELN)*** [17][18] 2. Based on ongoing child observations, developmentally appropriate authentic assessments of the child are completed and reported electronically into an OCDEL approved assessment tool following the tool's specified timeframes. [19] [20] 3. Results from authentic assessments are used for curriculum, individual child planning, and referral to community resources. 4. Implement a learning curriculum that incorporates the Learning Standards, including a written curriculum statement.	Program utilizes a curriculum that has been aligned to the Learning Standards for Early Childhood. If the program's curriculum has not been aligned, the provider must crosswalk the curriculum to the Learning Standards. [21]

[16] For school-age children, no initial screening is required however an observation is completed and shared with family within 90 days of program entry. See Sacc worksheets.
[17] If the functionality of ELN does not allow for entry of the assessment information, demographic information should be collected and child assessments should be completed on paper until the program is able to enter the information online. Attempted compliance should be documented via a record of Help Desk call logs and copies of emails. Upon resolution of the issue, the provider will be responsible for entering all data into ELN.
[18] Head Start providers are required to enter their data into the State Longitudinal Database System (SLDS)
[19] A child assessment must be completed on school-age children although it is not reported through ELN.
[20] For SACC only programs, the assessment should be completed and shared with families once per year.
[21] A list of aligned tools can be found on the SAS page (http://websites.pdesas.org/ocdel/default.aspx).

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Environment Rating	Complete the Learning Environment Checklist.	1. ERS self-assessment of every classroom/age group must be completed annually by the director or a staff member who has completed approved ERS professional development.[22] 2. A written Improvement Plan is developed to address any ERS subscale score below a 3.0.	1. The average facility score of all sampled classrooms/age groups assessed by a STARS ERS assessor must be 4.25. 2. Each individual sampled classroom/age group must have an ERS score no less than 3.50. 3. A written Improvement Plan is developed to address any ERS subscale score below a 3.50.	***1. The average facility score of all sampled classrooms/age groups assessed by a STARS ERS assessor must be a 5.25.*** ***2. Each individual sampled classroom/age group must have an ERS score no less than 4.25.*** ***3. A written Improvement Plan is developed to address any ERS subscale score below a 4.25.***

[22] Refer to the STARS Worksheets for more information.

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Community Resources/ Family Involvement	1. At enrollment, families are provided with information regarding public, social, and community services.[23] 2. The program collects child-centered information at enrollment to facilitate responsive care that is mindful of the needs of individual children and families. A family meeting is offered within 45 days of enrollment to encourage program-family partnerships and share initial observations and goals for the child.	1. At a minimum of once per year, written information on topics including health and human services, wellness, nutrition and fitness, and/or child development is given and explained to families and staff. 2. If applicable to the child, provider requests from families copies of child's IEP or IFSP, written plans, and/or special needs assessments completed by professionals to inform classroom practice. 3. Individual child information is shared in written form with families on a daily basis for infants and toddlers, and there is a format and procedure for use on an as needed basis for other age groups. 4. Specific group or classroom information is shared with families daily using a visual communication format. 5. A minimum of one parent conference is offered per year to discuss the child's progress and behavioral, social and physical needs.	1. A plan is written and implemented describing procedures to refer families to appropriate social, mental health, educational, wellness, and medical services. 2. Coordinate a minimum of one annual group activity to involve families in meeting program learning goals.[24] **3. A minimum of two family conferences are offered per year to discuss the child's progress and behavioral, social and physical needs. Authentic assessments of the child are shared with the family a minimum of two times per year.[25]**	1. If applicable to the child, provider, in conjunction with families and service providers from public social and community service organizations, implements activities appropriate to meet IEP or IFSP goals and/or special needs plans and objectives. 2. Program has policies that demonstrate engagement and partnership with families in program planning and decision making.

[23] Organizations include Early Intervention, Children and Youth Services, Mental Health and Intellectual Disability Services, County Assistance Office (CAO), and Child Care Information Services (CCIS).
[24] Refer to the STARS Worksheets for suggested activities.
[25] Best Practices will necessitate more frequent assessments for infants and toddlers.

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Transition	Program provides general information to families regarding transitioning[26] children to another classroom or educational setting.	1. Program transfers child records, at the request of the family, when the child transitions to another educational setting. 2. Program creates, with input from families, a list of community/school stakeholders regarding child transition. 3. Program includes age-appropriate activities for children to prepare for transition.	1. Families are offered a group meeting to provide information regarding a child's transition to another classroom or higher educational setting and to encourage families and their children to connect to the school setting by visiting. 2. Program sends letter of introduction to appropriate community/school stakeholders outlining goal to partner in child transitioning efforts from childcare to school setting. 3. Program participates in community/school transition activities as available.	1. Program offers families an individual meeting to share specific information regarding the child's transition to another classroom or educational setting and to give families written information about the child's developmental progress. 2. Program develops and shares a written plan for child transition with families and community/ school stakeholders.

[26] Refer to the STARS Worksheets for School Age Child Care for additional clarification on transitioning for SACC programs.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Business Practices	Program develops and distributes a Family Handbook.	1. Program creates a projected one-year operating budget, including a statement of income and expenditures. 2. A financial record keeping system for revenue and expenses is in place. 3. Organizational structure and job descriptions[27] are included in a personnel policy manual that is shared with staff.	1. A policy and procedure manual[28] is developed and available to the staff at all times. 2. A financial system with quarterly comparisons of expenses to revenue is implemented. 3. The program creates a mission statement	1. Annual operational business plan to address organizational stability and to implement quarterly reconciliation. 2. Program establishes a written code for professional conduct of staff. 3. Annual independent financial review by a CPA is conducted.[29] 4. Risk management plan[30] is written and developed that identifies potential operational risks and specifies ways to reduce or eliminate risks.
Continuous Quality Improvement	1. Annual site-based professional development plan completed. 2. Program uses documents for tracking illnesses and injuries, including plans of action to prevent further occurrences.	1. Complete and provide an annual Facility Professional Development Plan (FPDP) (or equivalent). 2. System of site safety review including strategies for supervising children and corresponding plan of action are instituted.	***Provider develops and implements a Continuous Quality Improvement Plan using multiple sources[31].***	***A Strategic Plan is aligned with the program's mission statement and put in place.***

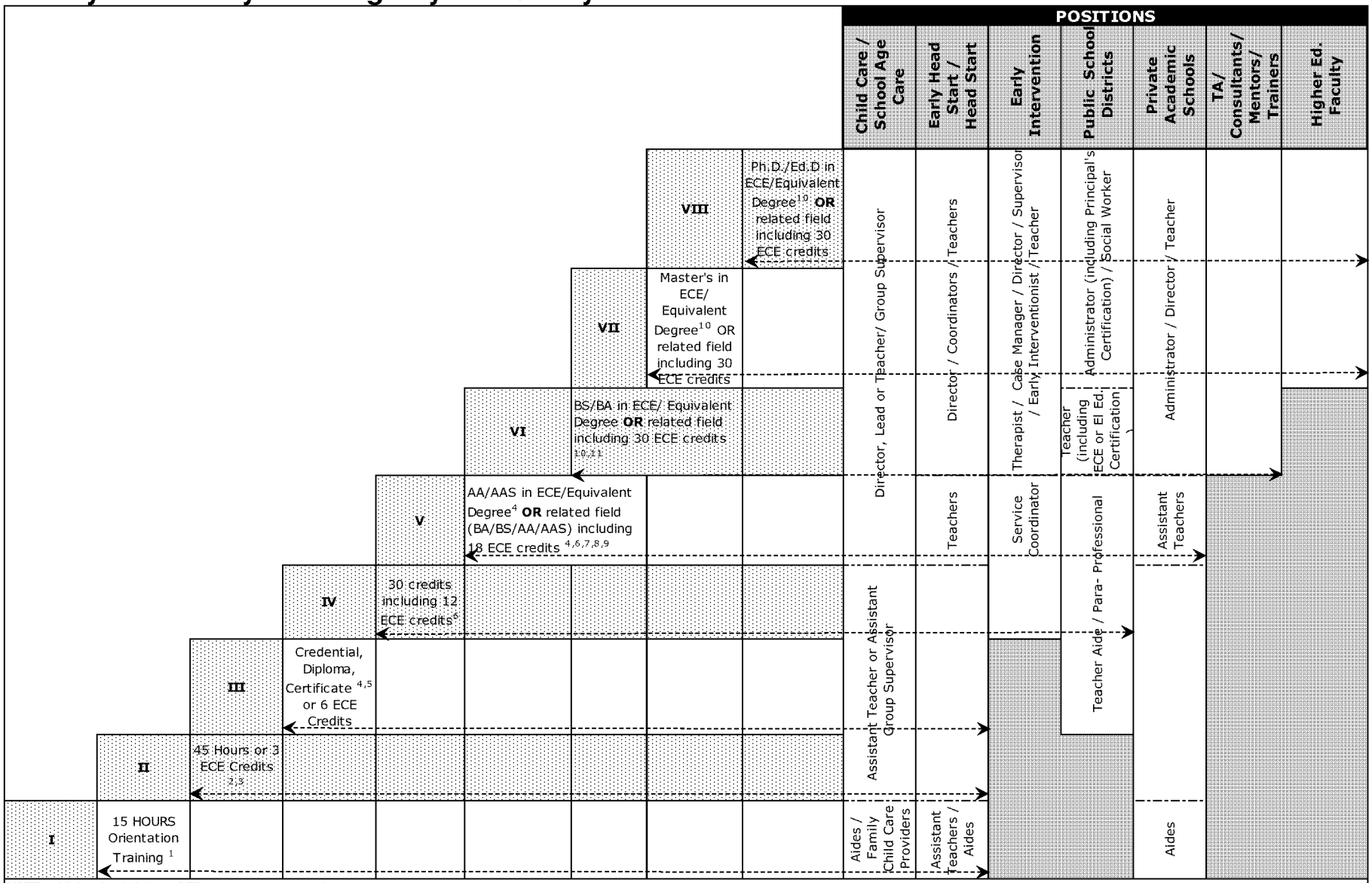
[27] An organizational chart should be accompanied by a written description of the duties and responsibilities of each staff position and the lines of authority and responsibility within the center.
[28] Manual includes personnel policies and written health policies covering topics found in *Caring for Our Children 3rd ed.*, a published Model Child Care Health Policy booklet (ECELS/NAEYC/AAP), and/or other appropriate Business Practices tools.
[29] For acceptable forms of review by a CPA, see Good, Better, Best: PA's CQI Guide to Best Practices Document (Appendix A). Also, as a reminder, when a provider signs the Keystone STARS Grant Agreement, the provider is also agreeing to follow the PA Department of Public Welfare's Sub-recipient/Vendor Audits – Sections I through VI and Audit Clauses A through E, which may apply at lower STAR Levels based on awards amount received.
[30] Risk Management Plan is reviewed at least annually and updated as deemed necessary.
[31] Sources of information include surveys of families, staff and/or school-aged children, ERS, LIS, audits, FPDP, etc.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR CENTERS	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Staff Communication and Support	1. Program provides documentation of a staff meeting held within the last six months. 2. Director develops and annually implements a plan for sharing information about Keystone STARS, continuous quality improvement, strategies for supervising children and professional development with staff members.	1. Each staff person must participate in a staff meeting at least once per month. Staff meeting must include discussions of quality and its impact on the Learning Program. 2. Director meets with each staff member using the plan developed in STAR 1. For new staff, this meeting is held within 90 days of start of employment.	1. Teachers and Assistant Teachers are provided at least two hours per month[32] of paid curriculum and lesson planning/preparation time away from children. 2. Annually, at least two classroom observations[33] are conducted and feedback regarding job performance is provided to the staff member. 3. Annual performance evaluation provided in written format to employee.[34]	1. Teachers and Assistant Teachers are provided at least four hours per month of paid curriculum and lesson planning/preparation time away from children.[30] 2. Staff members are offered a minimum of 15 minutes with no program responsibilities for each 4 hour period worked.
Employee Compensation		1. List of all staff by positions, salary, and tenure. 2. At least 2 employee benefits given to staff. [35]	1. A salary scale based on level of education/training and years of ECE experience is documented. 2. At least 3 employee benefits given to staff[33] and explained in the Policy and Procedure Manual.	At least 4 employee benefits given to staff[33]and explained in the Policy and Procedure Manual.

[32] Refer to the STARS Worksheets for School Age (SACC) for clarifications regarding SACC requirements.
[33] At least one observation is completed by the staff member's direct supervisor.
[34] Performance evaluation is based on direct supervisor's classroom observations, criteria established in advance (i.e. job description), and an employee self-assessment.
[35] Refer to the STARS Worksheets for a list of acceptable employee benefits and for an explanation of prorating for part-time employees.

Pennsylvania Early Learning Keys to Quality Career Lattice



NOTE 1: High school diploma/GED are assumed at Level I.
NOTE 2: These 45 Hours may include 15 Hours of Orientation Training from Level 1.
NOTE 3: For SACC providers, credits on the Career Lattice may be in Education (excluding Secondary Education).
NOTE 4: For Education and Retention (ERA) eligibility, refer to ERA guidance at all levels.
NOTE 5: Credential/Certificate/Diploma programs vary. These may fall on Level III or IV depending upon number of credits awarded. Review transcripts accordingly.
NOTE 6: Refer to the Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in PA document to determine if a practitioner meets Level IV/V Alternative Pathway requirements
NOTE 7: On the Career Lattice, related fields include Human Development, Psychology, Sociology, Social Work, Education, Nursing, Home Economics/Family and Consumer Science, Recreation, Child and Family Studies, Human Services
NOTE 8: Unrelated BA/BS/AA/AAS Degrees that include 30 ECE credits meet Level V of the Career Lattice.
NOTE 9: Continuing college students with at least 60 college credits/18 credits in ECE (EDUC - excluding Secondary Educ. if a SAC only program) are at Level V.
NOTE 10: For a list of approved degrees equivalent to an ECE Degree without teacher certification, go to www.pakeys.org under *Career Development/Requirements*
NOTE 11: At levels VI and above on the Career Lattice, in-state or out-of-state ECE Certification is also accepted regardless of degree awarded.

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS

Family Child Care Home Performance Standards for FY 2013-2014

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Family Child Care Home Performance Standards for FY 2013-2014

Preamble

Keystone STARS: Reaching Higher for Quality Early Learning

The Keystone STARS program was initiated in 2002 as a multifaceted approach to improving programs that serve young children in Pennsylvania. Research-based Performance Standards form the bedrock of this quality improvement program. The standards are guided by the principle that quality early learning is a foundation for children's success, and investment in the early care and education of Pennsylvania's children is an investment in the future. Therefore, the Keystone STARS Performance Standards reflect research-based indicators to improve outcomes for children. The standards are organized into four STAR levels that build upon each other in order to support continuous quality improvement. When a provider meets the Performance Standards for a STAR level, they receive the mark of quality, a STAR designation. A Keystone STARS designation informs families that the director and staff are committed to enhancing quality for the children and families in their program.

Pennsylvania Early Learning Keys to Quality Vision and Mission

Vision: All Pennsylvania families will have access to high quality care and education for their children, fostering successful futures in school and in life.

Mission: To create a comprehensive quality improvement system in which all early learning programs and practitioners are encouraged and supported to improve child outcomes. Improvements in programming are designed to increase the capacity to support children's learning and development; increase educational attainment among practitioners; enhance professional skills and competencies in support of children's learning and development.

Acknowledgements

The Pennsylvania Departments of Public Welfare and Education, Office of Child Development & Early Learning, would like to thank the diverse group of programs, practitioners, Regional Keys staff and partners, and early learning stakeholders from across the State who continue to share their vision and constructive ideas in crafting an indicator based quality improvement system to improve outcomes for children in Pennsylvania. Their honest discussion of how the PA Early Learning Keys to Quality is working locally and their constructive feedback to proposed improvements continues to be invaluable to this process.

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Family Child Care Home Performance Standards for FY 2013-2014

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How to Interpret the Performance Standards Grid

Each STAR level builds on the previous level. Unless otherwise specified, each successive level includes all items in the previous level. Please note that there is important information housed in the footnotes throughout the document and in the STARS Worksheets. For copies of the STARS Worksheets, please contact your Regional Key. Good, Better, Best: Pennsylvania's Continuous Quality Improvement Guide to Best Practices is an optional tool that can be used by STARS Specialists/Managers, STARS Designators, and practitioners to determine at what quality point in the spectrum a program is meeting a Keystone STARS standard. Additional information is available at http://www.pakeys.org/pages/starsDocs.aspx or by contacting your Regional Key.

Enrollment in the Keystone STARS program

Providers that do not meet the STAR 1 Performance Standards, yet wish to begin the process of continuous quality improvement may enroll in Keystone STARS by contacting the Regional Key. By enrolling in Keystone STARS it affords providers access to resources that will assist in working toward a STAR level.

To enroll in Keystone STARS, a provider must meet the following STARS Performance Standards:

Facility holds and posts a current DPW Certificate of Registration.

Complete the Keystone STARS Site Environment Checklist.

Primary Staff Person completes the Family Child Care Home STARS Orientation.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	**STAR 1** **Performance Standards**	**STAR 2** **Performance Standards**	**STAR 3** **Performance Standards**	**STAR 4** **1. Performance Standards, or** **2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards**
General	Must maintain Regular Certificate of Registration and/or meet program standards.[1]	Must meet all standards for STAR 1 and maintain Regular Certificate of Registration.	Must meet all standards for STAR 1 and 2 and maintain Regular Certificate of Registration.	Must meet all standards for STAR 1, 2, and 3 and maintain Regular Certificate of Registration.
Primary Staff Person/Owner Operator Qualifications[2]	1. Level I on the Career Lattice ***2. Complete professional development on the Core Body of Knowledge/ Professional Development Record (CBK/PDR) and FCCERS.*** 3. Current pediatric first aid certification.	1. Level II or above on the Career Lattice. ***2. Complete professional development on Continuous Quality Improvement (CQI) and the Learning Standards.*** 3. Attend child abuse mandated reporter professional development that reflects the most current laws in Pennsylvania.	1. Level III or above on the Career Lattice by 6/30/2013. ***2. Complete Family Child Care Home STARS Orientation Part 2.***	Level IV or above on the Career Lattice by 7/1/2014.[3]

[1] Facilities must maintain DPW Regulations and/or Head Start Performance Standards according to whichever apply to the site.
[2] Refer to the Career Lattice in the appendix.
[3] Until this standard becomes effective on 7/1/2014, the previous standard (Current CDA/CCP or 9 college credits in ECE/CD or related field) continues to be in effect, if the Primary Staff Person/Owner Operator develops an action plan. The action plan will be reviewed annually at designation and it must be completed by 7/1/2014. In addition, the Primary Staff Person/ Owner Operator must take a minimum of 6 credits per year. Please refer to your Regional Key for further information.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	**STAR 1** **Performance Standards**	**STAR 2** **Performance Standards**	**STAR 3** **Performance Standards**	**STAR 4** **1. Performance Standards, or** **2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards**
Primary Staff Person/Owner Operator Development[4]	1. Completion of Family Child Care Home Provider Self-Evaluation provided by DPW in the self-study packet. 2. All staff must have two hours of health and safety professional development annually.[5]	1. Annual professional development plan is developed based on needs identified in the Professional Development Record (PDR) and documented on the professional development plan in the PDR. 2. 12 annual clock hours of professional development based on the PDR. 3. 3 annual clock hours in management, professionalism, supervision, leadership, and/or administration. 4. All staff must attend at least two hour of professional development annually on child observation and/or inclusive practices.[6]	1. Annually participate in 1 professional growth and development activity. 2. 18 annual clock hours of professional development based on the PDR. 3. All staff must attend at least two hours of professional development annually on curriculum, program or child assessment.	***1. Annually participate in 2 professional growth and development activities.*** ***2. 24 annual clock hours of professional development based on the PDR.***
Secondary Staff/Substitutes and Assistants Qualifications	Current pediatric first aid certification.	High School Diploma or Generalized Education Development (GED) certification.		

[4] Refer to the STARS Worksheets for additional information on professional growth and development activities, as well as clock hours.
[5] Refer to the STARS Worksheets for courses that are acceptable.
[6] Refer to the STARS Worksheets for more information on selecting appropriate professional development opportunities.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	**STAR 1** **Performance Standards**	**STAR 2** **Performance Standards**	**STAR 3** **Performance Standards**	**STAR 4** **1. Performance Standards, or** **2. NAEYC/NAA/NFCC Accreditation and bold/italicized Performance Standards**
Secondary Staff/Substitutes and Assistants Development	6 annual clock hours of professional development, based on the PDR, taken by each staff member.	1. Annual professional development plan is developed based on needs identified in the Professional Development Record (PDR). 2. All staff must have two hours of health and safety professional development annually. 3. All staff must attend at least two hours of professional development annually on child observation, inclusive practices, and/or ERS.	1. 9 annual clock hours of professional development, based on the PDR, taken by each staff member. 2. All staff must attend at least two hours of professional development annually on curriculum, program or child assessment.	***1. 12 annual clock hours of professional development based on the PDR, taken by each staff member.*** 2. Annually participate in 1 professional growth and development activity.

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 **Performance Standards**	STAR 2 **Performance Standards**	STAR 3 **Performance Standards**	STAR 4 **1. Performance Standards, or** **2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards**
Child Observation/ Curriculum/ Assessment	Site obtains and maintains copies of the appropriate Learning Standards for all age groups in the program.	1. A developmentally appropriate screening of the child is completed and shared with family within 45 days of program entry.[7] 2. Learning Standards are used as a resource for program planning.	***1. All demographic information, including child, program and staff information, is recorded timely and accuracy is maintained in the Early Learning Network (ELN).***[8, 9] 2. Based on ongoing child observations, developmentally appropriate authentic assessments of the child are completed following the best practices of the selected assessment tool. [10] 3. Results from authentic assessments are used for curriculum, individual child planning, and referral to community resources. 4. Implement a learning curriculum that incorporates the Learning Standards, including a written curriculum statement.	Program crosswalks curriculum and assessment tools to the Learning Standards.

[7] For school-age children, no initial screening is required, however; an observation is completed and shared with family within 90 days of program entry.
[8] While Family providers must meet STAR 3 Family Standards of participating in Authentic Assessments and ELN, they are not required to report into the Early Learning Outcomes Reporting system until July 1, 2013. Visit the PA Keys website www.pakeys.org for more information.
[9] If the functionality of ELN does not allow for entry of the assessment information, demographic information should be collected and child assessments should be completed on paper until the program is able to enter the information online. Attempted compliance should be documented via a record of Help Desk call logs and copies of emails. Upon resolution of the issue, the provider will be responsible for entering all data into ELN.
[10] A child assessment must be completed on school-age children although it is not reported through ELN.

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards
Environment Rating	1. Complete the Keystone STARS Family Child Care Home Learning Environment Checklist. 2. Provider attests that TV, video or DVD watching is limited to no more than 5 hours per week, is developmentally appropriate and supervised.	1. FCCERS-R assessment completed by a STARS ERS assessor. 2. A written Improvement Plan is developed to address any score below a 3.0 on the FCCERS-R.	1. A FCCERS-R assessment by a STARS ERS assessor must average a score of 4.25 2. A written Improvement Plan is developed to address any ERS subscale score below a 3.5.	***1.A FCCERS-R assessment by a STARS ERS assessor must average a score of 5.25*** ***2. A written Improvement Plan is developed to address any ERS subscale score below a 4.25.***

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards
Community Resources/ Family Involvement	1. At enrollment, families are provided with information regarding public, social and community services.[11] 2. The program collects child-centered information at enrollment to facilitate responsive care that is	1. At a minimum of once per year, written information on topics including health and human services, wellness, nutrition and fitness, and/or child development is given and explained to families and staff. 2. If applicable to the child, provider requests from families copies of child's IEP	1. A plan is written and implemented describing procedures to refer families to appropriate social, mental health, educational, wellness, and medical services. 2. A minimum of one opportunity is offered for family involvement (e.g. volunteer opportunities, family play nights, family corner, picnics, lending library, monthly calendars). 3. A minimum of two family	1. If applicable to the child, provider, in conjunction with families and service providers from public social and community service organizations, implements activities appropriate to meet IEP or IFSP goals and/or special needs plans and objectives. 2. Program has policies that demonstrate engagement and

[11] Organizations include Early Intervention, Children and Youth Services, Mental Health and Intellectual Disability Services, County Assistance Office (CAO) and Child Care Information services (CCIS).

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards
	mindful of the needs of individual children and families. A family meeting is offered within 45 days of enrollment to encourage program-family partnerships and share initial observations and goals for the child. 3. Families are verbally informed of substitutes' and assistants' credentials and schedules.	or IFSP, written plans, and/or special needs assessments completed by professionals to inform developmentally appropriate practice. 3. A written method whereby families and providers can exchange observations, concerns and comments (e.g. daily log, notebook message center, family-teacher journal, take-home envelops). 4. A minimum of one family conference is offered per year to discuss the child's progress and behavioral, social, and physical needs. 5. Families are provided with information/application for publicly funded child care/health insurance programs, and tax credit information (Earned Income Tax Credit, PA TAX BACK). 6. Families are given written letter introducing substitutes and assistants, explaining their credentials and schedules.	conferences are offered per year to discuss the child's progress and behavioral, social, and physical needs. Authentic assessments of the child are shared with the family a minimum of two times per year.[12]	partnership with families in program planning and decision-making. 3. Families and school age children are asked, at least once per year, to evaluate the program's efforts to meet their needs (e.g. questionnaire, survey, suggestion box). 4. A minimum of two opportunities are offered for family involvement, one of which is to coordinate opportunity for family group information activity to: a) Enhance knowledge and understanding of child development needs, or b) Enhance health education knowledge.

[12] Best Practices will necessitate more frequent assessments for infants and toddlers.

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/NAFCC Accreditation and bold/italicized Performance Standards
Transition	Program provides general information to families regarding transitioning children to another educational setting.	1. Program transfers child records, at the request of the family, when the child transitions to another educational setting. 2. Program includes age-appropriate activities for children to prepare for transition.	1. Families are offered a group meeting to provide information regarding a child's transition to another educational setting and to encourage families and their children to connect to the school setting by visiting. 2. Program creates, with input from families, a list of community/school stakeholders regarding child transition.	1. Program sends letter of introduction to appropriate community/school stakeholders outlining goal to partner in child transitioning efforts from child care to school setting. 2. Program participates in community/school transition activities as available.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/ NAFCC Accreditation and bold/italicized Performance Standards
Business Practices	1. Copies of inspection reports required by local ordinances such as fire, building, and health inspections are posted where families can easily see them. 2. Program develops and distributes a Family Handbook. 3. File appropriate tax forms. 4. Proof of liability insurance.	1. A financial record keeping system for revenue and expenses is in place. 2. Provider has a signed copy of an established professional Code of Ethics[13].	1. Program creates a projected one-year operating budget, including a statement of income and expenditures. 2. Written job descriptions for substitutes and assistants, if applicable. 3. Review fire safety plan and emergency plan (including risk management) annually and update as necessary.	1. Current business plan. 2. Policy and procedure manual includes written health policies to cover topics per CFOC National Standards and found in published Model Child Care Health Policy booklet (ECELS/NAEYC/AAP) and is made available to staff at all times.

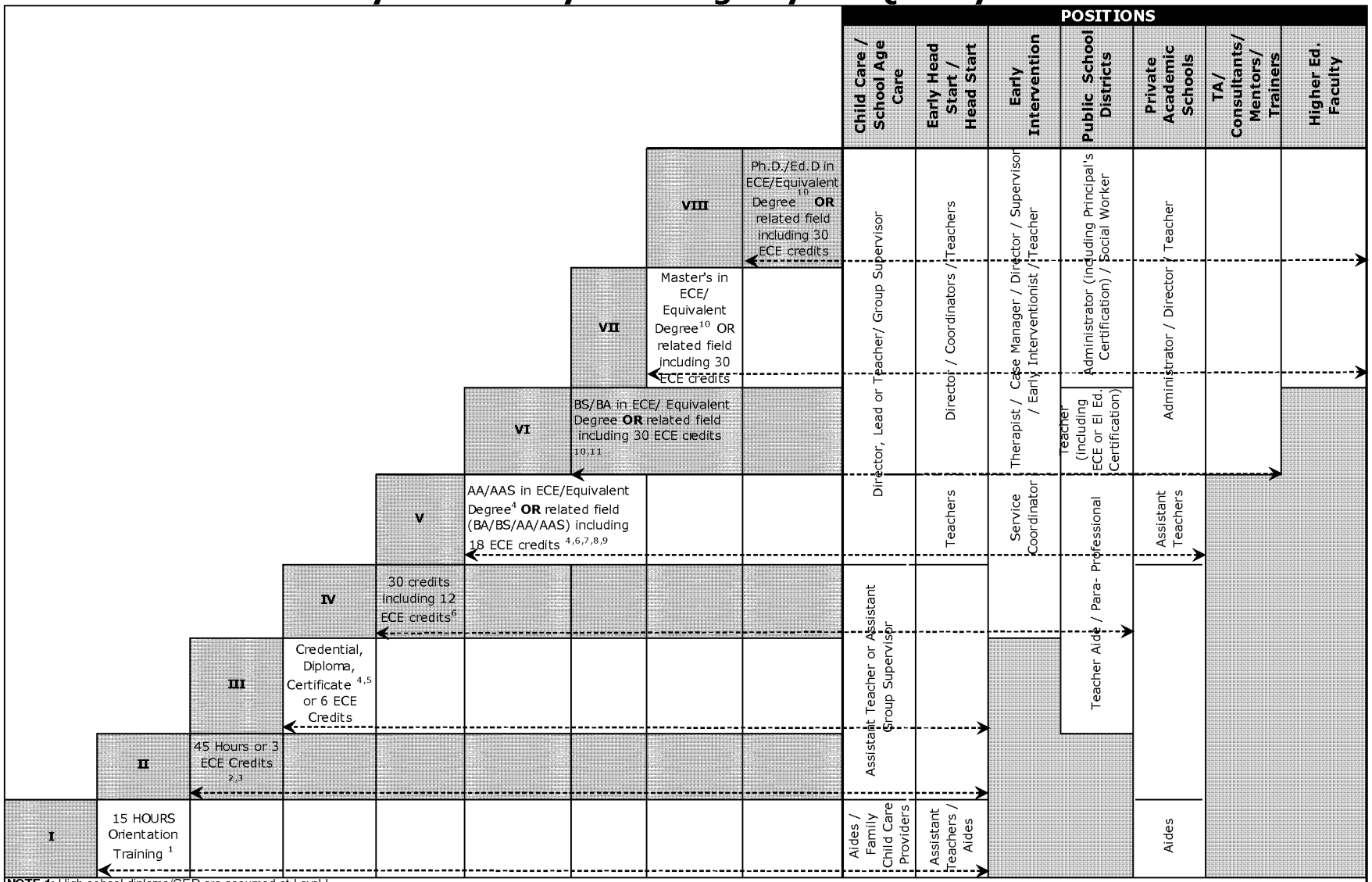
[13]Official codes of conduct from organizations, such as NAEYC, may be adopted.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR FAMILY CHILD CARE HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA/ NAFCC Accreditation and bold/italicized Performance Standards
Continuous Quality Improvement	Program uses documents for tracking illnesses and injuries, including plans of action to prevent further occurrences.	1. Complete and provide the professional development plan in the PDR. 2. System of site safety review including strategies for supervising children and corresponding plan of action are instituted.	***Provider develops and implements a Continuous Quality Improvement Plan using multiple sources[14].***	
Employee Compensation	Providers make provisions for substitutes or designated qualified staff in emergency situations.	1. List of all staff by positions, salary, and tenure. 2. At least 1 employee benefit[15] given to staff.		

[14]Sources of information include surveys of families, staff and/or school-aged children, ERS, LIS, audits, FPDP, etc.
[15] Refer to the STARS Worksheet for a list of acceptable employee benefits and for an explanation of prorating for part-time employees.

Pennsylvania Early Learning Keys to Quality Career Lattice



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NOTE 4: For Education and Retention (ERA) eligibility, refer to ERA guidance at all levels.
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NOTE 6: Refer to the Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in PA document to determine if a practitioner meets Level IV/V Alternative Pathway requirements
NOTE 7: On the Career Lattice, related fields include Human Development, Psychology, Sociology, Social Work, Education, Nursing, Home Economics/Family and Consumer Science, Recreation, Child and Family Studies, Human Services
NOTE 8: Unrelated BA/BS/AA/AAS Degrees that include 30 ECE credits meet Level V of the Career Lattice.
NOTE 9: Continuing college students with at least 60 college credits/18 credits in ECE (EDUC - excluding Secondary Educ. if a SAC only program) are at Level V.
NOTE 10: For a list of approved degrees equivalent to an ECE Degree without teacher certification, go to www.pakeys.org under *Career Development/Requirements*
NOTE 11: At levels VI and above on the Career Lattice, in-state or out-of-state ECE Certification is also accepted regardless of degree awarded.

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS

Group Home Performance Standards for FY 2013-2014

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Group Home Performance Standards for FY 2013-2014

Preamble

Keystone STARS: Reaching Higher for Quality Early Learning

The Keystone STARS program was initiated in 2002 as a multifaceted approach to improving programs that serve young children in Pennsylvania. Research-based Performance Standards form the bedrock of this quality improvement program. The standards are guided by the principle that quality early learning is a foundation for children's success, and investment in the early care and education of Pennsylvania's children is an investment in the future. Therefore, the Keystone STARS Performance Standards reflect research-based indicators to improve outcomes for children. The standards are organized into four STAR levels that build upon each other in order to support continuous quality improvement. When a provider meets the Performance Standards for a STAR level, they receive the mark of quality, a STAR designation. A Keystone STARS designation informs families that the director/primary staff person and staff are committed to enhancing quality for the children and families in their program.

Pennsylvania Early Learning Keys to Quality Vision and Mission

Vision: All Pennsylvania families will have access to high quality care and education for their children, fostering successful futures in school and in life.

Mission: To create a comprehensive quality improvement system in which all early learning programs and practitioners are encouraged and supported to improve child outcomes. Improvements in programming are designed to increase the capacity to support children's learning and development; increase educational attainment among practitioners; enhance professional skills and competencies in support of children's learning and development.

Acknowledgements

The Pennsylvania Departments of Public Welfare and Education, Office of Child Development & Early Learning, would like to thank the diverse group of programs, practitioners, Regional Keys staff and partners, and early learning stakeholders from across the State who continue to share their vision and constructive ideas in crafting an indicator based quality improvement system to improve outcomes for children in Pennsylvania. Their honest discussion of how the PA Early Learning Keys to Quality is working locally and their constructive feedback to proposed improvements continues to be invaluable to this process.

KEYSTONE STARS: CONTINUOUS QUALITY IMPROVEMENT FOR LEARNING PROGRAMS
Group Home Performance Standards for FY 2013-2014

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How to Interpret the Performance Standards Grid

Each STAR level builds on the previous level. Unless otherwise specified, each successive level includes all items in the previous level. Please note that there is important information housed in the footnotes throughout the document and in the STARS Worksheets. For copies of the STARS Worksheets, please contact your Regional Key. Good, Better, Best: Pennsylvania's Continuous Quality Improvement Guide to Best Practices is an optional tool that can be used by STARS Specialists/Managers, STARS Designators, and practitioners to determine at what quality point in the spectrum a program is meeting a Keystone STARS standard. Additional information is available at http://www.pakeys.org/pages/starsDocs.aspx or by contacting your RK.

Enrollment in the Keystone STARS program

Providers that do not meet the STAR 1 Performance Standards, yet wish to begin the process of continuous quality improvement may enroll in Keystone STARS by contacting the Regional Key. By enrolling in Keystone STARS it affords providers access to resources that will assist providers in working toward a STAR level.

To enroll in Keystone STARS, a provider must meet the following STARS Performance Standards:

Facility holds and posts a current DPW Certificate of Compliance.
Complete the Keystone STARS Site Environment Checklist.
Director (Primary Staff Person) completes the STARS Orientation.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR GROUP HOMES	**STAR 1** **Performance Standards**	**STAR 2** **Performance Standards**	**STAR 3** **Performance Standards**	**STAR 4** **1. Performance Standards, or** **2. NAEYC/NAA Accreditation and bold/italicized Performance Standards**
General	Must maintain Regular Certificate of Compliance and/or meet program standards.[1]	Must meet all standards for STAR 1 and maintain Regular Certificate of Compliance.	Must meet all standards for STAR 1 and 2 and maintain Regular Certificate of Compliance.	Must meet all standards for STAR 1, 2, and 3 and maintain Regular Certificate of Compliance.
Primary Staff Person as the Operator Qualifications[2]	**Complete professional development on the Core Body of Knowledge/ Professional Development Record (CBK/PDR) and Foundations of the Environment Rating Scale (ERS).**	1. Level III or above on the Career Lattice. 2. New Staff Orientation[3] completed by all aides and new staff within 90 days of start of employment. 3. Complete professional development on Continuous Quality Improvement (CQI), the Facility Professional Development Plan (FPDP), and the Learning Standards. **4. Complete professional development in the ERS scales appropriate to age groups in the facility.** 5. Attend child abuse mandated reporter professional development that reflects the most current laws in Pennsylvania. 6. Current pediatric first aid certification.	1. Level IV or above on the Career Lattice by 6/30/13. 2. Complete STARS Orientation Part 2.	Level IV[4] or above on the Career Lattice by 6/30/13.

[1] Facilities must maintain DPW Regulations and/or Head Start Performance Standards according to whichever apply to the site.
[2] Refer to the Career Lattice in the appendix.
[3] New Staff orientation can be provided using the OCDEL-approved Better Kid Care video series OR 15 hours of documented topics outlined by *Caring for Our Children 3rd ed., Section 1.4.2.* If the Better Kid Care videos offered are not utilized, documentation is required of PQAS approved professional development (including course title, hours and instructor name/signature) that has been cross-walked to the *Caring for Our Children* topic areas.
[4] Effective 7/1/2015, the STAR 4 requirement will be "Level V or above."

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR GROUP HOMES	**STAR 1** **Performance Standards**	**STAR 2** **Performance Standards**	**STAR 3** **Performance Standards**	**STAR 4** **1. Performance Standards, or** **2. NAEYC/NAA Accreditation and bold/italicized Performance Standards**
Primary Staff Person as the Operator Development[5]		1. Annual professional development plan is developed based on needs identified in the Professional Development Record (PDR). 2. Annually participate in 1 professional growth and development activity. 3. 12 annual clock hours of professional development based on the PDR. 4. 3 annual clock hours in management, professionalism, supervision, leadership, and/or administration. 5. All staff must have two hours of health and safety professional development annually.[6] 6. All staff must attend at least two hours of professional development annually on child observation, inclusive practices, and/or ERS.[7]	1. Annually participate in 1 professional growth and development activities. 2. 18 annual clock hours of professional development based on the PDR.	***1. Annually participate in 2 professional growth and development activities.*** ***2. 24 annual clock hours of professional development based on the PDR.*** 3. Complete the PA Director's Credential by 7/1/2015.
Secondary Staff Qualifications[8]		1. New Staff Orientation[9] completed by all aides and new staff within 90 days of start of employment. 2. High School Diploma or Generalized Education Development (GED) certification. 3. All staff at Level I on the Career Lattice.	Maintain at least one secondary staff person at Level II on the Career Lattice.	Maintain at least one secondary staff member at Level III on the Career Lattice.

[5] Refer to the STARS Worksheets for additional information on professional growth and development activities, as well as clock hours.
[6] Refer to the STARS Worksheets for courses that are acceptable.
[7] Refer to the STARS Worksheets for more information on selecting appropriate professional development opportunities.
[8] Refer to the Career Lattice in the appendix.
[9] New Staff orientation can be provided using the OCDEL-approved Better Kid Care video series OR 15 hours of documented topics outlined by *Caring for Our Children 3rd ed., Section 1.4.2.* If the Better Kid Care videos offered are not utilized, documentation is required of PQAS approved professional development (including course title, hours and instructor name/signature) that has been cross-walked to the *Caring for Our Children* topic areas.

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Secondary Staff Development[10]		1. Annual professional development plan is developed based on needs identified in the Professional Development Record (PDR). 2. 9 annual clock hours of professional development, based on the PDR, taken by each staff member.[11] 3. All staff must have two hours of health and safety professional development annually.[12] 4. All staff must attend professional development annually on child observation, inclusive practices, and/or ERS.[13] 5. One additional staff member must have current pediatric first aid certification.	1. 15 annual clock hours of professional development, based on the PDR, taken by each staff member.[14] 2. Additional staff must attend at least two hour of professional development annually on curriculum, program or child assessment the age-appropriate Learning Standards and/or ERS.[16]	***1. 18 annual clock hours of professional development based on the PDR, taken by each staff member.***[15] 2. Annually participate in 1 professional growth and development activity.

[10] Refer to the STARS Worksheets for additional information on professional growth and development activities, as well as annual clock hours.
[11] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 3 annual clock hours.
[12] Refer to the STARS Worksheets for courses that are acceptable.
[13] Refer to the STARS Worksheets for more information on selecting appropriate professional development opportunities.
[14] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 6 annual clock hours.
[15] Staff working less than 500 hours per year and volunteers/substitutes working more than 500 hours per year must take 9 annual clock hours.

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Child Observation/ Curriculum/ Assessment	Site obtains and maintains copies of the appropriate Learning Standards for all age groups in the program.	1. A developmentally appropriate screening of the child is completed and shared with family within 45 days of program entry.[16] 2. Learning Standards are used as a resource for staff in classroom planning and documentation of children's learning. 3. Provider selects an OCDEL approved assessment tool.	***1. All demographic information, including child, program and staff information, is recorded timely and accuracy is maintained in the Early Learning Network (ELN).***[17,1819] 2. Based on Ongoing child observations, developmentally appropriate authentic assessments of the child are completed and reported electronically into an OCDEL approved assessment tool following the tool's specified timeframes. 3. Results from the authentic assessments are used for curriculum, individual child planning, and referral to community resources. 4. Implement a learning curriculum that incorporates the Learning Standards, including a written curriculum statement.	1. Program utilizes a curriculum that has been aligned to the Learning Standards for Early Childhood. If the program's curriculum has not been aligned, the provider must crosswalk the curriculum to the Learning Standards.[20]

[16] For school age children, no initial screening is required however an observation is completed and shared with family within 90 days of program entry. See SACC worksheets.
[17] If the functionality of ELN does not allow for entry of the assessment information, demographic information should be collected and child assessments should be completed on paper until the program is able to enter the information online. Attempted compliance should be documented via a record of Help Desk call logs and copies of emails. Upon resolution of the issue, the provider will be responsible for entering all data into ELN.
[18] A child assessment must be completed on school-age children although it is not reported through ELN.
[19] Head Start State Supplemental providers are required to enter their data into ELN. Federal Head Start/Early Head Start providers may choose to submit their child enrollment data into ELN using the State Longitudinal Data (SLDS) upload process.
[20] A list of aligned tools can be found on the SAS page (http://websites.pdesas.org/ocdel/default.aspx).

LEARNING PROGRAM

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Environment Rating	Complete the Learning Environment Checklist.	1. ERS self-assessment of every classroom/age group must be completed annually by a staff member who has completed approved ERS professional development.[21] 2. A written Improvement Plan is developed to address any ERS subscale score below a 3.0.	1. The average facility score of all sampled classrooms/age groups assessed by a STARS ERS assessor must be 4.25. 2. Each individual sampled classroom/age group must have an ERS score no less than 3.5. 3. A written Improvement Plan is developed to address any ERS subscale score below a 3.5.	***1. The average facility score of all sampled classrooms/age groups assessed by a STARS ERS assessor must be a 5.25.*** ***2. Each individual sampled classroom/age group must have an ERS score no less than 4.25.*** ***3. A written Improvement Plan is developed to address any ERS subscale score below a 4.25.***

[21] Refer to the STARS Worksheet for more information.

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized
Community Resources/ Family Involvement	1. At enrollment, families are provided with information regarding public, social and community services.[22] 2. The program collects child-centered information at enrollment to facilitate responsive care that is mindful of the needs of individual children and families. A family meeting is offered within 45 days of enrollment to encourage program-family partnerships and share initial observations and goals for the child.	1. At a minimum of once per year, written information on topics including health and human services, wellness, nutrition and fitness, and/or child development is given and explained to families and staff. 2. If applicable to the child, provider requests from families copies of child's IEP or IFSP, written plans, and/or special needs assessments completed by professionals to inform classroom practice. 3. Individual child information is shared in written form with families on a daily basis for infants and toddlers, and there is a format and procedure for use on an as needed basis for other age groups. 4. Specific group or classroom information is shared with families daily using a visual communication format. 5. A minimum of one family conference is offered per year to discuss the child's progress and behavioral, social, and physical needs. 6. Families are provided with information/application for publicly funded child care/health insurance programs, and tax credit information (Earned Income Tax Credit, PA TAX BACK) upon enrollment.	1. A plan is written and implemented describing procedures to refer families to appropriate social, mental health, educational, wellness, and medical services. 2. Coordinate a minimum of one annual group activity to involve family in meeting program learning goals.[23] 3. A minimum of two family conferences are offered per year to discuss the child's progress and behavioral, social, and physical needs. Authentic assessments of the child are shared with the family a minimum of two times per year.[24]	1. If applicable to the child, provider, in conjunction with families and service providers from public social and community service organizations, implements activities appropriate to meet IEP or IFSP goals and/or special needs plans and objectives. 2. Program has policies that demonstrate engagement and partnership with families in program planning and decision-making.

[22] Organizations include Early Intervention, Children and Youth Services, Mental Health and intellectual Disability Services, County Assistance Office (CAO) and Child Care Information services (CCIS).
[23] Refer to the STARS Worksheets for suggested activities.
[24] Best Practices will necessitate more frequent assessments for infants and toddlers.

PARTNERSHIPS WITH FAMILY & COMMUNITY

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Transition	Program provides general information to families regarding transitioning children to another classroom or educational setting.	1. Program transfers child records, at the request of the family, when the child transitions to another educational setting. 2. Program includes age-appropriate activities for children to prepare for transition.	1. Families are offered a group meeting to provide information regarding a child's transition to another classroom or higher educational setting and to encourage families and their children to connect to the school setting by visiting. 2. Program creates, with input from families, a list of community/school stakeholders regarding child transition.	1. Program sends letter of introduction to appropriate community/school stakeholders outlining goal to partner in child transitioning efforts from child care to school setting. 2. Program participates in community/school transition activities as available. 3. Program offers families an individual meeting to share specific information regarding the child's transition to another classroom or educational setting and to give families written information about the child's developmental progress.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Business Practices	Program develops and distributes a Family Handbook.	1. Program creates a projected one-year operating budget, including a statement of income and expenditures. 2. A financial record keeping system for revenue and expenses is in place. 3. Organizational structure and job descriptions[25] are included in a personnel policy manual that is shared with staff.	1. A financial system with quarterly comparisons of expenses to revenue is implemented. 2. The program creates a mission statement.	1. Annual operational business plan to address organizational stability and to implement quarterly reconciliation. 2. Program establishes a written code for professional conduct of staff. 3. A policy and procedure manual[26] is developed and available to the staff at all times. 4. Risk management plan[27] is written and developed that identifies potential operational risks and specific ways to reduce or eliminate risk.
Continuous Quality Improvement	Program uses documents for tracking illnesses and injuries, including plans of action to prevent further occurrences.	1. Complete and provide an annual Facility Professional Development Plan (FPDP) (or equivalent). 2. System of site safety review including strategies for supervising children and corresponding plan of action are instituted.	***Provider develops and implements a Continuous Quality Improvement Plan using multiple sources[28].***	***A Strategic Plan is aligned with the program's mission statement and put in place.***

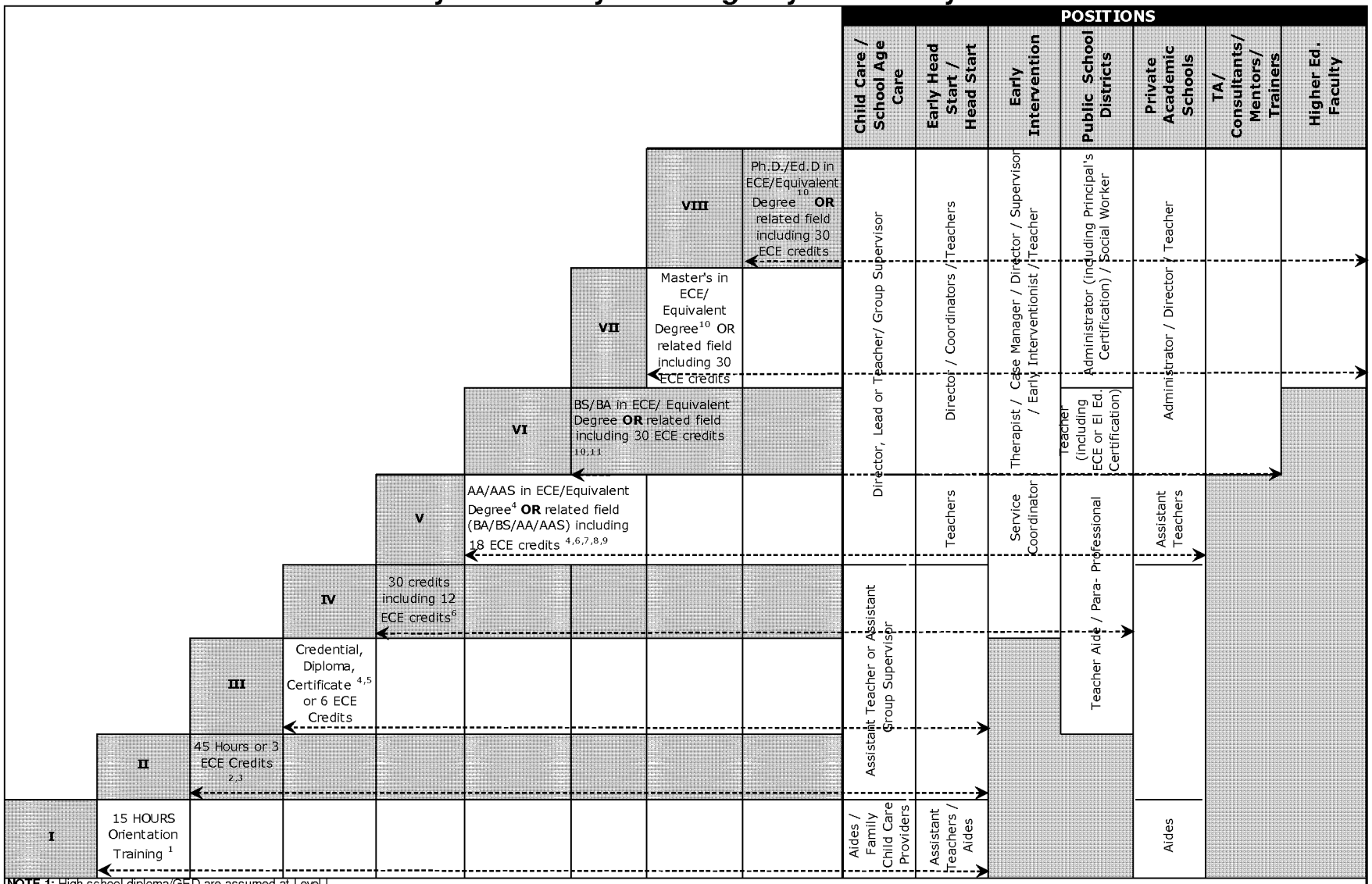
[25] An organizational chart should be accompanied by a written description of the duties and responsibilities of each staff position and the lines of authority and responsibility within the group home.
[26] Manual includes personnel policies and written health policies covering topics found in *Caring for Our Children 3rd ed.*, published Model Child Care Health Policy booklet (ECELS/NAEYC/AAP) and/or other appropriate Business Practice tools.
[27] Risk Management Plan is reviewed at least annually and updated as deemed necessary.
[28] Sources of information include surveys of families, staff and/or school-aged children, ERS, LIS, audits, FPDP plan, etc.

LEADERSHIP AND MANAGEMENT

PERFORMANCE STANDARDS FOR GROUP HOMES	STAR 1 Performance Standards	STAR 2 Performance Standards	STAR 3 Performance Standards	STAR 4 1. Performance Standards, or 2. NAEYC/NAA Accreditation and bold/italicized Performance Standards
Staff Communication and Support	1. Program provides documentation of a staff meeting held within the last six months. 2. Director (Primary Staff Person) develops and annually implements a plan for sharing information about Keystone STARS, continuous quality improvement, Strategies for supervising children and professional development with staff members.	1. Each staff person must participate in a staff meeting at least once per month. Staff meeting must include discussions of quality and its impact on the Learning Program. 2. Director (Primary Staff Person) meets with each staff member using the plan developed in STAR 1. For new staff, this meeting is held within 90 days of start of employment.	1. Teachers and Assistant Teachers are provided at least two hours per month of paid curriculum and lesson planning/preparation time away from children. 2. Annually, at least two classroom observations[29] are conducted and feedback regarding job performance is provided to the staff member. 3. Annual performance evaluation provided in written format to employee.[30]	1. Teachers and Assistant Teachers are provided at least four hours per month of paid curriculum and lesson planning/preparation time away from children. 2. Staff members are offered a minimum of 15 minutes with no program responsibilities for each 4 hour period worked.
Employee Compensation		1. List of all staff by positions, salary, and tenure. 2. At least 1 employee benefits given to staff[31].	1. A salary scale based on level of education/training and years of ECE experience is documented. 2. At least 2 employee benefits given to staff[30] and explained in the Policy and Procedure Manual.	At least 3 employee benefits given to staff[30] and explained in the Policy and Procedures Manual.

[29] At least one observation is completed by the staff member's direct supervisor.
[30] Performance evaluation is based on direct supervisor's classroom observation, criteria established in advance (i.e. job description) and an employee self-assessment.
[31] Refer to the STARS Worksheet for a list of acceptable employee benefits and for an explanation of prorating for part-time employees.

Pennsylvania Early Learning Keys to Quality Career Lattice



NOTE 1: High school diploma/GED are assumed at Level I.
NOTE 2: These 45 Hours may include 15 Hours of Orientation Training from Level 1.
NOTE 3: For SACC providers, credits on the Career Lattice may be in Education (excluding Secondary Education).
NOTE 4: For Education and Retention (ERA) eligibility, refer to ERA guidance at all levels.
NOTE 5: Credential/Certificate/Diploma programs vary. These may fall on Level III or IV depending upon number of credits awarded. Review transcripts accordingly.
NOTE 6: Refer to the Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in PA document to determine if a practitioner meets Level IV/V Alternative Pathway requirements
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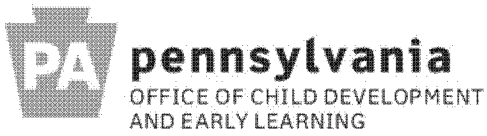

The "Good, Better, Best" (GBB) document was developed from experience managing the

Keystone STARS program, analysis of current research, and insights/suggestions practitioners have shared. The GBB document was created to assist practitioners in assessing program strengths as well as help identify next steps for improvement. Thoughtful assessment using a variety of sources of evidence can lead to the development of a meaningful continuous quality improvement (CQI) plan. This optional tool supports programs in meeting the targeted standards and understanding the more subtle continuum of quality contained within a standard. The tool allows programs not choosing to move up to a higher STAR level to consider making incremental improvements within a STAR level or standard. It also allows programs to identify areas where the minimum standard is exceeded and can be used to determine at what point in the spectrum a standard is being met. Understanding the quality continuum of a standard will enable programs to be more focused and specific in quality improvement efforts. Because Keystone STARS are indicator based standards, the concepts of incremental improvement demonstrated in GBB are able to be generalized to comprehensive quality improvement.

Continuous quality improvement requires a solid practice of reflection. When individuals and programs take the time to consider where they are and where they want to go, the pathway becomes clearer for both individuals and programs. The GBB document is meant to be a reflective tool for users when considering the direction a program might want to embark upon and assists in setting both short term and long term goals for improvement. There aren't any "right" or "wrong" answers with GBB. The intent of the document is to solidify for practitioners and other users the premise that Keystone STARS standards are not a "checklist" to be met, but guidance around elements of quality. STARS standards are not meant to be the "be all end all" of quality, but a piece in the quality continuum. No two programs are alike; nor should they be.

GBB celebrates the uniqueness of early learning and school programs and supports practitioners in their reflective practices.

In 2011, GBB was broken into two documents. One for Center/Group practitioners and a second for Family Child Care Practitioners. The Center/Group document is 123 pages in length. Seventy-eight percent of the Keystone STARS standards are included in GBB, and it spans STAR levels and is divided into the four areas of the Keystone STARS standards which are: (1) Staff Qualifications and Professional Development, (2) Learning Program, (3) Family and Community Partnerships, and (4) Leadership and Management.

The Family Child Care GBB document is 63 pages in length. Sixty percent of the Keystone STARS standards are included in the Family Child Care GBB, and it is broken down by Keystone STAR levels to better meet the needs of this population. The slight format difference in the Family Child Care GBB was based on feedback from providers and targets their needs as an independent operator more specifically.

Each standard in both versions of GBB is supported by research to validate the inclusion of each one in the Keystone STARS program standards. Reference materials were also added to assist users in understanding the justification behind each standard.

Version 2.0 Center/Group and Version 1.0 Family Child Care includes the following sections:

- ***Description of Criteria at each STAR Level***: This section is the quality continuum that a program uses to determine the "Good, Better or Best" level at which a standard is being met.
- ***Research***: This section contains qualitative as well as quantitative research from peer reviewed journals. Many of these citations will have a cost involved to download the document unless you are a subscriber to the site or journal, but they serve as a basis for the particular standard.
- ***Reference***: This section contains books, articles and other resources that support a standard. There are links that can be copied and pasted into a browser or link up directly to the article or tool. This section is especially useful for staff of early learning programs

who want easy to understand resources to share with families, colleagues and apply to practice.

- ***Sources of Evidence***: This section describes examples of sources of evidence that Programs, STARS Support Staff, Technical Assistance and Professional Development Consultants could use to document that a standard is being met. These sources of evidence are not exhaustive; programs may have other documents or unique sources of evidence that verify a standard is being met. The review of sources of evidence is part of the Keystone STAR accountability.
- ***Supports Available***: This section provides additional resources and tools that are available to assist programs in creating Continuous Quality Improvement (CQI) plans or in meeting a level of the continuum.
- ***Program Considerations:*** This section provides guidance/additional requirements around how other programs beyond Centers, Groups and Family Child Care can meet continuum levels. These considerations can be: Head Start (HS), Pre-K Counts (PKC), or School-Age (SACC) or Health and Safety items. Please note that standards may not address every consideration or continuum level.

Regional professional development on GBB is available. Additionally, all users of GBB are being asked to provide feedback on format and content through June 2012 to ensure that the documents strongly support CQI and reflective practice among Pennsylvania's early learning and school-age professionals. As the document is intended to focus on the needs of the practitioner/programs, this input will be invaluable as future versions are developed and disseminated.

To demonstrate the format of the two documents, below you will find examples of the Family Child Care GBB for *Leadership and Management* and *Learning Program* standards. *Partnerships with Family and Community* as well as *Staff Qualifications and Professional Development* for the Center/Group GBB standards are profiled below also.

LEARNING PROGRAM

Standard: A developmentally appropriate screening of the child is completed and shared with the family within 45 days of program entry. (effective 7/1/2012) (STAR 2)

	Good	Better	Best
Description of criteria at each level	• Developmentally Appropriate screening completed within 45 days from enrollment date and shared with families at "Getting To Know You"/Family Meeting • Screening instrument is reliable and valid. • Program has list of community resources available to families for possible referrals	• Families are included in completion of screening. • Formal Procedure for initial screening and referrals are located in the policy and procedure manual • Ongoing observations are completed in addition to the 45 day screening that record children's progress in the Key Learning Areas indicated in the Early Learning or Academic Standards	• Screenings are conducted as often as tool recommends or if there are changes to child's behavior or appearance • Use of interpreters in home language if necessary for written or oral communication of results • Sharing of information is sensitive to the diverse needs/backgrounds of families
Source(s) of Evidence	• Completed Developmental Screening such as Ages and Stages • Notes from parent/teacher conference • Resources for referral		
Supports Available	• Ages & Stages Professional Development: http://www.pakeys.org/private/profdev/prof_dev_calendar.asp • Technical Assistance on developmental screenings and supporting families are available through each Regional Key • An Optional Tool for referring families for services is available on the PA Key website: http://www.pakeys.org/pages/starsDocs.aspx		
References	• PACER Center. (2006). *Strategies for success in local early childhood parent outreach activities among diverse cultures* (ACTion Sheet: PHP-c132). Minneapolis, MN: PACER Center. Retrieved from http://www.pacer.org/parent/php/php-c132.pdf		
Research	Research shows that the use of a developmental screening instrument increases the detection of developmental delays. In addition, developmental questionnaires completed by parents may be a useful tool for practitioners in early childhood settings. Jee, S.H., Szilagyi, M., Ovenshire, C., Norton, A., Conn, A., Blumkin, A., & Szilagvi, P.G. (2010). Improved detection of developmental delays among young children in foster care. *Pediatrics,* 125, 282-289. Squires, J., Potter, L., Bricker, D., & Lamorey, S. (1998). Parent-completed developmental questionnaires: Effectiveness with low and middle income parents. *Early Childhood Research Quarterly, 13*(2), 345–354.		

FCC GBB v. 1.0 07/01/2011

pennsylvania
OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

LEADERSHIP AND MANAGEMENT

Standard: At least 1 employee benefit given to staff. (STAR 2)

	Good	Better	Best
Description of criteria at each level	• Program makes at least one of the following benefits available to eligible staff (as defined by the program): Flex time, Attendance bonus, Performance bonus; Paid professional membership, or Payment for staff development • Mandated benefits are paid (Social Security, Unemployment insurance, and Worker's compensation)	• Program makes at least one of the following benefits available to eligible staff: Annual incremental raises based on performance evaluation, Life insurance, Paid % of health insurance, Paid sick leave, Paid vacation/holidays, Reduced fee for child care services, Retirement plan, Short and/or long-term disability, Transportation Assistance, or Tuition reimbursement • Annual performance evaluation completed for each staff	• Program makes at least two of the following benefits available to eligible staff: Annual incremental raises based on performance evaluation, Flex time, Life insurance, Paid % of health insurance, Payment for staff development, Paid professional membership, Paid sick leave, Paid vacation/holidays, Reduced fee for child care services, Retirement plan, Short and/or long-term disability, and Tuition reimbursement
Source(s) of Evidence	• List of benefit options included in information given to employees • Employee receipt of benefit(s)		
Supports Available	• STARS TA		
References	• Employee Benefit Research Institute: www.ebri.org • Small Business Administration, providing employee benefits: www.sba.gov/content/providing-employee-benefits • U.S. Department of Labor Employee Benefits Security Administration: www.dol.gov/ebsa/ • Solis, H. L. & Hall, K. (2010). *Occupational outlook handbook, 2010-2011 Edition, Child care workers.* Washington, DC: U.S. Bureau of Labor Statistics. Retrieved from http://www.bls.gov/oco/ocos170.htm		
Research	Research shows that retention is higher among employees who receive extrinsic rewards (such as health benefits). In addition, child care staff benefits are significant predictors of child care quality. Hausknecht, J., Rodda, J. M. & Howard, M.J. (2008). Targeted employee retention: Performance-based and job-related differences in reported reasons for staying. *Human Resource Management, 48*(2), 269-288. Retrieved from http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1485&context=cahrswp&sei-redir=1#search="benefits+and+employee+retention" Whitebook, M., Howes, C., & Phillips, D. (1990). *Who cares? Child care teachers and quality of care in America.* Final Report: National Child Care Staffing Study. Oakland, CA: Child Care Employee Project. Retrieved from http://www.eric.ed.gov/PDFS/ED323032.pdf		

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

Standard: Annual clock hours of professional development based on PDR. (Covers 3 separate standards - STAR 2 and above)

	Good	Better	Best
Description of Criteria at each STAR Level	• STAR 2 15 hours (Directors) 12 hours (All Staff) • STAR 3 21 hours (Directors) 18 hours (Teachers/Assistants) 12 hours (Aides) • STAR 4 27 hours (Directors) 24 hours (Teachers/Assistants) 15 hours (Aides) • Group Child Care • STAR 2 15 hours (Primary) 9 (Secondary) • STAR 3 18 hours (Primary) 15 hours (Secondary) • STAR 4 24 hours (Primary) 18 hours (Secondary) • 25% face-to-face PD events/75% are video or in-house events. (Percentage of face-to-face PD events can be higher.) Online college courses are not considered video module learning. • PD selected should be relevant to age of group(s) teacher works with	• Some hours are at higher competency levels • Courses that are part of a series • PD is spread through the year, not "bunched up" just before designation/renewal • 50% face-to face PD events/50% video or in-house PD events. (Percentage of face-to-face events can be higher.) Online college courses are not considered video module learning. • Staff who have regular contact with children, youth, or their families receive training on mandatory reporting and the identification of indicators of suspected abuse and neglect. • Staff who work with children and youth are trained in: child and youth development, and the differing needs of children and youth at different stages of development; building positive relationships with children and youth; understanding how staff behavior can influence the behavior of children and youth; cultural awareness, sensitivity, and responsiveness; and understanding and combating bias and discrimination	• Some hours for each staff member are from credit bearing courses (Teachers/Assts) and Aides do a minimum of one credit/15 hours for direct credit • Involvement in CDA or courses that are part of a series (aides) • 75% face-to face PD events/25% video or in-house PD events (Percentage of face-to-face events can be higher.) Online college courses are not considered video module learning Staff who work with children and youth are trained in: working and communicating with families; designing and/or facilitating activities that support program goals and engage program participants; topics relevant to program goals and activities; and recognizing when children and youth may benefit from additional or alternative services • Program administrators and/or directors receive training in: program administration and management; staff supervision; and legal topics relevant to program operations, management, and oversight of programs

Research	Effective professional development requires repeated opportunities for individualized feedback. Research shows that when staff are empowered and supported in developing personal goals and objectives, they are more motivated to stay with the program. Brown, J. R., Knoche, L. L., Edwards, C. P., & Sheridan, S. M. (2009). Professional development to support parent engagement: A case study of early childhood practitioners. *Early Education and Development, 20*(3), 482-506. Retrieved from http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1014&context=cyfsfacpub&sei-redir=1#search="Professional+development+to+support+parent+engagement:+A+case+study+of+early+childhood+practitioners." Huang, D., & Cho, J. (2010). Using professional development to enhance staff retention. *Afterschool Matters, 12*, 9-16. Retrieved from http://www.niost.org/pdf/afterschoolmatters/ASM_Fall2010.pdf#page=13 Pianta, R. C., Mashburn, A. J., Downer, J. T., Hamre, B. K., & Justice, L. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly, 23*(4), 431-451. Retrieved from http://www.cds.unc.edu/CCHD/F2009/10-05/Pianta%20EARCHI_384-mtp-effects.pdf
Reference	Bowie, L., Garrett, S. B., Kinukawa, A., McKinney, K., Moore, K. A., Redd, Z., Theokas, C., & Wilson, B. (2006). *Program implementation: What do we know?* Washington, DC: Child Trends. Retrieved from http://www.childtrends.org/Files/Child_Trends-2007_06_01_FR_PrgmImplementation.pdf
Source(s) of Evidence	• Training certificates • Transcripts • Professional Development History • Attendance Sheets from PDO or online verification (if certificates are not signed OR proof of payment cross-referencing staff) • Annual Training Plan • PDE website (Act 48)
Supports Available	• PA Keys Online Calendar www.pakeys.org • Distance learning opportunities through Better Kid Care http://betterkidcare.psu.edu/page02a.html • Distance learning opportunities through ECELS http://www.ecels-healthychildcarepa.org/section.cfm?sectionID=4 • Professional Development that supports English as Second Language Learners-ELL (Spanish especially) • Remedial coursework, including English/writing • Online training on ELL or language acquisition • Satellite training/ Teleconferences in primary language of audience • Online opportunities, including webinars and webcasts in primary language of audience • "Beyond the PDR" sessions • Professional Development listing is available on http://www.pdesas.org/ocdel under the Professional Development tab

STAFF QUALIFICATIONS & PROFESSIONAL DEVELOPMENT

Program Considerations	• SACC – The content of staff professional development needs to be appropriate for the age groups served (including child development and other areas related to after school programming) • I/T – Provide training and/or coursework specifically addressing infants and toddlers • PKC – PA Pre-K Counts classroom personnel must have a minimum of 24 professional development hours annually with content that is related to early childhood education and/or required coursework for moves through the Career Lattice levels • PKC – Every PA Pre-K Counts teacher must attend a PA Pre-K Counts Core Series of professional development events within two years of hire. See PKC Personnel Policy #2 • HS – Classroom staff must have a minimum of 15 hours related to classroom activities. Could be based on the PDR or some other approved document • HS – Refer to the HS Act of 2007 professional development/training requirements • GROUP – For Staff PDR requirements in relation to PD taken, refer to the applicable STAR level worksheet. In addition, 3 annual clock hours must be in management, professionalism, supervision, leadership and/or administration and are included in the total number of annual clock hours required for the Primary Staff Person (STAR 2/3)		

Center/Group GBB v. 2.0 09/15/2011

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PARTNERSHIPS FOR FAMILY AND COMMUNITY

Standard: At a minimum of once per year, written information on topics including health and human services, wellness, nutrition and fitness and/or child development is given and explained to parents and staff. (STAR 2 and above)

	Good	Better	Best
Description of Criteria at each STAR Level	• Explanation describing the purpose for sharing this information • Once per year • Staff are informed individually or as a group about the topic that is currently being distributed by the facility	• Twice per year • Information is included in newsletter twice a year • Offered in second largest linguistic group of the program	• Three or more communications occur throughout the year • Monthly plan to rotate materials that are changed to address current situations in the environment • Parent and staff training on community resources • Resource fair held for families • Offered in all languages of families in program/community
Research	Early childhood practitioners can help parents take responsibility for their children's learning outcomes by providing materials and ideas for activities that parents can do at home and in the community with their children. Gupta, R. S., Shuman, S., Taveras, E. M., Kulldorff, M., & Finkelstein, J. A. (2005). Opportunities for health promotion education in child care. *Pediatrics, 116*(4), 499-505. Retrieved from http://pediatrics.aappublications.org/cgi/reprint/116/4/e499 Harvard Family Research Project. (2006). *Family involvement makes a difference: Evidence that family involvement promotes school success for every child of every age.* Cambridge, Massachusetts: Harvard Family Research Project, Harvard Graduate School of Education. Retrieved from http://www.hfrp.org/family-involvement/publications-resources/family-involvement-in-early-childhood-education		
Reference	James, D. W., & Partee, G. *No more islands: Family involvement in 27 school and youth programs.* Washington, DC: American Youth Policy Forum. Retrieved from http://www.aypf.org/publications/nomoreisle/index.htm McCormick Center for Early Childhood Leadership. (2010). *Research Notes: A window on early childhood administrative practices.* Wheeling, IL: National-Louis University, McCormick Tribune Center for Early Childhood Leadership. Retrieved from http://cecl.nl.edu/research/issues/rnsp10.pdf Riojas-Cortez, M., Flores, B. B., & Clark, E. R. (2003). *Los niños aprenden en casa*: Valuing and connecting home cultural knowledge with an early childhood program. *Young Children, 58*(6), 78–83. Retrieved from http://journal.naeyc.org/btj/200311/valuinghomeculture.pdf		

Source(s) of Evidence	• Dated handout given or sent to each parent • Staff are interviewed regarding how the director shared the information • Copies of newsletter • Staff meeting minutes • Certificates from trainings		
Supports Available	• Subscribe to ECELS e-newsletter to gather information • Subscribe to CHOP's daily "Children's Health Tip of the Day" e-newsletter to gather information http://www.chop.edu/consumer/common/email_info.jsp • On-site copies of Caring for Our Children and Model Child Care Health Policies • "Color Me Healthy" PD • Healthy Living is a Way of Life - https://www.capbluecross.com/Wellness/EducatorLinks/ • "I Am Moving, I Am Learning" PD • Child Development pamphlet series adapted from Yardsticks, ages 4 – 14. Contact appropriate Regional Key SACC Specialist to order		
Program Considerations	• GROUP – Follows GBB Continuum • SACC – Offer materials to families and staff regarding puberty and how to discuss with children • HS – Minimum of 2 times a year • PKC – No written requirement unless grantee/partner is in STARS but this can be used as a parent engagement strategy		

Keystone STARS Grant & Award Structure Overview FY 13 -14

Keystone STARS encourages and supports programs to develop and sustain higher levels of quality in order to strengthen outcomes for children and families and to improve school readiness. The SUPPORT GRANTS and MERIT AWARDS charts below indicate the maximum resources available, with approved expenses and submitted receipts, to qualifying programs at varying Keystone STAR levels, based on Full Time Equivalency (FTE). Family Child Care Home facilities eligibility could also be established by being enrolled in TIER 1 Child/Adult Care Food Program (CACFP) – administered through the United States Department of Agriculture (USDA).

Eligibility for grants and awards requires serving a subsidized population of no less than 10%.

RISING STARS SUPPORT GRANTS
RISING STARS Support Grants will be awarded to selected providers in targeted areas. Providers selected may be eligible for enhanced Professional Development, materials, financial awards, or any other good or service identified by the sponsoring Regional Key. RISING STARS Support Grants are only valid within the Regional Key awarded and are non-transferable.

Merit awards at STAR 3 & 4 Group/Centers account for programs implementing authentic assessment of children.

	MERIT AWARDS							
	Family Home	Group Homes	Center up to 6 FTE	Center 7- 12 FTE	Center 13- 45 FTE	Center 46-99 FTE	Center 100-180 FTE	Center 181+ FTE
STAR 2 3X Award *see below	$1,000	$1,575	$1,500	$2,365	$4,725	$9,450	$14,175	$23,500
STAR 3 Ongoing	$1,500	$2,470	$2,400	$3,655	$7,495	$15,050	$27,880	$37,400
STAR 4 Ongoing	$2,000	$3,255	$3,250	$4,835	$9,855	$19,500	$37,800	$49,250

** Award 2 additional years with CQI Plan and demonstrated progress*

Education and Retention Awards FY 13-14 for highly qualified staff (prorated less than 35 hrs per week)

Education and Retention Awards				
	Director-BA in ECE	Staff-BA in ECE	Staff-AA in ECE	CDA/SA Credential
STAR 2	$ 3,090	$ 2,320	$ 1,545	$ 600
STAR 3	$ 3,605	$ 2,705	$ 1,805	$ 700
STAR 4	$ 4,120	$ 3,090	$ 2,060	$ 800

Daily Rate for children receiving Child Care Works subsidy effective 08/01/13**

Child Care Works Daily Add On**				
	STAR 1	STAR 2	STAR 3	STAR 4
Full Time	$ 0.35	$ 0.95	$ 2.80	$ 5.00
Part Time	$ 0.15	$ 0.45	$ 1.05	$ 1.35

**EFFECTIVE DATE: August 1, 2013. The Daily Rate increased $.15 for the STAR 3 full time rate and $.90 for the STAR 4 full time rate. For more specifics about STARS standards, grants and eligibility requirements, visit www.pakeys.org > Keystone STARS. Awards are subject to change based on the final FY 2013-2014 appropriated state and federal funding levels. Amounts identified are maximum eligibility amounts and applying providers may be awarded less. All awards subject to availability of funds and are not guaranteed. Providers must be in active status and of good standing to qualify. Provider may not have any liabilities owed to the Commonwealth or the federal government, including but not limited to tax liens, Contractor Responsibility Program infractions, etc. Receipt reconciliation is a requirement of grant and award participation.

Pennsylvania

Professional Development System Framework for Early Care and Education

September, 2013

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OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Pennsylvania Early Learning Keys to Quality

Pennsylvania Professional Development System Framework for Early Care and Education

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For additional information about Pennsylvania's Professional Development System Framework for Early Care and Education contact:

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Pennsylvania Professional Development System Framework for Early Care and Education

This document provides a description of the progress Pennsylvania has made in developing a professional development system framework for early learning and school-age practitioners. The description is structured based on the professional development system elements defined in the National Child Care Information and Technical Assistance Center (NCCIC) Professional Development Systems Framework. Additionally, National Professional Development Center on Inclusion (NPDCI) Conceptual Framework for Professional Development guides Pennsylvania in ensuring a cross-sector planning and delivery approach.

Introduction

The Pennsylvania Early Learning Keys to Quality is the State's comprehensive, cross-sector quality improvement program, which encourages and supports all early learning practitioners to improve child outcomes. The three main components of this program are the PA Keys to Professional Development System (coordinated through the PA Key and six Regional Keys), Keystone STARS Pennsylvania's quality rating system (QRIS), and Community Outreach.

The PA Keys to Professional Development System is a comprehensive statewide framework for professionals serving children and families in all early childhood and school-age settings, including child care, Early Head Start and Head Start, early intervention, public school, private academic school, and school-age. It provides a continuum of professional development opportunities and ongoing support to practitioners to improve outcomes for children in early childhood and school-age programs. It is a clearly articulated framework that defines pathways that are linked to certification, leading to qualifications and credentials, and addresses the needs of individuals and adult learners. The system includes core knowledge competencies, an individual professional development record, career lattice, early learning standards, credentials, PA Quality Assurance System (an approval system for instructors and technical assistance consultants), education supports, and links to the Keystone STARS QRIS. In partnership with the PA Department of Education's Bureau of School Leadership and Teacher Quality, this system has worked to strengthen teacher certification guidelines and requirements.

The impetus for the current PA Keys to Professional Development System began during development of the QRIS in 2001. The QRIS planning group was Pennsylvania's first attempt to address early childhood quality issues comprehensively. Representatives from Head Start, child care, early intervention programs, and advocates were involved.

This cross-sector approach was adopted not only by Keystone STARS, but also was integrated into other service delivery strategies. For example, the Deputy Secretary of OCDEL is the person who oversees early childhood programs in both the Pennsylvania Department of Education and Department of Public Welfare.

With input from community stakeholders, OCDEL, and the PA Key, work collaboratively with five Regional Keys to set and implement priorities. State partners ensure funding; set guidelines, such as requiring credential- and credit-based professional development activities and developing standards for instructors; and support specific initiatives such as the State's early childhood mental health program.

The Regional Keys are responsible for local planning, coordinating, and implementing regional professional development activities. The system's philosophy emphasizes local professional development plans, formation of local cadres of experienced instructors and professional development organizations, and collaborative decision making with local partners, including institutions of higher education.

Pennsylvania's Local Education and Resource Network (LEARN) partners work throughout Pennsylvania communities to build support networks for organizations and individuals interested in quality early education. They also work with school districts and community-based early learning programs to develop ways to make smooth transition from preschool to kindergarten for children, parents, and teachers

Vision, Mission and Guiding Principles

The following mission and guiding principles for the Pennsylvania Key are central to guiding the work related to professional and workforce development.

Vision

All Pennsylvania families will have access to high quality care and education for their children, fostering successful futures in school and in life.

Mission

The Pennsylvania Key is committed to providing quality learning opportunities for Pennsylvania's children and their families by creating an integrated system of outreach, support and resources for early childhood and school-age educators and their programs.

Values

A Great Early Childhood Workforce System:

- Supports early childhood professionals at all levels, progress along diverse career pathways as defined by the career lattice
- Strengthens the capacity of early childhood professionals to support children's development and learning through high quality, developmentally, culturally, and linguistically appropriate instruction that is child-centered, inclusive, family-focused, and built on the foundation of the Core Knowledge Competencies

- Is comprehensive, coordinated, and responsive to the diverse needs of early childhood professionals serving all children and their families
- Uses data to inform practice

Professional development:

- Is accessible through a variety of formats, locations, times, and accommodates the learning needs of the profession, including individual learning abilities, technology usage, and geography
- Aligns with standards and evidence-based practice; supports the application of theory and professional philosophy to practice; promotes lifelong learning

Definition

Professional development is facilitated teaching and learning experiences that are transactional, collaborative and designed to support the acquisition of professional knowledge, skills, ethics/values and dispositions as well as the application of this knowledge in practice to benefit all children and families.

Guiding principles

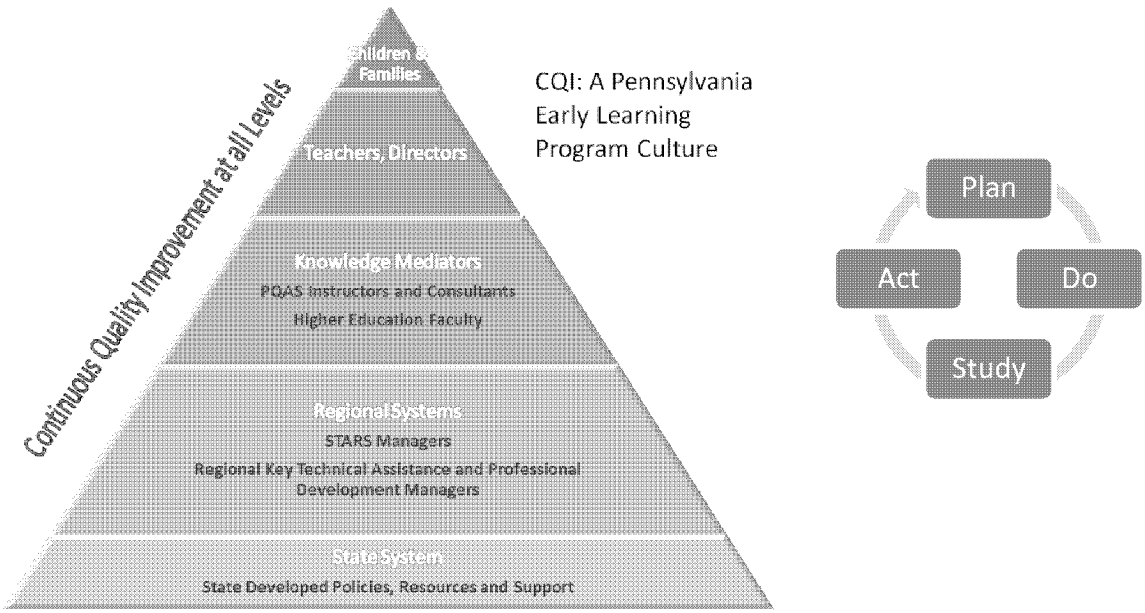
The ***guiding principles*** reflect the essential components of a quality improvement system designed to improve child outcomes.

1. **Leadership** of the system must be connected to both the Department of Education and the Department of Public Welfare. Leadership needs to be strong at all levels of the system including the Pennsylvania Key and Regional Keys. Local and regional leadership will be nurtured and supported.
2. **State, Regional and Local Coordination** and cooperation are essential elements.
3. **Commitment to Quality Content:** Content for quality improvement for programs, and professional development for practitioners, must be research-based, incorporating state and national research and best practices, and must build upon current standards such as the Early Learning Performance Standards, Keystone STARS Program Standards and Core Knowledge Competencies.
4. **All Practitioners and Programs** should be encouraged to participate in quality improvement activities, including program and practitioner improvement.
5. **Focus on Credentials and Professionalism:** A career lattice that will assist programs and practitioners to set milestones for professional development that encourages workforce development, allows practitioners to move smoothly between child care, Head Start, early intervention, schools, and other early learning programs, and recognizes the role of compensation is essential. All practitioners should be encouraged to increase their educational attainment, focusing on early childhood degrees and credentials. Professional development opportunities need to be offered in a variety of formats to support both rural and urban providers. To the maximum extent possible, all professional development and technical assistance should be aligned with and support Keystone STARS.
6. **Systems Coordination, Integration and Accountability:** Communication and collaboration with the higher education community, with schools, and with Head Start in order to assure

appropriate support and continuity is essential. There must be a single unified approach that brings together the core elements of Keystone STARS for programs with the core elements of practitioner-based professional development. The system must be transparent, outcome based with monitoring, evaluation and have clear accountability and cost responsibility.

7. **Compensation, Funding and Financing:** Supports for program and practitioner quality improvement require adequate and sustained funding that can assure access and participation by individuals and programs in rural, suburban and urban areas. Compensation for practitioners poses an ongoing challenge, and a variety of financial supports including public/private partnerships and rewards for the achievement of credentials, degrees and quality programs are necessary. The research based educational investments in Early Childhood Development, which the literature is clear, is yielding the highest public returns, and must continue to be explored as an economic development issue.
8. **Public, Stakeholder and Community Outreach:** Parents, families, stakeholders and community members should understand the importance of a quality early learning system. Parents should be encouraged to enroll their children in quality programs. All are partners in the development of a well-articulated quality system that serves the children and families of Pennsylvania. Public outreach and publicity about Keystone STARS is an essential component to the success of the quality initiative.
9. **Leveraging Resources:** Based on greater visibility, community outreach, and coordination, the system should create opportunities to access additional public and private funding streams, increase resources and develop innovative initiatives.
10. **Regional Planning:** Comprehensive regional planning with significant stakeholder involvement must serve as the cornerstone of the development and implementation of the PA Early Learning Keys to Quality system. Based on the input of diverse representation, the planning process must assess current capacity and gaps in services, as well as research demographic trends to determine future needs.

Continuous Quality Improvement at All Levels



In an ongoing effort to improve program impact, the continuous quality improvement cycle is implemented at all levels of the statewide system, examining not only internal processes at each level but by also examining a rich array of data sources to implement CQI across the entire system. Throughout this document, there are examples of projects and policies that are a result of this ongoing process.

Core Knowledge

Core knowledge

Pennsylvania's Revised Core Knowledge Competencies (CKC) represents a set of core knowledge statements along with what a practitioner should be able to do with the knowledge at three different levels of competence. Eight knowledge areas are identified as being important in Pennsylvania to early childhood professional development and competence: Child Growth & Development; Curriculum and Learning Experiences; Families, Schools and Community Collaboration and Partnerships; Assessment; Communication; Professionalism and Leadership; Health, Safety and Nutrition; Program Organization and Administration.

Within each Knowledge Area there are a set of additional competencies for those professionals who are already fulfilling a supervisory role or for those professionals who aspire to achieve an administrative function as part of their career pathway

For nearly ten years Pennsylvania has had a core body of knowledge. During that time it has gone through several revisions. The 2013 revised version was an extensive multi-year endeavor to align the CKC with existing state and national standards. These include the *Pennsylvania Department of Education Teacher Certification Guidelines (Chapter 49*-2), Pennsylvania Learning Standards (Infants and Toddlers, Pre-Kindergarten, Kindergarten, Grade 1 and Grade 2), Pennsylvania Child Day Care Regulations Chapter 3270, *NAEYC Standards for Early Childhood Professional Preparation Programs,* and *NAEYC Early Childhood Program Standards and Accreditation Criteria.* Additionally, this version more fully describes competence related to family engagement, cultural diversity, inclusive practices, and positive social emotional development.

The revisions are designed to improve the knowledge, skills and abilities of all educators s to effectively use data to guide instruction and program improvement for diverse learners. The revisions were informed by stakeholders and educators representing infancy through higher education; Early Intervention, and Head Start; Environment Rating Scale Assessors; and professional development (PD) and technical assistance (TA) consultants, and the Office of Child Development and Early Learning (OCDEL).

In the fall of 2011, Pennsylvania began the process of introducing the revisions and soliciting feedback from multiple stakeholder groups. Intended next steps are to combine the core knowledge competencies and self-assessment into a writeable PDF and integrate it as a part of the online registry. This will facilitate a completely online individual professional development plan aligned to the CKC.

Professional Development Record (PDR) is a tool to track individual professional growth and development. The PDR is aligned to the CKC and includes the following information:

- Employment history that includes the agencies and organizations of employment, time period of employment, position or title, and salary
- Educational degrees and certifications, awards and achievements, and any clearances
- A self-assessment aligned to the "core knowledge areas" of the CKC. Individuals assess themselves at Beginning, Developing or Mastery. An annual professional development plan that evaluates accomplishments and areas where additional professional development is needed. This is completed through self reflection and discussion with a supervisor.

Information about the PDR can be found on the PA Keys website, *click here*.

Core competencies

Core Competencies have been developed for each of the groups listed below. Each set of competencies addresses content, skills, knowledge and attitudes that lay the foundation for continuous quality improvement. These tools are designed to be used across systems for individual professional development planning and by supervisors in supporting individual and organizational needs. Statewide data collection occurs online for instructors, technical assistance consultants and STARS Managers to assist in planning and implementation of professional development and resource for these groups across the Commonwealth. To view these competencies, *click here*.

- ***Pennsylvania Core Competencies for Instructors.*** Requirement of the Pennsylvania Quality Assurance System in approving and maintaining qualified Professional Development Instructors. This document contains core competencies that are essential for all effective professional development strategies.
- ***Pennsylvania General Core Competencies for Relationship-Based Technical Assistance.*** Requirement of the Pennsylvania Quality Assurance System in approving and maintaining qualified Technical Assistance Consultants. This document contains general core competencies that are essential for all effective relationship-based technical assistance strategies.
- ***Pennsylvania Core Competencies for STARS Managers.*** This document contains general core competencies that are essential for STAR Managers/Specialists in their work of supporting programs to function at higher levels of quality and improve outcomes for children. Each Regional Key determines how the Self-Assessment checklist and planning for professional development integrates with the agency evaluation processes.
- ***Pennsylvania General Core Competencies for Relationship-Based Career Advising.*** This document contains general core competencies that are essential for all effective relationship-based career advising strategies. The competencies address skills, knowledge and attitudes that lay the foundation for developing a professional relationship with all advisees and promoting a strength-based approach to continuous quality improvement.
- **Pennsylvania General Core Competencies for Regional Program Quality Assessors.** This document contains general core competencies that are essential for all Regional Program Quality Assessors. The competencies address the skills, knowledge and attitudes that are foundational for developing professional relationships with all stakeholders, conducting objective quality assessments, and promoting a strength-based approach to continuous quality improvement.

The following chart identifies the content areas of these competencies. Cultural competence is woven throughout the content areas.

Content Area	Instructor	TA Consultant	Career Advisor	STAR Manager	Program Quality Assessor
Content Expertise	✓		✓		✓
Professionalism	✓	✓	✓	✓	✓
Principles of Adult Learning	✓	✓	✓	✓	✓
Building Relationships	✓	✓	✓	✓	✓
Communication	✓	✓	✓	✓	✓
Change Process	✓	✓	✓	✓	✓
Evaluation, Assessment and Planning	✓		✓		
Assessment and Planning		✓			
Administration, Assessment and Planning				✓	
Planning and Time Management					✓
Cultural, Linguistic, and Ability Diversity					✓

Additional competencies to support the existing director credential and school-age credential described in the Credential section of this document are listed below.

- ***Director Credential Knowledge Area Competencies Learning Objectives*.** Used by institutions of higher education when developing or revising director credential course work for approval by the Pennsylvania Key. To view, *click here*.
- ***Pennsylvania School Age Professional Credential Competencies and Indicators.*** Used by practitioners, instructors and assessors for the Pennsylvania School Age Professional Credential. To view, *click here.*

Access and Outreach

Online databases of training and educational opportunities

Registry System

Pennsylvania has had a registry data system for nearly ten years. The Pennsylvania Keys to Quality system includes three registries: the **professional development registry, instructor registry and workforce registry**.

The ***professional development registry*** is a database of professional development opportunities offered by instructors approved through the Pennsylvania Quality Assurance System (PQAS). Individuals register for a professional development event and, once attendance is verified, information is entered into a personal professional development history. In 2012-13 over 13,000 events were posted to the registry.

The ***instructor registry*** contains a listing of over 2,000 approved instructors. Instructor approval is aligned with the CKC. Only approved instructors are permitted to post professional development events to the professional development registry.

The current ***workforce registry*** is a voluntary system. Unlike other registries targeting early learning educators this registry is not restricted to individuals participating in a particular initiative, but rather is accessible to anyone and includes persons from across sectors. Current data elements of the workforce registry are aligned with the National Registry Alliance best practices; however there are a number of data elements currently not included or not required and all data are self-reported with no verification process.

Future enhancements to the registry system, currently underway, will result in a comprehensive workforce registry that contains all workforce data in one central location and can easily communicate this information to regional and state administrators as well as partners and early learning programs. These enhancements include updating the entire registry system to include the Core Knowledge Competency revisions and linkages to other existing early learning data systems in which child assessment and program level data is collected. We will soon institute the use of a learning management system in order to consolidate professional development initiatives on a scalable web-based platform which will allow the analysis of early educator workforce data, including assessment of early educators' learning, movement along the Career Lattice, retention in the field, and Core Knowledge Competency self-assessments.

Directory of College Degree Programs

Pennsylvania provides a list of higher education institutions offering degrees and certification in early childhood education on the PA Keys website. The list includes contact information and the type of degree and or certification offered. To view, *click here.*

Career development advising

In September of 2010 a Career Advising workgroup was formed to begin to develop tools and resources to support the many entities providing career advising supports throughout the state. This work was funded through the American Recovery and Reinvestment Act (ARRA).

Workforce Development Goal: In collaboration with essential cross-sector partners, create and promote a comprehensive and integrated continuum of high quality educational opportunities, experiences, and resources to ensure continuous professional growth and success of individuals who work with children and families.

Accomplishments to date include:

- Development of a 6 hour Career Advising professional development opportunity for Professional Development Instructors, Technical Assistance Consultants, Directors and Higher Education Faculty.
- An Instructor Institute to introduce two career advising modules. One module is designed specifically for Child Care Center Directors and one is for individual practitioners exploring the Pennsylvania Early Learning Keys to Quality Career Lattice.
- Online Career Advising toolkit that can be accessed by Instructors, Technical Assistance Consultants and Directors to download current forms, resources and supports.
- Pennsylvania Career Resource Guide Sections of this document include: Careers in Early Childhood and School Age, Salaries and Compensation, Investigating Your Career Pathway and Goals, Career Lattice and Teacher Quality, Choosing an Accredited College or University, Educational Requirements in Pennsylvania and Financial Resources.

Continuum of individual and group supports

Facility Professional Development Plan Survey is an annual assessment of professional development and technical assistance needs of all Early Childhood and School Age practitioners using an online survey. This survey aligns with the previous core body of knowledge and various program standards, and collects program type, knowledge areas and competency levels needed by age group served. In addition to the STARS Core Series, Regional Keys are responsible for delivering needs based professional development in their region. Future enhancements to the Workforce Registry will align information to the revised core competencies and allow administrators to pull real time reports about the needs of individuals, programs, counties and regions. Each region offers several low or no cost options for obtaining varying professional development hours required by different programs within the state. These options include Pennsylvania Quality Assurance System (PQAS) hours; hours offered by PQAS approved Instructors; Act 48 hours, required by the Department of Education for certified teachers; and Continuing Education Units (CEU), required by the CDA Council for renewal. Credit-bearing options are also available.

Pennsylvania Keys to Professional Development Hotline assists practitioners in navigating the registry and professional development systems in Pennsylvania. Annually the hotline receives over

12,000 calls and surveys conducted twice a year show a very high level of satisfaction with the customer service provided by the hotline staff.

The ***Early Childhood Executive Leadership (ECEL) Institute*** is a five-day leadership development program designed primarily for superintendents and assistant superintendents, principals and assistant principals, and early childhood development center/facility directors. Communities of participants come from the same service area or network so that members of the development and education system(s) can engage, integrate, and implement key concepts and approaches—and thereby ensure smooth transitions across the elements. It focuses on what early childhood leaders and educators need to know and be able to do in order to understand and connect the variety of systems serving children (Birth to Grade 3) and to ensure instructional improvements that will lead to student growth in cognitive, social, emotional areas. *Click here*.

Supports to Higher Education

OCDEL's collaboration and partnership with institutions of higher education has helped improve access to colleges and universities for early learning and school-age care professionals; making it easier for higher education institutions in Pennsylvania to offer early childhood education degrees and certification and for early learning professionals to earn those degrees. This partnership has also helped improve institutions of higher education community's understanding and knowledge of and connection to Pennsylvania Professional Development System and resources.

Higher Education Institute on Diversity, a collaboration with OCDEL, the Department of Education, Pennsylvania Key, and the BUILD Initiative, provides supports to the higher education community in the form of high-level professional development focusing on cultural, linguistic, ability and socio-economic diversity in higher education course offerings, practicum and program practices in meeting the requirements of Pennsylvania's PreK-Grade 4 Guidelines for teacher preparation. Approximately 250 participants have attended each Higher Education Institute on Diversity from 2007 through 2011.

Regional Keys' Higher Education Committees engage the higher education community and share information on OCDEL's programs and early childhood (ECE) initiatives as well as solicit feedback from the higher education community. Committees meet on a quarterly basis and information shared include Core Body of Knowledge (CBK), Career Advising project, Career Development, Continuous Quality Improvement (CQI) project, the Director Credential program, Pennsylvania Quality Assurance System (PQAS), professional development activities and need in the region, practitioner support, articulation and transfer. Through this medium information, materials and resources are shared at each committee meeting that help foster an understanding and knowledge by the higher education community of OCDEL's and Pennsylvania's Early Learning Professional Development System.

Early Learning Updates, an e-newsletter publication designed to provide the higher education community with important early learning initiative updates from the Office of Child Development and Early Learning (OCDEL) and the Pennsylvania Key. This newsletter is part of the wide-ranging strategy to improve and enhance communication between the higher education community, OCDEL and the PA Key.

Multiple professional development delivery methods

In additional to a wide variety of **face to face** options in every county in Pennsylvania, professional development opportunities occur in several modalities across the Commonwealth. The PA Key supports Regional Keys in offering **online** synchronous and asynchronous opportunities. **Video** opportunities and other distance learning opportunities, including online and **mail based** options, **on-demand self-learning** modules, and **hybrid** options are available to practitioners at every level of the career lattice.

Technical Assistance:

Pennsylvania has a comprehensive system of technical assistance supports for programs participating in a variety of early childhood initiatives. These include Keystone STARS, Pennsylvania Pre-K Counts and Head Start State Supplemental.

Technical assistance:

1. Is a comprehensive, coordinated, professional development service for practitioners serving children and families.
2. Supports positive change, is relationship-based, culturally sensitive, and uses a strength-based approach that focuses on the individual needs of the practitioner and/or program.
3. Maximizes resources by collaborating with, but not duplicating, the services of other partners.
4. Values a collaborative model of service delivery.
5. Acknowledges and builds on the diversity and commonalities of all practitioners.
6. Recognizes the context, resource, and unique nature of meaningful community outreach.
7. Promotes a cross-system network that allows each partner to make referrals and communicate throughout the system effectively.
8. Uses research and evidence-based practice.
9. Partners establish consistent data collection procedures to assess their program and inform decision-making and program improvement. Additionally, the data enables Pennsylvania to measure the details and effectiveness of services.

One on one support is available from the following resources:

Early Childhood Mental Health (ECMH) Consultation is designed to assist early care and education programs in meeting the social and emotional needs of children who exhibit challenging behaviors in the classroom. Any program participating in STARS may request this assistance. To learn more, *click here.*

Project Goals:

- Reduce the number of children expelled from early care and education settings due to behavioral issues
- Increase understanding of social and emotional development and its impact on educational success
- Link and bridge systems and services on behalf of a child, family and program

Infant Toddler Technical Assistance is an individualized technical assistance targeted to infant-toddler providers within STAR 2 facilities to enhance the provision of high quality services to very young children and their families with particular emphasis on relationship-based practices. Services occur through coordination with other technical assistance initiatives and ultimately result in improved outcomes for children and enhanced professional development of infant-toddler practitioners. To learn more, *click here.*

STARS Technical Assistance is a specialized consultation service available to support any program participating in Keystone STARS to achieve higher STARS levels. Technical assistance may take many forms, including individualized and on-site assistance to facilities aimed at helping them achieve a specified knowledge area of performance expectation of the Keystone STARS Performance Standards. To learn more, *click here*.

School Age Child Care Technical Assistance consists of regionally based school-age child care organizations and specialists to provide specialized professional development and technical assistance. A primary emphasis of their services focuses on professional development and technical assistance to support SACC providers participating in Keystone STARS. SACC PD/TA employ research-based methods for improving program quality, and impacting positive outcomes for children. Regional SACC-PD/TA also facilitates partnerships with community stakeholders to promote the development and expansion of out-of-school programming. To learn more, *click here*.

After-School Quality: The Process of Program Improvement (SACC ASQ) a five- step team approach, supported by technical assistance consultants, by which programs examine their program quality and strategies to make change. The process supports school-age providers ability to more deeply understand and implement the steps involved in a team approach to Continuous Quality Improvement. *After-School Quality* provides concrete steps, process and tools to make the most of sources of evidence and implement a sustainable process for continuous quality improvement. The corner stone of *After-School Quality* is a team approach and it supports the use of any youth program quality assessment tool. Developed by the National Institute on Out-of-School Time (NIOST), *After-School Quality* supports program improvement in the context of self-assessment, state quality rating systems and accreditation. In each case, *After-School Quality* is a flexible, effective approach for ensuring that the process of improving program quality comes from a team of people who are invested in and care about the program.

Child Care Health Consultation provides specially-trained health and safety professionals to offer consultation, technical assistance, and professional development to child care providers. Child care health consultants can give assistance over the phone, during onsite visits, and through professional development trainings. Goals are to:

- Improve health and safety status of children in child care
- Increase understanding among early care and education practitioners and families of health promotion and disease prevention
- Link children, families, and child care providers with community health resources

Pennsylvania Pre-K Counts and Head Start State Supplemental Assistance Program (HSSAP) Preschool program specialists provide technical assistance or make referrals to all PKC and HSSAP programs. This can include staff at all levels, partners and community collaboration partners depending on the issues. Programs can phone, email or request a sight visit. Specialists also provide TA resulting from concerns identified during monitoring visits or with implementation of new policy.

All Head Start grantees also have access to federal TA. Click here for more information about *Head Start* and *PA Pre-K Counts*.

Public engagement efforts/initiatives

Pennsylvania's Promise for Children is a coordinated statewide campaign to raise awareness about the value of quality early learning and to build responsibility among every Pennsylvanian for the early learning of the children in their lives. It is sponsored by the Pennsylvania Build Initiative, Heinz Endowments, The Grable Foundation, William Penn Foundation, and the Pennsylvania Early Learning Keys to Quality, in partnership with the Pennsylvania Office of Child Development and Early Learning (OCDEL). To learn more, *click here*.

Pennsylvania's ***Local Education and Resource Network (LEARN) Teams*** build support networks in every county for organizations and individuals interested in quality early education. LEARN Teams bring together early childhood programs, parents, school districts, and child-serving organizations to assess what quality early learning programs are currently available in the community and to develop ways to encourage quality early learning. They also work with school districts and community-based early learning programs to develop ways to make smooth transition from preschool to kindergarten for children, parents, and teachers. To learn more, *click here*.

Qualifications, Credentials, and Pathways

Pre-service requirements

Persons who wish to open a child care center, group child care home or family child care home are required to participate in an orientation training session prior to opening a facility. The orientation curriculum focuses on topics relating to opening and operating a child care facility including the child care facility regulations, the application process, requirements relating to child abuse and criminal history background checks, obtaining and submitting required business papers, obtaining a certificate of occupancy for the facility building, staffing requirements, recognizing health and safety hazards, and information about child care subsidy, the Keystone STARS QRIS and Early Intervention services for children with special needs.

Due to the diversity of program needs in Pennsylvania, careful consideration has been placed on making professional development available that assists all practitioners across sectors in moving up the career lattice within their current organization.

The following charts describe the types of requirements individuals are required to have to assume various positions. Keystone STARS requirements build on minimum requirements defined in Child Day Care regulation.

KEYSTONE STARS	
Position	**Current Requirement**
Lead Teachers, Group Supervisors STAR 3	100% must have an Associate's (AA) or Associate's of Applied Science (AAS) degree with 60/65 credits including 18 ECE credits, at Level V or above on the Career Lattice.
Assistant Teachers, Assistant Group Supervisors STAR 3	25% must have at least 30 credits including 12 ECE credits, at Level IV or above on the Career Lattice. 75% must have a credential, diploma, certificate or 6 ECE credits. at Level III or above on the Career Lattice.
Aides STAR 3	25% must have at least 45 Hours or 3 ECE credits, at Level II or above on the Career Lattice.
Lead Teachers, Group Supervisors STAR 4	100% must have an Associate's/AAS degree with 60 /65 credits including 18 ECE credits, at Level V or above on the Career Lattice; 50% must have bachelor's degree including 30 ECE credits, at Level VI or above on the Career Lattice.
Assistant Teachers, Assistant Group Supervisors STAR 4	50% must have 30 credits including 12 ECE credits, at Level IV or above on the Career Lattice; 25% must have an Associate's/AAS degree with 60 /65 credits including 18 ECE credits, at Level V or above on the Career Lattice.
Aides STAR 4	50% must have at least 45 Hours or 3 ECE credits, at Level II or above on the Career Lattice.

PENNSYLVANIA PRE-K COUNTS		
Position/Role	**Current Requirement**	**Future Requirement**
Lead Teachers	Effective December 2011, all lead teachers are required to have a Bachelor's degree and certification in ECE.	
Teachers Aides	Teacher aides must complete at least 2 years of postsecondary study or demonstrate knowledge and ability through a formal state or local academic assessment or possession of a Child Development Associate's (CDA) credential.	

HEAD START		
Position/Role	**Current Requirement**	**Future Requirement**
Education Coordinator	CDA credential, State Awarded Certificate, Associate's degree in ECE or a degree in a related field with experience teaching preschool children and a state awarded certificate to teach preschool aged children.	**As of September 2013:** Bachelor's (BA/BS) degree in ECE specific credits or related degree with course work equating to a major in ECE and experience teaching preschool aged children.
Lead Teachers	Associate's degree in ECE, a BA/BS in a related field with coursework equating to a major in ECE with experience teaching preschool aged children, enrolled with a BA in Teach for America and passed an exam such as the Praxis II.	**As of September 2013**: 50% teachers nationwide, Bachelor's (BA/BS) degree in ECE, or a related degree with coursework equating to a major in ECE and experience teaching preschool aged children.
Teachers Aides	High School equivalency.	**As of September 2013**: A CDA credential or enrolled in program for CDA credential to be completed within 2 years or Associate's degree (AA) or Associate's of Applied Science degree (AAS
Early Head Start Center based Teachers	Early Head Start teachers must have, at a minimum, a CDA credential and have been trained (or have equivalent coursework) in early childhood development.	As of September 30, 2012 all Early Head Start teachers must meet the prior requirement and be trained (or have equivalent coursework) in early childhood development with a focus on infant and toddler development.

Continuing education requirements

Child day care regulations require programs complete six hours of professional development annually. Keystone STARS Performance Standards define Staff Qualifications and Professional Development: standards in this area establish the educational qualifications required for Early Childhood Educators and program directors at each STAR level and details the amount and type of annual continuing education For instance, teachers in programs at STAR 4 must complete 24 hours of professional development annually, directors must complete 27 hours. At least a portion of the professional development must address content such as observation, assessment, curriculum and orientation. At STAR 3 directors must complete the Director Credential. Effective July 1, 2009, Relative/Neighbor (unregulated) providers must complete 12 hours of training over a two year period if they wish to be paid for caring for children in the subsidized child care program.

Early Childhood Certified teachers in Pennsylvania must follow Act 48 and Head Start staff follow the Head Start Federal Performance Standards.

Career lattice

Pennsylvania Early Learning Keys to Quality Career Lattice defines multiple pathways for professional growth and development for early childhood education and school-age care practitioners, Head Start, Public School Districts, Private Academic Schools, Technical Assistance

Consultants and Trainers, and Higher Education Faculty. It identifies qualifications, education and certification. The goal of Pennsylvania Keys to Quality Early Learning Career Lattice is to ensure that children in Pennsylvania are educated by professionals who have achieved adequate levels of education that are consistent across the state. The Career Lattice is organized in eight levels and includes a continuum of professional development from entry level training through credit-bearing coursework and degree attainment.

Early Childhood Teacher Quality: Recognizing High Quality Content in Pennsylvania document provides guidance in the calculation of Early Childhood Education core content credits specifically to verify credentials and determine placement on the Career Lattice. This document is used in the verification process for Keystone STARS and professional development/ technical assistance consultant approval.

For more information about Career Lattice requirements, *click here*.

Credentials

Child Development Associate, a national credential administered by the Council for Professional Recognition, is recognized in Pennsylvania at Career Lattice Level III. A credential can be earned based on setting type: center, family child care or home visitor. Individuals can also earn an age level endorsement for infants and toddlers or preschool.

Pennsylvania Director Core Credential provides a standard by which to measure program and fiscal management and leadership abilities of early childhood and school age directors and administrators. It is a requirement of Keystone STARS QRIS at the STAR three level. Thirty-six post secondary institutions have been approved to offer the Director Credential program resulting in nine college credits for individuals.

Pennsylvania School-Age Professional Credential is a competency based program modeled after the Child Development Associate (CDA). This credential was developed to support school-age practitioners participating in Keystone STARS. It is recognized on the career lattice in the same way the CDA is recognized (Career Lattice Level III). This credential can be taken for college credit. It is recognized in child care regulations as equivalent to 9 credit hours from an accredited college or university in elementary education or child development and 1 year experience with children. (Same as CDA). To support an individual's ability to obtain the appropriate content, a series of 34 modules have been created. Each module is aligned with the credential Competency Goals and Functional Areas and the Core Body of Knowledge.

For more information about credentials, *click here.*

Pathways leading to qualifications, degrees, and credentials

Program to Program Articulation efforts began in 2008 when the Office of Child Development and Early Learning, the Pennsylvania Key, and the Pennsylvania State System of Higher Education joined together to provide an opportunity for two and four year institutions of higher education which offer degrees in early childhood education or child development, to work on developing early childhood education program-to-program articulation agreements. The initiative facilitates articulation pathways and improved transfer opportunities for students and their academic credits. Articulation agreements are based on the accreditation standards for program quality as set forth by

the National Association for the Education of Young Children (NAEYC) and the PA Chapter 49-2 Guidelines for Pre-K to Grade 4. There are currently 60 early childhood program-to-program articulation agreements between two- and four-year institutions.

Gate Openers Initiative was a joint project of the Office of Child Development & Early Learning (OCDEL), Pennsylvania Key, Grable Foundation, Heinz Endowments and William Penn Foundation. The initiative focused on sustainable projects that will support early learning and school-age practitioners as they juggle full time employment and returning to higher education institutions for a Bachelors degree or ECE certification.

***Alternative Pathways-Career Lattice*:** Professionals come to a career from many different pathways. The alternative pathway to the Career Lattice recognizes the education and content knowledge that an early childhood or school-age professional possesses beyond the traditional pathway of an ECE or Education degree. It also incorporates demonstration of competency through an objective outside assessment (Praxis Exam).

Alternative Pathways-Director Qualifications: These alternative pathways allow a director to demonstrate a combination of Early Childhood Education Credits, Management Credits and years of experience in order to achieve the Director's Credential.

Credit for Prior Learning and Transfer Credit: OCDEL recognizes that adult students returning to college bring with them a level of experience, knowledge and skills from a variety of sources. Credit for prior learning (CPL) offers students the opportunity to apply relevant college-level knowledge, skills and competencies gained from work and life experiences, continuing education, self-instruction and independent study, informal or formal course work and others towards an academic degree or certificate. Transferring relevant prior learning knowledge, competencies and skills into college academic credits help save substantial time and money for students as they access colleges and universities for four year degree and/or certification completion. Institutional assessment for prior learning can include portfolio documentation, competency testing, or a combination of these and other sources of mastery evidence of content knowledge, skill or competency.

Many institutions of higher education in Pennsylvania participate in the College Level Exam Program (CLEP) which offers adult students the opportunity to demonstrate what they've already mastered and obtain college credits. As part of OCDEL's program-to-program articulation agreement initiative, early childhood practitioners are able to transfer and articulate credits earned for one level of credential, certificate or degree work to another, so that courses with similar core content are not repeated. Through the articulation project, participating four year colleges and universities accept up to sixty academic credits from prior learning experience at the two year level towards early childhood education baccalaureate degree. Students must document evidence of knowledge, skills and competencies gained from prior learning experience through submission of a portfolio to the receiving institution.

Six to nine college academic credits can be awarded for the Child Development Associate (CDA) credential earned in a community-based setting towards an Associate or a Bachelor's degree. Also, early childhood and school-age program directors can document prior knowledge, skills and competencies and obtain a Director Credential certificate by submitting a portfolio for evaluation.

Training Series

Pennsylvania has created numerous professional development series to support early learning and school-age educators. Series support individuals meeting required standards for example, observation, linking observation, assessment, curriculum and learning standards, and new staff orientation. Examples of additional series illustrating our work to support diverse populations can be found under the section *Cross Systems and Supports to High Risk Populations*. Each Regional Key has certified trainers available to provide professional development in these series. To learn more about how to participate, visit the PA Keys website or contact the Regional Key. *Click here*.

New Staff Orientation series have been developed to address the needs of center-based providers, school-age providers and family child care providers. All series are designed as self-learning modules and are 15 hours in length. In all instances, modules are designed to help individuals become familiar with their new program, become familiar with certification regulations, supervision and safety, child development, guiding behavior, curriculum and environment, professionalism and partnering and communicating with families. Modules in this series meet the requirements for Career Lattice Level I and Keystone STARS requirements for new staff. Over the course of the next two years these modules will be revised to include content specific to age groups served – infant-toddler, school-age, preschool. The Infant-Toddler modules are scheduled for completion by June 2014.

Pennsylvania's Child Observation Modules is a set of seven, two- hour modules beginning with an introductory workshop that deals with the various elements of doing observation in family, group or center care settings. Topics include: reasons for observing, planning and preparing to observe, and an introduction to four observation methods. Other modules help teachers learn how to use observations to learn about and support children's individual development; how to use observations to continually observe the program, evaluate its effectiveness, and make changes based on the observations; using observation to share or communicate observations in a positive way with parents, team members, or school-age children. Two modules are designed specifically for educators working in school-age child care programs. Modules in this series meet the STAR 2 annual Staff Development requirement for Keystone STARS.

Environment Rating Scale (ERS) Series consists of an ERS Foundations course that provides an overview of the structure and scoring of the ERS tools, and is a prerequisite for the tool-specific courses (Infant Toddler Environment Rating Scale, Early Childhood Environment Rating Scale, and School Age Care Environment Rating Scale). Family and Group Childcare programs may access a combined course (Family Child Care Environment Rating Scale). The Foundations course meets the STAR 1 Staff Development requirement for Keystone STARS and the tool-specific courses are a requirement for STAR 2 in all programs. For additional information and resources related to the Environment Rating Scales, *click here*.

Pennsylvania recently added professional development on other tools directors can use in continuous quality improvement efforts such as Classroom Assessment Scoring System© (CLASS) and the Program Administration Tool (PAS).

Pennsylvania's Learning Standards for Early Childhood curriculum consists of 9 units based on Pennsylvania's Learning Standards for Early Childhood. The units follow the titles for the Key Learning Areas for Pre-Kindergarten. Infants-Toddlers and Kindergarten are referenced throughout all nine units. Each unit is designed to help participants become familiar with the Learning Standards for Early

Childhood. They will help participants see how the standards are connected to curriculum and assessment. Emphasis is placed on how the standards provide the framework that guides our expectations for children. Each unit is divided into three one-hour segments that can be taught together or at three separate professional development meetings. For more information about these standards and for additional tools and resource, *click here*.

Links to Learning is a parallel series to the Learning Standards for Early Childhood, this series is designed for school-age care providers. A series of 26 hours of professional development modules, developed by the National Institute on Out-of-School Time (NIOST), to support practitioner understanding of the role of afterschool in providing complementary supports to ensure developmental progress of children. Participants learn how to guide curriculum planning in afterschool and how to link activities to learning standards and quality standards. The content of the modules also explores theme- and project-based learning, coordinating and communicating with schools and family engagement.

Links to Learning Foundations (4 modules, 6 hours) meets STAR 2 Director Qualifications Core Series requirement for learning standards for school-age programs participating in Keystone STARS. Other modules meet STAR 3 annual Staff Development requirement in the area of curriculum and learning standards and supports Partnerships with Family and Community. For additional information about resources and professional development to support school-age and afterschool programs, *click here*.

Mind in the Making (MITM) created by the nationally recognized Families and Work Institute is a 12-part series designed to bridge the gap between research and teaching practice. The Learning Modules are designed to complement existing early childhood teaching curricula, with a focus on helping teachers (defined as an adult who teaches and cares for young children) in schools, centers and home-based early childhood settings become more *reflective and intentional* in their work with young children and families.

Although the research referenced in the Learning Modules focuses on birth through school-entry, states and communities have also used the Modules for teachers in the early elementary years. In addition, the Modules have been and can be used to teach students in community colleges, colleges and universities.

Pennsylvania's unique implementation plan links completion of the modules with mentoring in the content of the modules and delivery strategies, a train the trainer methodology, and a strategy to sustain the effort in the context of the system of quality improvements now available to Pennsylvania's early learning programs and practitioners. This project:

- Encourages responsive and reflective teaching and learning based on the importance of relationships and integrating young children's social, emotional and intellectual (SEI) development
- Brings credible research in Early Childhood Education to early learning practitioners
- Engages practitioners as learners
- Builds and strengthens the training, facilitation and technical expertise available in the state
- Creates multiple layers of learning teams to enhance practice and assimilation

According to a University of Pittsburgh study evaluating the Mind in the Making Learning Modules for Early Childhood Teachers in Pennsylvania, teachers who completed the MITM learning modules "contributed to positive, meaningful changes in classroom practices that promote children's social, emotional and intellectual development." Furthermore, teachers with different educational levels,

and years of experience of teaching and from programs of different levels of quality were equally likely to improve.

Over 600 early learning facilities have participated in the initiative since its inception in 2004.

Step up to Supervision consists of eight director instructor-led sessions, designed to be offered in 60 minute staff enhancement meetings. Director Instructor module includes step-by-step Instructor's Manual, camera-ready handouts and activity pages, and instructional DVD. Topics will use Regulations for Child Day Care Centers to examine regulatory requirements on supervision of children in early care settings. Topics focus on:

- why staff-child ratios are necessary and application of ratio requirements throughout the daily schedule;
- assessment of risk to children key points to consider when choosing positions for optimum supervision of children;
- the importance of counting children, examine working as a team to properly supervise children, especially during difficult transition times;
- playground safety, developing universal playground rules, and choosing key supervisory positions
- identifying supervision considerations when moving children from one place to another, including taking children on outdoor walks and transporting them in a vehicle;
- analyzing the center's written supervision policy to determine if changes are necessary.

Strengthening Families Pennsylvania is a strength based approach to strengthening families and preventing abuse and neglect. This framework uses a set of strategies and tools that involve program staff working with families to build protective factors. With support from the National Alliance of Children's Trust Funds and the Pennsylvania Children's Trust Fund, OCDEL aligned the Strengthening Families Protective Factors with the Keystone STARS Quality Rating system. Optional Tools and Tip Sheets that reflect the Strengthening Families Protective Factors were created and can be found on the PA Key website. Each Regional Key in Pennsylvania has certified trainers available to provide professional development on the Strengthening Families Protective Factors to staff in the early learning system. To learn more about this initiative, *click here*.

Keystone Kids Go! (KKG) is an initiative in Pennsylvania focused on improving young children's nutrition and physical activity. Keystone Kids Go! was created by the Pennsylvania Departments of Health, Education, and Public Welfare, in partnership with Tuscarora Intermediate Unit , Penn State Cooperative Extension , Family Literacy Programs, Pennsylvania Nutrition Education Network and Head Start State Collaboration Office. This initiative is targeted towards early childhood practitioners from childcare, Head Start, early intervention, family literacy, and pre-kindergarten programs. The focus areas of KKG are to engage families and improve the health of children, families and practitioners. Each Regional Key has certified trainers available to provide professional development on Keystone Color Me Healthy, a program for early childhood practitioners which provides resources and materials to teach preschoolers that healthy eating and movement are fun. For more information about this initiative, *click here*.

I Am Moving I Am Learning (IMIL) is a proactive approach for addressing childhood obesity while enhancing school readiness in young children birth to five within Early Care and Education settings. IMIL is sponsored by the Pennsylvania Departments of Education and Welfare, the Pennsylvania Office of Child Development and Early Learning, the Head Start State Collaboration Office, and the

Administration for Children and Families, Office of Head Start. IMIL has 3 overall goals for building lifelong healthy preferences in young children:

1. Increase the quantity of time spent in moderate to vigorous physical activity within daily routines to meet national guidelines (a total of 120 minutes daily for preschool children)
2. Improve the quality of movement experiences intentionally planned and facilitated by informed and participating adults, including teachers and parents
3. Promote healthy food choices every day for children, teachers, and parents

The focus areas for IMIL are Administrative Competencies, Best Practice in Teaching and Learning, Engaging Families , Healthy Children/Families/Practitioner, science, technology, math, and the arts. Each Regional Key has certified trainers available to provide professional development on IMIL. To learn more about how to participate in this program, visit the PA Keys professional development calendar or contact the Regional Key.

Funding

Financial aid and scholarships

PA Keys to Professional Development Refund Voucher Program provides support for early childhood educators to obtain credits and credentials that support participation at higher levels of quality to meet Keystone STARS standards and improve outcomes for high need high risk children. To learn more about this program, *click here*.

Compensation/retention incentives

The ***Keystone STARS Education & Retention Award*** assists providers in establishing a stable workforce as they work towards higher levels of quality. In order to reduce turnover and improve the education of early childhood and school-age professionals, the Keystone STARS program includes the STARS Education & Retention Awards as annual financial awards to eligible staff employed by the provider. To be eligible, a facility must meet site-specific requirements as well as staff-specific requirements. Awards are determined by number of hours worked/week, position (director or teaching staff) and educational attainment.

Program quality awards

The ***STARS Merit Award*** is available to early learning and school-age providers serving high-risk/high need children to support continuous quality improvement as they achieve a STAR 2 or higher. In order to be eligible for these grant funds, a facility must meet all the STARS Performance Standards associated with the STAR designation. Merit awards may be requested for 1) equipment and supplies/materials; 2) training/professional development; 3) accreditation costs; 4) staff compensation. An award justification explaining how the award will support Continuous Quality Improvement and improved outcomes for children is a required part of each Merit Award application.

The intent of the ***STARS Support Grant*** is to assist Start with STARS and STAR 1 designated providers serving high-risk/high need children in achieving a higher STAR designation through

continuous quality improvement. The grant covers two categories of supports including Training/Professional Development and Site Supports. Grant funds may be used to meet the needs identified in one or both of these categories.

Basic eligibility for Support Grants, Merit Awards, and the Education and Retention Award includes (1) holding a full DPW Certificate of Compliance (Centers and Group Homes) or valid Certificate of Registration (Family Homes) and (2) having a minimum of 5% of enrolled children receiving Child Care Works subsidy or having an Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP). For Family Child Care Homes only, eligibility can also be established by being enrolled in the Child and Adult Care Food Program (CACFP) and being identified as eligible for Tier 1 CACFP reimbursement rates.

Tiered reimbursement

Child care programs participating in Keystone STARS at the STAR 2 level or above receive an add-on, or tiered reimbursement for each child they serve who is enrolled in the Child Care Works subsidy program. The tiered reimbursement increases with each STAR level and is applied to the daily subsidized child care rate.

For more information about the funding resources above, *click here*.

Quality Assurance

Approval Processes

Pennsylvania Quality Assurance Program (PQAS) is designed as a means to ensure quality professional development (PD) and technical assistance (TA) provided to early childhood and school-age practitioners in Pennsylvania. This system is designed so that individual instructors or TA consultants rather than individual professional development activities are reviewed and approved. Approved instructors and TA consultants are required to meet and maintain established qualifications, including educational achievements and professional development experience. All instructors or technical assistance consultants who work with practitioners and want to be eligible to participate in Office of Child Development & Early Learning (OCDEL) funded initiatives are required to be approved by the PQAS. The level and type of qualifications will in part determine the type of approval. For example faculty, director or specialty discipline. Instructors may only provide professional development in approved topic areas. To learn more about PQAS, *click here*.

Evaluation processes

Professional Development is evaluated in several ways. The obvious way is through both a participant and instructor evaluation at the completion of each professional development event. These evaluations are used to determine, in part, the quality of the professional development offered.

Additionally, the Regional Keys and PA Key have access to reports from the professional development registry. Reports can be used to determine, for instance where professional development is being offered in the state, region or county. It can be evaluated based on the number of providers in that

particular locale. Data can be used to analyze trends related to cancellations and attendance, as well as a number of other criteria.

Technical Assistance Accountability Plan (TAAPS) defines expectations for accountability and quality for STARS Technical Assistance. This system of benchmarks was developed to focus on three key categories:

- Measurable Impact on Provider
- Qualifications, Professional Development and Professionalism
- Reporting Obligations

The STARS-TAAP establishes the expectation that Technical Assistance will have a measurable effect on the program and that to be effective; consultants must be appropriately qualified and deliver services in a timely, consistent manner. It further defines what is to be measured in each category, the data sources to be used, how to collect the data, and benchmarks for each indicator.

PELICAN Keys to Quality for Technical Assistance aligns Action Plan goals to specific STARS standards and allows the TA contractors and Regional Keys to evaluate if goals in an Action Plan have been Met or Not Met. The implementation of goals in an Action Plan can be more closely correlated to the effectiveness of Technical Assistance than STAR movement and can be applied equally to all STAR levels. Thus, with the ability to assess goal achievement, this benchmark will be a primary indicator for assessing the effectiveness of technical assistance.

To further assess the effectiveness of TA, Keystone STARS has introduced the "sticky factor" to determine how well a childcare facility has retained the knowledge and skills provided by the consultant. Sticky factor is the measure of the change that remains three to six months or longer after the TA consultant has completed services and closed the plan. The Regional Key TA Manager collects this information by conducting a follow-up survey to the program that has received services to determine if each goal continues to be met/not met at that point in time. Goals marked as "Met" are considered achieved or "sticking" and goals marked as "Not Met" are considered not sticking. Fifty percent or more of all Action Plan goals must be met in order for the action plan to be considered "sticky." To read a research brief about the effectiveness of STARS Technical Assistance, *click here*.

***Good, Better, Best* is a tool to support continuous quality improvement.** The "Good/Better/Best" documents (one for Center/Group programs and one for Family Child Care) were developed from experience in managing the Keystone STARS program, analysis of current research, and insights/suggestions practitioners have shared. These tools assist practitioners in assessing program strengths as well as help identify next steps for improvement. Thoughtful assessment using a variety of sources of evidence can lead to the development of a meaningful continuous quality improvement (CQI) plan. This optional tool supports programs in meeting the targeted standards and understanding the more subtle continuum of quality contained within a standard. The tools allow programs not able to move up to a higher STAR level to consider making incremental improvements within a STAR level or standard. It also allows programs to identify areas where the minimum standard is exceeded and can be used to determine at what point in the spectrum a standard is being met. Understanding the quality continuum of a standard will enable programs to be more focused and specific in quality improvement efforts. The newest iteration of both tools reflect best practices in dealing with the diverse needs of families. Each standard now reflects what is "Better" and "Best" for working with all families in a program. To view these tools visit the Forms and Tools section of the PA Keys website, *click here*.

Monitoring processes

Monitoring occurs in several ways. The monitoring of staff qualifications for regulated providers occurs during the certification inspection visit. Staff qualifications for Keystone STARS participating facilities are also verified during the designation process. Additionally, other programs, such as Pennsylvania Pre-K Counts will have staff qualifications verified during their program monitoring visits.

Annually, each of the six Regional Keys executes and monitors contracts with a number of Professional Development and Technical Assistance organizations. Monitoring responsibilities include on-site observations and evaluations of at least 10% of the instructors and consultants that are actively providing services funded by the Regional Key that year.

Accreditation

Keystone STARS requires accredited programs to demonstrate not only verification of their current accreditation status but show evidence that the program meets additional specific Keystone STAR standards. Once recognized, an accreditation is allowed to be used to assist in achieving a STAR Level 4 in the QRIS.

Accrediting organizations wishing to be recognized in Keystone STARS must apply to be recognized and demonstrate Fiscal and Administrative Capability for Administering an Accrediting Process, Administrative Policies and System Evaluation Procedures, describe the Accreditation Process, demonstrate that the Institution's Standards for Early Learning Programs or School-Age/Afterschool Programs are research-based and crosswalk them with the Keystone STARS Standards.

Examples: Cross-Systems and Supports to High Risk Populations

Cross-systems

NPDCI/SpecialQuest Pennsylvania State Leadership Teams goals are to: increase access to and participation in leadership opportunities for families of young children with and without disabilities; develop a regional cross-sector professional development system to support increased opportunities for high quality inclusion; increase the emphasis in pre-service education (coursework and field experiences) on children with disabilities and inclusion.

Since 2007 the National Professional Development Centers for Inclusion (NPDCI) has worked with state and regional leaders to develop, implement and monitor a statewide plan for professional development that crosses traditional boundaries. The state leadership team includes representatives from child care, higher education, the state library system, Head Start, Early Intervention, OCDEL, Department of Health, and family advocacy groups.

In January 2008 Pennsylvania introduced SpecialQuest professional development approach and curriculum to promote quality inclusive practices for children with disabilities and their families in community programs. This relationship- and team-based approach enhances and sustains inclusive services, family leadership skills, and integrated, collaborative service delivery.

Infant Toddler Specialist Network included representatives from various state systems, such as early intervention, Keystone STARS, Early Childhood Mental Health and Health Consultation, Family Support, Infant-Toddler and STARS technical assistance, Early Head Start and institutes of higher education. All of these representatives provide technical assistance, consultation and/or professional development to early childhood professionals and families who support the healthy development of infants and toddlers. Specialists all received professional development in Program for Infant Toddler Care (PITC) from WestEd, Center for Social Emotional Foundations for Early Learning (CSEFEL), Strengthening Families, Mind in the Making, Reflective Practice and Center for Early Literacy and Learning (CELL).

The overall goal of the Network was to create a coordinated system of infant-toddler supports, both statewide and regionally, from which programs and families can access resources that are specific to their individual needs. Sustainability is managed by providing resources and training each time a new specialist is hired by one of the participating partners.

Early Intervention Technical Assistance system (EITA) provides statewide training and technical assistance on behalf of the Office of Child Development and Early Learning, Pennsylvania Departments of Public Welfare and Education. The primary recipients of EITA training and technical assistance are the local Infant/Toddler and Preschool Early Intervention agencies that provide supports and services to children birth to school age with developmental disabilities and their families. EITA is part of the Pennsylvania Training and Technical Assistance Network (PaTTAN). To learn more, *click here.*

Cross-system TA

The overall premise for the cross-systems work is three-fold:

- To create a seamless system of technical assistance that is easy to navigate by those who use it
- To better use available resources so as not to duplicate services
- To ensure that the technical assistance being offered is of a high quality

To accomplish this work, a cross-system TA work group meets quarterly and includes representatives from Head Start, Family Literacy, STARS Technical Assistance, Pre-K Counts, Early Intervention, School Age Technical Assistance, Early Childhood Mental Health, Home Visiting, Office of Child Development and Early Learning and the PA Key.

Additionally, this group is instrumental in planning webinars designed for knowledge mediators each year. These webinars are delivered by various experts in the field on topics identified by surveying Technical Assistance Consultants each summer. Webinars generally occur the first Friday of each month.

The Art and Science of Technical Assistance for Continuous Quality Improvement is a professional development series designed specifically for technical assistance consultants. These recorded webinars may be taken individually, but are designed to be taken as a series as the highly relevant themes of Hard to Reach: Hard to Serve Programs, Sustaining Change and Cultural Competence are woven through the entire series, connecting topics and increasing participant understandings. The webinar titles follow:

1. Working Together to Share Common Understanding about Children

2. Development, Learning and Outcomes: DAP and Implications for Quality Enhancement Part 1
3. Development, Learning and Outcomes: DAP and Implications for Quality Enhancement Part 2
4. Development, Learning and Outcomes: The Preschool Years: 3- 5 year olds
5. Development, Learning and Outcomes: School Agers – 5-12 year olds
6. Building a Common Vision: Strategies for Sustaining Change
7. Not By Chance: Connecting Learning to Child Outcomes
8. CQI: Keeping the Focus, Supporting the Progress

Future work includes expanding this community of practice (COP) approach to include Keystone STARS managers and program directors.

On Demand Learning via Penn State Better Kid Care Partnership includes the following:

- Close-captioned video learning segments that are available for translation by the user into any language via the YouTube translation option. Additionally, written transcripts of the lessons are available as requested for use with TDD devices.
- 19 lessons are available in Spanish
- Multiple titles are also available for professionals to support children with high needs. These include some of the following titles:
    - Are You Ready for a Child with Special Needs?Help Parents to be Advocates fro Children with Disabilities
    - Death, Loss , and Grief: Understanding How to Support Children
    - Every Child Counts: Building Community
    - Parents and Caregivers Working Together
    - Supporting Families in Healthy Living

Additional supports at all levels to support at-risk populations

In an effort to promote racial and cultural equity in all programs, Pennsylvania, in partnership with the PA Build Initiative and the Annie E. Casey Foundation, implemented a strategy to better evaluate racial equity and diversity among OCDEL's programs and the broader early childhood community. Using the Casey Foundation's **Race Matters** Toolkit, OCDEL examined to what extent our programs, policies, practices, and communications were effectively serving all of Pennsylvania's children and families; if there were discrepancies among various racial or cultural groups; and ways in which we could address those discrepancies. OCDEL encouraged its partners and programs to implement racial equity tools as they examined the makeup of their organizations and leadership, access to services, communications, etc. The goal is to integrate the examination of racial equity into all of our work by training LEARN Teams, providers of OCDEL services, and OCDEL leadership staff on how to use these tools in their work.

Additionally, two professional development series have been created to support early childhood educators' effectiveness in working with children and families at the classroom level. These series specifically address race, culture and English and dual language learners. A description of each series follows:

Supporting Conversations about Race and Culture in Early Childhood Settings is a series of four professional development modules (12 hours) related to racial equity and tolerance in the early childhood education classroom. These modules identify specific strategies to address race and culture and the impact on classroom behaviors and environment. Content includes an historical perspective of race; how young children develop racial identity, awareness and attitudes and the impact on their learning and development. Additionally, content addresses strategies for having substantial conversations with peers, families and children about race to support respect and equality. Participants will create an action plan to support family-teacher interactions, communication and diverse children and families. Directors with PQAS approval and who have attended the sessions are able to deliver this content to their staff.

Module 1: Beginning the Conversation
Module 2: Historic Perspectives and White Privilege
Module 3: Planning Supportive Environments for Children and Families (Part 1)
Module 4: Planning Supportive Environments for Children and Families (Part 2)

Supporting English Language Learners (ELLs) and Dual Language Learners (DLLs) in Early Childhood Classroom Settings is a series to increase knowledge about the ways in which evidence-based practices targeting dual language learners can be applied in all program settings.

Module 1: Culture, Language and Learning: Teacher Perspectives, Family Perceptions and Children's Knowledge and Understanding
Module 2: Developmental Framework for Second Language Acquisition
Module 3: Integrating Best Practices in the Early Childhood Classroom of English Language Learners
Module 4: Creating Family and Community partnerships to Facilitate Successes for English Language Learners
Module 5: Unpacking Developmentally Appropriate Assessment Processes

Deepening Our Understanding of Continuous Quality Improvement (CQI) builds on the model used with technical assistance consultants. This professional development series is designed to provide CQI training and resources that build on PA's Core Competencies for STARS Managers Survey Results. To begin in 2011, this professional development will facilitate development of Regional communities of practice (CoP's) by providing resources and strategies that best address current issues for STARS Managers, with emphasis on working with hard to reach and hard to serve providers.

Required Use of Standards in Early Learning and Development Programs

Program	Program Standards Guidance/Policy
Keystone STARS **Child Observation, Curriculum and Assessment**	**STAR 1** Site obtains and maintains copies of the appropriate Learning Standards for all age groups in the program. **STAR 2** Learning Standards are used as a resource for staff in classroom planning and documentation of children's learning. **STAR 3** Implement a learning curriculum that incorporates the Learning Standards, including a written curriculum statement. **STAR 4** Program utilizes a curriculum that has been aligned to the Learning Standards for Early Childhood. If the program's curriculum has not been aligned, the provider must crosswalk the curriculum to the Learning Standards.
Keystone STARS **Director Qualifications**	**STARS 2, 3, 4** Complete professional development on Continuous Quality Improvement (CQI), the Facility Professional Development Plan (FPDP), and the Learning Standards.
Keystone STARS **Staff Development**	**STARS 3, 4** Teachers/Assistant Teachers must attend at least two hours of professional development annually on curriculum, program or child assessment, the age-appropriate Learning Standards and/or ERS
Pre-K Counts	**Program Standards Guidance/Policy** **405.42 Program Day and Developmentally Appropriate Instructional Practices and Activities** Instructional time for students shall be time in the program devoted to developmentally appropriate instructions practices and activities provided as an integral part of the Program under the direction of qualified employees. (1) The following practices and activities, as described in the early learning standards in 4.20 (relating to prekindergarten education), count towards instructional time: (i) Classroom instruction (ii) Orientation of children during regular school hours to the Program, Program setting and Program routines conducted (iii) Meals and snack-time, as long as they are integral parts of the curriculum facilitated by the lead teacher and used for student learning experiences (iv) Play-time, including outdoor and indoor play or child directed activities as long as they are an integral part of the instructional day, facilities by the lead teacher and used for student learning

	405.45 Curriculum (a) The curriculum used in any classroom that includes a child who is enrolled in the Program must be standards-based. (b) The curriculum used in the Program must be determined by the Department to be aligned with the Early Learning Standards established by the Department.
Head Start Supplemental Assistance Program	**Program Standards Guidance/Policy** **Learning Standards** The Improving Head Start for School Readiness Act of 2007, in the section, 614A, Quality Standards, Curricula and Assessment, requires that all Head Start grantees… (F-3) implement a research-based early childhood curriculum that (F-3-E) is aligned with the Head Start Child Development and Early Learning Framework developed by the Secretary and, as appropriate, State early learning standards. The Act identifies domains of learning and development that are consistent with Pennsylvania's learning standards. HSSAP grantees must use Pennsylvania's Learning Standards for Early Childhood as part of their curriculum development and instructional planning, Supervisors' lesson plan reviews must include comments/review of how the learning standards have been integrated into the HSSAP classroom day. The revised 2009 edition of the Learning Standards for Early Childhood has been disseminated to all HSSAP grantees along with the Continuum of Learning. The Continuum indicates children's progression across ages and identifies the way in which the work done in preschool Head Start classrooms aligns with Pennsylvania's Academic Standards for 3rd through 12th grade. Additionally, the revised alignment of the Learning Standards with the 2011 Head Start Outcomes Framework has also been completed and illustrates the Standards' applicability for individualized and classroom instruction. Pennsylvania's Standards Aligned System (SAS) further demonstrates the link between the Learning Standards for Early Childhood and higher grades of learning. The six elements of SAS that support children's school access and later academic achievement include: clear standards, fair assessments, curriculum framework, instruction, interventions and materials and resources. OCDEL-SAS offers an extensive and varied set of resources and materials, sorted by the six SAS elements that support the use of Pennsylvania's standards as an integral part of instruction. Additional resources for transition, partnering with families and professional development are also available on OCDEL-SAS. This site can be accessed at: www.pdesas.org/ocdel. Both the Standards and the Head Start Framework-Standards Alignment are posted on this site. Additional resources have been designed to assist Head Start grantees' use of a standards-aligned instructional design:

	• A DVD series provides a unique opportunity for professional development related to the application of the Learning Standards. This 9-part series is available to any PQAS instructor, including those onsite director instructors, who have had attended a 6-hour Learning Standards professional development event sponsored by the Regional Keys. The DVD series has been designed to enable onsite administrators to provide hands-on, applicable professional development that is specific to the use of the Learning Standards in classrooms. The free-of-charge DVD series may be obtained, once the agency has identified a PQAS instructor who has participated in the Standards training, by contacting the PA Key, • A newly-revised professional development event, Integrating the Standards, Curriculum and Assessment, has been designed to provide information on the revised Standards documents, the Standards Aligned System and the way in which teachers combine curriculum, assessment and standards to design responsive classroom instruction and environments. This training opportunity is available through the Regional Keys. The PA Keys online calendar at www.pakeys.org lists the training opportunities in each region • Several parent-specific resources are available: o Parent-companion documents to the Learning Standards, Kindergarten, Here I Come, Learning is Everywhere and Kindergarten, Here I Am, are parent activity guides that contain at-home ideas and materials for families to use with their children to support children's school readiness. Copies of these guides can be ordered by emailing the printer, Waveline Direct, at fulfill@wavelinedirect.com.While the guides are free of charge, a nominal shipping and handling fee is charged. Samples of these parent-friendly materials can be viewed at http://paprom.convio.net/site/PageServer?pagename=LIECIndex o Learning Standards Wheels are available through the Community Outreach agencies. These wheels are designed for families and offer a snapshot view of children's development in each of the Standards' Key Learning Areas by age level.

Infant and Toddler Standards Content Validation

Evidence	Culturally appropriate	Linguistically appropriate	Developmentally appropriate
English Language Learners information (6. Interventions, p.3)	X	X	X
Incorporation of cultural and ethnic materials (1. Materials and Resources, p. 3)	X	X	X
Families ethnicity and culture (2. Connections to Families, p. 3)	X	X	X
Standards meet the needs of ALL children (Guiding Principle #8, p. 7)	X	X	X
Individual temperaments (15.1.2, Older Toddler, Supportive Practice, p. 9)	X	X	X
Home school connection (15.4.1, Standard Statement, Exemplars, and Supportive Practices, p. 15)	X	X	X
Learning about others' differences (15.4.3, Standard Statement, Exemplars, and Supportive Practices, p. 15)	X	X	X
Diversity and Culture (p. 17)	X	X	X
Music from a variety of cultures (9.1a.1, p.19)	X	X	X
All cultures have distinct art forms (9.2, Big Idea, p. 23)	X	X	X
Use of materials from other cultures (9.2.1, p. 23)	X	X	X
Characteristics of family culture (5.2.1, Older Toddler, p. 59)	X	X	X
Inclusive Classrooms (p. 79)	X	X	X
Communicating in different ways (1.1, Big Idea, p. 79; and 1.6, Big Idea, p. 85))	X	X	X
Verbal and non-verbal communication (1.7.1, p. 87)	X	X	X
Connection with families (p. 89)	X	X	X
Sharing of information (20.1.1, p. 91)	X	X	X
Home to school connections (20.1.2, p. 91)	X	X	X
School to home connections (20.1.3, p. 91)	X	X	X
Inclusion of cultural activities within program environment (20..2, p. 93)	X	X	X
Culturally sensitive screening and assessment (20.3.1, p. 93)	X	X	X
Appropriate goal development (20.3.2, p. 93)	X	X	X

Community supports (20.3.4, p. 95)	X	X	X

Supporting Research

Gonzalez-Mena, Janet. (1997, September 22). The cultural context of infant caregiving. Retrieved August 30, 2009 from www.thefreelibrary.com.

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Ritblatt, Shulamit Natan. (2005, March 22). Cultural competence in infant/toddler caregivers: application of a tri-dimensional model. Retrieved August 30, 2009 from http://www.thefreelibrary.com.

Infant and Toddler Standards Content Validation

Evidence	Culturally appropriate	Linguistically appropriate	Developmentally appropriate
English Language Learners information (6. Interventions, p.3)	X	X	X
Incorporation of cultural and ethnic materials (1. Materials and Resources, p. 3)	X	X	X
Families ethnicity and culture (2. Connections to Families, p. 3)	X	X	X
Meeting the needs of all children (Guiding Principle #7, p. 6)	X	X	X
Connections to families (p.7)	X	X	X
Learning through use of prior knowledge (Big Idea, p. 10)	X	X	X
Home school connection (15.4.1, Standard Statement, Exemplars, and Supportive Practices, p. 15)	X	X	X
Family provides context in which learning is constructed (Big Idea, p. 11)	X	X	X
Culture – Home/School Identity (15.4.1, p. 11)	X	X	X
Culture (15.4.3,, p. 12)	X	X	X
Diversity and Culture (p. 13)	X	X	X
Music from a variety of cultures (9.1a.2, p.14)	X	X	X
All cultures have distinct art forms (9.2, Big Idea, p. 16)	X	X	X
Connections to family and community (p. 43)	X	X	X
Individuals are connected to community (Big Idea, p. 48)	X	X	X
Characteristics of home (7.1.2, p. 48)	X	X	X
Individuals unique characteristics (7.3.1, p. 49)	X	X	X
Inclusive classrooms (p. 58)	X	X	X
Supporting acquisition of vocabulary (1.1.3, p. 59)	X	X	X
Connect prior knowledge with learning (1.1.4, p. 60)	X	X	X
Communicating in more than one language (1.7.1, p. 65)	X	X	X
Connection with families (p. 68)	X	X	X
Sharing of information (20.1.1, p. 69)	X	X	X
Home to school connections (20.1.2, p. 70)	X	X	X

School to home connections (20.1.3, p. 70)	X	X	X
Inclusion of cultural activities within program environment (20..2, p. 71)	X	X	X
Culturally sensitive screening and assessment (20.3.1, p. 72)	X	X	X
Appropriate goal development (20.3.2, p. 72)	X	X	X
Community supports (20.3.4, p. 73)	X	X	X
Temperament and individual needs of children (p. 76)	X	X	X

Supporting Research

Bredekamp, S. and T. Rosegrant. (1995). Reaching potentials: Transforming early childhood curriculum and assessment. Vol 2. National Association for the Education of Young Children. Washington, DC.

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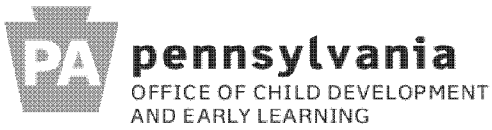
Alignment of PA Learning Standards for Early Childhood and States Kindergarten – Grade 3 Standards

Language and Literacy	
Standard	**Alignment to K-3**
1.1 Foundational Skills	X
1.2 Reading Informational Text	X
1.3 Reading Literature	X
1.4 Writing	X
1.5 Speaking and Listening	X
Mathematics	
Standard	**Alignment to K-3**
2.1 Numbers and Operations	X
2.2 Algebraic Concepts	X
2.3 Geometry	X
2.4 Measurement, Data and Probability	X
Scientific Thinking	
Standard	**Alignment to K-3**
3.1A Living and Non-living Organisms	X
3.1B Genetics	X
3.1C Evolution	X
3.2A Chemistry	X
3.2B Physics	X
3.3A Earth Structures, Processes and Cycles	X
3.3B Origin and Evolution of the Universe	X
Environment and Ecology	
4.1 Ecology	X
4.2 Watersheds and Wetlands	X
4.3 Natural Resources	X
4.4 Agriculture and Society	X
4.5 Humans and the Environment	X

Computer and Information Technology	
15.4 Computer and Information Technology	**X**
Social Studies Thinking	
5.1 Principles and Documents of Government	**X**
5.2 Rights and Responsibilities of Citizenship	**X**
5.3 How Government Works	**X**
6.1 Scarcity and Choice	**X**
6.2 Markets and Economic Systems	**X**
6.3 Functions of Government	**X**
6.5 Income, Profit and Wealth	**X**
7.1 Basic Geographic Literacy	**X**
7.2 Physical Characteristics of Places and Regions	**X**
8.1 Historical Analysis and Skills Development	**X**
Social and Emotional Development (Student Interpersonal Skills)	
16.1 Self-Awareness and Self-Management	**X**
16.2 Establishing and Maintaining Relationships	**X**
16.3 Decision Making and Responsible Behavior	**X**



Pennsylvania Early Learning Standards Alignment Study

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Executive Summary
2009

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I. Introduction

The Pennsylvania Early Learning Standards Alignment Study ("Study") was commissioned by the Pennsylvania Office of Child Development and Early Learning (OCDEL) of the Departments of Education and Public Welfare, with support from the William Penn Foundation, to support Pennsylvania's innovative work in the establishment of an effective early childhood accountability system. The Study reviewed the degree of alignment that Pennsylvania's early childhood standards and assessments demonstrate with each other and with the early grades of the K-12 system, and is intended to be used by OCDEL to revise its standards as necessary in response to the findings.

The Study concluded that, overall, the standards and assessments are strong and show good alignment across the age/grade levels.

II. Study Questions and Design

This study addressed both horizontal and vertical alignment questions.

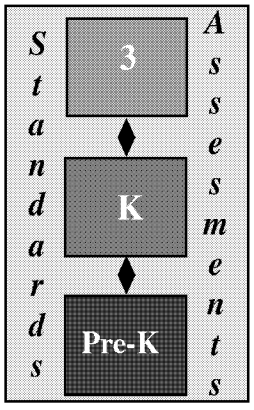
Horizontal alignment refers to the consistency of standards and assessment *within* a given age cohort (e.g., Pre-K), including to what degree the assessment reflects the learning and development represented in the standards.

Example: 4-year-olds

In this area, the Study asked:

- To what extent are Pennsylvania's Infant-Toddler standards aligned with the Ounce Scale assessment that is used for this age group?
- To what extent are Pennsylvania's Pre-K Standards aligned with the Work Sampling System assessment that is used for this age group?

Vertical alignment refers to the consistency of standards and assessments *between* age cohorts (e.g., Pre-K vs. Kindergarten [*short-term*] and Pre-K vs. Third Grade [*long-term*]), including to what degree the standards and assessments represent a progression of learning and development over time.



In this area, the Study asked:

- To what extent are Pennsylvania's Infant-Toddler, Pre-K and Kindergarten standards aligned?
- To what extent are Pennsylvania's standards for Kindergarten through 3rd grade aligned?
- To what extent is the Work Sampling System assessment for pre-k aligned with PA's PSSA 3rd grade assessment?

Typical analyses conducted on early childhood standards simply look at the extent to which the items in one document "match" the items in another document. This type of low complexity analysis was insufficient for this Study for two reasons: 1) OCDEL needed a more in-depth look at alignment; and 2) the low complexity approach would not work across such a wide age range.

In response, a new and innovative approach to analyzing alignment was developed for this Study. Following a review of alignment studies conducted for K-12 systems and a thorough study of research on early learning and development from birth through age 8, the research team developed a template and coding system that can be used to conduct high complexity alignment analyses. This approach to analyzing alignment addressed both *match* from one document to another and the *quality* of the alignment across documents. This analysis protocol was used to address alignment across the following four parameters:

1) Balance: the percentage of all indicators and items devoted to each domain.
2) Coverage: the degree to which template constructs are addressed by both documents
3) Depth: the percentage of indicators/items found on each template construct within the domain
4) Difficulty: the level of cognitive or developmental demand in pairs of indicators and items across documents

III. Summary of Findings and Observations;

A. *Conclusion*

Overall, the standards and assessments are strong and show good alignment across the age/grade levels. Pennsylvania is to be congratulated on developing a cohesive set of standards that address Birth through Second Grade. The vast majority of states have standards that address Infant-Toddler and Pre-Kindergarten, but are separate from the K-12 standards. Pennsylvania's approach is truly unique and forward thinking. There appears to be a relatively high degree of alignment in the Infant-Toddler through Kindergarten standards. Alignment in the Pre-K through Third Grade standards could be strengthened to provide a stronger framework for children's transitions and to reflect a more developmental orientation at the upper levels.

B. *Broad Based Areas for Improvement*

Three broad-based areas for improvement emerge from the study for follow-up by the PA Office of Child Development and Early Learning.

1. Pennsylvania's early learning standards acknowledge the tension between academic and developmental elements, and have taken steps to minimize the discord beyond what many states have done. Additional attention should be given to bolster the developmental elements in the revisions to the standards.
2. Not all of the items in the standards are addressed by the assessment instruments. Pennsylvania's standards contain more content than is assessed by the assessment instruments. Results from the alignment analyses should be reviewed carefully to ensure that the assessments have addressed all developmentally and academically significant content from the standards, and to determine that the assessment items sufficiently reflect the balance, coverage, depth and difficulty levels of the standards.
3. Some indicators appear across age groups. While it is true that standards can and should transcend age groups, indicators must be age appropriate. In cases where indicators appear for two age groups, the overlaps have been identified and the study recommends that Pennsylvania address all areas of overlap in its revisions in order to ensure that the standards reflect an appropriate progression in the knowledge and skills outlined for each age level and across the age levels.
4. In some cases, there were age gaps where indicators addressed a construct at one age level but no similar indicator was noted in the previous and/or next age level. For example, a construct might have been represented at prekindergarten and then at first grade, with nothing pertinent to the construct at kindergarten. Since continuity of learning is critical, recommendations were made to create indicators for the missing age levels.

C. *Balance, Coverage, Depth and Difficulty Findings*

Highlights of the findings in the areas of balance, coverage, depth and difficulty are noted below. Each of these findings can be addressed by OCDEL in the standards revisions.

Balance:

The study used the following criterion for balance: At any age level, when less than 10% or more than 50% of indicators focus on a single domain, there is a quality imbalance.

- In the infant-toddler through kindergarten alignment, Approaches to Learning and Physical Development are under-emphasized in some age groups.
- Language & Communication may be over-represented at 24-36 months.
- The Cognitive domain may be over-represented in Kindergarten.
- When compared to the Ounce assessment, the Infant-Toddler standards place a heavier emphasis on Language and Communication Development, and devote fewer indicators to Cognitive Development and General Knowledge, and Social and Emotional Development.

Depth and coverage:

The study identified the extent to which the specific constructs within each domain were addressed and noted:

- The indicators addressed the academic subject area constructs with greater depth than constructs related to cognitive processes.

- There is some uneven coverage of the constructs across age groups. There are some mismatches and breaks in coverage that are not developmentally or educationally appropriate which need to be addressed in the revisions.

Difficulty:
When looking at the extent to which paired indicators and items represent equivalent cognitive or developmental demand for what children should know and be able to do, the study found:

- The pairs of indicators in the infant-toddler through kindergarten standards reflected a progression of difficulty from younger to older in most cases. There are a small number of pairs in which indicators at the younger age appeared more difficult than the indicators at older ages, with some pairs showing equal difficulty or unmatched pairs without a corresponding indicator.

D. *Recommendations by Age*
The following age-specific recommendations are provided to assist OCDEL in its revision process.

Infant-Toddler Standards:

- Consider how play is reflected throughout the document to ensure that the standards communicate the importance of play across developmental domains in a coherent manner. Look across the different areas where play is addressed to ensure that the role play has in all areas of children's development is addressed and that the indicators present a coherent picture of how play develops across the various domains.
- Consider whether the "Red Flags" (select indicators designated within the document as particularly important for identifying children who might need to be screened for potential disabilities) within the standards document are the most effective way to educate caregivers regarding how to discern when children may need a formal screening and/or evaluation for suspected disabilities.
- Review the rationale for the age levels used in the standards document and consider whether it would be helpful to have the age levels used in the standards align more closely with the age levels used in the assessment for Infants-Toddlers.

Pre-Kindergarten Standards:

- Consider how play is reflected throughout the document to ensure that the standards communicate the importance of play across developmental domains in a coherent manner. It may be worthwhile to rethink the conceptualization of play as a fundamental part of the learning process.
- Review the indicators in the pre-kindergarten and kindergarten standards for identical pairs and revise them as appropriate to reflect progression of learning and development over time, with careful consideration of children's learning and development over time.
- Consider adding indicators that address important cognitive processes that develop at this age. These processes include reasoning, perspective taking, reflection on thought processes, planning and intentionality, and adaptability of thought processes.

- Consider adding a standard for technology that includes the use of technology and the social, ethical, and human issues related to it.

Kindergarten Standards:

- There is an apparent shift from developmental "domains" to a predominance of subject areas, with an over-emphasis on the Cognitive domain. In the overall domain of Cognitive Development and General Knowledge, the balance percentage is quite high at 59%. Consider whether to increase the relative emphasis on other domains by adding indicators there (such as in the area of play in the Approaches to Learning domain), and/or decreasing the relative emphasis on the Cognitive domain by removing some indicators from Cognitive-related subject areas.
- The content for Kindergarten is quite prescriptive and detailed, often expressed as lists of very specific indicators. Review the indicators to ensure that they address content that is deemed to be developmentally and academically significant.
- The items represented in the Kindergarten document are often quite sophisticated in their content (e.g., *Identify color, line and texture patterns in visual arts* and *Distinguish between scientific fact and a belief through literature*). Consider revising indicators that may presume knowledge that is not age appropriate for Kindergarten children.

First through Third Grade Standards:

The analysis suggests that the standards for grades One and Two are both broad and deep in their treatment of essential elements of early education. Pennsylvania is to be commended for having standards that span infancy through second grade and cover both academic and developmental content. Yet, there is room for important improvement if the standards are to align effectively with those of earlier developmental stages and years. Three areas are noted:

- *Under-emphasis of Specific Domains*: Two domains where additional emphasis is needed are Social and Emotional Development and Approaches to Play and Learning, particularly in Third grade where these domains were absent.
- *Under-emphasis on Cognitive Processes*: Like many states, Pennsylvania has accorded a great deal of attention to subject matter ***knowledge*** areas in grades One through Three. Sometimes, however, this emphasis comes at the expense of a focus on cognitive ***processes***. First, Second, and Third grade standards should be reviewed to accord greater attention to transcendent cognitive process, including such processes as problem solving, hypothesis making, conjecture, and analysis.
- *Missing Subject Area*: The Third grade standards do not include the Science subject area. They should be revised to include standards related to Science, including content related to both the scientific inquiry process and the various Science sub-fields.

E. Recommendations by Assessment

The following assessment recommendations are provided to assist OCDEL in its alignment work.

The Ounce Scale for Infants and Toddlers:

- The standards address a broader array of constructs than does the assessment. Results from the analyses should be reviewed to ensure that the assessment addresses all indicators/constructs deemed to be highly significant for this age.

Work Sampling System:

- Overall, the Pre-K standards and Work Sampling assessment are well aligned and when there is misalignment, there are constructs that are addressed in the standards but not on the assessment.

Pennsylvania System of School Assessment (PSSAs):

- The Work Sampling System addresses all domains of children's development (physical, social-emotional, language and cognitive development, as well as approaches toward play and learning), while the Third grade PSSA addresses only reading and mathematics. There is, therefore, significant mis-alignment in the *balance* of the content covered. Within the two areas of literacy and mathematics, however, there was a relatively good degree of alignment in the specific constructs addressed (i.e., the *coverage* and *depth* analyses).
- The Third Grade standards address reading and writing, mathematics, social studies, the arts and humanities, health, safety and physical education, and family and consumer sciences, while the Third grade PSSA addresses only reading and mathematics. Such narrowing of the assessments is problematic. To that end, we strongly recommend that the Department review what is being assessed in the PSSA, with some intention to align its assessment to the standards.
- Such consideration should also focus on critical questions with which the field is grappling:

1. What is the appropriate balance between the disciplinary areas and the developmental domains in standards and assessments, and how should this balance change over time?
2. How much of a child's learning should be assessed ***before*** Third grade?
3. What would such assessments for children below Third grade entail?
4. How much of a child's learning should be assessed ***at*** Third grade?

IV. Summary

Pennsylvania is to be commended for having standards and assessments that form a cohesive framework for education and assessments from birth through second grade. The high complexity alignment analyses conducted in this Study indicate good alignment from infancy through second grade and provide information that can be used to further improve the quality of the standards and assessments. Revisions in the standards will further strengthen the state's innovative approach to implementing an effective early childhood accountability system.

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WILLIAM PENN FOUNDATION

2013-2014 Approved Assessment Tools

Infant – Toddler (0-3 years)

Curriculum Associates

The BRIGANCE® Early Childhood Developmental Inventory (ECDI)

The BRIGANCE® Early Childhood Developmental Inventory (ECDI) pinpoints each child's individual readiness needs and monitors progress in the following key domains: language development, literacy, mathematics and science, social and emotional development, physical development and health, and approaches to learning. Based on over 30 years of research, the ECDI provides valid and reliable criterion-*referenced assessment, identifying a child's mastery of specific skills along a* developmental sequence. The ECDI supports observation-based assessment and includes clear, step-by-step directions for easy administration and record-keeping.

Curriculum Associates

The BRIGANCE® Head Start Developmental Inventory (HSDI)

The BRIGANCE® Head Start Developmental Inventory (*HSDI) pinpoints each child's individual readiness needs and* monitors progress in the following key domains aligned to the Head Start framework: language development, literacy, mathematics and science, social and emotional development, physical development and health, and approaches to learning. Based on over 30 years of research, the HSDI provides valid and reliable criterion-referenced assessment, identifying a *child's mastery of specific skills along a developmental sequence. The HSDI supports observation*-based assessment and includes clear, step-by-step directions for easy administration and record-keeping. The HSDI is also correlated to the BRIGANCE Head Start Screens and Readiness Activities for developmental screening and individualized instruction.

The BRIGANCE® Early Childhood Developmental Inventory (ECDI) and Head Start Developmental Inventory (HSDI)

Enables teachers to plan developmentally appropriate, individualized instruction, including objectives for IFSPs/IEPs, and to measure and report each child's progress over time by early learning standards or foundations.

- Language Development
- Literacy
- Math and Science
- Social and Emotional Development
- Physical Health and Development
- Approaches to Learning

Teachers administer easy-to-use assessments in the Developmental Inventory through observation, parent/caregiver interview, or child performance.

Overviews help teachers quickly understand each assessment's purpose, domain, and key administration information.

Helpful Comprehensive Skills Sequences break down skills step-by-step and list developmental age levels to help teachers and caregivers know which skills to look for and support next.

Pearson

The Ounce Scale ™

The Ounce Scale ™, companion assessment to the Work Sampling System, is a valid, research-based performance assessment that teachers and other early childhood professionals use to document the growth of infants and toddlers across six key developmental domains. The Ounce scale was intentionally designed to focus on areas that are developmentally appropriate for the very young.

Recommended uses

The Ounce Scale offers a meaningful way to evaluate and document children's growth, accomplishments, areas of difficulty, and temperament. This versatile tool is used by:

- Center-based childcare personnel

- Early Head Start teachers
- Home visitors
- Parent support group leaders
- Visiting nurses
- Teen parenting program staff
- Early interventional specialists
- Family home daycare providers
- Pediatricians and health aides

Benefits

- Presents a highly reliable, criterion-referenced measure based on specific developmental standards
- Helps meet Early Head Start and federal assessment requirements
- Allows you to gather information from multiple perspectives, giving a more well-*rounded picture of the child's* development
- Takes a natural, whole-child approach to observation
- Helps educate parents so that they can become more involved in decisions about their children
- Supports early intervention for at-risk kids
- *Enables you to celebrate children's achievements*
- Offers your district online tools to help streamline data collection and reporting

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Teaching Strategies GOLD®

Teaching Strategies GOLD® is an authentic, ongoing observational system for assessing children from birth through kindergarten, proven to be valid and reliable by extensive field testing. It helps teachers observe children in the context of everyday experiences, which is an effective way to learn what they know and can do. It is based on 38 objectives that include predictors of school success and are aligned with Pennsylvania Early Learning Outcomes Reporting Inventories. Teachers use these objectives to focus their observations as they gather information to inform instruction. Teaching Strategies GOLD® is fully bilingual and can be used with any developmentally appropriate curriculum.

Supports All Learners

Teaching Strategies GOLD can be used to support all types of learners, including children with special needs and children with advanced knowledge and skills.

Fully Bilingual: English and Spanish

Because Teaching Strategies GOLD is a fully bilingual tool, it offers teachers support for assessing the dual-language learners in their classrooms who are learning English and Spanish.

Pre-Kindergarten (3-5 years)

HighReach Learning GRO ™

HRL-GRO ™ is an observation tool designed to monitor progress and growth in children's behavior over time. In order to support children in achieving their full potential and developing school readiness skills, we must reflect on what we observe children doing. Designed as a tool to assist educators by making reflection and observation intentional and focused, GRO ™ provides critical information to know where a child is, and what the next step is in the development of skills.

Includes:

- 37 elements across 11 domains that allows you to track a child's progress from the way the skill develops at its early foundation to the steps of skill development leading to "school readiness"
- A 4-step sequence of development helps you to see a full range of skill progression, allowing you to work with any child, including those with special learning needs
- Specific teaching strategies for each learning element, showing how to link teaching to children's learning in that area
- Web- and paper-based applications that help you observe and record children's development and learning over time

- Family communication tools in English and Spanish that provide important information about children's development and learning
- A wide selection of site, class, and family reports
- Supports state standards
- Aligns to new Head Start Child Development Framework

NIEER/Lakeshore Early Learning Scale (ELS)
The Early Learning Scale (ELS) is an observation-based performance assessment. The ELS was developed by the National Institute of Early Education Research (NIEER) in response to requests by educators for a comprehensive, standards-based assessment system capable of informing instruction and making an impact on teaching and learning without being overwhelming to teachers. Observations, anecdotal notes, and work samples are analyzed using a research-based developmental trajectory, to provide teachers with a f*ocused look at children's development in the most critical areas. The ELS* can be used in any preschool classroom, with any curriculum and is appropriate for use with ALL children.

English Language Learners
In the ELS system, collecting documentation and assessing English language learners is determined to a large extent on the language of instruction and the purpose of the assessment. Professionals involved in the assessment of young English language learners should seek information and insight from family members in selecting, conducting, and interpreting assessments (NAEYC, 2009). Whenever feasible, assessment should be conducted in the language of instruction. So, if the child is a dual-language, bilingual documentation should be collected to accurately represent what the child knows and thus indicate what the focus of teaching should be in either language.

Children with Disabilities
Assessment systems such as the ELS can be the best method of assessing the instructional needs of children with *disabilities since they measure children's abilities in context and over time. The ELS instrument can also provide* excellent information for developing Individualized Educational Plan objectives. However,

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Pearson The Work Sampling System®
The Work Sampling System® is a valid, research-based performance assessment that teachers use to systematically *document children's skills, knowledge,* behavior, and academic accomplishments. As a result, teachers can better understand and communicate what individual students are learning, what they are beginning to master, and what they still need to improve.

Users & Applications
The tool helps to:

- *Collect information on the child's work and compare it to grade*-specific guidelines
- Identify what children are learning, what they are beginning to master, and what they still need to work on
- Use your observations and simplify the process of recording and interpreting them
- Inform curriculum and instruction planning

Content & Administration

- The three main, interrelated elements of The Work Sampling System—Portfolios, Developmental Guidelines and Checklists, and Summary Reports—are customized for each grade level.
- Portfolio samples are gathered throughout the year and help demonstrate progress through concrete *illustrations of the child's thinking.*
- Developmental Guidelines cover seven major curriculum areas: personal and social development, language and literacy, mathematical thinking, scientific thinking, social studies, the arts, and physical development and health.
- Summary Reports replace conventional report cards as a way of recording progress, communicating with parents, and meeting reporting requirements. Using information from the Developmental Checklists and Portfolio, you complete a Summary Report three times a year.

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Build
Strong Foundations For
Pennsylvania's Youngest Children

REVISED REPORT AND GUIDELINES ON EARLY CHILDHOOD ASSESSMENT FOR CHILDREN FROM BIRTH TO AGE 8 (Grade 3)

February 2007

Early Learning Standards Task Force
And Kindergarten Assessment Work Group
Pennsylvania BUILD Initiative
Pennsylvania's Departments of Education and Public Welfare
Harrisburg, PA

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REVISED REPORT AND GUILDELINES ON EARLY CHILDHOOD ASSESSMENT FOR CHILDREN FROM BIRTH TO AGE 8 (Grade 3)

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Note: See the accompanying document, *Summary of Assessment Measures* for the tables that describe the properties and descriptions of curriculum-consistent assessment measures.

EARLY CHILDHOOD ASSESSMENT FOR CHILDREN FROM BIRTH TO AGE 8 (Grade 3)

I. INTRODUCTION

Developmental assessments are a process which allows one to understand a child's competencies and to design learning environments which will help a child grow to his or her developmental potential whether this is from birth to age 8 or third grade. The principles and philosophy of assessment that we often apply to young children are part of a continuum that begins at birth and extends through Kindergarten to third grade. Measurement, both assessment and evaluation, of the skills learned by young children must rely upon practices that fit expected learning skills and behavior and then change, as appropriate, to support children as they grow and develop. Assessments that are implemented in the classroom and aligned with Pennsylvania's standards for learning (birth to age 8 or third grade) will help inform teachers about designing a curriculum that provides multiple learning opportunities that best suits how each child learns.

A two step process occurred to provide guidance to early childhood programs and school districts for the alignment of assessment and curriculum to the Pennsylvania standards for learning for children birth to age 8. First, a workgroup consistently mostly of members of the original Early Learning Standards Taskforce was formed. This workgroup developed a report, *Final Report and Guidelines on Assessment and Curriculum* (2005) to address the linkages of assessment and curriculum that would assist in the adherence to the Early Learning Standards for Pre-Kindergarten children. An important workgroup goal was to help make program personnel aware of available materials that encourage teachers to rely on authentic measures of early learning and development that link directly to program content and goals, as well as Pennsylvania's standards for learning, and that sample skills in natural, active learning environments, rather than contrived circumstances.

The second step in the process to provide guidance for Pennsylvania's standards for learning was to convene a second work group comprised of individuals from the Pennsylvania Department of Education, school districts, universities, early childhood, and early intervention to examine the original document developed by the Early Learning Standards Taskforce. The intent of the meeting was to examine the report and to determine how to modify it so that the report emphasized that assessment and curriculum are part of a continuum that begins at birth and extends through Kindergarten to third grade. The information provided in the *Revised Report and Guidelines on Early Childhood Assessment From Birth to Age 8 (grade 3)* incorporates information from the original report and it also emphasizes the importance of viewing assessment and curriculum development as a continuous process from birth to age 8.

Although curriculum and assessment are intertwined, a third step in the process was to create separate documents about assessment, curriculum, and classroom observation measures. The purpose of the separation was to help individuals access the information about each topic with greater ease. Each document provides comprehensive information about the importance of assessment, curriculum, or classroom observation to provide quality classrooms for children to succeed in school. The assessment and curriculum reports each have accompanying documents that contain tables describing individual assessment tools or curriculum resources. The documents for all topics include:

- *Revised Report and Guidelines on Early Childhood Assessment For Children From Birth to Age 8 (grade 3)*;

- *Summary of Assessment Measures*, document to accompany *Revised Report and Guidelines on Early Childhood Assessment For Children From Birth to Age 8 (Grade 3);*

- *Curriculum for Early Childhood Programs Serving Children From Birth to Age 8 (Grade 3);*
  - *Summary of Curriculum Resources*, document to accompany *Early Childhood Curriculum for Programs Serving Children birth to age 8 (grade 3)*;

- *Review of Early Childhood Classroom Observation Measures*

The accompanying document to this report, *Summary of Assessment Measures* (this can be found at www.pde.state.pa.us) provides a brief overview of critical features (Tables 1 through 3) for each child assessment instrument. These tables are appropriate for the Early Learning Standards for Pre-Kindergarten and Kindergarten and the instruments are marked accordingly. Next, within the document there is an overview of the coverage (i.e., alignment) of the Key Learning Areas of the Early Learning Standards for Pre-Kindergarten for a number of the measures (see Tables 4 and 5). Blank cells in the table represent the Key Learning Areas that are not covered by that instrument. An "X" indicates that there is *at least minimal* coverage of that key learning area. An overview for the Kindergarten Standards will be added in the future. For more specific details within each of the Key Learning Areas, one needs to refer to the extensive matrices in which items from each of the instruments are correlated with the Standards at the Indicator level. These publisher-correlations are located at www.pde.state.pa.us.

Finally, in the accompanying document, Table 6 provides an overview of each curriculum consistent measure appropriate for Pre-K to Kindergarten and older classrooms. A column in this table specifies if the curriculum has been aligned or not with the Pennsylvania Early Learning Standards (birth to age 8).

It must be noted that it is not the Department of Education's intention to make specific recommendations with regard to assessment tools, rather the Department wishes to provide guidelines for decision-making that would best adhere to the Pennsylvania standards for learning (birth to age 8). Given the many resources available on the market, both workgroups limited the list of assessment tools in the accompanying document to those that are evidence-based and have demonstrated technological adequacy for the preschool and elementary school-age groups.

It is important to realize that there are many purposes of assessment, such as for diagnostic purposes, for program evaluation, for determining school readiness, and for screening developmental delays or learning difficulties. These other purposes are not as relevant for adhering to the Pennsylvania standards for learning (birth to age 8) and so the focus of this report is on using assessment to inform instruction.

II. MEASURING CHILDREN'S DEVELOPMENT AND LEARNING

Background

The overall purpose of assessment, regardless of age, is to help teachers make appropriate instructional decisions about how to best teach children. The principles and philosophy of assessment that we often apply to young children are part of a continuum that begins at birth and extends through Kindergarten to third grade. Measurement, both assessment and evaluation, of the skills learned by young children must rely upon practices that fit expected learning skills and behavior and then change, as appropriate, to support children as they grow and develop. For example, young children learn and exhibit

their learning in different ways than older children. Young children learn by doing rather than just listening and may best exhibit what they know in actions rather than in speech or writing. Because growth is more rapid in the period from birth to age eight then at other periods of development it becomes challenging to capture children's skills and abilities, particularly at any one point in time (Zaslow, Calkins, & Halle, 2000).

The varying developmental changes make the needs for assessment of young children very different from those for older children or adults. In many instances, professionals both teach and test young children using downward extensions of methods used with older individuals, often to the detriment of children. Too often, childhood testing results in the "mismeasure" of young children. Assessment methods of children need to support children's developmental changes along a continuum to gather reliable data (Zaslow, Calkins, & Halle, 2000; Neisworth & Bagnato, 2004).

A common reaction from the field with regard to assessment is nervousness about the inappropriateness of "testing" children and fear about high-stakes decision-making. Certainly, the use of assessment tools that are inappropriate for children should be avoided, whether they are in preschool or of elementary school-age. Early childhood assessment should never be high-stakes. However, the benefits of assessment procedures for children birth to age 8 need to be more widely recognized. Integrating assessment with curriculum and standards offers an opportunity to elevate the level of professionalism in the field of early education (birth to age 8), similar to that of other more evidence-based fields.

Recommended practices in assessment of young children (birth to age 8) are guided by specific professional standards and position statements established by major national organizations, including the National Association for the Education of Young Children (NAEYC); Division for Early Childhood (DEC) of the Council for Exceptional Children; the Head Start Program Performance Standards; American Educational Research Association (AERA); and the National Association for School Psychologists. These practices have been set and revised regularly through a rigorous process of social validation by experts and practitioners in the fields. Many of the standards have a research evidence base (Dunst, Trivette, & Bagnato, 2001). Generally, the position statements and guidance reflect the concepts that assessment of young children (birth to age 8) is appropriate, beneficial, and useful, if used as intended.

Measurement Considerations

Several principles exist that are important when measuring the development and learning of children birth to age 8 or third grade. These principles direct programs in determining which assessment instrument best meets the needs of the children, as well as the needs of the program (both early childhood and school-age).

1. **Purpose:** Assessment results can identify both the well-developed and least well-developed skills of children so that beneficial learning experiences and teaching can be individually planned and carried out. Assessment on children birth to age 8 years is not conducted primarily for diagnostic purposes, that is, to determine whether the child has comparative deficits or delays in reference to peers his/her age. Rather, assessment of children presumes that assessment provides the information needed to plan programs and curriculum that will promote each child's progress. Assessments are conducted to:

    - Find out what children are interested in,
    - Find out children's strengths and areas of difficulty,
    - Make informed decisions about interventions,

- Discover how children change over time,
- Learn what children know in particular areas, such as reading,
- Link with instruction, making sure instruction is responsive and appropriate, matching what children can and cannot do, and
- Serve as a basis to report to parents.

Assessment is NOT conducted to classify the child's "readiness" for inclusion in an educational setting and assessment is DEFINITELY NOT conducted to exclude the child from preschool or Kindergarten because of an erroneously presumed lack of readiness. It IS conducted to plan beneficial opportunities for each child.

Many different purposes exist for assessment so instruments are usually designed to address only one specific purpose. Potential misuses of testing with children may occur when measures intended for one purpose are used inappropriately for other purposes (Hirsh-Pasek, Kochanoff, Newcombe & de Villiers, 2005). An example of this is to use results from a screening test to determine the cause of a child's developmental delay. A diagnostic tool is more appropriate for this purpose.

Keep in mind that the focus of this report's guidelines is on the process of assessment for the purpose of informing teaching. The measures reviewed and listed in the accompanying document, *Summary of Assessment Measures,* are limited to those most appropriate for this purpose. Teaching and learning are reciprocal processes that influence each other and only through assessment can it be determined how well the teacher is teaching and how well the student/child is learning (Kellough & Kellough, 1999). Recently, assessments, particularly in elementary school, have focused on determining a child's achievement level, rather than to "identify" a child's intervention needs or to ascertain appropriate instructional strategies.

One particular purpose of assessment often causes confusion and this is the use of screening instruments or "screeners." The criteria for developmental screening instruments are generically defined by the characteristic of being brief, cursory, objectively scored, reliable, and valid (Meisels, with Atkins-Burnett, 1994). Brief instruments, for reasons of feasibility, are often used when large groups of children need to be evaluated. The results generated from this type of procedure tend to be used for purposes that are beyond the classroom level or for informing teaching. Although it may be useful to teachers to view and be aware of results from a screening procedure, most commonly, results are used by schools/programs in order to identify those few children who may need to receive more extensive (diagnostic) assessment for determining developmental delays or special needs. A screener, though brief, is usually effective in catching the most severe cases of children who would need follow-up evaluation.

More recently, screening instruments are used to assess whether a child is developmentally ready to attend an educational program or to determine a child's school readiness. Screeners are often inappropriately used as readiness tests for children. School districts are not permitted to deny children entry to Kindergarten based on the results of a readiness test. However, the assessment results from pre-Kindergarten settings are important because the information can inform Kindergarten teachers about children's developmental status. This information, in conjunction with assessment results conducted near the beginning of the Kindergarten school-year, can aid in the development of a plan that best suits each child. A supportive transition between preschool and Kindergarten will occur when childcare teachers understand and have knowledge of the Pennsylvania standards for learning and communicate with school district teachers, and equally, school district teachers understand

children's early learning environments, what they have already learned, and what kinds of supports the children have received.

Assessing children as they enter Kindergarten is particularly important to help determine the child's areas of strengths and needs so the teacher can adapt the learning environment and activities to the needs of all the children in the classroom. "When [assessment] information is used by the classroom teacher to design the child's learning environment, [the child's] success in school is enhanced, and a more stimulating, exciting learning environment is facilitated (Niemeyer & Scott-Little, 2001, p 2). However, the measures often used at the start of Kindergarten are usually too brief to be appropriate for evaluating children's status and ongoing progress in a way that informs instructional planning that will align with Pennsylvania's standards for learning (birth to age 8).

2. **Method:** The ideal method of assessing children is through authentic, naturalistic observations that occur on an ongoing basis. The observations should occur during daily activities, teaching, and care routines to describe the development and learning of children. The assessment is not a one-time event since it is difficult to gather valid and reliable indicators of development from this type of information (NAEYC/NAECS/SDE, 2003). Methods of engaging in ongoing assessment include portfolios, observations, anecdotal notes, and checklists, to name a few.

   As children move into Kindergarten and the early grades of elementary school these types of assessments become more difficult to implement, but are not impossible. More norm-referenced testing, or testing to get a score, becomes more common place as children become older because of the need to assess large groups of children more quickly and to produce a score that can indicate progress or lack thereof. As children progress through the grades, there are fewer opportunities to engage in ongoing, authentic assessments. Classrooms become more structured and there is an increased focus on instruction and content. Overall, there are fewer authentic-based instruments available for the older age group. However, research has demonstrated that elementary school children enrolled in classrooms that use a curriculum-embedded assessment instrument showed greater gains in reading on a conventional test of academic accountability than those students who were not in such classrooms (Meisels, Atkins-Burnett, Xue, Bickel, Son, 2003).

   To provide a little background information on types of assessment, there are generally two types of assessment: formal and informal. Formal assessments are defined as highly valid and reliable (.8 or above), standardized (administered similarly each time), and have standards of comparison (norm-referenced, standards referenced, and criterion-referenced) to make sense of the results (see definitions). These instruments are usually published by a national company. Informal assessments, on the other hand, do not follow standard conditions or use standard materials, they often do not have documented reliability (.5 to .6 are acceptable) and validity, and they may be published, but they can also be teacher or program developed (i.e., classroom checklist). Ongoing, authentic assessments tend to fall under the definition of informal assessments and are usually considered to be criterion-referenced (the comparison is based on a students' own knowledge and skill rather than a norm group).

   For a comprehensive explanation of the terms related to methods of assessment, please see the "definition" section in the back of this report.

3. **Context:** As stated above under Method, the best way to assess children is through naturalistic observations of children on an on-going basis. Evidence of children's developmental abilities comes

from ongoing structured observations of naturally occurring behavior in natural, everyday settings and routines (home, preschool, community) by teachers and other caregivers (parents, psychologists, aides, and other team members). Structured observation schedules and ratings formats, as well as other teachable moments and informal interactions with the child, enable educators to capture real-life examples of each child's problem-solving, language, literacy, math, motor, social, and self-skills. Measures which sample real-life behavior in real-life settings are called ***authentic assessment*** measures. These types of measures can examine the whole child in their natural learning environment.

"Table-top testing" and/or "pencil-and-paper standardized tests" are discouraged for children birth to age 8 for a variety of reasons. For example, young children and children in Kindergarten may not be able to use a pencil effectively to demonstrate their knowledge. A test of this type does not capture some of the skills that are critical to success in school (i.e., social and emotional development; approaches to learning) (Scott-Little & Niemeyer, 2001). As children grow older and their skills broaden they are better able to demonstrate their knowledge and skill. Again, assessment of children follows a continuum similar to children's developmental changes. Younger children need naturalistic opportunities to demonstrate their skills while this need begins to change as children grow older where they can more easily demonstrate their knowledge in a traditional test format. However, the more natural the setting for assessment the more likely a thorough and accurate assessment of children's skills and abilities will occur.

4. **Process:** Caregivers and/or teachers are committed to compiling ongoing observation data for every child several times (at least 3 times) each year during his/her education. Assessment is not a one-time event; rather, it is conducted serially over time to document progress and growth during the child's participation in high-quality care and education programs, including both preschool and elementary school. It is not primarily comparative, but rather individualized so that each child's previous performance is viewed as the reference point to make individual comparisons about progress and gains due to the program and/or curriculum being implemented (i.e., criterion-referenced). Ongoing, authentic assessments become more challenging as children enter elementary school, but they are not impossible. Anecdotal notes and record-keeping, whether this is documented through mastery tasks; checklists, questionnaires, and rating scales; portfolios; and observations are a sure-fire method of documenting children's progress and learning of the curriculum. It is best not to use "one shot" assessment information to modify the curriculum because children can changes so dramatically through the school-year.

5. **Standards-based:** Best practice emphasizes that assessment is NOT conducted separate from the child's program and/or curriculum. Assessment is an integral part of each child's educational program and it drives the curriculum and instruction that is developed. Early childhood assessment (birth to age 8 or third grade) has content that links or aligns with the Pennsylvania standards for learning and the best practices of the professional organizations (e.g., NAEYC, DEC, Head Start). Measures which are authentic and sample content contained in the standards or the program are called ***curriculum-consistent*** measures. Please see the accompanying document, *Summary of Assessment Measures.*

6. **Parents as Partners:** One critical part of assessment is the role of the parent. To fully understand a child's development a family-centered focus is important (National Association of School Psychologists, 2005). Parents and educators should work together as a team. Parents witness their children's functioning and behavior in a wide variety of contexts, and their input is valued as part of

the child's overall assessment. Many parents lack an understanding of the processes of assessment and what is expected and appropriate. An emphasis should be placed on explaining the importance of ongoing assessment to parents and how their role is critical to the process. Families need to understand how their child is being assessed and what the findings mean to them and to their child. The more that parents are included in the assessment process the greater their ability to make fully-informed decisions in addition to the likelihood of their cooperation with the education planning for their child.

Summary

There are a number of guiding principles for assessment that are summarized in the following bullets (Scott-Little, 2001; Scott-Little & Niemeyer, 2001; NAEYC & NAECS/SDE, 2003):

- Ethical principles guide assessment practices,
- Assessments benefit all children,
- Assessment instruments are used for their intended purpose and the purpose is clear,
- Assessment is ongoing and regular throughout the school year,
- Assessments are sensitive to cultural and language differences,
- Instruments are age appropriate (sufficiently measures above and below age targeted),
- A range of indicators is assessed,
- Multiple sources and types of information are used,
- Evidence is gathered from realistic settings and situations that reflect children's actual performance, and
- Instruments are reliable and valid.

Steps to Conduct Assessment

Supervisory support for assessment by program administrators is critical to maintain ethical standards, recommended practices, as well as the reliability and validity of the instrument being used. Assessment instruments and methods change as children develop from birth to age 8 or third grade. In the early years, authentic measures are emphasized because of the developmental capabilities of the children. As children enter elementary school in Kindergarten, authentic assessment methods begin to decrease because there are fewer opportunities to engage in this type of assessment and more formal assessments increase as children gain the developmental skills necessary to demonstrate their knowledge. Please note that conducting authentic, curriculum-consistent assessments will provide the richest information about the whole child. The following steps present the ideal assessment process. However, implementing any of the steps is a plus for any education program working with children birth to age 8.

1. Use only authentic curriculum-based scales to the greatest extent possible as the first stage in evaluating the early learning skills of children while they are participating in the educational settings.

2. Compile ongoing observation data for every child at least 2 times (preferably 3 times) per year, for example, September and May or September, January, and May to document the child's progress over time. The frequency of monitoring is dependent on the progress the child is making.

3. Gather information from teachers, aides, parents, and other caregivers who know the child well and observe daily children's naturally occurring thinking, language, social, motor, and self-control skills.

4. Watch, observe, and record each child's strong and weak skills through daily/weekly observations.

5. Use a specific measure of early learning skills to probe further into areas that may require more in depth evaluation such as early literacy, reading, math, and general knowledge.

6. For children with developmental disabilities, use only measures that have been designed and field-validated for use with children having specific needs as the primary measurement tool.

7. Collect information on all children individually and as classroom groups to note changes overtime.

8. Incorporate information collected into teaching strategies, classroom activities and curricula materials at each time-point. Constructing the environment to encourage particular activities is an appropriate method of collecting data.

9. Use the information collected over time as records of the performance and progress of children to share with parents and for transition building with principals, the teacher's of the following school year (i.e., kindergarten teachers or first grade teachers), and others.

Teachers and other professionals are obligated to write reports that are understandable and useful to families. Many families have little background understanding of assessment information or may have low-literacy skills and these issues should be kept in mind when the report is being written. Families need adequate time to review reports, ask questions or express concerns before any information about the child is used for decision-making.

Culture and Language Fairness in Assessment

Children from minority groups can vary from mainstream American children in many ways. For example, ethnically diverse children differ in their styles of interaction, such as speaking only when one is spoken too, being more passive participants and preferring more cooperative learning than competitiveness with other children. They have difficulties with the way information is conveyed in group situations compared to their interactions in the home. Further, children with limited English proficiency are unable to process information in the classroom and can become inattentive and distractible. These types of differences could be mistaken for lack of motivation, lack of school readiness, or even developmental delay. Indeed, children from culturally and linguistically different backgrounds are over-identified as mentally retarded and their ability to learn is too often underestimated.

It is necessary to determine skill and fluency in the language or combination of languages that a child uses. Difficulty in communication can be due to limited English skills, the process of second language acquisition, or a communication disorder. Assessing children's non-English language competency is important because age-appropriate skills in the child's home language would eliminate concern for a communication disorder.

Authentic assessment methods are advocated for all children; however, this is especially important for children whose culture and language are different from the mainstream. Dynamic and active learning measures are preferred to standardized measures which could decrease assessment bias against minority children. These assessments are usually conducted in comfortable, familiar settings that are of interest to the child and rely far less on children's language abilities compared to most conventional tests. Again,

authentic assessments are achievable in elementary grades, and may be of particular importance to ethnically diverse children to ascertain their developmental difficulties. Although these children will have to participate in the more standardized assessments expected in many school districts, the supplement of authentic observational methods is ideal.

II. LINKING ASSESSMENT AND CURRICULUM

Assessment information gathered about children is a starting point for determining if the goals identified for children's learning are being met. The goals should align with the standards and describe the expectations for what students should know and be able to do according to those standards. The identified goals will help in the development of the curriculum and various instructional strategies.

Assessments are one method of determining if the goals identified for children are linked to activities that will be interesting and match the abilities and needs of children who participate in education programs. The use of ongoing assessment provides the tools to re-align the curriculum to keep children moving along the continuum of learning.

"Ongoing assessment of children's progress in relation to the curriculum goals gives staff a sense of how their approach may need to be altered for the whole group or for individual children" (NAEYC & NAECSSDE, 2003, p. 9).

See the documents *Curriculum for Early Childhood Programs Serving Children from birth to age 8 (grade 3)* for more information about curriculum, as well as the accompanying document *Summary of Curriculum Resources* that describes curriculum that align with the Pennsylvania standards for early learning (birth to age 8).

III. CONCLUSION

The guidelines provided in this report for assessment measures offers a foundation for complying with the Pennsylvania standards for learning for children birth to age 8 by making effective decisions about how to assess children. It is critical to incorporate the information attained from assessments into the curriculum and classroom activities. Again, please see the document, *Curriculum Early Childhood for Programs Serving Children from birth to age 8 (Grade 3)*, for information regarding curricula that align with the Pennsylvania standards for learning for children birth to age 8.

The guidelines about assessment are not recommendations for specific actions, measures, methods, or products. Thoughtful planning based upon the principles in these guidelines and the accompanying documents can lead to assessment systems and curriculum plans that meet schools' needs, comply with the Pennsylvania standards for learning, and benefit children, teachers, and parents in the process.

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XII. DEFINITIONS

Achievement test: Tests that examine skills that the child has already acquired.

Alignment: The process of linking content and performance standards to assessment, instruction and learning in classrooms.

Assessment: Not a "test", rather a systematic procedure/process for obtaining information from observation, interviews, portfolios, projects, tests, and other sources that can be used to make judgments about children's characteristics. There are many purposes of assessment. Tools designed for one purpose are in most cases inappropriate to use for a purpose other than that which they were intended.

Criterion-referenced: An assessment in which a student's response(s) is compared to a level of performance in an area of knowledge or skill, rather than to a group of children or normative group. Results are typically reported as levels of proficiency, such as emerging skill or mastery.

Curriculum: A body of material that defines the content to be taught and the methods to be used. Information organized on a specific topic; a set of topic specific information created for a defined group.

Developmentally appropriate: Decisions about the well-being and education of children based on at least three important kinds of information or knowledge: what is known about child development and learning, what is know about the strengths, interests, and needs of each individual child in the group, and knowledge of the social and cultural context in which children live (Bredekamp & Copple, 1997).

Documentation: The process of keeping track of and preserving children's work as evidence of their progress.

Early Learning Standards: Statements that describe expectations for the learning and development of young children 3 to 5 years of age.

Field tested: The use of an instrument in realistic settings that leads to the validation and reliability of its use.

Formative assessment: Assessments that examine student learning for the purpose of improving the quality of teaching and student learning and not for evaluating individual students. These types of assessments are often conducted at the beginning of the year and are ongoing.

Guidelines: A description of suggested elements aimed to accomplished a defined activity.

Implementation: The process of taking a planned curriculum, assessment system or evaluation design and making it happen in ways that are consistent with the plan and desired results.

Norm-referenced: A standardized testing instrument by which the person's performance is interpreted in relation to the performance of a group of peers who have previously taken the same test – a "norming" group.

Observational assessment: Assessment based on teachers' systematic recordings and analysis of children's behavior in real-life situations.

Outcomes: Desired results for young children's learning and development across multiple domains.

Performance: Behaviors exhibited while putting into action specific skills.

Reliability: The consistency of an assessment tool (being free of error); important for generalizing about children's learning and development. Reliability is represented by a figure between .00 and 1.0, such that values closer to 1.0 indicate better reliability.

Screening: The use of a brief procedure or instrument designed to identify, from within a large population of children, those children who may need further assessment to verify developmental and/or health risks.

Skills: The ability of students to use knowledge effectively and readily in performance, the ability to transform knowledge into action.

Standardized: An assessment with clearly specified administration and scoring procedures and normative data.

Standards-based assessment: A process through which the criteria for assessment are derived directly from content and/or performance standards.

Standards-based instruction: Instructional practices designed to help every child achieve the standards.

Summative assessment: Assessment that summarizes student learning to gauge if students have met program goals and objectives. Most standardized tests are summative and are not designed to provide feedback during the learning process. These types of assessments are usually conducted at the end of the school year.

Validity: The extent to which a measure or assessment tool measures what it was designed to measure. This is represented by a figure between .00 and 1.0, such that values closer to 1.0 indicate better validity.

*Definitions based largely on the work of the *National Association for the Education of Young Children (NAEYC)* and the *National Association of Early Childhood Specialists in State Departments of Education*. Other definitions can be found at "The words we use: A glossary of terms for Early Childhood Education Standards and Assessments," developed by the *State Collaborative on Assessment and Student Standards (SCASS)*. Online at http://www.ccsso.org/projects/SCASS/projects/early_childhood_education_assessment_consortium/publications_and_products/2838.cfm

Build
Strong Foundations For
Pennsylvania's Youngest Children

SUMMARY OF ASSESSMENT MEASURES

Document to accompany

REVISED REPORT AND GUIDELINES ON EARLY CHILDHOOD ASSESSMENT FOR CHILDREN FROM BIRTH TO AGE 8 (Grade 3)

February 2007

Early Learning Standards Task Force
And Kindergarten Assessment Work Group
Pennsylvania BUILD Initiative
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THE REVISED REPORT AND GUIDELINES ON EARLY CHILDHOOD ASSESSMENT FOR CHILDREN FROM BIRTH TO AGE 8 (Grade 3)

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SUMMARY OF ASSESSMENT MEASURES

I. INTRODUCTION

Developmental assessments are a process which allows one to understand a child's competencies and to design learning environments which will help a child grow to his or her developmental potential whether this is from birth to age 8 or third grade. This document is intended to accompanying the updated report, *Revised Report and Guidelines on Early Childhood Assessment for Children from Birth to Age 8 (grade 3),* that can be found at www.pde.state.pa.us. The revised report contains information about assessment including its purpose, measurement considerations, steps to conducting assessment, cultural and language fairness, and linking assessment with curriculum. The report is a critical piece to read for a greater understanding of the benefits of assessment for children birth to age 8 as well as an understanding of the need to implement assessment methods that support children's developmental changes along a continuum.

The summary of assessment measures contained within this document offers information about the extent to which several assessment tools align with Pennsylvania's standards for learning (birth to age 8). It is important that assessments that are implemented in the classroom be aligned with Pennsylvania's standards for learning (birth to age 8 or third grade) to help inform teachers about designing a curriculum that provides multiple learning opportunities that best suits how each child learns.

It is not the Department of Education's intention to make specific recommendations with regard to the items on the lists provided herein (see Tables 1-3), rather, the Department wishes to provide guidelines for decision making that would best adhere to the Pennsylvania standards for learning (birth to age 8). Given the many resources available on the market, both workgroups limited the list of assessment tools to those that are evidence-based and have demonstrated technological adequacy for the preschool and elementary school age groups.

The list of assessment tools also focuses specifically on assessment for the purpose of informing instruction; thus, the measures are all appropriate and feasible for administration by teachers and other classroom personnel. It is important to realize that there are many purposes of assessment, such as for diagnostic purposes, for program evaluation, for determining school readiness, and for screening developmental delays or learning difficulties. These other purposes are not as relevant for adhering to the Pennsylvania standards for learning (birth to age 8) and so the focus of this report is on using assessment to inform instruction.

II. TYPES OF ASSESSMENT MEASURES

The measures profiled in this document (Tables 1 through 3) were chosen based on their technical qualities and their match with the above philosophy about developmentally-appropriate early childhood assessment for children birth to age 8 (third grade). Three types of measures are profiled in three separate tables and there is a column that distinguishes if the instrument is appropriate for the Pre-Kindergarten or the Kindergarten Standards:

- **Authentic Curriculum-based Measures:** These measures are best used by teachers, professionals, and other caregivers in the early childhood program or elementary schools. They best fulfill the philosophy of professional organizations and best match the content of most curricula and Pennsylvania's standards for learning.

- **Specific Early Learning Skills Measures:** These measures provide more in depth probes into specific skill areas including literacy, math, language, and other pre-academic competencies and are to be used in cases when more in-depth understanding of a particular area of development is needed. Assessment using these measures does not need to be conducted if the authentic curriculum-based measures used adequately cover the domains of interest. There are many in-depth single-domain instruments; the guidelines provided here are limited to those instruments that can easily be used by classroom personnel.

- **Disability-Sensitive Measures:** These measures accommodate best the various sensory-motor, language, cognitive, social-behavioral, and cultural needs of children with developmental disabilities. The instruments in this third category are also appropriate for use by teacher or classroom personnel and can be used before, and independent of, a formal referral process that may take place regarding special education services.

III. HOW TO READ THE TABLES

Tables 1 through 3

The assessment instruments are grouped into three tables. Table 1 lists the instruments which are multi-domain developmental measures. The list represents technically adequate instruments that are feasible for use by classroom personnel to administer on an ongoing/repeated testing basis such that they are embedded into the program's curriculum planning. Though not all of the listed instruments were designed as "authentic" measures, many can be used in an observational or "authentic fashion". Authentic methods are strongly encouraged whenever possible. Assessments of pre-academic skills and social-emotional skills are listed in Table 1 because they are essential for alignment with the state standards but are often omitted from multi-domain instruments.

Table 2 represents the instruments which are designed for specific developmental domains. These measures can be used in instances when more detailed information is desired with regard to a child's learning or functioning in a particular domain.

Table 3 represents a list of measures that apply especially well to children experiencing special needs or developmental delays. Note that some of the multi-domain developmental assessments listed in Table 1 may also be used with special needs children. By the same token, some of the instruments listed in Table 3 may be appropriate to use with typically developing children. Instruments listed in Table 3 are recommended for teachers to inform their teaching and can be used separate from and/or along with any assessment process related to special education placement.

The following are descriptions of the column categories listed in Tables 1 through 3:

Age range	Refers to the age range for which the measure has been developed.
Standards	Marks off which assessment tool is appropriate for either the Early Learning Standards, Kindergarten Standards, or both.
Type	Norm-referenced or Criterion-referenced (see definitions).
Method of Administration	Refers to the way data on child outcomes are collected. Assessment can be administered to individual children or through ongoing observations by teachers or other adults who are reported on check sheets/report forms, notes, portfolios, etc.
Time to administer	Refers to an estimated amount of time required to administer the measure or a subtest of the measure.
Reliability	Refers to one aspect of the technical adequacy of the measure. A range is reported in order to include information on sub-scores and total scores, as well as multiple informants. Internal consistency, test-retest, inter-rater, split-half are some of the types of reliability coefficients reported. A reliability of .8 or higher is preferred.
Comments	Brief descriptions of unique features.

Tables 4 and 5

Tables 4 and 5 provide a shorthand overview of how extensively the assessment tools cover the Key Learning Areas of the Early Learning Standards for Pre-Kindergarten. In the future, tables will provide an overview of how the assessment tools cover the Kindergarten Standards.

Tables 6

Table 6 provides descriptions of each assessment instrument available for use with a column specifying if they have been aligned with Key Learning Areas for either the Early Learning Standards for Pre-Kindergarten or Kindergarten. Further information is provided about the publisher and where to find the instrument.

Table 1: Authentic, Curriculum-Consistent Measures

Multi-domain Developmental Assessments	Age range	Standard		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Ages and Stages Questionnaire (ASQ)	6 mo to 5 yrs	X	X	Norm-ref	Parent and teacher observation	10-30 min.	.44 to .58	
Battelle Developmental Inventory (BDI)	0 to 8 yrs	X	X	Norm- ref	Individually administered	45-90 min. 10-30 min. for screener	.90 to .99	*Requires supervised training*. Parental input for social areas.
Child Observation Record (COR) (High/Scope)	2.5 to 6 yrs	X	X	Criterion-ref	Teacher observation	Ongoing/Varies with classroom and child	.80 to .93	Training required. Parent report form.
Developmental Assessment of Young Children (DAYC)	0 to 6	X	X	Norm-ref	Teacher observation	10-20 min. per subtest	.94 to .99	
*Developmental Continuum (Creative Curriculum)	3 to 5 yrs	X		Criterion-ref	Teacher observation	Ongoing	.87 to .97	
Developmental Observation Checklist System (DOCS)	0 to 6 yrs	X	X	Norm-ref	Parent/ teacher observation	30 min to complete 15-20 to score	.85 to .94	Instructions for use with special needs children.
Early Screening Profiles Revised (ESP-R)	3.5 to 7 yrs	X	X	Norm-ref	Individually administered	15-30 min.	.66 to .91	Can be used for children with special needs. Cultural sensitivity not addressed. Home survey included.
Early Childhood Observation System (ECHOS)	K to 2nd grade		X	Criterion-ref	Teacher observation	Ongoing/varies with classroom and child		
Learning Accomplishmt Profile-3 (LAP-3)	4 to 6 yrs	X	X	Criterion-ref	Individually administered	45 to 90 min.		
Work Sampling System – 4th Ed.	3 to 10 yrs	X	X	Criterion-ref	Teacher/parent observation	15 min for checklists	.87 to .94	Data collected through portfolios. Question and answer sheet for families.

Note: Though not all of the listed instruments were designed as "authentic" measures, many can be used in an observational or "authentic fashion". Authentic methods are strongly encouraged whenever possible.

Table 1 CONTINUED: Authentic, Curriculum-Consistent Measures

Pre-academic Skills Assessments	Age range	Standard		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Basic School Skills Inventory (BSSI-3)	4 to 7 yrs	X	X	Norm-ref	Teacher observation	5-8 min. per domain	.91 to .98	
Boehm Test of Basic Concepts (Boehm-R)	K to 7 yrs		X	Norm-referenced	Individually administered	45 min.	.55 to .87	
*Bracken Basic Concepts Scale - Rev. (BBCS-R)	2.5 to 8 yrs	X	X	Norm-ref	Individually administered	30 to 45 min.	.88 to .94	*Requires extensive training*. Criterion referenced Spanish version. Shorter school readiness composite version.
Brigance Comprehensive Inventory of Basic Skills (CIBS-K)	0 to 5.5 yrs	X	X	Norm-ref & Criterion-ref	Individually administered	30 to 40 min.	.70 to .99	*Requires extensive training*. Cultural sensitivity not specified. Computer scoring available. Shorter Screener version available.
Kaufman Survey of Early Academic and Language Skills (K-SEALS)	3 to 7 yrs	X	X	Norm-ref	Individually administered	15 to 20 min.	.88 to .94	
Qualls Early Learning Inventory (QELI)	4 to 7	X	X	Norm-ref & Criterion-ref	Teacher observation	10 min to complete		
Young Children's Achievement Test (YCAT)	4 to 8	X	X	Norm-referenced	Individually administered	25 to 45 min.	.83 to .99	

Note: Though not all of the listed instruments were designed as "authentic" measures, many can be used in an observational or "authentic fashion". Authentic methods are strongly encouraged whenever possible.

Table 1 CONTINUED: Authentic, Curriculum-Consistent Measures

Social Emotional Assessments	Age range	Standard		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Ages and Stages Questionnaire-Social/Emotional	6 to 60 months	X	X	Curriculum Based/ Criterion-Ref	Group/ Individual	10-15 min.	.82 to .94	Can be used in conjunction with other developmental screening tools
Devereux Early Childhood Assessment Program (DECA)	2 to 5 years	X		Norm-ref	Teacher observation	~ 10 min.	.55 to .94	Includes curricular materials and classroom strategies. Spanish version available.
Preschool and Kindergarten Behavior Scales (PKBS-2)	3 to 6 yrs	X	X	Norm-ref	Teacher observation	8-12 min.	.81 to .97	Separate score conversion tables are available for home-based and school-based raters. Record forms available in Spanish.
Social Competence and Behavior Evaluation (SCBE)	2.5 to 6.5 yrs	X	X	Norm-ref	Teacher observation	~15 min.	.72 to .91	Teacher and Parent report. Spec. needs included. Interpretation requires clinical training. Available in Spanish & French. Reliable abbreviated version.
Social Skills Rating System (SSRS)	PreK form: 3 to 6 yrs Elem form: K to 6 grd	X	X	Norm-ref	Teacher observation	10-25 min.	.57 to .91	Parent observations. Training in psychological testing needed. Computer scoring available.
Vineland Social-Emotional Early Childhood Scales (SEEC)	0 to 6 yrs	X	X	Norm-ref	Interview	15 to 25 min.	.71 to .79	Parent report. Interview conducted by trained interviewer.

Note: Though not all of the listed instruments were designed as “authentic” measures, many can be used in an observational or "authentic fashion". Authentic methods are strongly encouraged whenever possible.

Table 2: Specific Early Learning Skills Measures

Reading/Pre-academics Assessments	Age range	Standard		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Comprehensive Test of Phonological and Print Processing (CTOPP)	5 to 24 yrs		X	Norm-Ref	Individually administered	30 min	.70 to .92	
Dynamic Indicators of Basic Emergent Literacy Skills (DIBELS)	K to 3rd grade		X		Individually administered	Screener 1-5 min.	.72 to .97	Designed to be short (one minute) fluency measure used to regularly monitor the development of pre-reading and early reading skills.
Early Literacy Skills Assessment (ESLA)	3 to 5 yrs	X	X	Criterion-Ref	Individually administered	30 min	.64 to .86	Conducted in the format of a storybook, stopping where indicated to ask questions
Get Ready To Read!	3.5 to 5 yrs	X			Individually administered	Screener 10-15 min.	.78	Validated Spanish version.
*Phonological Awareness Literacy Screening (PALS-PreK)	4 year olds	X		Criterion-Ref	Individually administered	20-25 min.	.75 to .94	Manual includes instructional interpretations of results. Internet data entry.
Phonological Awareness Literacy Screening (PALS-K)	5 to 6 yrs		X	Criterion-Ref	Individually administered	30 min.	.71 to .94	
Phonological Awareness Literacy Screening (PALS-1-3)	1st to 3rd grade		X	Criterion-Ref	Individually administered	30 min.	.86 to .92	
Test of Early Reading Ability, 3rd Ed. (TERA-3)	3.5 to 8.5 yrs	X	X	Norm-ref diagnostic measure	Individually administered		.88 to .98	

Note: These instruments could be used in addition to the instruments in Table 1 for cases in which more detailed assessment of a specific developmental domain is warranted or desired.

Table 2 CONTINUED: Specific Early Learning Skills Measures

Language Assessments	Age range	Standard		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Diagnostic Evaluation of Language Variation (DELV)	4 to 12 yrs		X	Criterion-ref	Individually administered	Screener: 10-15 min. Diagnostic: 45 min.	Not available yet.	Scores 1) degree of language variation & 2) risk for disorder. Sensitive to variations from mainstream English.
Preschool Language Scale – 4th Ed. (PLS-4)	0 to 7 yrs	X	X	Norm-ref	Individually administered	20-45 min.	.82 to .98	Validated and normed Spanish version.
Test of Early Language Development (TELD-3)	2 to 8 yrs	X	X	Norm-ref	Clinician administered	15 to 45 min		
Oral Written and Language Scales (OWLS)	3 to 22 yrs	X	X	Norm-ref	Individually administered	20 to 30 min. per subscale	.80 to .89	
Mathematics Assessments								
Test of Early Mathematics Ability-3rd Ed. (TEMA-3)	3 to 9 yrs	X	X	Norm-ref or can be used as a diagnostic instrument	Individually administered	40 min	.80 to .94	A separate *Probes* guide provides a series of follow-up questions to be used after the standard testing to examine children's methods of solution

Note: These instruments could be used in addition to the instruments in Table 1 for cases in which more detailed assessment of a specific developmental domain is warranted or desired.

Table 3: Disability-Sensitive Measures

Name of Instrument	Age range	Standards		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Adaptive Behavior Assessment System II (ABAS)	Birth to adulthood	X	X	Norm-ref/ Criterion Ref	Individually administered	15 min	.80 to .90	
Ages and Stages Questionnaire-Developmental (ASQ)	4 to 60 months	X	X	Curriculum-Based/ Criterion Ref	Group admin.	10-30 min.	.44 to .94	Evaluations at 4-month intervals.
Ages and Stages Questionnaire-Social/Emotional	6 to 60 months	X	X	Curriculum-Based/Criterion Ref	Group/ Individual	10-15 min.	.82 to .94	Can be used in conjunction with other developmental screening tools
Assessment, Evaluation, and Programming System (AEPS)	Birth to 6 yrs	X	X	Curriculum-Based/ Criterion Ref	Individually administered			It is useful and effective for close monitoring and individualized instruction
*Battelle Developmental Inventory (BDI)	0 to 8 yrs	X	X	Norm- ref	Individually administered	45-90 min. 10-30 min. for screener	.90 to .99	*Requires supervised training*. Parental input for social areas.
Carolina Curriculum for Preschoolers with Special Needs (CCPSN)	24 to 60 months	X		Curriculum-Based/ Criterion Ref	Group/ Individual			
Communication and Symbolic Behavior Scale-Developmental Profile	8 months to 6 years	X	X	Curriculum-Based/ Criterion Ref	Individually administered	5-30 min.		
Every Move Counts	Young children with severe disabilities	X		Curriculum-Based/ Criterion Ref	Individually administered			

Table 3: CONTINUED Disability-Sensitive Measures

Name of Instrument	Age range	Standards		Type	Method	Time to administer	Reliability	Comments
		Early Learning	Kindergarten					
Pediatric Evaluation of Disability Inventory (PEDI)	8 mos to 6 yrs	X	X	Curriculum-Based/ Criterion Ref	Individually administered	45-60 min.	.79 to .99	
Project Oregon Curriculum for Visually Impaired and Blind Preschool Children Skills Inventory	Birth to 6.0 years	X	X	Curriculum-Based/ Criterion ref	Individually administered			
Temperament and Atypical Behavior Scales (TABS)	11 to 71 months	X	X	Norm-ref/ Criterion Ref	Individually administered	5-15 min.	.84 to .95	

Table 4: Quick Glance of Coverage of Early Learning Standards for Pre-Kindergarten by the Curriculum-Consistent Measures

Name of Instrument	Approach To Learn	Creative Arts	Language and Literacy				Logical Math	Personal Social	Physical Health	Program Partnerships	Science	Social Studies
			Recept Lang	Exp Lang	Compr-hension	Literacy						
Multi-Domain Developmental Assessments												
Ages and Stages Questionnaire (ASQ)	X	X	X	X	X		X	X	X			
*Battelle Dev. Inv. 2nd Ed. (BDI-2)	X	X	X	X	X	X	X	X	X	X	X	X
*Child Observation Record (COR)	X	X	X	X	X	X	X	X	X	X		
Dev. Assessment of Young Children (DAYC)	X		X	X	X	X	X	X	X			
*Developmental Continuum (Creative Curriculum)	X	X	X	X	X	X	X	X	X	X	X	X
Developmental Observation Checklist System (DOCS)	X		X	X	X	X	X	X	X	X		
Early Screening Profiles (ESP-R)			X	X					X			
*Work Sampling System – 4th Ed.	X	X	X	X	X	X	X	X	X	X	X	X
Pre-Academic Skills Assessments												
Basic School Skills Inv (BSSI-3)	X		X	X	X	X	X	X				
*Bracken Basic Concepts Scale - Rev. (BBCS-R)						X	X	X			X	

Table 4: CONTINUED: Quick Glance of Coverage of Early Learning Standards for Pre-Kindergarten by the Curriculum-Consistent Measures

Name of Instrument	Approach To Learn	Creative Arts	Language and Literacy				Logical Math	Personal Social	Physical Health	Program Partnerships	Science	Social Studies
			Recept Lang	Exp Lang	Compr-hension	Literacy						
Pre-Academic Skills Assessments CONTINUED												
*Brigance (CIBS-K)			X	X	X	X	X	X	X			
*Kaufman Survey of Early Acad. and Language Skills (K-SEALS)	X		X	X		X	X					
Young Children's Achiev. Test (YCAT)				X		X	X					
Social Emotional Assessments												
Ages and Stages Questionnaire-S/E	X	X	X	X				X				
* Devereux Early Childhood Assessment Program (DECA)	X							X		X		
Reading/Pre-academics												
* Phonological Awareness Literacy Screening Pre-Kindergarten (PALS Pre-K)						X						

Note that an "X" indicates coverage even if just at a *minimal* extent.
*Alignment at the indicator level was performed by the publisher rather than by an independent specialist.

Forthcoming Curriculum Consistent Measures under review:

- Multi-domain developmental assessments
  - Learning Accomplishment Profile-3 (LAP-3)
- Pre-Academic assessments
  - Qualls Early Learning Inventory (QELI)

Table 5: Quick Glance of Coverage of Early Learning Standards for Pre-Kindergarten by the Disability-Sensitive Measures

Name of Instrument	Approach To Learn	Creative Arts	Language and Literacy				Logical Math	Personal Social	Physical Health	Program Partnerships	Science	Social Studies
			Recept Lang	Exp Lang	Compr-hension	Literacy						
*Adaptive Behavior Assessment System II (ABAS)	X		X	X		X	X	X	X			
Ages and Stages Questionnaire (ASQ)	X	X	X	X	X		X	X	X			
Ages and Stages Questionnaire-S/E	X	X	X	X				X				
*Assessment, Evaluation, and Programming System (AEPS)	X	X	X	X		X	X	X	X			
Battelle Developmental Inventory (BDI-2)	X	X	X	X	X	X	X	X	X	X	X	X
* Carolina Curriculum for Preschoolers with Special Needs (CCPSN)	X	X	X	X		X	X	X	X			
* Communication and Symbolic Behavior Scale (CSBS DP)	X	X	X	X		X	X	X				
* Every Move Counts		X	X	X				X				
* Pediatric Evaluation of Disability Inventory (PEDI)	X	X	X	X				X	X			
* Project Oregon Curriculum for Visually Impaired and Blind Preschool Children Skills Inventory	X	X	X	X		X	X	X	X			
* Temperament and Atypical Behavior Scales (TABS)	X	X	X	X				X				

Note that an "X" indicates coverage even if just at a *minimal* extent.

*Alignment at the indicator level was performed by the publisher rather than by an independent specialist

Table 6: Quick Glance of Coverage of the Kindergarten Curriculum Resources

Name of Instrument	Approaches to Learning	Arts & Humanities	Family-School-Community Partnerships	Health, Safety, and Physical Education	Math	Personal Social	Reading, Writing, Speaking, and Listening	Science		Social Studies			
								Science and Tech	Environment and Ecology	Civics and Govt	Economics	Geography	History
Early Childhood Observation System (ECHOS)	X			X									

TABLE 7: Assessment Resources for Early Childhood Standards for Pre-K and K

Note: The assessments listed below are suggestions and not recommendations for programs and schools.

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
Authentic, Curriculum Consistent Measures					
Multi-Domain Developmental assessments					
Ages and Stages Questionnaire (ASQ)		X	Birth to 5 years	The **ASQ** system is a low-cost, reliable way to screen infants and young children for developmental delays. Parents complete the simple, illustrated 30-item questionnaires at designated intervals, assessing children in their natural environments to ensure valid results. Each questionnaire covers five key developmental areas: communication, gross motor, fine motor, problem solving, and personal-social. Professionals then convert parents' responses of yes, sometimes, and not yet — in just 2-3 minutes — to color-coded scoring sheets, enabling them to quickly determine a child's progress in each developmental area.	www.brookespublishing.com
Battelle Developmental Inventory, second edition (BDI-2)	X		Birth to 7.11 years	The **BDI-2 is** an individualized assessment that may be used for a variety of purposes, including identifying children with disabilities, evaluating groups of children with disabilities in early education programs, assessment of the typically developing child, assessment (screening) for school readiness, program evaluation for accountability, identification of integrated activities to help achieve milestones. There two types of assessment: the full assessment and the screening test. The full assessment refers to the use of the complete instrument,	www.riverpub.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				including all five domains. The screening test refers to an abbreviated instrument that includes 100 test items from the full BDI-2.	
Child Observation Record (COR) (High/Scope)	X		2.5 to 6 years	The **COR** assessment is based on six child development categories that represent broad domains of child development. The categories include initiative, social relations, creative representation, movement and music, language and literacy, and mathematics and science. To do the assessment, teachers spend a few minutes each day writing brief notes that describe significant behavior of the child. After recording the notes, they are then classified and rated according to the COR categories, items, and levels. After many observations and by systematically using the COR framework, a teacher has a comprehensive portrait of the child.	www.highscope.org
Developmental Assessment of Young Children (DAYC)		X	Birth to 5.11 years	The **DAYC** helps to identify children with possible delays in the domains of cognition, communication, social emotional development, physical development, and adaptive behavior. You'll have five subtests (one for each of the above domains) that you can administer separately or as a comprehensive battery to individual children in about 10 to 20 minutes. The DAYC format allows you to obtain information about a child's abilities through observation, interview of caregivers, and direct assessment.	www.proedinc.com
*Developmental Continuum (Creative Curriculum)	X		3 to 5 years	The *Creative Curriculum's* **Developmental Continuum Assessment Toolkit** is a complete assessment system directly correlated to the goals and objectives of *The Creative Curriculum.* This tool is valid and reliable and it allows teachers to conduct authentic assessments based on observations taken during everyday classroom activities.	www.teachingstrategies.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
Developmental Observation Checklist System (DOCS)		X	Birth to 6 years	**DOCS** is a three-part inventory/checklist system for the assessment of very young children with respect to general development (language, motor, social, and cognitive development), adjustment behavior, and parent stress and support.	www.proedinc.com
Early Screening Profiles Revised (ESP-R)		X	2 to 6.11 years of age	**ESP-R** is a tool that uses multiple domains, settings, and sources to measure cognitive, language, motor, self-help, and social development of children. It also surveys the child's articulation, home environment, health history, and test behavior. The result is an ecologically valid assessment that provides practical information to help you make accurate screening decisions, as well as plan intervention strategies for children and their families.	ags.pearsonassessments.com
Early Childhood Observation System (ECHOS)	X		K to 2nd grade	The **ECHOS** combines technology with ongoing observation in the classroom to help teachers easily monitor the progress of young learners and guide instruction. Designed to work on the Palm OS® handheld computer, teachers observe their students in the classroom while the students are naturally engaged in every-day activities. Teachers monitor what grade-level skills, knowledge or behaviors a student consistently demonstrates or needs to develop.	http://harcourtassessment.com
Learning Accomplishment Profile-3 (LAP-3)			36 to 72 months	The **LAP-3** is a criterion-referenced assessment instrument measuring development in the domains of gross motor, fine motor, pre-writing, cognitive, language, self-help, and social/emotional. Its on-going observation format allows teachers and/or clinicians to record a child's progress and introduce appropriate activities to support acquired and emerging skills.	www.kaplanco.com
Work Sampling System – 4th Ed.	X		Pre-K to 5th grade	The **Work Sampling System** is an ongoing classroom performance assessment system that documents children's	www.pearsonearlylearning.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				skills, knowledge, behavior, and accomplishments across a wide variety of curriculum areas on multiple occasions.	
Pre-Academic Skills Assessments					
Basic School Skills Inventory (BSSI-3)		X	4 to 6 years	The **BSSI-3** is used to identify children who are at high risk for school failure, who need more in-depth assessment, and who should be referred for additional study. The inventory of 137 items is based on teachers' judgments of desirable school performance. The BSSI-3 provides a quick teacher rating scale of early abilities in six areas: Daily Living Skills, Spoken Language, Reading, Writing, Mathematics, and classroom behavior.	www.proedinc.com
Boehm Test of Basic Concepts (Boehm-3)			K to 2nd grade	The **Boehm-3** is the new edition that helps teachers measure 50 basic concepts most frequently occurring in current kindergarten, first, and second grade curriculum. The instrument is group-administered in a classroom setting and it can effectively identify concepts children already know and those they need to learn to be successful in school.	http://harcourtassessment.com
*Bracken Basic Concepts Scale - Rev. (BBCS-R)	X		2.6 to 8 years	The **BBCS-R** measures basic concept acquisition and receptive language skills in children. The results can be used for IEP development and remediation. Further, the BBCS–R can be used for norm-referenced, criterion-referenced, or curriculum-based assessment.	Harcourtassessment.com
Brigance Comprehensive Inventory of Basic Skills (CIBS-K)		X	Pre-k to 9th grade	The **CIBS-R** is a flexible instrument, and offers pretests and post tests for many skill assessments. There are 154 assessments in readiness, speech, listening, research and study skills, reading, spelling, writing, and math provide a	www.curriculumassociates.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				wealth of choices. The teacher may select the assessment according to individual student needs. The results are expressed in terms of skills mastered or not mastered, identifying areas of strength and weakness.	
Kaufman Survey of Early Academic and Language Skills (K-SEALS)		X	3 to 6.11 years	**K-SEALS** is an easy-to-administer measure of children's language skills. The instrument contains three separate subtests to measure vocabulary; numbers, letters, and words; and articulation.	ags.pearsonassessments.com
Qualls Early Learning Inventory (QELI)			K and 1st grade	The **QELI** is an observational measure that focuses on six key areas linked to future success in school. The QELI helps teachers observe and record information about cognitive knowledge and classroom behaviors in six key areas measuring general knowledge, oral communication, written language, math concepts, work habits, attentive behavior.	**www.riverpub.com**
Young Children's Achievement Test (YCAT)		X	4.0 to 7.11 years	The **YCAT** is a tool that helps in the early identification of children at risk for school failure. The YCAT yields an overall Early Achievement standard score, and individual subtest standard scores for General Information, Reading, Writing, Mathematics, and Spoken Language. The individual subtests can be given independent of each other, leading to flexible testing sessions.	www.proedinc.com
Social Emotional Assessments					
Ages and Stages Questionnaire: Social/Emotional (ASQ: SE)		X	6 to 60 months	ASQ: SE is a screening system to assess children's social-emotional development at 6, 12, 18, 24, 30, 36, 48, and 60 months. Areas that are assessed include self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people.	www.brookespublishing.com
Devereux Early Childhood Assessment Program (DECA)	X		2 to 5 years	The **DECA** Program is a strength-based assessment and planning system for children. Based on resilience theory, this comprehensive system is made up of a 5-step system	www.devereuxearlychildhood.org

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				designed to help children develop healthy social/emotional skills and reduce challenging behaviors. The 5-step system supports use of the DECA by parents and teachers alike in order to recognize and plan for the strengths and goals related to strong resilience for each child.	
Preschool and Kindergarten Behavior Scales (PKBS-2)			3 to 6 years	The PKBS-2 is a behavior rating scale that is easy to use, very practical, and based on a solid foundation of research. There are two separate scales that provide an integrated and functional appraisal of the social skills and problem behaviors of young children. The scales can be completed by parents, teachers, and other caregivers.	www.proedinc.com
Social Skills Rating System (SSRS)			3 to 18 years	**SSRS** is a nationally standardized series of questionnaires that obtain information on the social behaviors of children and adolescents. The instrument evaluates a broad range of socially validated behaviors-behaviors that affect teacher-student relationships, peer acceptance, academic performance, and more. Select from three rating forms—teacher, parent, and student— or use all three for a comprehensive picture across school, home, and community settings. The SSRS uses a Social Skills Scale that measures positive social behaviors and a Problem Behaviors Scale that measures behaviors that can interfere with the development of positive social skills.	ags.pearsonassessments.com
Vineland Social-Emotional Early Childhood Scales (SEEC)			Birth to 5.11 years	The Vineland SEEC, based on the popular Vineland Adaptive Behavior Scales is an early childhood measure of social-emotional adjustment. The scales are useful for evaluating levels of social-emotional behavior in individuals with disabilities and for gauging how the disabilities affect their daily functioning. The tests results can be used to plan a program and select activities best suited to an individual's needs, to monitor progress and to	http://ags.pearsonassessments.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				evaluate an individual's success after completing a program.	
Reading/Pre-academics Assessments					
Comprehensive Test of Phonological and Print Processing (CTOPP)			K to college	The **CTOPP** assesses phonological awareness, phonological memory, and rapid naming. The two primary purposes for the CTOPP are to identify individuals who are below their peers in phonological abilities and to determine strengths and weaknesses among developed phonological processes.	www.pearsonassessments.com
Dynamic Indicators of Basic Emergent Literacy Skills (DIBELS)			K to 3rd grade	**DIBELS** is an instrument that is designed to measure phonological awareness, alphabet principle, and fluency with connected text. The indicators are standardized and individually administered and are specifically designed to be short (one-minute) fluency measures.	http://dibels.uoregon.edu
Early Literacy Skills Assessment (ELSA)			3 to 5 years	The **ELSA** measures the emerging literacy skills of children attending early childhood programs. This assessment tool is in storybook form and can be used by teachers to assess young children's literacy skills in the areas of comprehension, alphabetic principle, phonological awareness, and concepts about print	www.highscope.org
Get Ready To Read! Screening Tool			4 years old	The **Get Ready to Read! Screening Tool** is a reliable, research-based series of questions for children in the year prior to entering kindergarten to determine whether they have the early literacy skills they need to become readers. The tool is a 20-item instrument that focuses on print knowledge, emergent writing, and linguistic awareness.	www.getreadytoread.org
*Phonological Awareness Literacy Screening (PALS-PreK)	X		4 year olds	The **PALS Pre-K** is a scientifically-based phonological awareness and literacy screening tool that measures preschooler's developing knowledge of literacy fundamentals. The instrument measures name writing ability, upper and lower-case alphabet recognition, letter	pals.virginia.edu

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				sound and beginning sound production, print and word awareness, rhyme awareness and nursery rhyme awareness. The instrument is designed to be administered by classroom teachers and it offers guidance for tailoring instruction to children's specific needs.	
Phonological Awareness Literacy Screening (PALS-K)			K	**PALS-K** is a measure of children's knowledge of several literacy fundamentals: phonological awareness, alphabet recognition, concept of word, knowledge of letter sounds and spelling. PALS-K provides a direct means of matching literacy instruction to specific literacy needs and provides a means of identifying those children who are relatively behind in their acquisition of these fundamental literacy skills.	pals.viriginia.edu
Phonological Awareness Literacy Screening (PALS-1-3)			1st to 3rd grade	PALS 1-3 can be used with children in grades one, two, and three to identify students at risk of reading difficulties. PALS 1-3 is designed to measure young children's knowledge of literacy fundamentals and can be used as a diagnostic tool to provide teachers with explicit information to help guide their teaching.	pals.viriginia.edu
Test of Early Reading Ability, 3rd Ed. (TERA-3)			3.5 to 8.5 years	The TERA-3 measures children's mastery of early developing reading skills, as opposed to being a reading "readiness" test. The TERA-3 has three subtests that include knowledge of the alphabet, conventions of print, and construction of meaning from print.	http://ags.pearsonassessments.com a
Language Assessments					
Diagnostic Evaluation of Language Variation (DELV)			4 to 12 yrs	The **DELV** screening tool is used by clinicians to identify children who are at-risk for a language disorder. The instrument focuses on general language disorder and does not measure either receptive or expressive language or vocabulary.	www.hartcourtassessment.com
Preschool Language			Birth to	The **PLS-4** screens children's total language skills	www.harcourtassessment.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
Scale - 4rd Ed. (PLS-4)			6.11 years	including auditory comprehension (vocabulary and receptive language) and expressive language (expressive vocabulary, syntactic knowledge, and ability to convey coherent concepts). The instrument can identify children who are at risk for a language disorder and need further evaluation.	
Test of Early Language Development (TELD-3)			2 to 7.11 years of age	The **TELD-3** is a screener that helps identify children who are experiencing language delays or difficulties. The instrument provides an overall Spoken Language score, but it can also yield scores for receptive language and expressive language subtests for finer discriminations of language difficulties.	www.pearsonassessments.com
Oral Written and Language Scales (OWLS) including Listening Comprehension (LC)/Oral Expression (OE) and Written Expression (WE)	X		OWLS: LC/OE 3.0 to 21.11 WE: 5.0 to 21.11 years	**OWLS LC/OE** is an individually administered assessment of receptive and expressive language for children and young adults. The **LC Scale** measures receptive language by using an easel. The examiner reads a verbal stimulus aloud and the examinee responds by indicating a picture on the examinee's side of the easel. With the **OE Scale** the examinee answers a question, completes a sentence, or generates one or more sentences in response to a visual/verbal stimulus. The **OWLS: WE** offers an authentic assessment of written language skills in children and young adults. The WE examines use of conventions (handwriting, spelling, punctuation), use of syntactical forms (modifiers, phrases, sentence structures), and ability to communicate meaningfully (relevance, cohesiveness, organization).	http://ags.pearsonassessments.com
Mathematics Assessments					
Test of Early Mathematics Ability-3rd			3 to 9 years	The **TEMA-3** measures the mathematics performance of children. It can also be used to detect learning problems in	www.psych-edpublications.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
Edition (TEMA-3)				mathematics for older children. The test measures informal and formal (school taught) concepts and skills in the following domains: numbering skills, number-comparison facility, numerical literacy, mastery of number facts, calculation skills, and understanding of concepts.	
Disability Sensitive Measures					
Adaptive Behavior Assessment System II (ABAS-II)	X		Birth to adult	The **ABAS-II** assesses individuals with mental retardation, learning difficulties, ADD/ADHD, or other impairments. The ABAS-II is the only instrument to incorporate current American Association of Mental Retardation (AAMR) guidelines for evaluating the three general areas of adaptive behavior (Conceptual, Social, Practical). Further, it assesses all 10 specific adaptive skills areas specified in the DSM-IV. The ABAS-II helps to determine how the individual is responding to daily demands, as well as to help develop treatment and training goals.	http://harcourtassessment.com
Ages and Stages Questionnaire (ASQ)		X	Birth to 5 years	The **ASQ** system is a low-cost, reliable way to screen infants and young children for developmental delays. Parents complete the simple, illustrated 30-item questionnaires at designated intervals, assessing children in their natural environments to ensure valid results. Each questionnaire covers five key developmental areas: communication, gross motor, fine motor, problem solving, and personal-social. Professionals then convert parents' responses of yes, sometimes, and not yet — in just 2-3 minutes — to color-coded scoring sheets, enabling them to quickly determine a child's progress in each developmental area.	www.brookespublishing.com
Ages and Stages Questionnaire: Social/Emotional		X	6 to 60 months	**ASQ: SE** is a screening system to assess children's social-emotional development at 6, 12, 18, 24, 30, 36, 48, and 60 months. Areas that are assessed include self-regulation,	www.brookespublishing.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
(ASQ:SE)				compliance, communication, adaptive functioning, autonomy, affect, and interaction with people.	
Assessment, Evaluation, and Programming System (AEPS)	X		Birth to 6 years	The **AEPS** is an activity-based, field-tested instrument that links assessment, intervention, and evaluation for children who have disabilities or are at risk for developmental delays. With the second edition, professionals can assess and monitor six key developmental areas in young children: fine motor, gross motor, cognitive, adaptive, social-communication, and social. The AEPS helps identify educational targets tailored for each child's needs, formulate developmentally appropriate goals, conduct before and after evaluations to ensure interventions are working, and involve families in the whole process.	www.brookespublishing.com
*Battelle Developmental Inventory (BDI)	X		Birth to 7.11 years	The **BDI-2 is** an individualized assessment that may be used for a variety of purposes, including identifying children with disabilities, evaluating groups of children with disabilities in early education programs, assessment of the typically developing child, assessment (screening) for school readiness, program evaluation for accountability, identification of integrated activities to help achieve milestones. There two types of assessment: the full assessment and the screening test. The full assessment refers to the use of the complete instrument, including all five domains. The screening test refers to an abbreviated instrument that includes 100 test items from the full BDI-2.	www.riverpub.com
Carolina Curriculum for Preschoolers with Special Needs (CCPSN)	X		2 to 5 years	The natural follow-up to **CCPSN** is designed for the assessment and teaching of children with mild to severe special needs from 2 to 5 years' developmental age. The curriculum itself is divided into 22 logical teaching sequences covering five developmental domains:	www.brookespublishing.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				cognition, communication, social adaptation, fine motor, and gross motor. Once the initial assessment is complete, professionals select curricular items (there are more than 400) that correspond to each child's special needs.	
Communication and Symbolic Behavior Scale (CSBS)	X		Birth to 6 years	**CSBS** is a norm-referenced, standardized instrument used to assess infants, toddlers, and preschoolers at risk for communication delays and impairments. However, CSBS — used during natural play routines and other adult-child interactions — is different from other language assessment instruments. Its 22 5-point rating scales survey children's language skills as well as their symbolic development, which is demonstrated in the children's gestures, facial expressions, and play behaviors. Please note: It should be administered by a speech-language pathologist, early interventionist, psychologist, or other professional trained to assess developmentally young children.	www.brookespublishing.com
Every Move Counts	X		Young children with severe disabilities	This is a sensory-based program for recognizing and improving communication in people of all ages who are perceived as being unable to communicate. The Sensory Response Assessment identifies sensory activities a client enjoys and how that enjoyment is communicated. The client's natural response becomes a means to request these preferred activities. Then this basic response becomes the foundation of a more functional communication system. Every Move Counts includes intervention strategies, activities, and recordkeeping forms.	www.proedinc.com
Pediatric Evaluation of Disability Inventory (PEDI)	X		6 mos to 7 years	The **PEDI** assesses key functional capabilities and performance in children ages six months to seven years. It can be used to evaluate older children whose functional	http://harcourtassessment.com

Assessment tool	Alignment		Age Group or Grade level	Description*	Publisher
	Yes (On PDE website)	Yes (see Table 4)			
				abilities are lower than those of seven-year-olds without disabilities. PEDI lets you measure both capability and performance by observing self-care, mobility, and social function	
Project Oregon Curriculum for Visually Impaired and Blind Preschool Children Skills Inventory	X		Birth to 6 (develop mental level)	The **Skills Inventory** consists of 640 behavioral statements organized in eight developmental areas: Cognitive, Language, Socialization, Vision, Compensatory, Self-Help, Fine-Motor, and Gross Motor. Each of these eight areas contains skills which have been developmentally sequenced and arranged in age categories: birth-1, 1-2, 2-3, 3-4, 4-5, and 5-6 years. All major skills needed by a visually impaired or blind child in preparation for first grade, such as prerequisites for orientation and mobility and braille, are included. The Skills Inventory is also available in Spanish, Large Print, and Braille.	www.soesd.k12.or.us/
Temperament and Atypical Behavior Scales (TABS)	X		11 to 71 months	**TABS** is specifically designed to identify temperament and self-regulation problems that can indicate a child's risk for developmental delay. TABS consists of three components: TABS Screener completed by parents. Only children whose scores indicate a potential problem are assessed with the more extensive TABS Assessment Tool. The TABS Assessment Tool, also completed by parents, provides evaluation results of behavior in four categories: detached, hypersensitive-active, under-reactive, and dysregulated.	www.brookespublishing.com

* All descriptions are obtained from the websites for each instrument.

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Build
Strong Foundations For
Pennsylvania's Youngest Children

REVIEW OF EARLY CHILDHOOD CLASSROOM OBSERVATION MEASURES

February 2007

Early Learning Standards Task Force
And Kindergarten Assessment Work Group
Pennsylvania BUILD Initiative
Pennsylvania's Departments of Education and Public Welfare
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REVIEW OF EARLY CHILDHOOD CLASSROOM OBSERVATION MEASURES

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REVIEW OF EARLY CHILDHOOD CLASSROOM OBSERVATION INSTRUMENTS

I. INTRODUCTION

Although individual child assessment information is critical for aligning with the Pennsylvania standards for learning and for developing curricula, it is equally important to assess the quality of the early childhood (birth to age 8) classroom environment through standardized classroom observation systems. This is another important component of compliance with the Pennsylvania standards for learning and for ensuring program quality.

This document is one of three documents that focus on different aspects of the learning environment that enhances quality, including curriculum, on-going assessment, and classroom environment. Each document provides comprehensive information about the importance of assessment, curriculum, or classroom observation to provide quality classrooms for children to succeed in school. The assessment and curriculum reports each have accompanying documents that contain tables describing individual assessment tools or curriculum resources. The documents for all topics include:

- *Review of Early Childhood Classroom Observation Measures*

- *Revised Report and Guidelines on Early Childhood Assessment For Children From Birth to Age 8 (grade 3)*;
    - *Summary of Assessment Measures*, document to accompany *Revised Report and Guidelines on Early Childhood Assessment For Children From Birth to Age 8 (Grade 3);*

- *Curriculum for Early Childhood Programs Serving Children From Birth to Age 8 (Grade 3);*
    - *Summary of Curriculum Resources*, document to accompany *Early Childhood Curriculum for Programs Serving Children birth to age 8 (grade 3)*;

II. CLASSROOM ENVIRONMENT

A high-quality classroom environment is a valuable mechanism for ensuring positive child outcomes. It is ideal to gather information on both individual child assessment outcomes and the quality of the classroom environment because children's developmental outcomes are often dependent on the quality of their experiences in educational (and family) settings (Pianta, 2003). In addition, determining classroom quality through standardized classroom observations systems can assist programs in a variety of ways including measuring and noting teachers' strengths and weaknesses, developing professional development, planning for and evaluating of programs, and evaluating policy initiatives.

High-quality early childhood programming (birth to age 8) has long been considered essential to promoting children's academic and school readiness (Bredekamp & Copple, 1997). Policy documents consistently emphasize the importance of high quality programming and the early

childhood research supports the need for this emphasis. For example, research has found that children who participate in high-quality settings score higher on standardized measures of school readiness and engage in more complex activities with peers (Burchinal, Lee, & Ramey, 1998; Campbell & Ramey, 1994; Howes, & Hamilton, 1993; Kontos, Howes, Shinn, & Galinsky, 1997). Further, preschoolers attending high-quality programs tend to enter Kindergarten with greater knowledge of verbal and numerical concepts, the ability to cope with school tasks, the likelihood of making normal progress through the primary grades, and higher ratings of social skills (see La Paro, Pianta, & Stuhlman, 2004). High quality preschool classrooms have also been found to contribute to children's literacy success (Dickinson & Sprague, 2001).

The quality of classroom experiences is also critical for children in the early elementary grades. Quality classroom experiences provided to children in Kindergarten is related to observation of the child's competence and on-task behavior and to teacher's reports of children's social and academic skills (Pianta, La Paro, Payne, Cox, & Bradley, 2002). Other studies have found long-term effects of child care quality on children's language, cognitive, and social skills through early elementary school (Peisner-Feinberg, Burchinal, Clifford, Culkin, Howes, Kagan, & Yazejian, 2001).

Defining quality in preschool and elementary classrooms is challenging because of the multitude of constructs that can be examined within a classroom. Historically, assessment of classrooms has focused on the features of the environment, such as availability of materials, space for play, and safety (La Paro, Pianta, & Stuhlman, 2004), but it can also include teacher-child interactions, mode of instruction, and language and literacy experiences in the classroom. Other more distal measures for defining quality are teacher credentials, class size, and family characteristics. These measures, however, are disconnected from teacher's and children's actual classroom interactions.

The purpose of this paper is to provide detailed information about five standardized classroom observation instruments. Each instrument is distinct in its intent and purpose. For example, some instruments examine the physical environment of the classroom while other instruments document social climate or instructional practices. In brief, Table 1 describes what constructs each instrument assesses while the Appendix similarly describes the constructs but also what it measures in the classroom and the age range.

All of the instruments listed can be used by program directors or school administrators for program improvement, supervision, and professional development, including staff self-assessment, monitoring, and teacher training.

Table 1
Summary of Standardized Classroom Observation Instrument

Instrument		Construct
Assessment of Practices in Early Elementary Classrooms (APEEC)		Global dimensions of DAP in Kindergarten to 3rd grade classes
Caregiver Interaction Scale (CIS)		A teacher's interactions with children and the teacher's emotional tone, discipline style, and responsiveness in the classroom.
Classroom Assessment Scoring System (CLASS)		Emotional and instructional climate
Early Language and Literacy Classroom Observation (ELLCO)		Language and literacy practices in classroom
Environment Rating Scales		
1.	Infant and Toddler Environment Rating Scale-Revised (ITERS-R)	Global assessment of structural quality in infant and toddler classrooms
2.	Early Childhood Environment Rating Scale-Revised (ECERS-R)	Global assessment of structural quality in preschool classrooms
3.	Family Day Care Rating Scale (FDCRS)	Global assessment of quality in family day care homes
4.	School-Age Environment Rating Scale (SACERS)	Global assessment of quality in after-school programs

III. CLASSROOM OBSERVATION ASSESSMENT INSTRUMENTS

Assessment of Practices in Early Elementary Classrooms (APPEC)

The Assessment of Practices in Early Elementary Classrooms (APEEC; Maxwell, McWilliam, Hemmeter, Ault, & Schuster, 2001)) assesses global classroom quality that could be found in any elementary classroom environment. The instrument focuses on observation of developmentally appropriate practices in Kindergarten to 3rd grade classrooms. Few global classroom assessments exist for the elementary grades, particularly those that are specifically designed for this age group. Most instruments are designed for the pre-kindergarten classrooms and have been adapted to fit into an early elementary classroom (Maxwell, et al., 2001). This is often difficult because it may affect the instruments validity and reliability.

The design of the APEEC is similar to the Early Childhood Environment Rating Scale-Revised (ECERS-R) in that it uses observation as a primary data source, with teacher report used only as needed or if the descriptor was not observed. The APEEC contains 16 items with each item having two or more descriptors rated on a 7-point score where a score of 1 represents developmentally inappropriate practices and a score of 7 represents excellent developmentally appropriate practices. The instrument was designed for classrooms that serve both children with or without disabilities.

Table 2 describes the categories of the 16 items of the APEEC.

Table 2
APEEC Category and Item Descriptions

Category	Description
Physical environment	-- Room arrangement -- Display of child products (artwork) -- Classroom accessibility -- Health and safety
Instructional context	-- Use of materials and computers -- Monitoring child progress -- Teacher-child language -- Instructional methods -- Integration and breadth of subjects
Social Context	-- Children's role in decision-making -- Participation of children with disabilities -- Social skills, diversity -- Transitions between activities -- Family involvement.

Caregiver Interaction Scale (CIS)

The Caregiver Interaction Scale (CIS) developed by Jeffrey Arnett (1989) examines the quality of a teacher's interaction with pre-school children. This widely used tool is completed by an observer who rates the teacher's behavior in a child-care or home-based setting. The primary use of this instrument is to examine a teacher's interactions with children and to assess the teacher's emotional tone, discipline style, and responsiveness in the classroom.

The CIS contains 26-items that are rated on a four-point scale that includes: 1 (not at all), 2 (somewhat), 3 (quite a bit), or 4 (most of the time). The items are usually organized into the following four sub-scales: sensitivity, harshness, detachment, and permissiveness (Kruif, McWilliam, Ridley, & Wakely, 2000). When combined, these four scales give an overall caregiver quality score. Table 3 describes these four categories:

Table 3
CIS Category and Description

Category	**Description**
Sensitivity	This reflects developmentally appropriate interactions, enthusiasm and warmth
Harshness	This reflects hostile and excessively critical behavior toward children
Detachment	This refers to the degree to which the teacher is uninvolved or uninterested in children
Permissiveness	This reflects tolerance of misbehaviors.

Classroom Assessment Scoring System (CLASS)

Instruments that examine classroom quality primarily tend to focus on the physical and organizational aspects of the classroom and on more global classroom processes (Pianta, et al., 2004). However, the definition for quality also includes the kind of instruction and teacher-child interactions that occur in preschool and elementary settings. In conjunction with the physical environment, research has found that the type of interactions with adults and the instruction that occur in pre-kindergarten and early elementary school have effects on children's achievement and social competence (see La Paro, Pianta, & Stuhlman, 2004). Examples of classrooms with high-quality interactions include teachers who promote children's learning through scaffolding and support, establish episodes of joint attention with children, and offer appropriate questioning and feedback (La Paro, Pianta, & Stuhlman, 2004).

The Classroom Assessment Scoring System (CLASS) was developed by La Paro and Pianta (2000; La Paro, Pianta, & Stuhlman, 2004) and it examines the emotional and instructional climate of the classroom. Because materials can be variable across early childhood programs, this instrument is intriguing because it examines the use and implementation of curriculum and materials. Thus, the CLASS examines what teachers do with the materials as opposed to what is available in the physical environment (La Paro, Pianta, & Stuhlman, 2004).

The instrument was designed for observations in pre-kindergarten to 3rd grade classrooms. The instrument has nine subscales to assess classroom quality in terms of emotional and instructional climate and quality of teacher-child interactions, which includes classroom management and instructional supports for learning. Each subscale is rated on a 7-point scale ranging from 1 or 2 (classroom is low on that dimension) to 6 or 7 (classroom is high on that dimension).

Table 4 describes the nine subscales on the CLASS (Pianta, et al., 2005). In general, the two factors of emotional climate and instructional climate are derived from all of the constructs.

Table 4
Nine Subscales of the CLASS

Category	Definition
Social-emotional constructs	
Positive climate	Reflects enthusiasm, enjoyment, and respect displayed during interactions between the teacher and children, as well as peer interactions
Negative climate	Reflects the negative tone within the classroom, such as anger, hostility, or aggression exhibited by the teacher and/or children
Teacher sensitivity	Reflects how responsive the teacher is to emotional and academic needs, such as providing comfort and encouragement
Management constructs	
Over-control	Extent to which the classroom activities are rigidly structured and the degree to which children's autonomous behaviors are exhibited
Effective behavior management	The ability to monitor, prevent, or redirect behavior
Productivity	Reflects the teacher's use of instructional time and routines for children's learning
Instructional support constructs	
Concept development	Reflects how well teacher's encourage higher order thinking skills, creativity, and problem solving
Instructional learning formats	Reflects how the teachers engage children in activities and facilitate activities so that learning opportunities are maximized.
Quality of feedback	Reflects the verbal evaluation teacher's provide to children about their work, comments, and ideas

Early Language and Literacy Classroom Observation (ELLCO)

The Early Language and Literacy Classroom Observation (ELLCO; Smith & Dickinson, 2002) measures the quality of the language and literacy experiences in classrooms by examining literacy practices and environmental supports. Research has found correlations between presence of specific literacy materials and the frequency of literacy behaviors during free play (Morrow, 1990). The instrument was designed to help identify practices and environmental supports that encourage children's early literacy and language development from preschool to elementary school – or classrooms that serve children age 3 through age 8 (third grade). Similar

to the other instruments, the uses for the ELLCO are many, including for research, monitoring progress, supervision, and professional development.

The ELLCO contains three interdependent tools to examine the literacy environment and supports. For the observation aspect of the tool the items are rated on a 5-point scale ranging from (1) deficient to 5 (exemplary). Table 5 describes the three tools of the ELLCO.

Table 5
Three Tools of the ELLCO

Category	Items
Literacy Environment Checklist (occurs prior to the observation)	24 items: -- Book area -- Book selection --- Book use -- Writing materials -- Writing around the room
Classroom Observation	14 items in two categories -- General classroom environment including organization, contents, presence and use of technology, opportunities for child choice and initiative, classroom management strategies, and classroom climate -- Language, literacy, and curriculum, including oral language facilitation, presence of books, approaches to reading, approaches to writing, approaches to curriculum integration, diversity, home support, assessment
Teacher Interview	Conducted as a supplement to the classroom observation
Literacy Activities Rating Scale (conducted only after the environment checklist and classroom observation have occurred)	Two categories (9 items): -- Book reading (i.e., number of full-group book readings) -- Writing

Environment Ratings Scales

The Early Childhood Environment Scales are comprised of four scales that each examines the global or overall quality of environments of care in which children can be engaged. The focus of these instruments is on the physical environment and safety with less emphasis on interactive processes of the teacher and child (this part of the ECERS-R instrument is self-reported). None of the scales measure instructional practices of the teacher. The first instrument to be developed

was the ECERS (Harms & Clifford, 1980) and the other three instruments were an adaptation of this format. All four instruments have similar categories and rating scales. Each of these instruments can be used for program and class improvement and can also be used as a pre- and post-test measure to document the impact of training and continuing education. The following is a brief description of each scale. A summary of the four scales are described in Table 6 which is below the description of each instrument (p. 12).

(1) Early Childhood Environment Rating Scale – Revised (ECERS-R)

The Early Childhood Environment Rating Scale (ECERS) was originally developed by Harms and Clifford (1983) and was recently revised (Harms, Clifford, & Cryer, 1998). The primary purpose of the Early Childhood Environment Rating Scale is to assess the quality of early childhood environments including the use of space, materials, and experiences to further children's development, including the daily schedule and supervision. It is now one of the most widely used instruments for a global assessment of the early childhood classroom that examines the structural quality of early childhood programs. The changes to the revised ECERS, or ECERS-R, reflect changes in the early childhood field that occurred since the original ECERS was published, including inclusion of children with disabilities and sensitivity to cultural diversity.

Table 6 describes the categories of the 43 items of the ECERS-R. Each item is rated on a 7-point scale ranging from (1) inadequate to (7) excellent. Basically, a rating of (1) or inadequate, indicates a lack of care that is not good for children's development, a (3) or minimal rating indicates that the custodial care is good, a (5) or good rating indicates that the basic tenets of developmentally appropriate care exist, and finally, a (7) or excellent describes high quality care that expands children's experiences, extends their learning, and provides warm and caring support. In the scoring system there are opportunities to document clarification and questions for selected items.

(2) Infant/Toddler Environment Rating Scale-Revised (ITERS-R)

The Infant/Toddler Environment Rating Scale-Revised (ITERS-R; Harms, Cryer, & Clifford, 1990) uses the same format and scoring system as the ECERS-R. However, the ITERS-R is designed to assess center-based child care programs for infants and toddlers up to 30 months of age. The global definition for the environment includes space, interaction, activities, schedule, and provisions for parents and staff. Included in the ITERS-R is the assessment in the environment children's health and safety, appropriate stimulation through language and activities, and warm, supportive interaction. Table 6 describes how the 39 items of the ITERS-R are organized.

(3) Family Day Care Rating Scale (FDCRS)

Family day cares are commonly chosen by parents who are looking for care for children under three. These are care facilities that are provided in an individual's home for a small group of children. The Family Day Care Rating Scale (FDCRS; Harms & Clifford, 1989) is designed to assess family child care programs conducted in a provider's home. Because a range of ages can

be served in a Family Day Care setting, the descriptors of the items cover ages from infancy to kindergarten.

The FDCRS consists of 40 items, including 8 supplementary items for programs enrolling children with disabilities that fall into 7 subscales (see Table 6).

Similar to the ECERS-R, the FDCRS uses the 7-point rating scale ranging from (1) inadequate to (7) excellent. As before, the inadequate and minimal levels focus on providing basic materials and on health and safety precautions. To rate good and excellent, the observer must see positive interactions, planning, and personalized care in addition to materials.

(4) School-Age Care Environment Rating Scale (SACERS)

The School-Age Care Environment Rating Scale (SACERS; Harms, Jacobs, & White, 1996) instrument is targeted for children who are school-age but are under non-parental care. The SACERS is not meant for family child care homes but in center-based facilities. Because the hours of elementary school do not always cater to working parents' standard business hours, the instrument is designed to assess group-care programs for children of school age or between 5 and 12 of age.

When developing the SACERS, the authors drew from research, criteria for developmental appropriateness for school-age children, and definitions for quality for school-age programs. However, the primary basis for the format of the instrument was the ECERS.

The SACERS is comprised of 49 items (including 6 supplementary items for programs enrolling children with disabilities) that are divided into 7 categories. Similar to the ECERS, each item has a 7-point scale ranging from inadequate to excellent.

Table 6
Summary of Environment Rating Scales

Instrument	Age Group/Classroom	Item Categories
Early Childhood Environment Rating Scale- Revised (ECERS-R)	Classrooms of children 2 ½ to 5 years of age	43 items: -- Space and furnishings -- Personal Care Routines -- Listening and Talking -- Activities -- Interaction -- Program Structure -- Parents and Staff
Infant/Toddler Environment Rating Scale – Revised (ITERS-R)	Classrooms of children birth to 30 months of age	39 Items: -- Space and furnishings -- Personal care routines -- Language-reasoning -- Activities -- Interactions -- Program structure -- Parents and staff
Family Day Care Rating Scale (FDCRS)	Family Day Care homes of children infancy to Kindergarten	40 items: -- Space and furnishings for care and learning -- Basic care -- Language and reasoning -- Learning activities -- Social development -- Adult needs -- Provisions for exceptional children
School-Age Care Environment Rating Scale (SACERS)	After-school programs for school-age	49 items: -- Space and furnishings -- Health and safety -- Activities -- Interactions -- Program Structure -- Staff development -- Special needs

III. CONCLUSION

Examining classroom quality through standardized classroom observation systems is an important component toward alignment with the Pennsylvania standards for learning for children birth to age 8. Any of the five instruments described above would provide a means to determine quality in the classroom. However, each instrument is distinct in its intent. Careful consideration must occur when choosing an instrument. For example, one must determine if structural features, process variables (i.e., teacher-child interactions), or literacy supports is the best measure of quality for a particular program or school. One must remember that a quality early learning environment is one piece toward ensuring positive outcomes for children, including school readiness and school success. By using standardized classroom observation systems, programs have the added benefit of having information to develop professional development and to engage in program planning.

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V. APPENDIX: Overview of Classroom Environment Measures

Instrument	Age Range of Classroom	What does it Assess?	Measures?
Assessment of Practices in Early Elementary Classrooms (APEEC)	K to 3rd grade	Global dimensions of DAP in Kindergarten to 3rd grade classes	Physical environment Instructional context Social context
Caregiver Interaction Scale (CIS)	Pre-K	A teacher's interactions with children and the teacher's emotional tone, discipline style, and responsiveness in the classroom.	Sensitivity Harshness Discipline Permissiveness
Classroom Assessment Scoring System (CLASS)	Pre-K to 3rd grade	Emotional and Instructional climate in the classroom	Social Emotional climate Classroom management Instructional supports for learning
Early Language and Literacy Classroom Observation (ELLCO)	3 to 8 years	Quality of language and literacy practices in classroom	Literacy environment Classroom observation
Environment Rating Scales (ERS)			For all scales: Space and furnishings Health and safety Appropriate stimulation through language and activities Warm, supportive interactions
1. Infant/Toddler Environment Rating Scale-Revised (ITERS-R)	Up to 30 months of age	Global assessment of structural quality in infant and toddler classrooms	
2. Early Childhood Environment Rating Scale-Revised (ECERS-R)	2 ½ to 5 years	Global assessment of structural quality in preschool classrooms	
3. Family Day Care Rating Scale (FDCRS)	Infancy to K	Global assessment of quality in family day care homes	
4. School-Age Environment Rating Scale (SACERS)	School--age	Global assessment of quality in after-school programs	

September 2013

List of Family-Friendly Standards Resource Materials

Learning Standards for Early Childhood

	English	Spanish
Pennsylvania Infant/Toddler Learning Standards for Early Childhood	X	X
Pennsylvania Prekindergarten Standards for Early Childhood	X	X
Pennsylvania Kindergarten Standards for Early Childhood	X	X
Pennsylvania Continuum of Learning	X	X

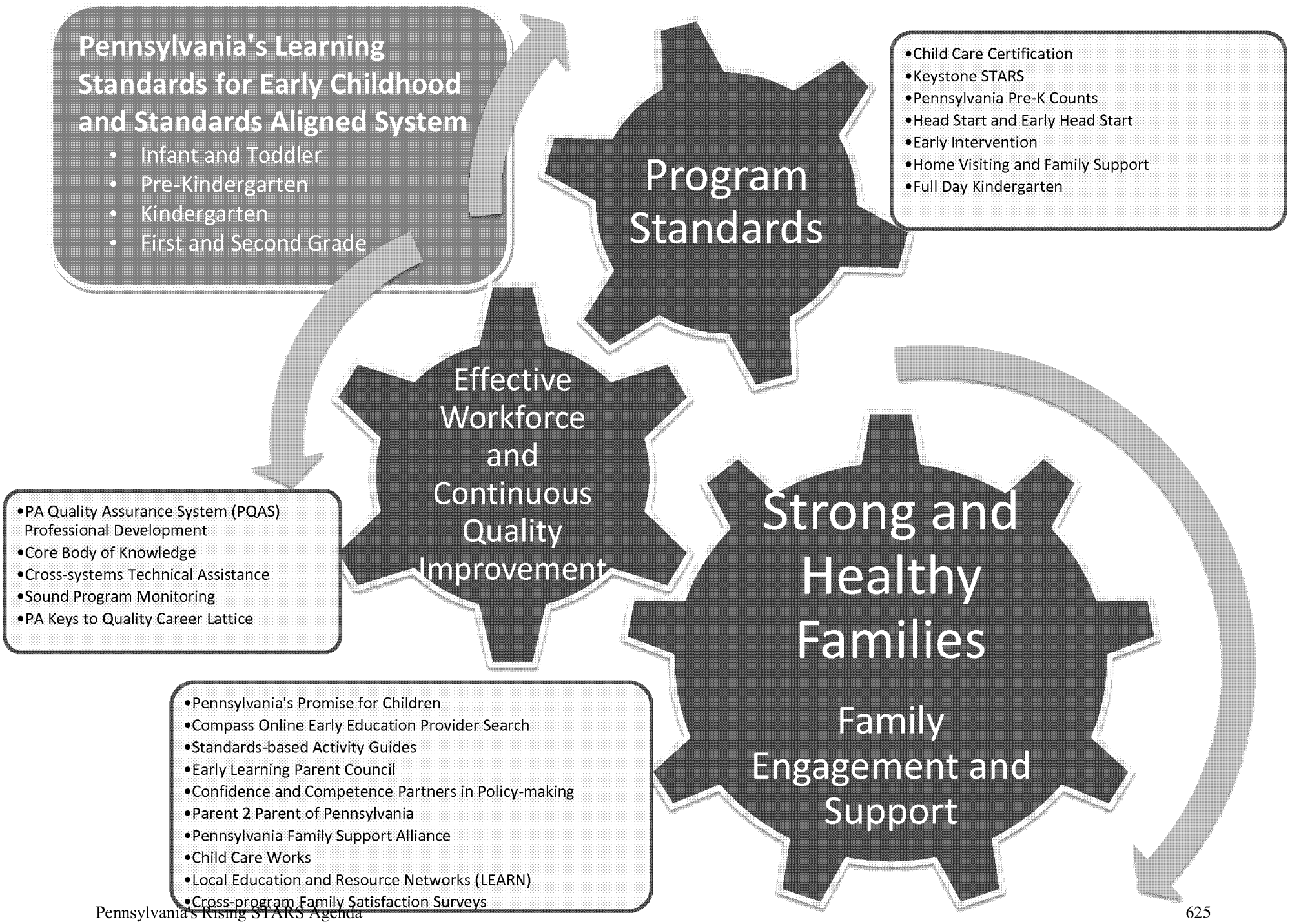
Learning Standards Resources for Families

	English	Spanish
Every Day I Learn through Play	X	X
Learning is Everywhere!	X	X
Kindergarten, Here I Come!	X	
Kindergarten, Here I Am!	X	
Learning Standards Wheel	X	X
Recipes for Readiness	X	X
Building Blocks for Babies	X	

Keystone STARS (TQRIS) Standards Print Materials for Families

	English	Spanish
Keystone STAR Brochure "Looking for quality child care?"	X	
Reach for the STARS Brochure Description of each STAR level is and what a parent would expect in the center STAR 1,2,3,4	X	

Family Engagement in Pennsylvania



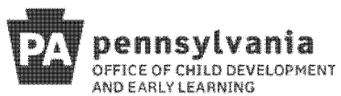
List of Local Education and Resource Network (LEARN) Lead Partners, 2013-2014

*denotes Lead Partners serve more than one county

Adams:	United Way of Adams County Ready 2 Learn
Allegheny:	Pittsburgh Association for the Education of Young Children (PAEYC)
Armstrong:	ARIN Intermediate Unit 28
Beaver:	Beaver County Early Care & Education Council
Bedford:	Local Interagency Coordinating Council*
Berks:	Berks Early Care and Education Council
Blair:	United Way of Blair County
Bradford:	Bradford-Sullivan Early Childhood Coalition*
Bucks:	Bucks County Quality Child Care Coalition
Butler:	Lifesteps, Inc.
Cambria:	Alternative Community Resource Program, Inc.
Cameron:	Early Child Care Coalition*
Carbon:	Lehigh Carbon Community College
Centre:	Local Interagency Coordinating Council*
Chester:	Chester County Intermediate Unit
Clearfield:	Clearfield Interagency Coordinating Council
Clarion:	Early Intervention Council
Clinton:	Local Interagency Coordinating Council*
Columbia:	Northeast Regional Key*
Crawford:	Twin Creeks Head Start
Cumberland:	South Central Regional Key*
Dauphin:	Capital Beginnings
Delaware:	Southeast Regional Key*
Elk:	Early Child Care Coalition*
Erie:	Early Connections/Success by Six
Fayette:	Fayette County Early Care & Education Council.
Forest:	Early Learning Coalition*
Franklin:	Early Childhood Partners
Fulton:	South Central Community Action Programs
Greene:	Greene County Early Care and Education Community Team
Huntingdon:	Huntingdon County Child and Adult Development Corp.
Indiana:	Indiana County Department of Human Services
Jefferson:	DuBois-Jefferson Kid Council
Juniata:	United Way of Mifflin-Juniata, Success by Six*
Lackawanna:	United Way of Lackawanna & Wayne Counties, Success by Six*
Lancaster:	United Way of Lancaster County, Success by Six
Lawrence:	Lawrence County Early Learning Task Force
Lebanon:	South Central Regional Key*
Lehigh:	Lehigh Valley Early Learning Network*
Luzerne:	Hildebrandt Learning Center
Lycoming:	Northeast Regional Key*
McKean:	LICC and Early Intervention Council
Mercer:	Our Children, Our Future

Mifflin:	United Way of Mifflin-Juniata, Success by Six*
Monroe:	Pocono Services for Families and Children
Montgomery:	Southeast Regional Key*
Montour:	Montour County Advocates for Children
Northampton:	Lehigh Valley Early Learning Network*
Northumberland:	Early Care and Education Coalition of Northumberland County
Perry:	Kim Damico
Philadelphia:	Southeast Regional Key*
Pike:	Recognizing Excellence in Early Childhood Education (REECHE)
Potter:	Local Interagency Coordinating Council (LICC) & Early Intervention Council
Schuylkill:	Northeast Regional Key*
Snyder:	Early Care and Education Coalition of Union/Snyder Counties*
Somerset	Community Action Partnerships for Somerset County
Sullivan:	Bradford-Sullivan Early Childhood Coalition*
Susquehanna:	Joanne Sivers
Tioga:	Northeast Regional Key*
Union:	Early Care and Education Coalition of Union/Snyder Counties *
Venango:	Venango County Kid Connection & Early Intervention
Warren:	Early Learning Coalition*
Washington	Early Care & Education Community Engagement Team
Wayne:	United Way of Lackawanna & Wayne Counties, Success by Six*
Westmoreland:	United Way of Westmoreland County
Wyoming:	Wyoming County HANDS
York:	United Way of York County, Focus on Our Future

Pennsylvania Family Engagement Crosswalk



The Pennsylvania Family Engagement Crosswalk was developed to demonstrate the similarities and continuity between four different professional resources: the *Pennsylvania Early Learning Standards*, the *Head Start Family Engagement Outcomes Framework*, the *Strengthening Families Protective Factors Framework*, and the *PTA National Standards for Family-School Partnerships*.

This document can be used to assist Pennsylvania Office of Child Development and Early Learning's Family Engagement Pilot Partners to see the link between the frameworks, and to ultimately assist with locating specific resources that would support efforts in family engagement within their communities. By highlighting the commonalities, this document can be used by Pilot Partners in their communities to identify opportunities for additional resources or strategies to engage families.

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME(S)	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Families are supported in times of need. Families benefit from community supports and resources that are responsive to the changing needs of families. Also beneficial are those supports which assist in building upon a family's strength	**FAMILY WELL BEING** Parents and families are safe, healthy, and have increased financial security. **FAMILY CONNECTIONS TO PEERS AND COMMUNITY** Parents and families form connections with peers and mentors in formal or informal social networks that are supportive and/or educational and that enhance social well-being and community life. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf	**Standard 20.3: SUPPORTING CHILDREN'S LEARNING** Strand: 20.3.4 Community Supports **Standard 20.2: FAMILY ENGAGEMENT** **Strand:** 20.2.2: Special Events and Activities http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: CONCRETE SUPPORT IN TIMES OF NEED** Everybody needs help sometimes, and families that can get help when they need it are able to stay strong and healthy. Whether the need is caused by a sudden crisis—like a death in the family or loss of employment—or an ongoing issue such as substance abuse or depression, being able to ask for and receive help is important to keeping families strong. **PROTECTIVE FACTOR: PARENTAL RELIENCE** In order to deal with the stresses of life, parents need to be strong and flexible, and they need to be able to bounce back when adversity hits. If parents were treated harshly themselves as children, they may need role models, resources, and encouragement to be able to deal with challenges while nurturing their children. http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf	**Primary:** **Standard 6: COLLABORATING WITH COMMUNITY** Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation. http://www.pta.org/programs/content.cfm?ItemNumber=1807 **Standard 2: COMMUNICATING EFFECTIVELY** Families and school staff engage in regular, two-way, meaningful communication about student learning. http://www.pta.org/programs/content.cfm?ItemNumber=1811

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME(S)	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Families experience relationships with community partners--such as child care professional, faith-based community, health & human service programs, School personnel--that are affirming, reciprocal and build upon their strengths. Across their child's lifespan, family members may partner with a variety of individuals, agencies, organizations, programs, etc. Children benefit when these partnerships are relationship-based, reciprocal and build upon strengths of the child and family.	**POSITIVE PARENT-CHILD RELATIONSHIPS** Beginning with transition to parenthood, parents and families develop warm relationships that nurture their child's learning and development. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf **FAMILY CONNECTIONS TO PEERS AND COMMUNITY** Parents and families form connections with peers and mentors in formal or informal social networks that are supportive and/or educational and that enhance social well-being and community life. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf	**Standard 20.1 CONNECTIONS:** Shared Understanding of Family and School Values, Philosophies and cultures **Strand:** 20.1.1 Information Exchange **Strand:** 20.1.2 Home to School Connections **Strand:** 20.1.3 School to Home Connections **Standard: FAMILY ENGAGEMENT** **Strand:** 20.2.2: Special Events and Activities **Standard:** 20.3: Supporting Children's Learning **Strand:** 20.3. 2. Goal Development http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: CONCRETE SUPPORT IN TIMES OF NEED** Everybody needs help sometimes, and families that can get help when they need it are able to stay strong and healthy. Whether the need is caused by a sudden crisis—like a death in the family or loss of employment—or an ongoing issue such as substance abuse or depression, being able to ask for and receive help is important to keeping families strong. **PROTECTIVE FACTOR: SOCIAL CONNECTIONS FOR FAMILIES** When parents have an informal network of trusted friends in their community, they have a support system for meeting both practical and emotional needs. They can brainstorm about problems together, give and receive back-up child care, and help meet unexpected needs such as transportation. As a social group, parents provide each other with norms for how family and community issues should be handled. http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf	**Primary:** **Standard 1: WELCOMING ALL FAMILIES INTO THE SCHOOL COMMUNITY** Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class. http://www.pta.org/programs/content.cfm?ItemNumber=1805 **Standard 2: COMMUNICATING EFFECTIVELY** Families and school staff engage in regular, two-way, meaningful communication about student learning. http://www.pta.org/programs/content.cfm?ItemNumber=1810

COMMON IDEA	HEAD START FAMILY ENGAGEMENT OUTCOME	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Families have the support and information they need to encourage their child's learning and development The bond between child and family is the stable connector throughout a child's life. Families benefit from having ongoing support to learn about and understand their child's development	**FAMILIES AS LIFELONG EDUCATORS** Parents and families observe, guide, promote, and participate in the everyday learning of their children at home, school, and in their communities. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf **POSITIVE PARENT-CHILD RELATIONSHIPS** Beginning with transition to parenthood, parents and families develop warm relationships that nurture their child's learning and development.	**Standard 20.1 CONNECTIONS:** Shared Understanding of Family and School Values, Philosophies and cultures **Strand:** 20.1.2 Home to School Connections **Strand:** 20.1.3 School to Home Connections **Standard 20.2 FAMILY ENGAGEMENT** **Strand:** 20.2.2 Special Events and Activities **Standard 20.3: SUPPORTING CHILDREN'S LEARNING** **Strand:** 20.3.1 Screening and Assessment **Strand:** 20.3.2 Goal Development **Strand:** 20.3.3 Ongoing Progress Review **Strand:** 20.3.4 Community Supports http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: KNOWLEDGE OF PARENTING AND CHILD DEVELOPMENT** Parents who understand normal child development have reasonable expectations for their children. Parents who have alternative strategies for dealing with children's challenging behavior can avoid harsh punishments. http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf **PROTECTIVE FACTOR: HEALTHY SOCIAL AND EMOTIONAL DEVELOPMENT IN CHILDREN** Parenting can be especially difficult when children act out or exhibit challenging behaviors. When children can communicate their feelings appropriately and interact positively with their families and with other adults and children, parenting becomes less stressful.	**Primary** **Standard 3: SUPPORTING STUDENT SUCCESS** Families and school staff continuously collaborate to support students' learning and healthy development both at home and at school, and have regular opportunities to strengthen their knowledge and skills to do so effectively. http://www.pta.org/programs/content.cfm?ItemNumber=1810 **Standard 1: WELCOMING ALL FAMILIES INTO THE SCHOOL COMMUNITY** Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class. http://www.pta.org/programs/content.cfm?ItemNumber=1805 **Standard 4: SPEAKING UP FOR EVERY CHILD** Speaking up for every child—Families are empowered to be advocates for their own and other children, to ensure that students are treated fairly and have access to learning opportunities that will support their success. http://www.pta.org/programs/content.cfm?ItemNumber=1809 **Standard 6: COLLABORATING WITH COMMUNITY**

				Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation. http://www.pta.org/programs/content.cfm?ItemNumber=1807

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Family members have support from other families. Family members benefit when they have opportunities to share experiences, and provide support to and receive from each other.	**FAMILY CONNECTIONS TO PEERS AND COMMUNITY** Parents and families form connections with peers and mentors in formal or informal social networks that are supportive and/or educational and that enhance social well-being and community life. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf	**Standard 20.1 CONNECTIONS:** Shared Understanding of Family and School Values, Philosophies and cultures **Strand:** 20.1.3 School to Home Connections **20.2 FAMILY ENGAGEMENT** **Strand:** 20.2.2 Special Events and Activities http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: SOCIAL CONNECTIONS FOR FAMILIES** When parents have an informal network of trusted friends in their community, they have a support system for meeting both practical and emotional needs. They can brainstorm about problems together, give and receive back-up child care, and help meet unexpected needs such as transportation. As a social group, parents provide each other with norms for how family and community issues should be handled. **PROTECTIVE FACTOR: PARENTAL RELIENCE** In order to deal with the stresses of life, parents need to be strong and flexible, and they need to be able to bounce back when adversity hits. If parents were treated harshly themselves as children, they may need role models, resources, and encouragement to be able to deal with challenges while nurturing their children http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf	Primary **STANDARD 5: SHARING POWER** Families and school staff are equal partners in decisions that affect children and families and together inform, influence and create policies, practices and programs. http://www.pta.org/programs/content.cfm?ItemNumber=1808 **Standard 6: COLLABORATING WITH COMMUNITY** Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation. http://www.pta.org/programs/content.cfm?ItemNumber=1807 **Standard 1: WELCOMING ALL FAMILIES INTO THE SCHOOL COMMUNITY** Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class. http://www.pta.org/programs/content.cfm?ItemNumber=1805

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Families have goals of their own and benefit from having supportive partners to help reach their goals. As family members identify and develop goals, their own knowledge grows. When families are stronger, communities are stronger.	**Families as Learners** Parents and families advance their own learning interests through education, training and other experiences that support their parenting, careers and life goals **FAMILY CONNECTIONS TO PEERS AND COMMUNITY** Parents and families form connections with peers and mentors in formal or informal social networks that are supportive and/or educational and that enhance social well-being and community life. **FAMILY WELL BEING** Parents and families are safe, healthy, and have increased financial security. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf	**Standard 20.3: SUPPORTING CHILDREN'S LEARNING** **Strand**: 20.3.4 Community Supports **20.2 FAMILY ENGAGEMENT** **Strand:** 20.2.2 Special Events and Activities http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: SOCIAL CONNECTIONS FOR FAMILIES** When parents have an informal network of trusted friends in their community, they have a support system for meeting both practical and emotional needs. They can brainstorm about problems together, give and receive back-up child care, and help meet unexpected needs such as transportation. As a social group, parents provide each other with norms for how family and community issues should be handled. **PROTECTIVE FACTOR: PARENTAL RELIENCE** In order to deal with the stresses of life, parents need to be strong and flexible, and they need to be able to bounce back when adversity hits. If parents were treated harshly themselves as children, they may need role models, resources, and encouragement to be able to deal with challenges while nurturing their children **PROTECTIVE FACTOR: CONCRETE SUPPORT IN TIMES OF NEED** Everybody needs help sometimes, and families that can get help when they need it are able to stay strong and healthy. Whether the need is caused by a sudden crisis—like a death in the family or loss of employment—or an ongoing issue such as substance abuse or depression, being able to ask for and receive help is important to keeping families strong.	**Primary** **Standard 6: COLLABORATING WITH COMMUNITY** Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation. http://www.pta.org/programs/content.cfm?ItemNumber=1807 **Standard 2: COMMUNICATING EFFECTIVELY** Families and school staff engage in regular, two-way, meaningful communication about student learning. http://www.pta.org/programs/content.cfm?ItemNumber=1811

			http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf	

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS
Families grow in their leadership and utilize these skills in many different ways Family members have unique experiences and expertise from which communities can benefit. When families have supports and opportunities to grow in their leadership, they become agents of change and supporters of what is working.	**FAMILIES AS ADVOCATES AND LEADERS** Parents and families participate in leadership development, decision-making, program policy development, or in community and state organizing activities to improve children's development and learning experiences. http://eclkc.ohs.acf.hhs.gov/hslc/standards/IMs/2011/pfce-framework.pdf	**STANDARD 20.2: FAMILY ENGAGEMENT** **Strand:** 20.2.1 Shared Governance or decision making http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258	**PROTECTIVE FACTOR: SOCIAL CONNECTIONS FOR FAMILIES** When parents have an informal network of trusted friends in their community, they have a support system for meeting both practical and emotional needs. They can brainstorm about problems together, give and receive back-up child care, and help meet unexpected needs such as transportation. As a social group, parents provide each other with norms for how family and community issues should be handled. http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf	**Primary** **Standard 4: SPEAKING UP FOR EVERY CHILD** Speaking up for every child—Families are empowered to be advocates for their own and other children, to ensure that students are treated fairly and have access to learning opportunities that will support their success. http://www.pta.org/programs/content.cfm?ItemNumber=1809 **Standard 5: SHARING POWER** Families and school staff are equal partners in decisions that affect children and families and together inform, influence, and create policies, practices, and programs. http://www.pta.org/programs/content.cfm?ItemNumber=1808

COMMON ELEMENT	HEAD START FAMILY ENGAGEMENT OUTCOME	PARENT TEACHER ASSOCIATION (PTA) NATIONAL STANDARDS FOR FAMILY-SCHOOL PARTNERSHIPS	PENNSYLVANIA EARLY LEARNING STANDARD(S) Partnerships for Learning: Families, Learning Environments and Communities	STRENGTHENING FAMILIES PROTECTIVE FACTOR(S)
Supporting Families in times of Transition Transition is a normal part of growth in children and families during which there may be a range of emotions and needs. Where there are strong relationships between families and partner both children and their families feel more secure throughout the process.	**Family Engagement in Transitions** Parents and families support and advocate for their child's learning and development as they transition to new learning environments, including EHS to HS, EHS/HS to other early learning environments, and HS to Kindergarten through Elementary School.	Primary **Standard 1: WELCOMING ALL FAMILIES INTO THE SCHOOL COMMUNITY** Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class. http://www.pta.org/programs/content.cfm?ItemNumber=1805 **Standard 2: COMMUNICATING EFFECTIVELY** Families and school staff engage in regular, two-way, meaningful communication about student learning. **Standard 4: SPEAKING UP FOR EVERY CHILD** Speaking up for every child—Families are empowered to be advocates for their own and other children, to ensure that students are treated fairly and have access to learning opportunities that will support their success. http://www.pta.org/programs/content.cfm?ItemNumber=1809	**Standard 20.4 Transition** 20.4.1 Program Entry 20.4.2 Program Exit 20.4.3Community Connections	**PROTECTIVE FACTOR: KNOWLEDGE OF PARENTING AND CHILD DEVELOPMENT** Parents who understand normal child development have reasonable expectations for their children. Parents who have alternative strategies for dealing with children's challenging behavior can avoid harsh punishments. **PROTECTIVE FACTOR: HEALTHY SOCIAL AND EMOTIONAL DEVELOPMENT IN CHILDREN** Parenting can be especially difficult when children act out or exhibit challenging behaviors. When children can communicate their feelings appropriately and interact positively with their families and with other adults and children, parenting becomes less stressful. http://www.cssp.org/reform/strengthening-families/2013/SF_All-5-Protective-Factors.pdf

Family Engagement Pilot Community Self- Assessment

The Family Engagement Self-Assessment should be used by Pilot Partners to capture the starting point and ending progress made by Pilot Partner Communities during the year long process. This tool can help identify areas of community strengths and challenges. The information gathered during the process of the self-assessment will aid in the development of an action plan, and allow Pilot Partners to identify the growth achieved throughout the project.

The self-assessment should be conducted by the Pilot Partner Communities at the beginning and end of the project, and is designed to be a team process, with use of a facilitator. OCDEL and PA Key staff is available to assist with this process.

With this self-assessment, *community partners* are defined as members of the faith-based community, early learning professionals, school staff, human service and non-profit agencies, business and civic leaders, policymakers, families, and friends.

This assessment was created using the following frameworks:

- *The Pennsylvania Early Learning Standards*
- *The Head Start Parent, Family, Community Engagement Framework*
- *The Strengthening Families Protective Factors Framework*
- *National PTA Standards for Family-School Partnerships*

Family Engagement Pilot Community: Self- Assessment ©
August 2013
Pennsylvania Office of Child Development and Early Learning

1. ***Families are supported in times of need*** Families benefit from community supports and resources that are responsive to the changing needs of families. Also beneficial are those supports which assist in building upon a family's strength.

	Considerations	What is happening now in our community
1.a	In our community, families receive consistent messages that challenges are a natural part of life and parenting. These messages may come from the faith community, schools, human service agencies, businesses, family, friends etc.	
1.b	In our community, support services are not stigmatizing and engage in collaborative decision making with families.	
1.c	In our community, families receive consistent messages that there are others they can turn to in times of need. These messages may come from faith communities, schools, human service agencies, businesses, family, friends etc.	
1.d	In our community, available are support agencies and services to help families in times of need. These may include: Information and Referral lines (211), Community Action Programs, Faith Based Organizations etc.	

	Considerations	What is happening now in our community
1.f	In our community, the supports that families turn to in times of stress and transition have strong networks of support themselves, and a meaningful way to ensure they have access to up- to- date and accurate information.	
1.g	In our community, there is available personal enrichment and /or professional development on an ongoing basis in areas such as: accessing support services, building upon family strengths, etc. These support efforts are coordinated across entities.	
1.h	In our community, there are safe and accessible spaces available for community members to gather for sharing and support. These may include family centers, playgrounds, faith communities, recreation centers, parks, schools, libraries, etc.	

2. *Families experience relationships with community partners that are affirming, reciprocal and build upon their strengths.*

Across their child's lifespan, family members may partner with a variety of individuals, agencies, organizations, programs etc. Children benefit when these partnerships are relationship based, reciprocal and build upon strengths of the child and family.

	Considerations	What is happening now in our community
2.a	Our community intentionally creates or supports situations where families can share their joys, interests, hopes and expectations of their children with others. These could be: potlucks, open houses, community nights, welcome wagons etc.	
2.b	In our community, agencies and organizations routinely provide opportunities for families to share their expertise and experiences related to their child. Families ask questions, discuss concerns and are provided the information they need to be equal partners in decision making. Specific attention is provided at entry, exit and transition periods. However, families are provided opportunities on a regular basis.	
2.c	In our community, agencies and organizations routinely share information about how to access services, and the roles and responsibilities of the agency and how they relate to the family. These roles and responsibilities should be reflective of the needs of the families served and be responsive to their input.	

2.d	In our community, agencies and organizations have policies in place to ensure that every family is connected to individuals within the agency or organization who are building relationships with families.	
2.e	In our community, community partners support each other in developing partnerships to share strategies, policies and procedures, so families feel supported and welcomed by a variety of partners they may encounter.	
2.f	In our community, there is available personal enrichment and /or professional development available to community partners and families on an ongoing basis related to building relationships that are affirming, reciprocal and build upon strengths.	

3. *Families have the support and information they need to encourage their child's learning and development.*

The bond between child and family is the stable connector throughout a child's life. Families benefit from having ongoing support to learn about and understand their child's development.

	Considerations	What is happening now in our community
3.a	In our community, information about parenting and child development is available through a variety of locations and modalities. It is accessible and relevant to the families that live in our community.	
3.b	In our community, information about child development and parenting provides consistent messages. This may include: • how to support a child's social/emotional development; • how to identify stages or milestones in development • who families can talk to with questions about their child's development; • how families can support their child's learning and development at home. • how can families can develop relationships and supports with other families.	

	Considerations	What is happening now in our community
3.c	In our community, community partners recognize the diversity of parenting styles, techniques and expectations. Families and community members are provided the opportunity to explore: • cultural/ethnic expectations • social expectations • how they were parented • development of new parenting practices • their relationships with their children.	
3.d	In our community, there are numerous and varied opportunities for families to engage in activities that strengthen the bond between family and child.	
3.e	In our community, there is available personal enrichment and /or professional development to community partners and families on an ongoing basis related to providing families the support and information they need to encourage their child's learning and development.	

	Considerations	What is happening now in our community
3.f	In our community, community members serve as gateways to supportive resources (such as: early intervention services, behavioral health services) and share information about these resources in ways that are non-stigmatizing to the child and family.	
3.g	In our community, community partners recognize that children learn and grow at their own pace. Families who include children with developmental delays, disabilities and/or special health care needs are supported to have access to and participate in the fabric of the community. All families feel welcomed and supported.	

4. *Family members have support from other families.*

Family members benefit when they have opportunities to share experiences, and provide support to and receive from each other.

	Considerations	What is happening now in our community
4.a	In our community, there are a variety of formal and informal networks for families, which provide opportunity for families to share parenting stories, strategies, joys and challenges.	
4.b	In our community, we encourage, support and provide safe, accessible spaces where families can engage together in family- friendly activities.	
4.c	In our community, community partners view family- to- family support as an integral part of their programs and have policies and procedures in place to connect families with each other.	

4.d	In our community, there is available personal enrichment and /or professional development to community partners and families on an ongoing basis related to family to family support.	

5. *Families have goals of their own and benefit from having supportive partners to help reach their goals.*

As family members identify and develop goals their own knowledge grows. When families are stronger, communities are stronger.

	Considerations	What is happening now in our community
5.a	In our community, there are numerous opportunities for family members to participate in lifelong learning. This may include: • information related to self-sufficiency • education • parenting • home ownership • health • recreation	
5.b	In our community, families have access to supports for lifelong learning and family goal setting opportunities. This may include: • transportation, • housing, • employment training and opportunities, • child care	
5.c	In our community, families have access to community partners who can support them in developing and making progress towards goals.	

5.d	In our community, there is available personal enrichment and /or professional development to community partners and families on an ongoing basis related to supporting families to help them reach their goals.	

6. *Families grow in their leadership and utilize these skills in many different ways.*

Family Members have unique experiences and expertise from which communities can benefit. When families have supports and opportunities to grow in their leadership, they become agents of change and supporters of what is working.

	Considerations	What is happening now in our community
6.a	In our community, family members have multiple opportunities to participate in personal development activities and trainings that assist them in growing their leadership skills	
6.b	In our community, community partners value the participation and input of varied families in planning efforts and decision making processes.	
6.c	In our community, community partners provide the appropriate supports so families are able to participate in leadership development activities, planning, and decision-making efforts. These supports are coordinated amongst community partners.	
6.d	In our community, families share and use their voice in varied ways to speak up for their child, other children and the community as a whole.	

6.e	In our community, there is available personal enrichment and /or professional development to community partners and families on an ongoing basis related to supporting families grow in their leadership and use their skills in different ways.	

7. *Families are supported in times of Transition.*

Transition is a normal part of growth in children and families during which there may be a range of emotions and needs. When there are strong relationships between families and partners both children and their families feel more secure throughout the process.

	Considerations	What is happening now in our community
7.a	In our community, as children experience transitions, families are provided consistent information, strategies and supports, from a variety of sources so they can assist their child in navigating the next step. These transitions may include: home to child care, to preschool, to school, between schools, etc.	
7.b.	In our community, there are relationships between entities that provide consistent, accurate and affirming information about transition next steps with each other so families have consistent messaging. These relationships may occur between early learning to school, school to home, etc.	

Family Survey Data

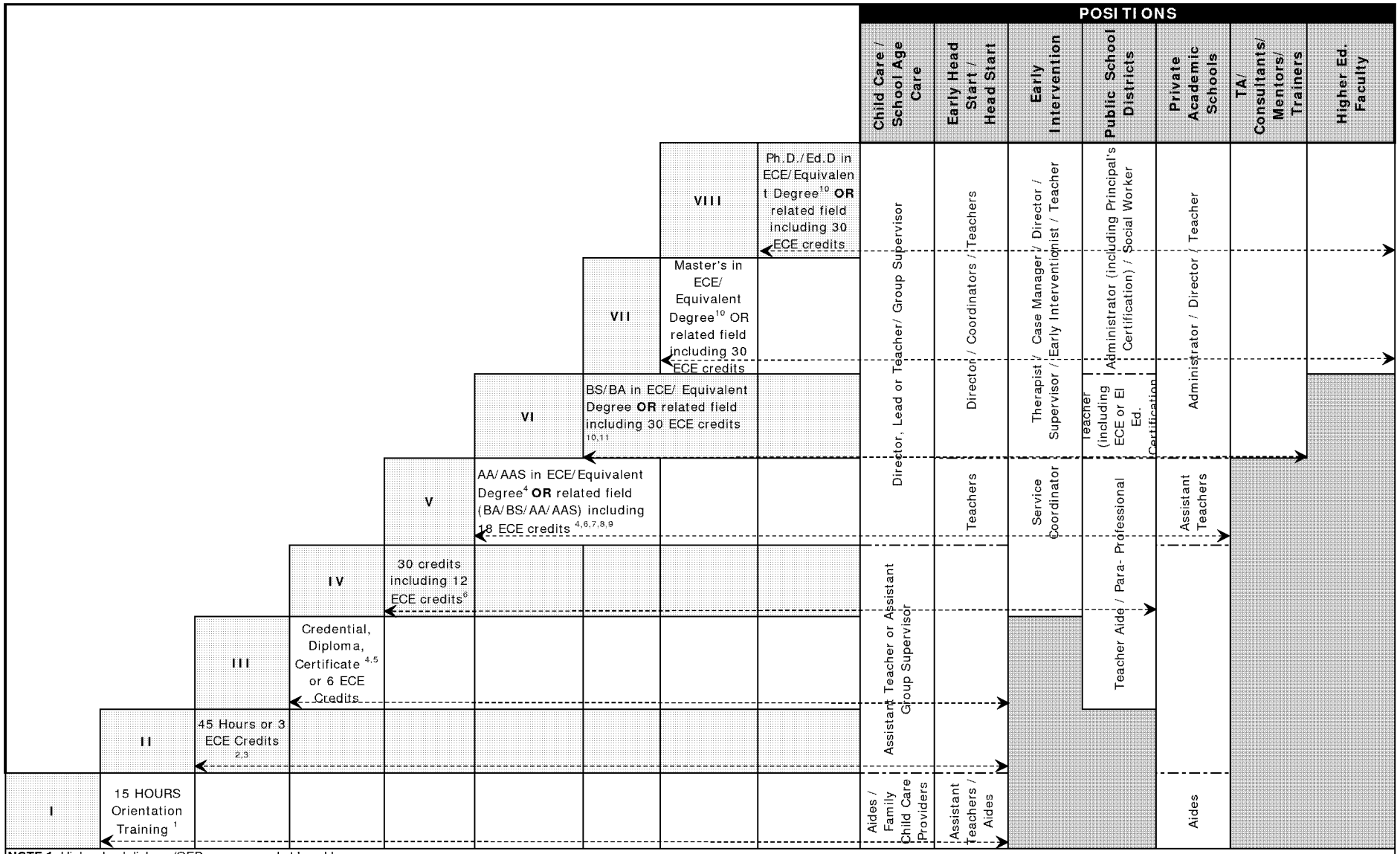
Office of Child Development and Early Learning Family Survey 2012-2013

The annual survey provides an opportunity for the Pennsylvania Office of Child Development and Early Learning (OCDEL) to hear directly from the families served. Programs in the annual family survey process include: Child Care Works (child care subsidy), Early Intervention (infant/toddler and preschool programs), Early Head Start, Head Start State Supplemental, Keystone STARS, Maternal Infant Early Childhood Home Visiting Programs (MIECHV), PA Pre-K Counts, and Parent-Child Home Program.

In the past year, my child's Early Care and Development Program…	% Agree
Gave me information about their mission, goals, policies and procedures.	96%
Helped me to be able to see how much progress my child is making.	94%
Were available to talk with me at times that fit into my schedule.	95%
Helped me to access other programs and/or services for my family (for example: parent support, food stamps, WIC, get a library card etc.).	76%
Were honest with me, even if they had difficult things to discuss.	95%
Made it easy for me to talk to them about my child and our family.	95%
Asked me about how well the program is meeting my child's needs.	87%
Understood my family's culture, beliefs and traditions.	95%
Helped families get to know and support each other.	72%
Helped me to understand how information collected about my child and family is used for program improvement.	86%
Helped me feel more confident in my skills as a parent.	91%
Built on my child's strengths and interests.	95%
Gave me information about organizations that offer support to parents (for example: Parent to Parent of PA, Support Groups, Parent Training Information Centers, Family Resource Centers)	81%
Was Provided during times that met our family's needs.	96%
Gave me ideas of how to support my child's development at home.	92%
Helped me to understand and support my child's behavior. (For example, helping my child to handle their feelings, helping my child to get along with others, helping my child to feel secure with my chosen caregiver(s), helping my child transition)	90%
Provided me information about community organizations, agencies and events that are of interest to families with young children.	82%

In the past year, I have used information about my child's performance to support my child's learning and development at home.	96%
In the past year, I have used information about my child's performance to make changes in how I teach my child.	94%

Pennsylvania Early Learning Keys to Quality Career Lattice



NOTE 1: High school diploma/GED are assumed at Level I.
NOTE 2: These 45 Hours may include 15 Hours of Orientation Training from Level 1.
NOTE 3: For SACC providers, credits on the Career Lattice may be in Education (excluding Secondary Education).
NOTE 4: For Education and Retention (ERA) eligibility, refer to ERA guidance at all levels.
NOTE 5: Credential/Certificate/Diploma programs vary. These may fall on Level III or IV depending upon number of credits awarded. Review transcripts accordingly.
NOTE 6: Refer to the Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in PA document to determine if a practitioner meets Level IV/V Alternative Pathway requirements
NOTE 7: On the Career Lattice, related fields include Human Development, Psychology, Sociology, Social Work, Education, Nursing, Home Economics/Family and Consumer Science, Recreation, Child and Family Studies, Human Services and
NOTE 8: Unrelated BA/BS/AA/AAS Degrees that include 30 ECE credits meet Level V of the Career Lattice.
NOTE 9: Continuing college students with at least 60 college credits/18 credits in ECE (EDUC - excluding Secondary Educ. if a SAC only program) are at Level V.
NOTE 10: For a list of approved degrees equivalent to an ECE Degree without teacher certification, go to www.pakeys.org under *Career Development/Requirements*
NOTE 11: At levels VI and above on the Career Lattice, in-state or out-of-state ECE Certification is also accepted regardless of degree awarded.

pennsylvania
OFFICE OF CHILD DEVELOPMENT
AND EARLY LEARNING

Early Childhood Education Teacher Quality:

Recognizing High Quality Core Content in Pennsylvania

Pennsylvania Early Learning
Keys to Professional Development

Early Childhood Education Teacher Quality in PA

RATIONALE: Why is the study of Early Childhood Education core content important for early childhood educators, professional development/ PQAS Instructors, other professionals, and most importantly, for children and families?

The research about outcomes for children when teachers have professional development in Early Childhood content is compelling. Working with young children is a profession that requires knowledge of how children grow and develop as well as the skills to communicate effectively with children and families. Research compiled in the last fifteen years underscores two essential findings: 1.) that high quality early learning programs are important for good child outcomes, and 2.) that practitioner education and training are keys in providing good early learning experiences. Some research references:

1. Practitioner/teacher preparation (both pre-service and in-service) significantly predicts program quality. Research provides compelling evidence of the value added to children's development and experiences by high quality programs in such areas as vocabulary, mathematics, print awareness and concepts, all critical for later school and life success (NIEER Report, December 2005).

2. The education and specialized professional development opportunities of practitioners are critical to sustaining high quality early learning experiences for children. Early childhood practitioners provide more sensitive and appropriate experiences for children if they have completed more years of formal education and have received specialized training in early childhood education or child development (C.M. Connors, et.al. 2005).

3. Experience alone is not a predictor of effective care-giving. Practitioner formal education and specialized training are among the most critical elements in ensuring positive outcomes for children (W.S. Barnett, 2004; Burchinal, et.al, 2002).

4. Highly trained and qualified practitioners providing high quality early learning and developmental experiences for children translates into long term economic and social benefits as well as less crime on children as they grow into adulthood (The High/Scope Perry Preschool Study, 2004).

A key component of any professional development system is the creation of a core body of knowledge, which identifies a set of content areas that help define the knowledge expectations for all practitioners in a given field. The Pennsylvania Core Body of Knowledge (CBK) is a set of early childhood core competencies linked to the learning standards and aligned with PA PreK- 4 Program Framework Guidelines that need to be mastered by all those working with children; the primary focus of the CBK is to facilitate child learning and development and to work effectively with families.

Early Learning Keys to Quality establishes guidelines related to professional development. The program and professional development-based quality

improvement content is research based, incorporates state and national research and best practices, and builds upon current standards including: the Pennsylvania Early Learning Standards (ELS), PreK-4 guidelines, the Standards Aligned System (SAS), the Pennsylvania Core Body of Knowledge, the Keystone STARS Program Standards, NAEYC Accreditation Standards

Why do we want to count ECE credits?

1. To align course work with Pennsylvania's definition of Early Childhood as birth through nine years of age;

2. To establish a practitioner's placement on the PA Early Childhood Career Lattice;

3. To help develop a plan for further study, filling educational gaps and gaining additional ECE content knowledge in order to better inform practice and enhance child positive outcomes;

4. To account for Early Childhood credits for eligibility for Education and Retention Awards (ERA) for highly qualified staff in child care in the Keystone STARS program. **Policy around ERA eligibility requirements has not changed.**

While Career Lattice placement is the primary intent of the protocol, eligibility for Keystone STAR Education and Retention Award (ERA) is a secondary consideration. A practitioner may meet a Career Lattice Level and not be eligible for an ERA. Please contact the appropriate Regional Key for additional guidance.

TRANSCRIPT REVIEW: Methodology of Core Content ECE Credit Verification

1. **Verify that college/ university attended is accredited.** Institutions of higher education must be accredited by one of the six accrediting bodies for credits to be considered. Please go to the Department of Education website at http://ope.ed.gov/accreditation/ for additional information regarding higher education accreditation. Additionally, many colleges and universities identify all accreditations on their websites. The six regional accrediting organizations for institutions of higher education in the United States are:

    - Middle States Commission on Higher Education
    - New England Association of Schools and Colleges, Commission on Institutions of Higher Education
    - North Central Association of Colleges and Schools, The Higher Learning Commission
    - Northwest Commission on Colleges and Universities
    - Southern Association of Colleges and Schools, Commission on Colleges
    - Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges
    - Accrediting Council for Independent Colleges and Schools

Early Childhood Education Teacher Quality in PA

Online Degrees: Distance Education and Training Council (DETC) is a recognized accrediting organization for distance learning courses. Click here to link to the DETC website or go to: http://www.detc.org/search_schools.php

Foreign Degrees: Practitioners who obtained a degree outside of the United States should have their degree translated and reviewed by World Education Services (WES). Click here to link to the WES website or have a letter from the institution of higher education attended that translates the degree earned and the courses taken so that ECE content can be determined. Or go to: http://www.wes.org/students/icap.asp

Transcript Documentation Support: The National Student Clearinghouse (NSC) is another source for practitioners to utilize to provide documentation of degree(s) and transcripts. Click here to link to the NSC website or go to: http://www.studentclearinghouse.org/

2. **Call the College for a Transcript Review** – To request a transcript review, the practitioner should contact the conferring institution and request a letter that states the number of ECE core content credits awarded to applicant. This letter will serve as **the source of evidence.** ***No credits will need to be counted*** *by the Regional Key, the PA Key or the ECE Credit Advisory Group.*

3. **Visit the College/ University Website** – To obtain information about core coursework identified on the transcript, the practitioner should review the course listings for the ECE/Equivalency Degree to see which courses are listed under the major (as specific courses) and compare this list to the transcript. Attach information that supports the counting of credits to the transcript prior to review by the Regional Key.

4. **Visit the PA College Transfer Website –** Go to www.PATRAC.org to see if the college/university's syllabi are listed there. The website is updated yearly and is a valuable resource tool on transfer institutions and course equivalencies for colleges and universities that are participating members.

5. **Compare the ECE course selection from the college to the transcript -** This comparison can help the practitioner understand if a class is required for specific ECE content and count those credits.

Courses in or directly related to ECE core content areas might begin with:

CHD	Child Development	ECE	Early Childhood
CFA	Child and Family Studies	ECED	Early Childhood Education
EARL	Early Childhood Education	HDFS	Human Development and Family Studies (specific to young children)
EC	Early Childhood		
ECH	Early Childhood		

Early Childhood Education Teacher Quality in PA

Courses with other prefixes may contain ECE core content (or School-age specific content). Examples include:

EDUC	Education
ED	Education
MUSI	Music for Early Childhood
EDTF	Instructional Media for Early Childhood Education
PSYC	Psychology of Early Childhood
PSY	Child Psychology
HSR	Management & Administration in Human Services
EI	Strategies for Early Intervention
YW	Youth Work
SED	Special Education
ASE	After School Education
EDA	Special Education, Education of Differing Abilities
EDR	Literacy
EDSP	Special Education
EDA	Special Education, Education of Differing Abilities
EDR	Literacy
HDFS	Human Development and Family Studies (specific to young children)

Additionally, courses with '*Early Learning*,' '*Young Child*', '*Primary Child*' etc. in the title may also contain ECE core content.

Additional Examples of Class Titles in Early Childhood

(This is not an exhaustive list, but provides guidance to reviewers.)

Infant Toddler Content Focus

- Child Development: Birth to Three
- Programming for Infants and Toddlers
- Attachment Theory
- Assessment of Infants and Toddlers
- Family Focused Infant and Toddler Care
- Infant & Toddler Development /lab
- Techniques of Parent Education
- Infant and Toddler Care and Education

Preschool or General ECE Content Focus

- EC Leadership
- Health, Safety, Nutrition in the ECE Environment
- Play and the Young Child
- EC Exceptionalities
- Including Children with Special Needs in EC
- Inclusion Practices in EC Settings
- Curriculum in EC
- Observation & Assessment in ECE
- Child Psychology
- Emergent Literacy
- Language and Literacy in ECE
- Partnering with Parents
- Family Systems and Child Rearing
- Families and Early Childhood Education
- Creative Experiences with Young Children
- Child Growth & Development
- Art for the Developing Child
- Teaching Young Children - An Introduction to Early Childhood
- Cultural Diversity in ECE
- Diversity Perspectives in Early Childhood Education
- Cross-cultural Perspective in Child Rearing
- Social Studies for Young Children
- Social-Emotional Development in Young Children 0-8
- History & Trends in ECE
- Using Technology to Support Classroom Learning in ECE

Early Childhood Education Teacher Quality in PA

- Instructional Media for Early Childhood Education
- Special Education Methodology
- Young Children in Society
- Health, Safety, Nutrition for the Young Child
- Children with Disabilities
- Young Children as Theory Builders
- Issues and Advocacy in ECH
- Curriculum Early Childhood Classroom
- Observing & Recording the Behavior of the Young Child
- Early Childhood Professional
- Speech & Language Development in EC
- Introduction to American Sign Language For Use in the Classroom
- Foundations of Early Literacy
- Language Arts and Reading for ECE
- Math & Logical Thinking in EC
- Behavior Management in ECE
- Early Childhood Classroom Environment
- Observation and Communication with Young Children
- Practicum in Early Childhood
- Science for Young Children
- Clinical Skills with Young Children
- Psychology of Early Childhood
- Career Growth & Development in ECE
- Nature of the Young Child
- Early Childhood Science & Math
- Music & Movement for Young Children
- Music for Early Childhood
- Society and the Child
- Diversity and Partnerships in Family, Schools, and Community
- Children, Parents and Community
- Growth and Wellness in Childhood
- Organizations and Admin of ECE Programs
- Policy & Planning in EC
- Legal Issues & Ethics
- Advocacy in EC
- Problems & Issues in EC Ed
- Educating Students with Special Needs in Inclusive Settings
- Foundations (or Fundamentals) in ECE (or Education if SACC program)
- ECE Program Management
- Assessment and Planning for Young Children
- Childcare Standards and Regulations
- Cross Cultural Perspectives in Child Rearing and Child Care
- Administration & Supervision of Early Childhood Programs
- Planning for Developmentally Appropriate Practices
- Values & Ethics in EC
- Professionalism & Leadership in EC
- Business Management in EC

School-age Content Focus (Note: *Practitioners with an ECE or ELED degree working in a SACC-only program are exempt from a core content review.)*

- Adolescent Psychology
- Out of School Time: Promises and Practices
- Core of Child and Youth Care Work
- Promoting Developmental Success: Assets and Activities
- Teaching Health and Wellness in Elementary Schools
- Adolescence: Risk & Resiliency
- Fundamentals of School Age Care
- Developmental Needs of School Age Children
- Exploring Arts in School Age Programs
- English Language Structure for English as Second Language Teachers
- Educational Leadership and Professional Development
- Reading and Literature for Young Adults
- Family and Professional Collaboration
- Introduction to American Sign Language For Use in the Classroom
- Teaching Students with Autistic Spectrum and Developmental Disorders
- Classroom Partnerships and Inclusion
- Foundations of Youth Work

- Family and Community Engagement
- Critical Issues in Youth Work
- Teaching Reading and Language Arts 4 – 6
- Exploring Sciences in School-age Programs
- Teaching Non-Native Speaking and Culturally Diverse Students
- Bully Prevention in Schools
- Understanding Emotional Intelligence
- Using Technology in the Classroom
- Health and Safety of Children
- Family Systems and Child Rearing
- Middle Childhood/Adolescent Development
- Adolescent Literature
- Adolescent Psychology
- Introduction to Classroom and Behavior Management
- Teaching and Learning in Extended Learning Environments
- Extended Learning in Action (Applied Project)
- Introduction to Afterschool Care and Education
- Program Environment and Curriculum Development in Afterschool Programs
- Child and Adolescent Development
- Supervision and Leadership on Afterschool Education
- Healthy Child
- Integrated Curriculum

PROTOCOL FOR COUNTING ECE/ EDUCATION CREDITS

The purpose of this protocol is to provide consistency across the Commonwealth in the identification and calculation of ECE core content credits, including partial or full credit for a particular course, specifically to determine placement on the Career Lattice for the purpose of establishing the qualifications of staff for Keystone STAR level. This process will establish a permanent record of this determination for the practitioner. Once a determination has been rendered, this decision stands regardless of movement across Regional Keys or between programs, unless there is a programmatic switch that would affect how credits were determined, such as a switch from a school-age only site to an early learning facility. **Decisions rendered prior to the clarification of this policy will stand and will not be reviewed against the revised policy for decisions about program STAR level; however, at the discretion of the hiring agency, a practitioner may be required to complete a new transcript review and/ or complete the PD Action Plan to attain a Career Lattice level under the clarified guidelines.**

If a practitioner feels that there is additional documentation that would warrant a review of a decision established under the old guidelines, the new guidance will be followed. This could result in a status reduction.

College students with at least 60 college credits and 18 credits in ECE (or EDUC- excluding Secondary Education if a SACC only program), will still be considered a Level V on the Career Lattice.

Rewarding High Quality Early Childhood Education Core Content

For Practitioners with a Bachelor's Degree in a Related Field:

To be eligible for an Education and Retention Award (ERA), practitioners are required to have 30 ECE credits. Credits are verified by the Regional Key through a transcript review or submission of the ECE Counting Credits Calculation Tool.

If a practitioner's transcripts do not meet the requirements established under these clarifications for ECE or SACC content, but a Career Lattice Level was established in prior years, that level will be maintained/grandfathered for the Keystone STAR level of the program.

Special note regarding practitioners who received an ERA prior to fiscal year 2011/2012 and who had a Detailed Qualifications Action Plan in place as of 7/1/2011: Practitioners that continue to show good faith commitment (minimum of six ECE core content credits a year in 2011-2012 and onward) towards meeting 30 credits in ECE (or, for SACC practitioners, EDUC excluding Secondary Education) may continue to receive an Education and Retention Award (ERA) in 2012-2013.

For Practitioners Who Earned a T.E.A.C.H. Model Degree:

Effective July 1, 2012, any practitioner who earned an Associate's or a Bachelor's degree that was a recognized T.E.A.C.H model in Pennsylvania from an institution of higher education is eligible for an ERA. This policy is applicable even if the individual practitioner did not receive T.E.A.C.H. funding. A list of approved T.E.A.C.H. programs by institution can be found on the PA Keys website under *Career Development/Degrees and Credentials*.

PQAS Instructors:

As per PQAS application guidelines, applicants applying for the Certified Instructor, Director Instructor, and Affiliate Instructor level will have credits reviewed under this same guidance. A Certified Instructor must complete the waiver process referenced in the application if they do not meet the 30 credit requirement. Specialty Discipline Instructors and Faculty Instructors should follow the guidance provided in the PQAS Application Guidelines.

Early Childhood Education Teacher Quality in PA

Director Credential Coursework:

Practitioners who have earned the PA Director Credential and/or who have taken the credit coursework from one of the PA approved institutions of higher education can count those 9 credits as ECE Core Content. If coursework was taken in the not-for-credit modality, those courses do not count as ECE specific content as no college level credit was awarded by the institution of higher education.

Credits do NOT need to be counted in the following situations (Career Lattice only):

1. Early Childhood Education (ECE) Bachelor's degree (*with or without teaching certification*) and the subject-area content was entirely ECE content;
2. Degree programs that have been approved by the PA Key as equivalent to ECE, without teacher certification. Please refer to www.pakeys.org under "Career Development/Requirements" for a list of approved degrees;
3. Elementary Education (ELED) Bachelor's degree (*with or without teaching certification*) and teacher works with school-age children;
4. Early Childhood/Elementary Education (ELED/ECE) dual Bachelor's degree (*with or without teaching certification*);
5. Early Childhood Education N-3 (ECE/N-3 PA) Pennsylvania Instructional I/II Teaching Certificate;
6. Early Childhood Education Instructional Certification out of state from an accredited institution;
7. Early Childhood Education PreK-4 (ECE/PreK-4) as required by Chapter 49;
8. Current National Board for Professional Teaching Standards Certification (NBPTS) in the appropriate age category for the age level assignment.

NOTE: *Simply passing the Early Childhood Education PRAXIS II test (or other test recognized by PDE) or holding a Pennsylvania Private Academic Certificate does not qualify for PDE Certification.*

Hierarchy of Transcript review:

The review of courses for counting relies on the level of documentation that is provided. Course number/prefix/course titles, course descriptions, syllabi, etc. are sources of evidence to consider when making a determination. Use of the PA Department of Education PreK-4 Program Framework Guidelines will be applied when reviewing and assessing the documentation provided. Please click here to access.

When transcripts are reviewed, the following protocol applies:

1. Review by Regional Key staff – The Regional Key may request a further review by:

2. PA Key – The PA Key may ask for advice from the:
3. ECE Credit Advisory Group – made up of Regional Key, PA Key, OCDEL staff and representatives from the higher education community.

OCDEL will make any final determinations based on the information provided from prior reviews and the practitioner. When a review is completed at the Regional Key level, a highlighted transcript with a date and signature is acceptable documentation. It is assumed that a majority of the reviews will be completed at the Regional Key level. When there is a need to have transcripts reviewed at the PA Key or ECE Credit Advisory Group Level, the Regional Key recommendation (with attached form) is required with the transcript that the Regional Key examined. A reason for the additional review must also accompany the documentation submitted. When a further review is requested, all sources of evidence such as those listed above are needed before the review can occur. Regional Keys will still complete Level I reviews if practitioners submit additional documentation after an initial review. Higher level reviews are requested by the Regional Key at their discretion. *Practitioners must consult their Regional Key prior to seeking re-evaluation.*

TRANSCRIPT REVIEW PROCEDURE

Please use the following guidance when determining the number of ECE credits in the transcript(s) if the degree is not in ECE/Equivalency Degree or ELED for school age:

1. For any course that has been determined to be primarily ECE content, full credit is given for that course. If the course content is over 50 percent ECE content, full credit is given. If that determination cannot be made, partial credit is given (see below).
2. If the course is an Elementary Education course (and the staff member works ONLY with school age children) full credits are given for that course. *A change in teaching assignment may necessitate an additional review for applicability of coursework content.*
3. For **partial credits** please follow the guidance below:
    - Partial credit is considered one credit for a course, regardless of the full credit amount. When reviewing transcripts, courses may earn either one credit or the full credit may be awarded when the majority of the content is clearly ECE core content per the documentation provided. If further sources of evidence or documentation are not provided by the practitioner, the counting of credits can only go as far as clarity of the documentation provided allows.
    - Courses that are in Special Education or Elementary Education automatically receive one credit for ECE core content unless additional documentation is provided.

4. Start by reviewing **course prefix and title** - Note that some ECE courses are taught out of the Education department or in other disciplines such as Psychology, Literacy, Music, and Mathematics etc. Courses with ECE related content may have prefixes such as: PSY, PSCH, MAT, MATH, LIT. If unable to determine relevance to ECE from course prefix and title, proceed to next step.

5. **Course description and syllabi -** Many colleges keep course descriptions on file for up to 25 years. It is the responsibility of the practitioner to include these descriptions for consideration. Many are crosswalked with NAEYC competencies and/or Chapter 49-2 PreK-4 Program Framework Guidelines. Helpful questions to guide coursework analysis include:

   - *What is the course objective/focus? Do the course objectives indicate ECE theory, approaches, methods or applications?*
   - *What are the topics to be covered? Are the topics covered inclusive of children from Birth to Grade 4?*
   - *Student assignments and expectations? Are the assignments relevant to Birth to Grade 4 approaches?*
   - *Action research documentation (especially graduate level coursework) is there a final report/paper that documents evidence of implementation or evaluation of the project?*

6. **Student Teaching** documentation for additional source of evidence

   - Grade Level Attestation by practitioner
   - PDE Form 430 (This is the ONLY source of evidence that counts as of July 1, 2011 for new graduates.)
   - Out of State/Out of the Country Student Teaching placements in accordance with the acceptance of the Pennsylvania Department of Education refer to: http://www.pde.state.pa.us/portal/server.pt/community/certifications/7199

Early Childhood Education Teacher Quality in PA

Counting ECE Credits for Placement on the Career Lattice in PA Keys to Quality		
Description	**Clarification**	**# of Credits Awarded**
Significant (the majority) coursework is in ECE Content (see page 10)	Example: the syllabus provided has 5 of 8 objectives that are ECE content: award full credit.	Equal to transcript
Related Course (see page 4 and 10-11)	Course where some ECE specific content is covered, but clearly not primarily ECE focused	1 Credit (Note: *Additional credit may be given with a course syllabi that would document higher ECE content percentage*)
Student Teaching/ Practicum/Internship	Example: Kindergarten & 6th grade placements (and age group served is Pre-K for practitioner being reviewed)	Maximum on transcript relevant to age group served. In this example, only the Kindergarten portion of student teaching would be applicable. Half of the credits for student teaching would be counted in this scenario.
Student Teaching – All ECE	Birth – Grade 4 (Chapter 49-2 certifications include Grade 4)	Maximum on transcript
Student Teaching	School Age Professionals – count PK – 8th grade setting.	Maximum on transcript

Note: The guidance above is for semester calculations. If an IHE operates on a quarter system, a ratio will need to be determined and credits counted accordingly. Contact the IHE to determine how to calculate if it is not posted on their website.

Number of ECE Credits Awarded (or EDUC Credits, excluding Secondary Education for SACC only programs) per course specified above for RELATED degrees as defined on the Career Lattice. Students who have an unrelated degree that includes 30 ECE credits without certification cannot go any higher than Level V on the Career Lattice.

Early Childhood Education Teacher Quality in PA

ALTERNATIVE PATHWAYS TO ACHIEVE QUALIFICATIONS:

Below are clarifications to policies concerning alternative pathways for directors and staff to meet qualifications. These include:

- Alternative Pathways for staff to meet Level IV on the PA Early Learning Keys to Quality Career Lattice
- Alternative Pathways for directors and staff to meet Level V on the PA Early Learning Keys to Quality Career Lattice
- Alternative Pathways to meet Director Qualifications

The alternative pathways are based upon a combination of education and/or professional development, ECE credit attainment, and experience. For director qualifications **only** a defined number of administrative/management credits are also required.

Alternative Pathways-Director Qualifications

These alternative pathways describe the education and/or professional development, ECE credit attainment, and experience required to meet the director qualifications. Meeting an alternative pathway towards demonstration of Pennsylvania Director Qualifications, **does not** result in issuance of the Pennsylvania Director Credential but does result in meeting the Keystone STARS standard. **No application should be submitted to the PA Key**. The calculation tool at the end of this document serves as documentation that an individual has met an alternative pathway.

To assist a facility with director turnover, the Pennsylvania Director Credential requirement may be extended for 2½ years from a director's start date, **if** the director enrolls in Pennsylvania Director Credential coursework **and** develops a Detailed Action Plan for completion within **2½ years**. If a new director does not meet the alternative pathway at date of hire, this should be considered when planning educational goals. This process is for **maintaining** a current STAR level only, not for upward movement.

Please note that if a director previously qualified for the alternative pathway for a Pennsylvania Director Qualification under the old guidance, a director is grandfathered and does not need to have qualifications re-evaluated. Each Regional Key should have documentation of a director having met this alternative pathway in a program file **by June 30, 2011** for this to be applicable.

The chart below should be used to determine if a director meets the alternative pathways to demonstrate director qualifications. In doing so, please make sure to read the corresponding footnotes. Working from left to right on the chart, evaluate the director's current qualifications based on the following: Degree – meets Level VII or above on the Career Lattice

1.) ECE Credit Minimum – meets the required number of ECE credits, or Education (excluding Secondary Education if SACC only)

Early Childhood Education Teacher Quality in PA

2.) PA Director Credential requirement – meets the required number of administrative/management credits

3.) Years of supervisory/administrative experience – meets the number of years of relevant experience in ECE or school-age for the pathway a practitioner is attempting to meet.

Alternative Pathways to Director Qualifications			
Degree[1] (Level VII or above on the Career Lattice)	**ECE Credit Minimum[2]** (aligned with Career Lattice)	**Administrative/ Management Credit Requirement**	**Years of Supervisory/ Administrative Experience in ECE/ School-age** (aligned with PA Director Credential)
Masters in ECE	N/A	3 Credits in Admin/Management (related to childcare)	N/A
Masters in Related Field[1]	30 ECE/Equivalent Credits[2]	3 Credits in Admin/Management (related to childcare)	1 year
Masters in Non-Related Field (and meets Certification requirements)	30 ECE/Equivalent Credits[2]	3 Credits in Admin/Management (related to childcare)	2 years
Masters in Related or Non-Related Field with Current PA or Out-of-State Teacher Certification	30 ECE/Equivalent Credits[2]	3 Credits in Admin/Management (related to childcare)	2 years
Accredited Program – Director[3]	As per Accreditation[3] Standards	As per Accreditation Standards[3]	As per Accreditation Standards[3]

[1] Degrees required for Level V and above may be in ECE or a related field. Related fields include Human Development, Psychology, Sociology, Social Work, Education, Nursing, Home Economics/Family and Consumer Sciences, Recreation, Child and Family Studies, and Business.

[2]Refer to section on how to count credits earlier in this document for guidance.

[3] Directors in NAEYC, NAA, or NECPA Accredited STAR 4 programs are not required to take the Director Credential coursework or to count ECE credits as the Standards in Accreditation apply.

Early Childhood Education Teacher Quality in PA

Alternative Pathways-Career Lattice:

Professionals come to a career from many different pathways. The alternative pathway to the Career Lattice recognizes the education and content knowledge that an early childhood or school-age professional possesses beyond the traditional pathway of an ECE or Education degree. It also incorporates demonstration of competency through an objective outside assessment.

For Level IV and V placement on the Career Lattice the following table should be used to determine if individuals meet the alternative pathways to achieve staff qualifications. When using the chart below, be sure to read the corresponding footnotes. Working towards the right, evaluate the staff member's current qualifications based on the following:

1) Degree – meets Level IV or above on the Career Lattice
2) Passing score on the the Pennsylvania Educator Certification Test (PECT) [1] Pre-K to 4th grade test administered by Pearson. Content on the exam includes:
   - Child development, learning and assessment
   - Collaboration and professionalism
   - Language and literacy development
   - Social studies, arts, and humanities
   - Mathematics, science, and health
3) Passing score on the PRAXIS II [2] 4th -8th grade test #5152 administered by ETS (SACC only practitioners). Content on the exam includes:
   - Adolescents as learners
   - Curriculum and instruction
   - Assessment
   - Professionalism

[1] The PECT was developed in alignment with Pennsylvania regulations and standards, including the Pennsylvania Program Framework Guidelines and the relevant Pennsylvania Academic Standards. The PDE has contracted with the Evaluation Systems group of Pearson to assist in the development and administration of the tests.

[2] The PRAXIS II is a nationally recognized test designed for individuals who have completed an undergraduate degree and assesses whether the entry level middle school teacher has the content that is important and necessary at the time and entry into the profession in order to teach English, math, social studies and science.

Early Childhood Education Teacher Quality in PA

Alternative Pathways to Career Lattice		
Degree[1]	**ECE Credit Minimum**[2]	**PECT (PK-4) or PRAXIS II #5152 (For SACC Only)**
Level IV (Related Associate's degree)	None	Yes
Level IV Unrelated Bachelor's degree)	None	Yes
Level V (Bachelor's degree, Related Field)	None	Yes
Level V (Bachelor's degree, Unrelated Field)	12 ECE/ Equivalent Credits	Yes

[1] Degrees required for Level V and above may be in ECE or a related field. Related fields include Human Development, Psychology, Sociology, Social Work, Education, Nursing, Home Economics/Family and Consumer Sciences, Recreation, Child and Family Studies, and Business.
[2] Refer to section on how to count credits earlier in this document for guidance.

ECE COLLEGE CREDIT CALCULATION TOOL

This form is to be used to determine Career Lattice Levels and the number of ECE credits (or education, excluding secondary education) in an individual's transcript(s). Follow the guidance below when completing the form:

Contact Information: Complete name, current email and employer.

Institution of Higher Education: List all institutions of higher education (IHE) attended. Check if the IHE is from one of the recognized agencies found earlier in this document.

Degrees, Credentials, Certificates, and Awards: List all degrees, credentials, certificates awarded.

ECE/ Education Credits: List total credits if in an ECE/mixed age setting (including special circumstance/other at bottom of chart) AND determine the total credits if in a SACC only program.

Career Lattice Level: Determine the PA Early Learning Keys to Quality Career Lattice Level for ECE, SACC Only, and Exception/Other (if applicable). At a minimum, ECE and SACC **must** be calculated. If grandfathered, complete this field also.

Alternative Pathways: If an alternative pathway was used to determine Career Lattice or Director Qualifications, complete these fields.

Other/ Justification of Decision: Document justification for "Other" category. List ONLY the number of credits that were calculated for this special circumstance. These credits may not "count" if the practitioner leaves that program setting, and would therefore be subtracted from the totals in #4 above. For example, Nursing credits may receive full credit if a practitioner was employed in a respite care setting, however not all of the credits may count in a non-respite care setting.

Signatures/ Date:
The form on the previous two pages must include an authorized signature including organization and date. Copies of the transcript(s) used to make the determination should be attached to the decision document as well.

Distribution:
A copy of the original signed document should be placed in the employee's personnel file. A copy should be placed in the facility file at the Regional Key. The original copy is the property of the employee for their PDR.

Ethical Considerations for Review:
To avoid a potential conflict of interest, transcripts are not to be reviewed by anyone with whom the candidate has or has had a prior professional or personal relationship If there is no appropriate person within an agency to review the documentation, it should be sent up to the next review level.

Early Childhood Education Teacher Quality in PA

Resources & References:

1. PA Core Body of Knowledge (CBK) - for detailed information on this document, visit www.pakeys.org and go to *Career Development.*
2. National Association for the Education of Young Children (NAEYC) - for specific information on accreditation and professional development guidance, visit www.naeyc.org.
3. PA Chapter 49-2 Guidelines - for detailed information, visit www.education.state.pa.us and go to *Certifications/Chapter 49.*
4. Standards Aligned System (SAS) -for detailed information, visit www.pde**sas**.org.
5. National Board for Professional Teaching Standards (NBPTS) – for detailed information on this national credential, visit www.nbpts.org.
6. PATRAC.org- for detailed information on transfer programs and course equivalencies, visit www.PATRAC.org
7. ECE Credit Advisory Group is a workgroup of higher education faculty from two and four year institutions, Regional Key, PA Key, and OCDEL staff.
8. U.S. Department of Education Reviews Research Literature on ECE Professional Development - has a released a review of the research literature on strategies that improve and support professional development in the early childhood field. The review, *Toward the Identification of Features of Effective Professional Development for Early Childhood Educators*, summarizes research findings on what works in four critical areas of professional development and is available at: http://www2.ed.gove/rshcstat/eval/professional-development/literature-review.pdf

Questions regarding the information contained in this document should be directed to the designated point of contact at your Regional Key. For further assistance, contact the PA Key and direct questions to Michele Black (717) 213-2068, micbla@berksiu.org, Dr. Bernadine Ahonkhai (717) 213-2064, beraho@berksiu.org, or Catherine Cormany at OCDEL (717) 265-8911, ccormany@state.pa.us.

ECE COLLEGE CREDIT CALCULATION TOOL

Practitioner Name:	
Contact Email:	**Current Employer Address/ Phone:**

Institution(s) of Higher Education:

Accredited Institution? ❑ Yes ❑ No

Degree(s), Credentials, Certificates Awarded:	**ECE/ Education Credits** excluding Secondary Education, if a SACC only program **AND** includes credits from "Other" category below, if applicable)	
	ECE:	**SACC:**

Career Lattice Level (Circle level for EACH in case change in care level occurs)

ECE:	I	II	III	IV	V	VI	VII	VIII
SACC Only:	I	II	III	IV	V	VI	VII	VIII
Exception Below:	I	II	III	IV	V	VI	VII	VIII

Grandfathered as reviewed prior to Clarification: ❑ Yes ❑ No

I II III IV V VI VII VIII

Alternative Pathways (Only complete the row applicable to the qualifications)

Career Lattice: ❑ Level IV ❑ Level V

Director Qualifications: ❑ Yes ❑ No

Director meets an alternative pathway toward demonstration of Director Qualifications. This ***does not*** result in issuance of the PA Director Credential.

Other/ Justification of Decision: i.e. age group(s) served and other documentation/notations as necessary to support determination.	**Credits** (Specific to Job Title/Location)
	* Note calculation is dependent upon practitioner's current role/employment setting

_____ _____

AUTHORIZED SIGNATURE DATE

_____ _____

TITLE AGENCY

Attach transcript and other relevant documentation to support decision.

Pennsylvania Early Learning Keys to Quality
200 N. Third Street, 3rd Floor
Harrisburg, PA 17101-1511
Tel: 800-284-6031
Fax: 717-213-0585
www.pakeys.org

Career Resource Guide

for Early Learning and School-Age Professionals

09/12

pennsylvania
OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

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This guide was successfully created thanks to the dedication of everyone on the Career Pathways Advising Work Group, which was comprised of participants from OCDEL, PA Key, Regional Key, Higher Education, Head Start, Career and Technical Education Instructors, and early education advocates representing the diversity in thought required to make this document a valuable resource for the wide array of individuals supportive of early learning and school-age professionals. Also, a special acknowledgement of thanks goes to Peg Szczurek from DVAEYC for compiling and organizing a significant portion of the information provided in this resource guide.

1. INTRODUCTION

A decision to work with children in early education and school age settings is a decision that involves choosing a profession which requires knowledge about diverse children and families. This diversity includes the various ages of the children with whom you will work, the various developmental and ability levels, as well as the language, cultural and economic differences that will be found in the individual families with which you will work.

When one decides to work with young children, it means choosing to be a professional in the early childhood education field. While specialized professional development and credentials are required, help is often needed in order to navigate the system.

This resource guide seeks to assist early childhood professionals with planning their career pathways. Course work and training will encompass a variety of topics: child development, curriculum and assessment, effective learning environments, health and safety, cultural competence, addressing the needs of children who have disabilities, classroom management, teaching strategies, family engagement and more. There are many settings for Early Learning and School-Age Programs.

These may include:

- Early Care and Education Centers
- Early Head Start and Head Start Programs
- PA Pre-K Counts Programs
- Nursery Schools
- Private Licensed Academic Schools
- Public and Private Elementary Schools
- Family Child Care Centers and Group Homes
- Early Intervention Programs
- After School Programs

Careers in Early Learning or School-Age Programs vary from positions in administration to teaching or specialist positions. You might choose to work in a child care center, children's museum, higher education institution, or specialized service organization, such as child advocacy or funding for children's initiatives. To be sure, in all of these settings you will encounter a wide range of diversity.

Professionals enter this field in many ways. Some make a plan that includes college before their first job. Others find themselves in this field somewhat by chance and decide on career plans as they go along. There are many entry points and multiple career pathways. However, every career should be built on planning and experience. In addition, effective teachers come into this field with certain "habits of the mind". According to Margie Carter and Deb Curtis in their book, *Training Teachers: A Harvest of Theory and Practice*, there are some core dispositions of early childhood and school-age professionals. Below are some of those dispositions worth your consideration. Do you:

- Delight in and are curious about children's development?
- Value children's play?
- Expect continuous change and challenge in all aspects of your work?
- Are willing to take risks and make mistakes?
- Make time for regular reflection and self-examination?
- Seek collaborative learning and peer support?
- Value the diverse ways in which children learn, develop, express interest and enthusiasm and interact with individuals and materials in the environment?

Then, this profession is a likely fit for you! In fact, self-reflection is the first step in career planning. Begin with setting aside time to contemplate how you will choose to spend your career and what your next steps might be. Good luck in your pursuit and welcome to your career with children!

2. VISION

Forty years of research across the United States has consistently demonstrated that high quality early learning is significantly linked to teacher/caregiver competency and professionalism. Teachers must master a specialized body of knowledge that is shared by all members of the profession and then apply that knowledge to make the best possible decisions for diverse children and families in everyday practice. Pennsylvania has been working towards building a system that supports programs, centers, schools, and family providers in developing high quality learning environments and experiences for children. Career planning for professionals in this field is one way to ensure that continuous quality improvement in early learning and school-age programs takes place.

3. PURPOSE

The Career Resource Guide for Early Learning and School-Age Programs is designed to support professionals in career planning. It is an overview of the resources available in Pennsylvania to assist in mapping a career pathway and in managing your career. The guide is updated annually. We hope that this resource guide proves useful to you and we also recommend that you seek career advising.

4. YOUR COMMITMENT

Working with diverse children and families is a critical role; one which, if done well, facilitates optimal developmental outcomes for children. It takes hard work and dedication, often with long hours and limited resources, to make a difference. You will have a positive impact on the lives of many children and their families. A strong commitment to employ best practices in our work is necessary. Additionally, many professionals face daily decisions that have moral and ethical implications. The NAEYC Code of Ethical Conduct offers guidelines for responsible behavior and sets forth a common basis for resolving the ethical dilemmas that professionals may encounter in early learning and school-age programs. Each individual must be willing to embrace the children and families that are served and to become culturally competent and sensitive. The National Association for Family Childcare (NAFCC) adopted NAEYC's code. School-age practitioners have their own code of conduct adopted by the National Afterschool Association (NAA). To download a copy of ethical codes of conduct from NAEYC and NAA go to:

NAEYC: http://www.naeyc.org/files/naeyc/file/positions/Ethics%20Position%20Statement2011.pdf

NAA: http://www.naaweb.org/downloads/NAACodeofEthicsJan09.newaddress.pdf

The Cultural & Linguistic Self-Assessment Checklist is another tool that you may consider using when setting your goals. The checklist addresses the importance of cultural, linguistic and ability diversity in early care and education settings. The checklist also provides concrete examples of best practices that foster a culturally diverse and competence learning environments for diverse children and their families. To access and download this Cultural & Linguistic Self-Assessment Checklist visit: http://www11.georgetown.edu/research/gucchd/nccc/documents/Checklist%20PHC.pdf.

5. CORE COMPETENCIES

Pennsylvania has established core competencies for any professional who is working in early learning or school-age programs. The Pennsylvania Core Body of Knowledge (CBK) for early childhood and school-age professionals outlines the core knowledge and skills needed for work with young children. Annual self-assessment related to these core competencies will establish professional development goals for each educator. To view the document select: http://www.pakeys.org/docs/cbk.pdf.

6. CAREERS

Below is a list of the types of positions one might find in this field in various program settings. Be advised that most early childhood and school-age program settings are moving towards requiring or preferring staff with degrees. Increase your chances of obtaining a position by earning preferred credentials. Please hit "control" on your keyboard and then "click" on your mouse to select any of the items listed below. Doing so will take you directly to a specific chart for more information.

Center-Based Child Care
Group Child Care
Family Child Care
Head Start & Early Head Start
Registered Non-Private Schools (Religious)
Bureau of Certification Services
Home Visiting Program
Technical Assistance Consultants
Public Elementary Schools
Keystone STARS
School-Age Child Care
PA Pre-K Counts Programs
Licensed Private Academic Schools
Child Care Information Services (CCIS)
Early Intervention
PA Quality Assurance System (PQAS)
Post Secondary Education
Advocacy/Policy/Research/Other

Center-Based Child Care

Child care and early learning services delivered in a DPW licensed center facility.

Learn More	www.dpw.state.pa.us/forchildren/childcareearlylearning/index.htm www.pacca.org (Utilize this site for a wide array of resources and information.)

Possible Positions	Description	Minimum Qualifications
Director	Manages overall site operations including hiring and supervising staff, liaising with parents and program development.	BA/BS in Early Childhood Education (ECE) or child development field with 1 year relevant experience; or AA/AAS in a related field with 3 years relevant experience.
Lead Teacher/Group Supervisor	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	BA/BS in a related field; or AA/AS/AAS in a related field with 2 years relevant experience.
Assistant Teacher/Assistant Group Supervisor	Assists lead teacher with creating a supportive environment, lesson planning and instruction, health and safety, child assessment and support of families.	High School diploma + either college credits, training or experience in ECE
Teacher Aides	Assists with the implementation of daily program activities.	High school diploma or 8th grade education + experience in ECE.

Group-Based Child Care

The premises in which care is provided at one time for more than six but fewer than 16 older school-age level children or more than six but fewer than 13 children of another age level who are unrelated to the operator. The term includes a facility located in a residence or another premises.

Learn More	http://www.pacode.com/secure/data/055/chapter3280/chap3280toc.html	
Possible Positions	**Description**	**Minimum Qualifications**
Primary staff	Manages overall site operations including hiring and supervising staff, liaising with parents and program development. Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	High School diploma or GED + 30 college credits or 600 or more hours of secondary training or 15 credits & 1 year of experience working with children or 2 years of experience working with children
Secondary staff	Assists with the implementation of daily program activities.	High school diploma or 8th grade education + 2 years of experience working with children

Family Child Care

A small business owner who provides child care in a home setting.

Learn More	http://www.pakeys.org/pages/get.aspx?page=FCC http://nafcc.org/index.php (Utilize this site for a wide array of resources and information.)	
Possible Positions	**Description**	**Minimum Qualifications**
Owner/Operator	Provides DPW regulated child care in a home setting.	High School diploma or GED.

School-Age Child Care

Child care offered afterschool and during the summer for children in Kindergarten through 8th grades. This care can be provided in a variety of settings including homes, centers, schools and community centers.

Learn More	http://www.pakeys.org/pages/get.aspx?page=Programs_SchoolAge http://www.naaweb.org/ (Utilize this site for a wide array of resources and information.)

Possible Positions	Description	Minimum Qualifications
Site Director	Manages overall site operations including hiring and supervising staff, liaising with parents and schools and program development.	BA/BS in an education or child development field with 1 year relevant experience; or AA/AS/AAS in a related field with 3 years relevant experience.
Lead Teacher/Group Supervisor	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	BA/BS in a related field; or AA/AS/AAS in a related field with 2 years relevant experience.
Assistant Teacher/Assistant Group Supervisor	Supports lead teacher in designing and implementing a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	High School diploma + either college credits, training or experience in school age work. School-Age credential (SAPC) preferred.

Licensed Private Academic Schools

Schools licensed by PA Department of Education that are funded by private paying families.

Learn More	http://pa.gov/portal/server.pt/community/private_academic_certificates/8822/nursery_kindergarten_teacher_and_nursery_kindergarten_assistant_teacher/506771

Possible Positions	Description	Minimum Qualifications
Lead Teacher	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	Minimum qualifications will vary by as there are several pathways to meet the requirements.
Assistant Teacher	Assists lead teacher with creating a supportive environment, lesson planning and instruction, health and safety, child assessment and support of families.	Minimum qualifications will vary by as there are several pathways to meet the requirements.

Registered Non-Private School (Religious)

Schools not certified by the PA Department of Education but are funded by private paying families.

Learn More	http://pa.gov/portal/server.pt/community/private_academic_certificates/8822/nursery_kindergarten_teacher_and_nursery_kindergarten_assistant_teacher/506771	
Possible Positions	**Description**	**Minimum Qualifications**
Lead Teacher	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	BA/BS including 24 credits in ECE, child development or elementary education plus 2 years of experience.
Assistant Teacher	Assists lead teacher with creating a supportive environment, lesson planning and instruction, health and safety, child assessment and support of families.	CDA; enrolled in a CDA with experience; or enrolled in an AA/AS/AAS or BA/BS program.

PA Pre-K Counts Programs

PA Pre-K Counts is a state-funded early childhood education program serving over 11,000 at-risk children ages 3-5 years; agencies eligible to provide high quality services to these children include: school districts, STAR 3 and STAR 4 child care centers, Head Start programs, and private academic licensed nursery schools.

Learn More	http://www.pakeys.org/pages/get.aspx?	
Possible Positions	**Description**	**Minimum Qualifications**
Lead Teacher	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	PDE Certification in ECE and within 6 years of initial service must convert their Instructional I certificate to an Instructional II certificate.
Teacher Aide	Assists lead teacher with creating a supportive environment, lesson planning and instruction, health and safety, child assessment and support of families.	CDA; AA/AS/AAS degree or 2 years post secondary education in ECE or related field preferred.
Pre-School Program Specialist	Provides consultation, training and assistance to programs to ensure compliance with PA Pre-K Counts and Head Start State Supplemental regulations/policies; reports on program progress in meeting deliverables and outcomes.	BA/BS in ECE or child development; MA/MS in ECE, child development or administration preferred. Plus 5 years experience.

PA Keystone STARS

PA Keystone STARS is an initiative of the Office of Child Development and Early Learning (OCDEL) to improve, support, and recognize the continuous quality improvement efforts of early learning program in Pennsylvania. Note: Positions may vary at different regional keys.

Learn More	www.pakeys.org	
Possible Positions	**Description**	**Minimum Qualifications**
STARS Coordinator	Ensures that all STARS designations and renewals are conducted in a timely, efficient and accurate manner: communicates information concerning designation and renewal to the ERS Team; supports the STARS Designator and STARS Managers through guidance of Key Policies and Procedures and by connecting STARS Staff to resources.	BA/BS in ECE, child development, social services, business administration or related field. Current PA Quality Assurance System (PQAS) Certification preferred. 2 to 5 years related experience in management, supervisory, government, industry or human services
STARS Program Supervisor	Plans and coordinates the day-to-day operations of the Keystone STARS Support staff of the Regional Key. Primary responsibilities include supervision, training, and monitoring of Keystone STARS program and various support staff.	BA/BS in ECE, social work, business administration or related field. Current PA Quality Assurance System (PQAS) Certification preferred. 3 to 5 years related experience in government, industry, human services supervisory or management.
STARS Designator	Ensures all STARS designations and renewals are conducted in a timely, efficient and accurate manner; supports the work of the STARS Managers through guidance and interpretation of performance standards, grant procedures and policies, and by connecting STARS Managers to appropriate resources.	BA/BS in ECE, child development, social services, business administration or related field. Current PA Quality Assurance System (PQAS) Certification preferred. 2 years related experience in management, supervisory, government, industry or human services
Professional Development Coordinator	Responsible for the development, implementation, coordination, and evaluation of activities, strategies, and subcontracts related to professional development of early learning practitioners in the Regional Key. Includes oversight of curriculum, CDA, credential programs, community-based opportunities, college credit coursework, and distance education. Educates higher education institutions about Keystone STARS. Represents Regional Key in workgroups concerning the Early Learning Standards, school-readiness initiatives, and collaboration with other institutions of education and professional development.	BA/BS in ECE, child development, social work, business administration or related field. 3 years related experience in government, education, industry or human services. Current PQAS certification required. Experience in higher education, training systems, plan development, monitoring or program evaluation required.

STARS Manager	Manages a caseload of child care providers participating in the Keystone STARS Quality Initiative; provides information about Keystone STARS and interpretation of performance standards; assists and supports providers in achievement of quality standards; connects providers with community resource: promotes the availability and value of the Keystone STARS program to clients, providers, and the general public.	BA/BS in ECE, child development, social services, business administration or related field. Current PA Quality Assurance System (PQAS) Certification preferred. 2 years related experience in government, industry or human services. Experience in higher education, training systems, plan development, monitoring or program evaluation required.
Infant-Toddler Specialist	Coordinates infant-toddler services in early childhood that have clear standards of accountability, meets the needs of professionals in the field, improves outcomes for young children, strengthens the relationship with early intervention, and is coordinated with the work of the Regional Keys and the Office of Child Development and Early Learning. Offers technical assistance and consultation to infant-toddler programs that expands high quality care of very young children.	BA/BS in child development, early childhood education, education, social work, psychology; with experience in Infant Toddler preferred. Current PQAS or willingness to obtain. Has knowledge of developmentally appropriate practices and emerging best practice in I-T care giving, understand the impact and need for strong and positive social-emotional development experiences as well as language and literacy development for growth and development. 2 years related experience in management, supervisory, government, industry or human services.
Early Childhood Mental Health Consultant	Ensures the development and understanding of the necessary components in a strong Early Childhood Mental Health system and provides support, education, and resources to early learning practitioners and programs, as it relates to Early Childhood Mental Health.	MA/MS in Child Development, Social Work or Early Childhood Education. 3 to 5 years related experience plus supervisory experience.
School-Age Child Specialist	Coordinates a training and technical assistance program to meet the professional development needs of school-age child care providers in the Regional Key; develops and implements best practices and models in high quality school-age care and after-school programming.	BA/BS in child development, ECE, education, social work, human services or related field. 2 to 5 years related experience in government, industry or human services.
Executive Director	Responsible for the overall management, implementation and integration of a system that will provide individualized technical assistance and support, resources, and financial merit awards to eligible early care and education providers and staff who are working toward achieving quality early care and education as part of Keystone STARS.	BA/BS in ECE, social work, business administration or related field. Master's Degree preferred. 5 years related experience in government, industry or human services. Supervisory and management experience required.

Head Start & Early Head Start

Head Start is a federally and state funded program providing comprehensive services to low income at-risk children and families. Early Head Start supports pregnant mothers and children 0-3. Head Start programs serve children 3-5 years of age. *Indicates local policy may require higher minimum qualifications.

Learn More	http://transition.acf.hhs.gov/programs/ohs	
Possible Positions	**Description**	**Minimum Qualifications**
Lead Teacher*	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	AA/ AS/AAS in ECE with BA/BS preferred. Related degree accepted with ECE experience. By September 30, 2013: 50% of teachers must have BA/BS or advanced degree in ECE or equivalent.
Early Head Start Teacher *	Ensures a supportive classroom environment, lesson planning and instruction, health and safety, child assessment and support of families.	CDA or enrolled in a CDA program and training in child development; AA/AAS or BA/BS preferred and coursework in infant/toddler development.
Teacher Aide	Assists lead teacher with creating a supportive environment, lesson planning and instruction, health and safety, child assessment and support of families.	High school equivalency
ED Coordinator/ Curriculum Specialist/ Early Head Start Coordinator	Oversees the implementation of curriculum and support teachers in lesson planning; supervises center staff including teachers.	BA/BS in ECE or related field with ECE credits equivalent to a major and experience teaching pre-school children. Prefer 2 years supervisory experience.
Home Visitor*	Facilitates learning between the parent and the child. Teaches parents about child's cognitive, social, emotional and physical development. Promotes emergent literacy, health, pre-natal wellness and crisis management.	Currently locally determined.
Pre-School Program Specialist	Provides consultation, training and assistance to programs to ensure compliance with PA Pre-K Counts and Head Start State Supplemental regulations/policies; reports on program progress in meeting deliverables and outcomes.	BA/BS in ECE or child development; MA/MS in ECE, child development or administration preferred. Plus 5 years experience.

Child Care Information Services (CCIS)

Child Care Information Services (CCIS) agencies are the hub of child care information in your local area. CCIS agencies provide you and your family with information on quality child care and personalized child care referrals to child care providers based on your specific needs or preferences. CCIS agencies also administer the Child Care Works subsidized child care program.

Learn More	http://www.dpw.state.pa.us/findfacilsandlocs/childcareinformationservices/index.htm	
Possible Positions	**Description**	**Minimum Qualifications**
CCIS Director	Ensures that all eligibility determinations and provider agreements are executed in a timely, efficient and accurate manner: manages funds to insure timely and accurate expenditures; provides staff training to insure understanding of program policy and procedure; communicates with subsidy coordinator regarding issues, needs, concerns of the CCIS and consumers; refers cases for investigation and for appeal proceedings and supports managers and staff and bears responsibility for program integrity.	BA/BS in ECE, child development, social services, business administration or related field. 2 to 5 years related experience in management, supervisory, government, industry or human services
CCIS Eligibility Supervisor	Assists the CCIS Director to meet program goals and objectives by providing direct training and supervision to staff and oversight of eligibility determination and regulatory actions. Monitors timeliness and accuracy of work, as well as staff scheduling, supervision and performance evaluation.	BA/BS in ECE, child development, social services, business administration or related field. 1 year related experience in management, supervisory, government, industry or human services
CCIS Eligibility Specialist	Provides information about early learning/child care options; generates provider referrals; screens funding inquiries for subsidy, explains eligibility process, collects documents, processes applications and redeterminations, communicate with consumers. Determines eligibility, manages legal notices and waiting list; creates and manages child schedules; processes provider attendance.	Minimum AA/AAS degree or 2 years postsecondary education and 2 years relevant work experience; BA/BS in social services or related field preferred.

Bureau of Certification Services

The Bureau of Certification Services is responsible for the regulation of all child care centers, group child care homes and family child care homes in Pennsylvania. The Certification Bureau receives inquiries regarding a variety of topics, including: 1) The requirements and process for opening a child care facility, 2) The statutes and regulations for operating a child care facility.

Learn More	http://www.dpw.state.pa.us/employment/index.htm	
Possible Positions	**Description**	**Minimum Qualifications**
Early Learning Program Certification Representative	Responsible for field work inspecting, certifying, and monitoring early learning child care facilities within an assigned geographic area including inspection, certification, and monitoring of child care facilities; investigating complaints; conducting orientation training for prospective facility operators; explaining the rules, regulations, policies, and certification requirements governing early learning child care facilities; and providing technical assistance to early learning child care facility operators regarding regulatory requirements and correction of violations noted during inspections.	2 years experience providing direct services to children and youth and a bachelor's degree that includes 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development; OR an equivalent combination of experience and training, which includes 1 year experience providing direct services to children and youth and 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development.
Early Learning Program Certification Supervisor	Supervises Early Learning Program Certification Representatives who inspect, certify, and monitor child care facilities; reviews and supervises the review of certification applications; reviews information gathered during inspections to determine if the findings support the recommendation to approve, deny, or revoke a certification of compliance or registration; ensures that guidance and advice is available to early learning child care facility operators for correcting statutory and regulatory violations.	1 year experience as an Early Learning Program Certification Representative; OR 3 years experience providing direct services to children and youth and a bachelor's degree that includes 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development; OR An equivalent combination of experience and training, which includes 2 years experience providing direct services to children and youth and 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development.

Early Learning Program Regional Manager	Responsible for planning, organizing and directing the inspection, certification and monitoring of early learning child care facilities; authorizing the approval of certificates of compliance or registration for early learning child care facilities; overseeing the implementation of corrective action plans resulting from inspections or complaints; coordinating with local government officials and public and private agencies, organizations and service providers to ensure the availability of quality early learning child care services and compliance with early learning program regulatory requirements; ensuring technical assistance is provided to current and prospective early learning child care providers; ensuring complaints involving child care facilities are thoroughly investigated including suspected cases of child abuse; overseeing the implementation, application and review of policies, procedures, and regulations governing early learning child care facilities; and supervising Early Learning Program Certification Supervisors and clerical personnel.	2 years of experience as an Early Learning Program Certification Supervisor; OR 5 years of professional experience providing direct services to children and youth, at least 2 years of which were in a supervisory capacity, and a bachelor degree that includes 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development; OR An equivalent combination of professional experience and training, including 2 years of professional experience supervising the provision of direct care services to children and youth and 24 semester hours of college level courses in ECE, child development, special education, EL ED, psychology, or human development.

The Pennsylvania Quality Assurance System (PQAS)

The Pennsylvania Quality Assurance System (PQAS) is designed as a means to ensure quality professional development (PD) and technical assistance (TA) provided to early childhood and school-age practitioners in Pennsylvania. This system is designed so that individual instructors or TA consultants rather than individual professional development activities are reviewed and approved. Approved instructors and TA consultants are required to meet and maintain established qualifications, including educational achievements and professional development experience.

Learn More	http://www.pakeys.org/pages/get.aspx?page=Career_PQAS	
Possible Positions	**Description**	**Minimum Qualifications**
Certified Instructor	Provides professional development on ECE content.	BA/BS in ECE or Child Development; or in a related field, including 30 ECE credits or ECE Certification as defined on Level VI of PA's Career Lattice. (For SACC instructors and consultants, credits may be in Education, excluding Secondary Education.) Required to facilitate 25 or more hours of PD for adults the last three years. Dual certification is available with submission of both a professional development module and a technical assistance action plan.
Specialty Discipline Instructor	Instructs on non-ECE content regulated to specialty areas. For example health, business administration and law.	Individuals who do not have early childhood/school-age educational backgrounds but have important information to share (e.g., nurses, accountants, lawyers). These individuals possess a Bachelor's degree from an accredited institution; have a professional license or other type of recognized credential and 15 hours of professional development experience for adults in the last three years. (A minimum of a high school diploma will be accepted in certain circumstances.)
Affiliate Instructor	Instructor that is being mentored to become a Certified Instructor.	AA/AS/AAS in ECE, Child Development, or related field, with 18 ECE credits, as defined on Level V of PA's Career Lattice (For SACC instructors, credits may be in Education, excluding Secondary Education) and 25 or more hours of PD experience for adults in the last three years. The instruction delivered by an Affiliate Instructor must be prepared and delivered through the support of a Certified Instructor who has been approved at the Certified Instructor level for at least two years.
Director Instructor	Instructor that is certified to teach her own staff on specific modules.	Directors who have at minimum an AA/AS/AAS in ECE, Child Development, ECE Certification or related field as defined on Pennsylvania's Career Lattice with 6 ECE credits, and have taken the required prerequisite instruction as specified on the application can instruct *their site staff* only on the topics for which they have received PQAS approval.

Faculty Instructor	Instructor that is a college faculty member.	MA/MS in ECE, Child Development or related field, including 30 ECE credits, as defined on PA's Career Lattice Level VII. (For SACC instructors, credits may be in Education, excluding Secondary Education.) Faculty need to have taught two courses, at least two terms at the same institution of higher education within two years prior to applying for PQAS. Faculty, who have a Doctoral level degree and might not have the ECE credits, may choose topic codes that would be supported by their educational background.

Post Secondary Education

Post secondary education is an educational level that follows the completion of a school providing a secondary education, such as a high school, secondary school, or gymnasium. Examples of institutions that provide post secondary education are vocational schools, community colleges, independent colleges, and universities in the United States. Completion of post secondary education generally results in the awarding of certificates, diplomas, or academic degrees. Post secondary education includes teaching, research, exacting applied work, and social services activities of universities. Within the realm of teaching, it includes both the undergraduate and graduate level for qualified students who wish to further their education and skills.

Learn More	http://www2.ed.gov/about/offices/list/ope/index.html

Possible Positions	Description	Minimum Qualifications
Professor	Teaches ECE content and may oversee programs at college or university.	Graduate degree in ECE, child development or related field.
Adjunct Professor	Teaches ECE content on part time basis at a college or university.	Graduate degree in ECE, child development, or related field.
Administrator	Accountable for ECE programs at college or university.	Graduate degree.
Career Advisor/Counselor	Delivers counseling and technical assistance related to creating a career pathway.	BA/BS in ECE: MA/MS in ECE preferred plus experience in CA work.

Early Intervention

The Pennsylvania Early Intervention program provides support and services to families with children, from birth to age five, with developmental delays and disabilities.

Learn More	http://www.portal.state.pa.us/portal/server.pt/community/early_intervention/8710 (Also contact local organizations that serve children with special needs.)

Possible Positions	Description	Minimum Qualifications
Clinical Services Supervisor	Provides clinical oversight, conducts on-sight observations twice a year for each staff member, chairs Peer Review committee, organizes staff meetings, interviews potential new hires, organizes new employee training, reviews schedules and caseloads and provides group clinical supervision.	BA/BS required and must be a licensed - Speech/Language Pathologist, Occupational Therapist or Physical Therapist.
Occupational Therapist	Provides Occupational Therapy evaluations and IEP services for children with disabilities 3 to 5 years of age; this includes children with developmental delays, physical disabilities, and active medical conditions.	Registered by the AOTA and licensed by PA. Graduate of an accredited Occupational Therapist program with a Master's Degree and PA license.
Physical Therapist	Provides Physical Therapy evaluations and/or IEP physical therapy service to children with disabilities 3 to 5 years of age; this includes developmental disabilities, chronic physical disabilities, and active medical conditions.	Degree from an accredited Physical Therapy program with a PA license in Physical Therapy is required.
Speech and Language Pathologist	Provides speech/language and hearing screenings, evaluations and therapy to children 3 to 5 with special needs and prepare written reports accordingly	Registered by ASHA and licensed by PA or in CFY year Graduate of an accredited Speech/Language Pathology program with a Master's Degree is required. PDE teaching certificate required.
Service Coordinator	Acts as Local Education Representative responsible for coordinating initial and annual IEPs and review meetings. Acts as a resource in orienting new families to Early Intervention, facilitates transitions of children from the (0-3) Early Intervention program to School District according to PA state guidelines and timelines, coordinates and leads IEP meetings and other meetings with families and staff.	BA/BS in Special Education and/or ECE required; Master's Degree preferred. 2 years of experience in an educational setting, preferable early childhood.

Early Interventionist/ Special Instruction	Provides Infant/Toddler Early Intervention and special education in the home and community.	BA/BS in early intervention, ECE, special education, child development, special education or family studies; 1 year experience working directly with preschool children with disabilities and their families or a university-supervised or college-supervised student practicum or teaching experience with young children with disabilities and their families; knowledge, understanding and skills needed to perform the functions specific to early interventionist responsibilities.
Early Intervention Service Coordinator	Provides oversight and coordination of Infant/Toddler Early Intervention.	BS/BA including 12 college credits in early intervention, early childhood special education, ECE, child development, special education, family counseling, family studies, social welfare, psychology or other comparable social sciences; 1 year experience working with or providing counseling to children, families or individuals with disabilities. OR: AA/ AS/AAS, or 60 credit hours, in early intervention, ECE, special education, early childhood education, child development, special education, family counseling, family studies, social welfare, psychology, or other comparable social sciences, and 3 years. Certification by the PA Civil Service Commission as meeting the qualifications of a Caseworker 2 or 3 classifications.

Home Visiting Programs

Home visiting for families with young children is a longstanding strategy offering information, guidance, risk assessment, and parenting support interventions at home. Programs may include Nurse-Family Partnership (NFP); Parents As Teachers (PAT); Early Head Start (EHS); and Healthy Families America (HFA).

Learn More	http://www.ocdelresearch.org/Reports/Home%20Visiting/PA%20MIECHV%20Updated%20State%20Plan%20final%20(revised%207-5-11).pdf	
Possible Positions	**Description**	**Minimum Qualifications**
Home Visitor	Makes home visits to assess the health and well being of the child, teaches the parents about child development, early literacy, health promotion and makes referrals for supportive services.	Varies widely depending on the model but typically range from AA/AS/AAS in ECE to RN degrees.

Technical Assistance Consultants

STARS Technical Assistance is an intensive, one-on-one service provided to early learning and school-age facilities to help the facility achieve specific Keystone STARS quality performance standards and movement in STAR levels.

Learn More	http://www.pakeys.org/pages/get.aspx?page=Programs_Tech	
Possible Positions	**Description**	**Minimum Qualifications**
TA Consultant on Leadership and Management	Provides coaching, modeling, and mentoring to improve the quality of services and supports to children, families and professionals of early care and education and school-age programs participating in Keystone STARS.	BA/BS in a field related to administration/business practices with a minimum of 2 years experience in delivering on-site consultation to early childhood programs related to administration and business practices as delineated in the Keystone Stars performance standards. Or AA/AS/AAS in a field related to the content area and 4 years experience delivering on-site consultation to early childhood programs related to administration and business practices as delineated in the Keystone Stars performance standards. Must possess a PQAS TA consultation certification.
TA Consultant on Health and Safety	Provides coaching, modeling, and mentoring to improve the quality of services and to promote the health and safety of children, families and professionals of early care and education and school-age programs participating in Keystone STARS.	BA/BS in a field related to PA health professional certification or license and with a minimum of 2 years experience in delivering on-site consultation to ECE programs related to health and safety practices as delineated in the Keystone Stars performance standards. Must possess a PQAS TA consultation certification.
TA Consultant on Learning Program	Provides coaching, modeling, and mentoring improve the quality of services and supports to children, families and professionals of early care and education and school-age programs participating in Keystone STARS.	MA/MS in ECE, child development, or EL ED (with coursework in early childhood education) and 2 years experience working in child care, Head Start, or a preschool program along with supervisory, mentoring or coaching experience. Or BA/BS in the same fields with 4 years experience in working in child care along with a minimum of 2 years supervisory, mentoring or coaching experience. Must possess a PQAS TA consultation certification.

Intermediate Units

Intermediate units operate as regional educational service agencies providing cost-effective, management-efficient programs to Pennsylvania's 500 public school districts and over 2,400 non-public and private schools. In addition, intermediate units serve as liaison agents between the school districts and the Pennsylvania Department of Education by addressing traditional and emerging needs and by serving as essential links in PA.

Learn More	www.paiu.org	
Possible Positions	**Description**	**Minimum Qualifications**
Supervisor Preschool Early Intervention	Supervises staff who provide Early Intervention Services for children with special needs; includes teachers, aides; may include therapists and psychologists	Masters Degree and typically a Supervisory Certificate from PDE.
Early Intervention Teacher	Provides Preschool Early Intervention Services in the community and/or specialized programs.	Masters Degree and appropriate Teaching Certificate from PDE.

Public Elementary Schools

Teaching positions in elementary schools will vary by school district.

Learn More	Contact your local school district for more information.
Positions/ Qualifications	Teaching positions and minimum qualifications in elementary schools will vary by school district.

Advocacy/Policy/Research/Other

These positions may be located in a variety of settings including: non-profit organizations, academic institutions, professional associations, public policy groups.

Learn More	Contact local advocacy and policy organizations.	
Possible Positions	**Description**	**Minimum Qualifications**
Early childhood advocate	Engages ECE practitioners, parents, legislators and other stakeholders in the wider community on the importance of supporting ECE.	BA/BS in ECE or related field; minimum of 5 years relevant experience.
Researcher	Gathers data and other information on various issues related to ECE, children and families.	BA/BS in related field.
Policy analyst	Stays informed about legislative and administrative developments relevant to ECE and offers commentary on their impact and on the levers that will influence strategic policy makers.	MA/MS in public policy; 2-5 years relevant experience.
Foundation program officer	Participates in developing priorities, and in evaluating, screening, and supporting proposals for projects to improve the ECE field.	BA/BS and 5 years in the field, including experience as ECE director or program coordinator.
Government analyst	Stays informed on government developments relevant to ECE and offers policy advice to the ECE community and groups that serve children and families.	MA/MS in public policy; 2-5 years relevant experience.
Video producer/journal editor/book author	Produces work for publication that will support and/or improve the ECE field.	BA/BS in journalism, film, or related field
Career Advisor	Delivers counseling and technical assistance related to creating a career pathway. Career advisors are familiar with the career lattice, strategies to navigate through the higher education world, and requirements for various ECE programs such as: PA Keystone STARS, PA Pre-K Counts, Head Start, and teacher certification.	MA/MS in ECE and 2 yrs. experience in career advising or BS/BA in ECE and 3 to 5 yrs. experience in career advising; Knowledge of Early Care and Education/School-Age Programming and of the PA higher education system.

7. COMPENSATION AND BENEFITS

In most annual budgets for programs or organizations, staff compensation and benefits expenses can be as high as 75% of the total budget. Employers strive to create worthy wages and to offer market competitive benefits but depending on funding and revenue sources, some institutions may not be able to meet the total compensation and benefit demands of those seeking employment. Expect a wide range in salary scales and benefits depending on the type of position that you are pursuing. For example: In the Philadelphia Public School System in 2012, paraprofessional salaries ranged from $24,000 to $28,000. Provided below are some sample salary scales from recent surveys for child care and Head Start programs. For other programs such as: PA Pre-K Counts, Public Early Elementary School Faculty, and Early Intervention (EI) staff/educators, please contact these programs directly for possible salary ranges. Additionally, compensation for early educators in non-childcare settings or school-age settings varies by location. Remember that each PA school district establishes its own compensation agreements with faculty and also unionized school districts have contract requirements that go beyond compensation.

Child Care Workforce Compensation

SOURCE: 2010 PA Child Care Association (PACCA) bi-yearly survey of PA salary trends. Note that salaries listed are based upon education and experience of 372 programs from 54 counties. Respondents may have had experience levels which created salaries that were greater than those with higher educational levels.

Starting Wage by Position and Level of Education					
Level of Education	**Director**	**Assistant Director**	**Group Supervisor/ Lead Teacher**	**Assistant Group Supervisor/ Assistant Teacher**	**Aide**
No high school diploma, no GED	NA	NA	$9.00	$8.44	$7.59
High school diploma or GED	NA	NA	$9.47	$8.29	$8.27
Child Development Associate or School Age Credential	NA	$20,824.67	$10.64	$9.17	$8.59
3-6 ECE Credits	NA	$19,760.00	$9.24	$8.50	$8.17
18 ECE Credits	NA	$23,740.00	$9.83	$8.77	$8.52
Associate degree	$27,985.47	$26,281.97	$10.66	$9.82	$8.39
Bachelor degree	$32,694.08	$27,438.64	$11.34	$9.95	$9.15
Master degree	$36,584.60	$29,680.47	$12.27	$10.04	$9.34

Average Wage by Position and Level of Education					
Level of Education	**Director**	**Assistant Director**	**Group Supervisor/ Lead Teacher**	**Assistant Group Supervisor/ Assistant Teacher**	**Aide**
No high school diploma, no GED	NA	NA	NA	$7.74	$7.88
High school diploma or GED	NA	$29,426.67	$9.64	$8.83	$8.51
Child Development Associate or School Age Credential	NA	$18,487.50	$10.88	$9.75	$8.73
3-6 ECE Credits	NA	$23,412.00	$10.11	$8.94	$7.95
18 ECE Credits	NA	NA	$10.43	$9.41	$8.84
Associate degree	$32,555.41	$26,900.56	$11.33	$10.11	$8.73
Bachelor degree	$37,120.39	$28,815.46	$12.33	$10.14	$9.22
Master degree	$40,634.18	$39,776.67	$13.50	$9.85	$9.83

Highest Wage by Position and Level of Education					
Level of Education	**Director**	**Assistant Director**	**Group Supervisor/ Lead Teacher**	**Assistant Group Supervisor/ Assistant Teacher**	**Aide**
No high school diploma, no GED	NA	NA	NA	$9.69	$8.01
High school diploma or GED	NA	NA	$11.23	$9.74	$8.90
Child Development Associate or School Age Credential	NA	$22,042.21	$12.50	$10.77	$9.57
3-6 ECE Credits	NA	$23,028.67	$10.11	$9.77	$8.47
18 ECE Credits	NA	NA	$11.69	$10.09	$10.02
Associate degree	$31,567.21	$27,089.65	$12.54	$11.22	$9.42
Bachelor degree	$39,604.31	$30,402.18	$13.67	$11.23	$9.96
Master degree	$41,926.63	$41,872.86	$14.86	$11.07	$10.67

Child Care Workforce Compensation

SOURCE: June 2010 survey conducted by the Delaware Valley Association for the Education of Young Children (DVAEYC) of 48 NAEYC-accredited and Keystone STAR 3 and 4 centers in Southeastern Pennsylvania

	High School Diploma	High School + CDA	A.A. in ECE	B.A. in ECE	M.A. in ECE
Classroom Aide	$21,000	$21,500 - $22,000			
1-2 years experience	$21,000	$21,500	**N/A**	**N/A**	**N/A**
3-5 years experience	$21,000	$22,000			
Assistant teacher	$21,000 - $22,500	$21,000 - $23,500			
1-2 years experience	$21,000	$21,000	**N/A**	**N/A**	**N/A**
3-5 years experience	$22,500	$23,500			
Classroom Teacher			$26,500 - $27,000	$30,500 - $31,000	$32,500 - $33,500
1-2 years experience	**N/A**	**N/A**	$26,500	$30,500	$32,500
3-5 years experience			$27,000	$31,000	$33,500
Lead Teacher			$28,500 - $29,000	$32,000	$34,500 - $35,000
1-2 years experience	**N/A**	**N/A**	$28,500	$32,000	$34,500
3-5 years experience			$29,000	$32,000	$35,000

TIP: You can find out information about national statistics by searching by job title on the Bureau of Labor Statistics Occupational Outlook Handbook at: http://www.bls.gov/ooh/a-z-index.htm#C. For example, here is the link to Childcare Workers: http://www.bls.gov/ooh/personal-care-and-service/childcare-workers.htm.

Head Start Workforce Compensation

SOURCE: 2011 Annual Program Information Report for PA, Office of Head Start

Child Development Staff - Classroom Teacher Salary By Level of Education	
Level of Education	**Average Salary**
No Credential	$23,892.83
Child Development Associate	$20,266.00
Associate degree	$22,733.98
Baccalaureate Degree	$25,996.22
Advanced Degree	$30,593.92

Typical Benefits for Professionals in the Child Care Workforce

Based on the Program Administration Scale (PAS) by Teri N. Talan and Paula Jorde Bloom

Minimal	Better Practice
Salary increase within last 2 years	Salary increase annually
Partial health insurance offered	Employer pays more than 50% health insurance
6 or more paid sick/personal days	9 or more paid sick/personal days
5 or more paid vacation days after 1 year of service	10 or more paid vacation days after 2 years
Option to contribute to a retirement plan	Employer matches 3% or more of retirement contributions
Some tuition reimbursement	$100 or more per year for tuition
Other Optional Benefits: Child Care reimbursement offered; Flexible scheduling, i.e. 10-month positions.	

8. INVESTIGATING CAREER PATHWAYS & GOALS

Career Pathways

A *Career Pathway* is a plan for how a person would like to design and implement the phases or steps in a career such as: Early Childhood Education or School Age Programming. *Career Planning* is an intentional and positive approach to mapping out the steps to take in pursuing a career pathway.

Effective career plans include:

- Completing a self-assessment.
- Setting goals for obtaining credentials.
- Setting goals for professional development.
- Developing a realistic, step by step plan of action to meet goals.

Begin by setting professional or academic goals and find out:

- The credentials or professional development you need to obtain or maintain for the position you desire.
- The quality initiatives that the center, program, or perspective employer is involved in and the requirements for your targeted position.
- The timeline or deadline for meeting those requirements.

Once you have this information, then:

- Complete a self-assessment: review your background and experience.
- Gather proof (transcripts, diplomas, professional development records) of your education.
- Identify potential academic programs or training programs and research them to make sure that they are accredited and approved.
- Identify sources of financial aid.

As you set out to develop your plan you may need to overcome one or more of these issues. See the Career Advising Toolkit for suggestions on how to overcome some of these potential barriers at: http://www.pakeys.org/presentations/careeradvisingtoolkit/player.html.

- Academic failure in the past
- Learning difficulties or differences
- Financing an education
- Time Management
- Getting organized
- Lack of external support
- Transportation
- Child Care
- Family Commitments
- Health Problems
- English as a Second Language
- Technology Competence
- Feeling "too old" for college

Career Planning and Advising

All educators will benefit from Career Advising. Seasoned practitioners can receive help to determine next steps in moving towards best practice – it might be to earn an additional credential or to create a plan for ongoing professional development, especially opportunities beyond workshops. All educators who work in a program that is participating in a quality improvement initiative will be interested in progressing along the career lattice. In particular, those who work in programs that are participating in PA Keystone STARS can garner the advice that they need to make informed decisions. Additionally, individuals interested in careers in the Early Learning and School-Age Program field will enter the workforce knowledgeable about career opportunities and resources that are available if they receive career advising.

Where to get career advice?

A wide array of organizations and agencies exist that might assist you in career planning. These include:

- **Career Links**: access at PA Department of Labor: www.pacareerlink.state.pa.us.
- **AmeriCorps**: http://www.dli.state.pa.us/pennserve OR search at www.americorps.gov.
- **PA Child Care Association** (PACCA): www.pacca.org.
- **PennAEYC**: the state affiliate of National Association for the Education of Young Children – to find your local affiliate visit: www.pennaeyc.org.
- High school guidance counselors or teachers at high school technical schools.
- Colleges and universities academic advising departments.
- Public Libraries: most public libraries have a job center or work place referral department.
- Local job fairs.
- Workforce development organizations in your community and information on careers, salaries and benefits: http://www.careeronestop.org/.
- Private employers – sometimes the human resource department provides counseling.
- Private career counselors.

Who is a Career Advisor?

A **Career Advisor** (CA) is a professional who delivers counseling and technical assistance related to creating a career pathway. Career advisors are familiar with the career lattice, strategies to navigate through the higher education world, and requirements for various ECE programs such as PA Keystone STARS, PA Pre-K Counts, Head Start, and teacher certification. They have excellent interpersonal skills and can guide professionals in deep reflection about career choices. Career Advisor Job qualifications may include:

- Master's Degree in ECE (some CAs might have a BA/BS in ECE and 3 to 5 years of experience)
- Specialized training in Career Advising/Planning
- Knowledge of Early Care and Education/School-Age Programming
- Knowledge of the PA higher education system
- 2 years experience in Career Advising preferred

Core Competencies for Career Advisors in Pennsylvania:

The *Core Competencies for Career Advisors in Pennsylvania* is a document that details the skills, knowledge, and attitudes that are essential for all effective relationship-based career advising. The competencies lay the foundation for developing professional relationships with advisees. It is located at: http://www.pakeys.org/uploadedContent/Docs/Early%20Learning%20Programs/CQI/CA%20Competency%20Checklist%202012.pdf.

Career Advising Toolkit:

http://www.pakeys.org/presentations/careeradvisingtoolkit/player.html

Be sure to check out the **Career Advising Toolkit** for a tutorial on how to navigate the credential requirements for various positions. This will be especially helpful to you if you are not meeting with a career advisor. Also, this toolkit will guide you through use of the career lattice mentioned below. Each segment of the lattice is explained and there are additional career advising resources provided such as:

- College placement testing tip sheet
- Planning forms
- Transcript request guide
- College entrance essay tips
- Foreign student transcript guide
- Suggestions for overcoming barriers

PA Early Learning Keys to Quality Career Lattice:

The goal of this lattice is to ensure that children in Pennsylvania are being educated by professionals who have achieved adequate levels of education that are consistent across the state. The lattice also serves as a guide for those who are interested in related positions within the field by indicating the typical requirements for those positions. For instance: public schools, Head Start/Early Head Start programs, technical assistance and professional development agencies, etc. are all related entities that interview candidates for positions that work with children or educators. Please see the following resources where you can find more about the requirements for the Career Lattice and how it is formatted.

Self-Learning Module: http://www.pakeys.org/CareerLattice/player.html

Career Lattice: http://www.pakeys.org/uploadedContent/Docs/PD/Career%20Lattice.pdf

9. CHOOSING THE RIGHT ACADEMIC PROGRAM

Early Childhood Education Teacher Quality in PA

In acknowledgement of the diverse backgrounds of directors, early childhood and school-age professionals, the Office of Child Development and Early Learning (OCDEL) recognized the need to provide guidance in the identification and calculation of early childhood education (ECE) core content credits to determine placement on the Career Lattice for the purpose of establishing staff qualifications for Keystone STAR levels. OCDEL further recognized the need to establish alternative pathways for meeting director qualifications and Career Lattice Levels IV and V. *The Early Childhood Education Teacher Quality: Recognizing High Quality in Pennsylvania* document provides guidance to identify ECE core content and to determine alternative pathways. You can find the document at: http://www.pakeys.org/uploadedContent/Docs/PD/ECE%20Teacher%20Quality.pdf.

Educational Requirements for Professionals in Early Learning and School-Age Care

The PA Keys to Professional Development System is a comprehensive statewide framework for professionals serving children and families in all early childhood and school-age settings, including child care, Early Head Start and Head Start, early intervention, public school, private academic school, and school-age. It provides a continuum of professional development opportunities and ongoing support to practitioners to improve outcomes for children in early childhood and school-age programs. It is a clearly articulated framework that defines pathways that are linked to certification (if needed), leading to qualifications and credentials, and addresses the needs of individuals and adult learners. The system includes a core body of knowledge, professional development record, career lattice, early learning standards, credentials, PA Quality Assurance System (an approval system for instructors and technical assistance consultants), education supports, and links to the Keystone STARS QRIS. In partnership with the PA Department of Education's Bureau of School Leadership and Teacher Quality, this system has worked to strengthen teacher certification guidelines and requirements.

Core Series – Child Care Directors and Family Child Care providers are required to attend the following professional development sessions:

- **Core Body of Knowledge/Professional Development Record (CBK/PDR):** This 3-hour session provides practitioners with an introduction to the PA Keys' professional development systems and the tools that have been developed for practitioners use. Participants learn how the CBK/PDR can be used to help assess and chart their education, training needs, and accomplishments.
- **Facility Professional Development Plan (FPDP):** This session assists practitioners in their development of a professional development plan for their program.
- **Continuous Quality Improvement (CQI):** This session defines and presents the philosophy of Continuous Quality Improvement (CQI), which is the basic premise for the Keystone Stars Quality Rating System. Participants practice writing goals and objectives that would inform a CQI plan and be introduced to the Keystone STARS CQI planning tool.

- **Environment Rating Scales (ERS) 101 Foundations:** Participants learn how the ERS scales measure quality, how the ERS scales are used in PA, and how to accurately score the ERS. Upon completion of Foundations seminar, participants will be properly prepared for the specific scale PD seminars: 201 ITERS-R; 202 ECERS-R; 203 SACERS; 204 FCCERS-R.
- **Infant Toddler Environment Rating Scale (ITERS-R):** Participants learn about the indicators of quality in infant and toddler settings, how the scale measures quality, and how to use the scale as a self-assessment tool of their infant/toddler classrooms (Birth-36 months).
- **Early Childhood Environment Rating Scale (ECERS-R):** Participants learn about the indicators of quality in early childhood settings, how the scale measures quality, and how to use the scale as a self-assessment tool to conduct an ECERS self-assessment of their early childhood/kindergarten classrooms (37 months through entrance into 1st grade).
- **School-Age Care Environment Rating Scale (SACERS):** Participants learn about the indicators of quality in school-age settings, how the scale measures quality, and how to use the scale as a self-assessment tool to conduct a SACERS self-assessment of their school-age classrooms (This scale is use when the majority of children are in grades 1 and above).
- **Family Child Care Environment Rating Scale (FCCERS-R):** This 3-hour seminar is part of the Keystone STARS core training series and meets the requirements of Keystone STARS for Family and Group Child Care facilities operating in a residence. Participants learn about the indicators of quality in mixed-age group early childhood settings, how the scale measures quality, and how to use the scale for continuous quality improvement.
- **Integrating the Early Childhood Standards into Curriculum and Assessment (ELS):** This six-hour event will define Curriculum, Assessment, and the Standards Aligned System and the connections to the Revised Early Learning Standards. Discussions include the six elements of the Standards Aligned System and how the elements need to be interrelated and integrated to increase student achievement.
- **Core Support Professional Development –** These sessions are offered to provide helpful assistance in completing Keystone STARS Standards requirements. Some examples of these sessions are: Observation Skills (Level 1 & 2), Business Practices Series, Literacy Series, Ages and Stages (ASQ), Emergency Preparedness, Mandated Reporter, Pediatric First Aid, and Color Me Healthy.
- **Needs-Based Professional Development**–These sessions provide more specific information in each of the 8 knowledge areas of the CBK to support the work of the early learning practitioner. For current PD offerings in your region, go to www.pakeys.org and log in to access the PD Online Calendar. Note that these needs-based professional development opportunities may be offered at competency Level I, II, and III. Be sure you are ready for the level for which you register.

Other ways to meet professional development needs may include completion of credit-bearing coursework or Act 48 courses, which may be offered by local school districts, Intermediate Units, or professional development agencies.

Child Development Associate Credential: The Child Development Associate® (CDA) is the most widely recognized credential in early childhood education (ECE) and is a key stepping stone on the path of career advancement in ECE. The CDA credential is based on a core set of competency standards, which guide early care professionals as they work toward becoming qualified teachers of young children. The credential can be earned in different categories: Infant and Toddler, Preschool, Family Child Care, and Home Visitor. CDA candidates master how to nurture the emotional, physical, intellectual, and social development of children. For more information on the CDA credential, go to the CDA Council website at: www.cdacouncil.org or call 800-424-4310.The CDA credential is recognized in Pennsylvania as achieving Level 3 on the PA Career Lattice. This credential can be taken for ECE credit, or as a noncredit program that can count for 6-9 ECE credits in local colleges or universities. Visit the PA Key website at: www.pakeys.org or contact your Regional Key for more information on how to enroll in a CDA program and the benefits in completing the CDA credential.

School-Age Professional Credential: The Pennsylvania School-Age Professional Credential (SAPC) is administered by the PA Key through the six Regional Keys. It was developed to promote quality services for children and families by providing specific standards, professional development and evaluation of school-age practitioners. Individuals interested in acquiring the SAPC must meet specific eligibility requirements, complete 120 hours of coursework addressing the thirteen (13) Functional Areas, and complete a collection of information including a Portfolio, Resource File, Observations and Family Questionnaires. The final step in the process is an on-site assessment review with a SAPC Assessor. This credential is recognized as meeting Level III on the Pennsylvania Early Learning Keys to Quality Career Lattice. For additional information on school-age options, visit: http://www.pakeys.org/pages/get.aspx?page=Programs_SchoolAge.

Director's Credential: The Pennsylvania Director Credential is designed to provide a standard by which to measure program and fiscal management and leadership abilities of early childhood and school-age directors and administrators. It is also a requirement of childcare providers participating in Keystone STARS continuous quality assurance program at the STAR 3 level. There are eight core knowledge areas and seventy-eight learning objectives for the Director Credential. Qualified early childhood and school-age professionals who do not participate in Keystone STARS program may take the Director Credential course from approved higher education institutions which are found at: http://www.pakeys.org/pages/get.aspx?page=Career_Degrees and apply to the PA Key for award of the Director Credential certificate upon completion of the coursework or through the Director Credential Portfolio submission option.

Practitioners with a Master's degree in Early Childhood Education can also meet this standard (while not being awarded a director credential) via an alternative pathway. Information on this alternative pathway is found in *Early Childhood Education Teacher Quality: Recognizing High Quality Core Content in Pennsylvania at*: http://www.pakeys.org/uploadedContent/Docs/PD/ECE%20Teacher%20Quality.pdf.

Educators with questions about the following degree programs are encouraged to contact the college or university for further information.

Associate's Degree: A degree earned on completion of a two-year program of study at a community college, junior college, technical school, or other institution of higher education.

Bachelor's/Baccalaureate Degree: A bachelor degree is an academic degree conferred by a four-year college or university at the undergraduate level.

Master's Degree: An academic degree conferred by a college or university for individuals who complete at least one year of prescribed study beyond the bachelor's degree.

Ph.D. or Ed. D.: An academic degree conferred by a college or university and is generally referred to as terminal degrees. They are the highest degrees awarded in specific disciplines after at least three years of study and a dissertation.

Teacher Certification: Teacher certification is the anticipated outcome of the completion of many four-year baccalaureate degree programs approved by the Pennsylvania Department of Education, acknowledging completion of requirements and attainment of competencies resulting in eligibility to work in Pennsylvania public or private schools. Pennsylvania considers the education of its children to be among the highest priorities of state government and has dedicated many resources toward that end. Educators prepare for their responsibilities in the schools of the Commonwealth by the completion of (1) state-approved teacher education programs including a student teaching or intern experience, (2) PECT, Praxis I and Praxis II assessments and/or America Council Testing Foreign Language (ACTFL) and (3) application materials documenting that all certificate requirements have been met. Those requirements have been raised significantly in recent years. For information visit: http://www.pde.state.pa.us/portal/server.pt/community/teachers_and_teacher_certifications/7199.

PRAXIS/PAPA/PECT Tests: There are changes to the PRAXIS tests. There are new computerized PAPA/PECT tests, which will replace specific PRAXIS exams. For information go to: http://www.pakeys.org/uploadedContent/Docs/PAPA%20PECT%20PRAXIS%20Doc.pdf.

Prior Learning Assessment (PLA): Prior Learning Assessment is a way for a student to document learning acquired outside of a college classroom and for evaluating that learning as a way to earn college credit. This process recognizes many ways in which learning can occur and avoids duplication of learning experiences for which a student can demonstrate knowledge and competence. The breadth and depth of experiential learning activities can be illustrated through information provided in a portfolio. The portfolio includes documentation of knowledge gained and competencies acquired as a result of the experiences. The PLA portfolio will identify that the learning is publicly verifiable, of college-level quality, theoretically based, generally applicable beyond the situation in which it was learned, and related to the student's academic goals and degree program. Each college and university has specific procedures for prior learning assessment. Student interested in PLA should consult the specific college or university to obtain information about those procedures.

Educators with questions about the following degree programs are encouraged to contact the college or university for further information.

ECE Equivalency Degree Chart: Some institutions of higher education in Pennsylvania offer a non-certification degree equivalent to an Early Childhood Education (ECE) degree. Institutions of higher education have submitted program listings and other documentation to the PA Key to support that these degrees contain ECE core content. Individuals who hold such a degree from one of the institutions listed below should be placed on Level V or VI of the PA Early Learning Keys to Quality Career Lattice. A professional who has earned one of these degrees is also eligible for the Education and Retention (ERA) award. You can find a listing of the college/university, the degree title, and a point of contact at: http://www.pakeys.org/uploadedContent/Docs/PD/ECE%20Equivalency%20Degrees.pdf.

Continuing Education Units (CEUs): Many colleges have an Office of Continuing Education that offers CEU courses. These courses are designed for professionals who are not seeking college degrees but would like ongoing professional development. The courses and credits do not require admissions testing, generally have no prerequisites, are not awarded grades and do not count towards a degree. Colleges may have an internal process to convert non-credit courses into credit bearing ones.

Head Start Professional Development: In addition to the PA Keys' Online Calendar professional development opportunities, Head Start provides ongoing training. For information visit:

- U.S Department of Health and Human Services, Early Childhood Learning and Knowledge Center, Office of Head Start: http://www.acf.hhs.gov/programs/ohs/eclkc/index.html
- Pennsylvania Head Start Association: http://paheadstart.org/

Private Academic Certificates: In addition to public school certification, there is also private academic school certification. Either certification is appropriate for nonpublic and private academic schools in the appropriate areas. Teachers who teach in a nonpublic school (religious school) *registered* by the Department of Education are not required to be Pennsylvania certified; however, the school can choose to request certification of their teachers. The requirements for the certification areas available can be found at http://www.portal.state.pa.us/portal/server.pt/community/private_academic_certificates/8822.

10. CHOOSING AN ACCREDITED SCHOOL

For assistance in researching an early childhood or school-age program degree at a college or university in Pennsylvania, you should seek a career advisor (see previous section 8). Also, visit the PA Keys website: http://www.pakeys.org/uploadedContent/Docs/PD/Assistance%20in%20Researching%20Degree%20Programs.pdf.

Verification of College/University Accreditation

Institutions of higher education must be accredited by one of the seven accrediting bodies for any credits earned to be considered for credentials. Please go to the Department of Education website at: www.ope.ed.gov/accreditation for additional information regarding higher education accreditation.

Additionally, many colleges and universities identify all accreditations on their websites.
The six regional accrediting organizations for institutions of higher education in the United States are:

- Middle States Commission on Higher Education
- New England Association of Schools and Colleges, Commission on Institutions of Higher Education
- North Central Association of Colleges and Schools, The Higher Learning Commission
- Northwest Commission on Colleges and Universities
- Southern Association of Colleges and Schools, Commission on Colleges
- Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges
- Accrediting Council for Independent Colleges and Schools

Online Degrees

Distance Education and Training Council (DETC) is a recognized accrediting organization for distance learning courses. For additional information go to: http://www.detc.org/search_schools.php.

Foreign Degrees

Professionals who obtained a degree outside of the United States should have their degree translated and reviewed by World Education Services (WES). For information on translations visit: http://www.wes.org/students/icap.asp.

3 Simple Steps Before Applying for Higher Education

1. **Advising**
   - Meet with a career advisor!
   - Get an education plan or checklist of required courses.

2. **Admissions**
   - Submit an application to the college – most accepted online. A fee is usually required.
   - Review essay questions and draft responses.
   - Obtain letters of recommendation.
   - Collect official transcripts and other required documentation. Get an informal review if needed prior to application.

3. **Placement Testing May Be Required for Credential Programs**

   - CDA Credential and Associate Degree: Reading Comprehension and Math Skills Placement Tests

   - Bachelor/Baccalaureate Degree: PAPA (Pre-Service Academic Performance Assessment) is needed if enrolling in a teacher certification program. This test includes: Reading, Writing and Math Skills. For information on these tests go to: http://www.pakeys.org/uploadedContent/Docs/PAPA%20PECT%20PRAXIS%20Doc.pdf

   - Master Degree: May require Graduate Record Exam (GRE), Miller Analogies Test (MAT), or PA Educator Certification Tests (PECT). The following document provides information: http://www.pakeys.org/uploadedContent/Docs/PAPA%20PECT%20PRAXIS%20Doc.pdf

11. CHOOSING A DELIVERY FORMAT

Pick the type of program that fits your learning style! Consider the advantages and disadvantages of these learning formats to decide which type works best for you.

Type of Class	Advantages	Disadvantages
Podium or Lecture or Face-to-Face Type of Program	• Success rate for podium classes 70-75% • Works well for traditional student who is not working or working part-time • Enables student to experience college setting • Allows for questions and clarification of issues	• Time commitment - many classes scheduled during the day • Must travel to class • Not all classes scheduled each semester
Online Program	• Rarely have to set foot in classroom--travel is not an issue but you may need to be on campus for exams or arrange for a proctor at your location • Allows for flexibility - complete work at your convenience • Allows for students to be away from area and continue with classes • May be able to take classes at other institutions (check to determine if they transfer) • Almost any type of course can be found on-line • Sometimes easier for shy/reserved students to respond on-line or ask questions than in class	• Lack of structure/supervision • Requires discipline by the student to prioritize school with work/family • Cost of on-line courses sometimes higher • Lack explanations of key points by professors • Success rate for on-line classes -50% • Many courses cannot be taught on-line such as laboratory experience working with children • Typically they are harder than face-to-face • Require technical/computer competency and access to computer • On-line courses may not be accepted at another college for graduation • PDE may not accept this option for teacher certification (check with PDE before enrolling)
Hybrid or Blended Class Program	• The best of both worlds - students attend class for face-to-face instruction while some materials/resources/quizzes are put on-line for students to access	• Requires technology skills and access to computer
Accelerated Program	• Obtain your degree more quickly, sometimes within 2 years • Each course typically lasts between 6-8 weeks • Often Combines In-Person and Online formats • Many are adult cohorts—you progress through your courses together, building strong relationships	• Intensive--- A 15-week semester is reformatted into only 6-8 weeks • Class hours are long--- often meet 4-5 hours one evening each week with additional online components • Requires technology skills and access to computer (for those with online or hybrid models)

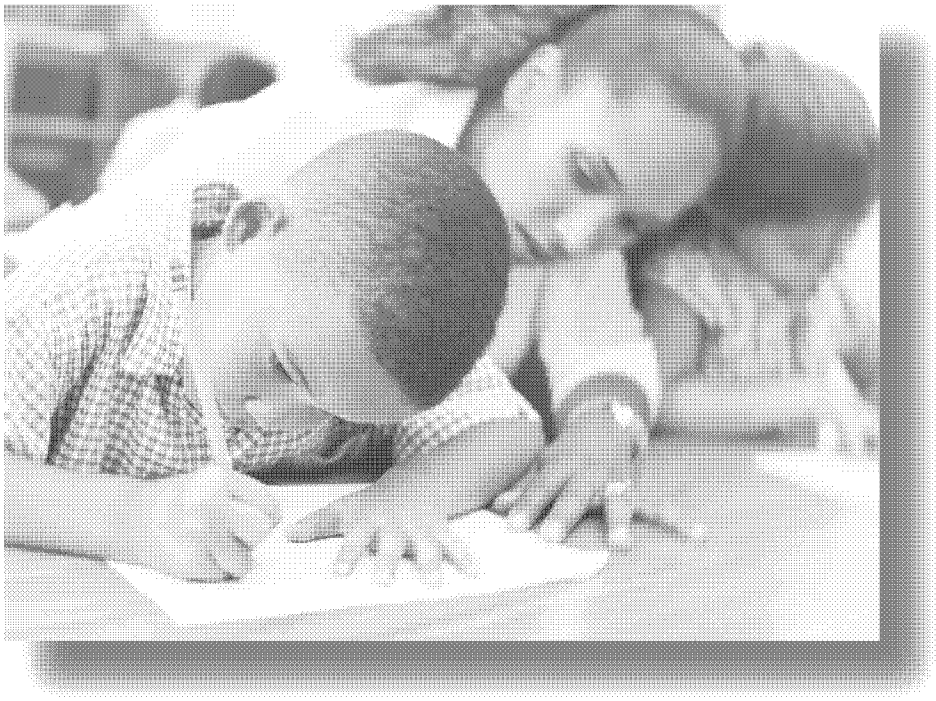
TIP:

You may want to try one of these self-assessments regarding distance learning or online learning.

- Early Childhood Learning and Knowledge Center (Head Start) – Distance Learning Self-Assessment
  http://eclkc.ohs.acf.hhs.gov/hslc/hs/resources/pd/Individual%20Development/Choosing%20a%20Higher%20Education%20Program/prodev_caf_00048_061606.html

- Quiz - Is online learning right for you? Northampton Community College
  http://webapp.northampton.edu/OnlineLearningQuiz/Default.aspx

- Are you ready for online learning? Clarion University of PA
  http://media.clarion.edu/virtual-campus/quiz.html



12. CHOOSING TO ARTICULATE

Articulation Agreements – Pennsylvania's investments in Keystone STARS, PA Pre-K Counts, Head Start Supplemental grants, and school district pre-k programs have increased the demand for early childhood educators with bachelor degrees and ECE certification. Based on the compelling needs for a highly educated early childhood education workforce, Pennsylvania is committed to developing a mechanism for state-wide program-to-program articulation in early childhood education so that early educators do not have to repeat associate degree courses at the 4-year institutions. OCDEL is committed to ensuring the creation of improved and seamless transfer opportunities and their credits for early childhood students.

There are currently 56 early childhood program-to-program articulation agreements in early childhood education between two- and four-year institutions in Pennsylvania. All 14 four-year institutions in Pennsylvania and all 14 community colleges across the Commonwealth have program-to-program articulation agreements in early childhood education. Several private and academic baccalaureate institutions have also signed early childhood education program-to-program articulation agreements with two year institutions, and many more institutions are working on developing early childhood education articulation agreements.

These seamless articulation agreements between two- and four-year institutions of higher education allow practitioners, upon successful completion of the associate degree program in early childhood education, to transfer between 54 and 60 academic credits to a baccalaureate pre-k to grade 4 degree program, and gain junior status at the four-year institution. Early childhood education students admitted to the pre-k to grade 4 degree program through the program-to-program articulation agreement initiative do not have to repeat either general education or early childhood education courses with the same core competencies at the four-year institution.

More information about the OCDEL initiated program-to-program articulation agreement in early childhood education can be accessed at the PA Keys' website at http://www.pakeys.org. The document will be revised and updated annually to include new institutions that have signed program-to-program articulation agreements in early childhood education.

Additional information on statewide program-to-program articulation agreements and the Transfer and Articulation Oversight Committee of PDE can also be accessed at: www.PATRAC.org.

Some colleges may not have formal articulation agreements but may be very generous in accepting credits for transfer. Be sure to talk to an admissions counselor and/or an early childhood education faculty adviser if the college you are interested in attending is not listed as one with a formal articulation agreement. Go to: www.PATRAC.org to see if the syllabi for a college or university are listed there. This website is updated yearly and is a valuable resource tool on transfer institutions and course equivalencies for colleges and universities that are participating members.

For non-traditional students:

The first step upon starting courses at a community college is to talk to the transfer counselor. Every college or university has an admissions office where you will find the transfer counselor to answer questions regarding what courses will transfer and if you will be able to use those courses/credits towards a four year degree.

If you are a graduate from a Career/Technical High School:

Students Occupationally and Academically Ready (SOAR) is a Pennsylvania program which allows Career and Technical Education (CTE) students to earn free college credits. You have earned these free credits if you have scored well on your NOCTI (or other approved test at the end of your program) and if your teacher can confirm that you have completed your entire CTE program. To obtain these free credits, you must submit the proper paperwork to the college, as outlined below. Some of this paperwork must be signed by your CTE teacher and director. You are responsible for this process, not your school. For more information go to:
http://www.collegetransfer.net/Search/PABureauofCTESOARPrograms/tabid/3381/Default.aspx.

Step 1: See which colleges offer free credits for your CTE Program of Study.

A website identifies which Pennsylvania colleges award free credits for each CTE Program of Study. Below are instructions for this website. To find the free credits offered for Pennsylvania CTE Programs of Study (POS) visit this website: http://www.collegetransfer.net/. After selecting your Program of Study and your high school graduation year, you can view all of the colleges offering free credits for your particular CTE program. For more about college transfer questions and answers go to:
http://www.collegetransfer.net/AskCT/tabid/2285/Default.aspx.

How to find colleges and free credits offered:

Go to www.collegetransfer.net.

- Scroll over to the **Search** tab at the top of the page.
- Scroll down and click on **PA BUREAU OF CTE SOAR PROGRAMS** and a box will pop up.
  - Step 1: Using the dropdown box, select your high school Program of Study **by title or CIP Code.**
  - Step 2: Select **your graduation year.**
- Click the **Search** button and a list of colleges will appear with the courses available for no cost and the majors that accept these credits at the college.

Step 2: Apply to the college and complete financial aid application.

Complete the college application process and select a major that accepts the credits for your CTE Program of Study high school program. It is best to do this in the fall of your senior year. To be eligible for any financial aid and most scholarships, your financial aid application must be completed in the spring of your graduation year.

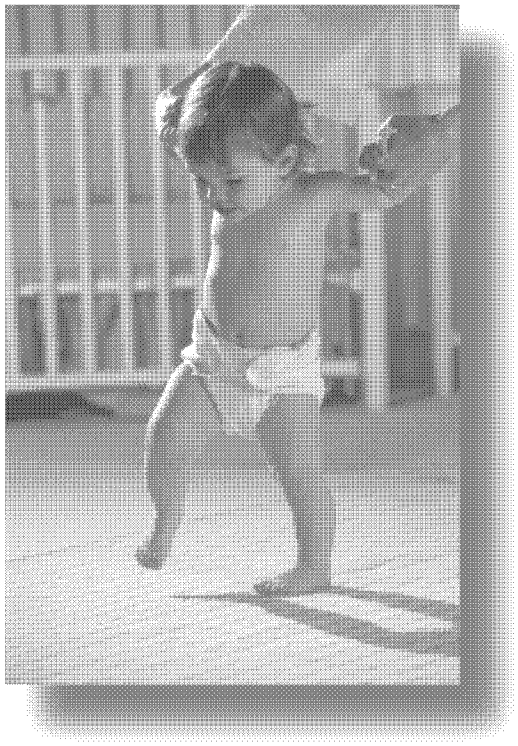
Step 3: In late May or June, as soon as you graduate, you forward the SOAR/POS paperwork to the college admissions office.

Below are the steps to properly complete and submit all the necessary materials to receive your free SOAR college credits. If you have any questions, contact your career and technical center school counselor or teacher. **It is your responsibility to submit these materials to the college.** You must take charge of this process and make certain that everything is completed and forwarded in a timely fashion.

SOAR/POS Paperwork to be collected by the student and forwarded to the college:

- Copy of High School Diploma (you obtain at graduation)
- Official High School Transcript (must be sent separately by high school counselor)
- NOCTI Skills Certificate or Certificate of Completion (obtain from CTE program or high school counselor)
- POS Perkins Statewide Articulation Agreement Student Documentation Cover Sheet (obtain from CTE program or high school counselor)
- Secondary Program Competency Task List signed by CTE program instructor (obtain from CTE program instructor)

Mail these materials to the college admissions office – send as early as possible so that your fall semester college schedule will reflect these college courses and credits. Using the free college credit you earned through your performance and hard work at the CTE will help you progress in your chosen career path. The credits are good for up to 3 years from your date of high school graduation. Collect these documents, even if you are not yet certain of your college plans.



13. FINANCIAL AID RESOURCES

Most students, who are pursuing a degree, will need annually to complete a **FAFSA**: FREE Application For Federal Student Aid is found at: www.FAFSA.ed.gov. The application is also used to apply for financial aid from PHEAA. PHEAA's website is found at: http://www.pheaa.org/.

Once your FAFSA application is completed, you will find out your expected family contribution (EFC). Colleges use EFC to determine financial need. If you are awarded aid it might be a combination of grants, loans, or work-study. As you consider college selection, be advised that Pennsylvania's state colleges, universities, and community colleges offer tuition rates that are much lower than private schools. Don't hesitate to do some research on additional scholarship options. See the resources below to explore ways to fund your education. In addition to the websites below, investigate other groups that might award scholarships or grants. These might include: religious organizations, cultural and civic groups, endowments, corporate sponsorships, employer sponsorships or tuition reimbursement, private loans.

- **FAFSA - Free Application for Federal Student Aid:** www.FAFSA.ed.gov
  - Aid might include: Pell Grants, loans, and work-study

NOTE: This website is free! Be wary of websites that charge a fee to assist you in completion of your FAFSA.

- **Student Aid on the Web:** www.studentaid.ed.gov
  - **Federal Student Aid Information Center (FSAIC):**
    1-800-4-FED-AID (1800-433-3243)
    P.O. Box 84
    Washington, DC 20044-0084

NOTE: The FSAIC staff will answer your federal student aid questions, including:

  - Provide information about federal student aid programs.
  - Create a "My FSA" account, a federal student aid personalized folder to help you decide on a career, research schools, and find scholarships. Track your process in the college planning and application process and access other sources of non-federal aid.
  - Help with completion or updates to your FAFSA.
  - Help in understanding your Student Aid Report (SAR) which contains your application results.
  - Explain the process of determining financial need and awarding aid, and general information about your current federal student loans.

- **PHEAA (Pennsylvania Higher Education Assistance Agency)**: http://www.pheaa.org/
  - This agency processes state financial aid for resident students of Pennsylvania.

- **PA Voucher:** http://www.pakeys.org/pages/get.aspx?page=Career_Financial
  - These are funds to off-set the costs of college coursework through the PA Keys. The Voucher Programs includes: College tuition Reimbursement or Payment for CDA Assessment Fee.

- **College.gov:** www.college.gov
  - This website is designed to motivate high school students with inspirational stories and information about planning preparing, and paying for college.

- **Military:** www.studentaid.ed.gov/military
  - If you serve or served in the armed forces or have a family member in the service, visit this site to find out more about grants, repayment, and forgiveness options.

- **Private Student Loans:** www.privatestudentloans.com
  - A resource to help meet the total cost of your education.
  - A way to supplement your federal financial aid, when you need it most.

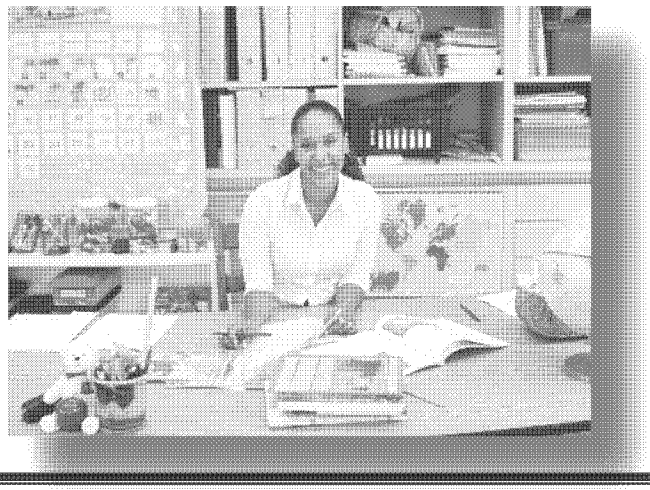
NOTE: *Don't allow lenders to convince you to borrow* ***more*** *money than you need. Be cautious and beware of predatory lenders.*

- **Student Scholarships Search:** www.studentscholarshipssearch.com
  - Student Scholarships Search provides students and parents with a *free* searchable database of college scholarships and grants.
  - No registration is required and new scholarships are updated daily.

- **Education Tax Benefits:** http://www.finaid.org/otheraid/tax.phtml

- **Employer Tuition Reimbursement:** Many employers provided some type of tuition reimbursement program as part of the employee benefits package.

- **Loan Forgiveness:** http://studentaid.ed.gov/repay-loans/forgiveness-cancellation/charts/teacher

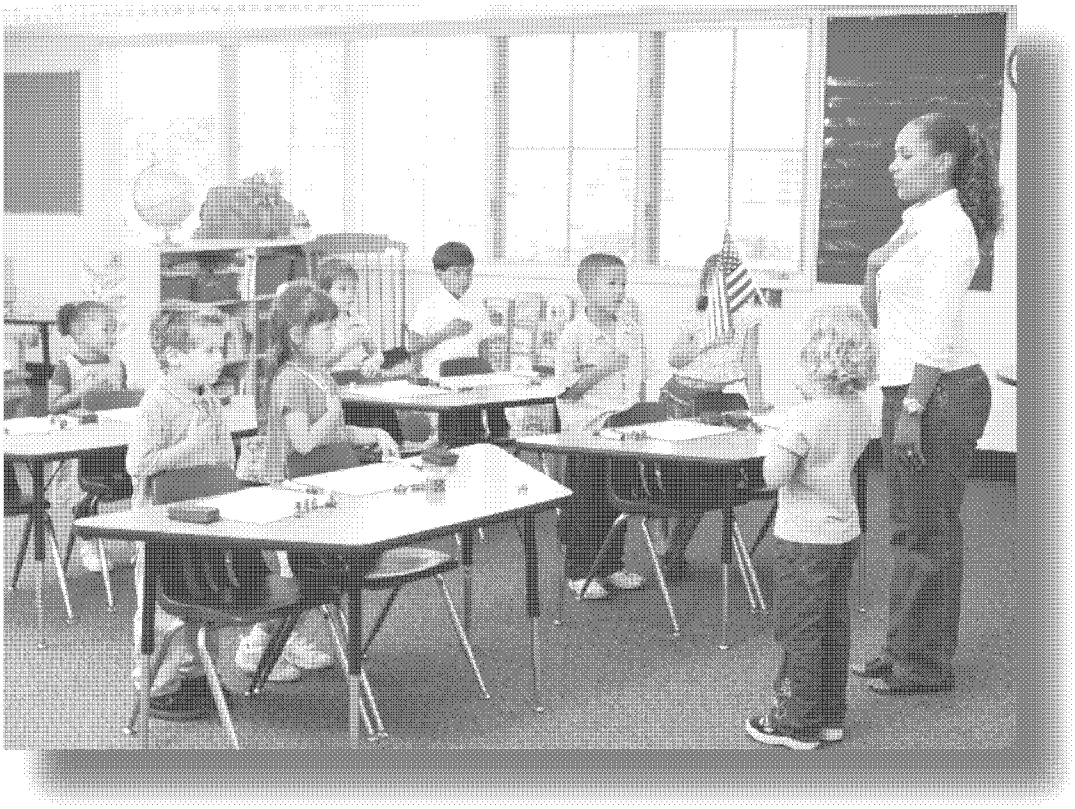


14. GLOSSARY

Act 48 of 1999	This Act requires persons holding Pennsylvania professional educator certification to complete continuing education requirements every five years in order to maintain their certificates as active.
Accreditation	A process through which child care programs voluntarily meet specific standards to receive endorsement from a professional agency. The National Association for the Education of Young Children (NAEYC), the National Accreditation Commission For Early Care and Education Programs (NAC), the National Afterschool Association (NAA), and the National Association for Family Child Care Providers (NAFCC) are among the organizations that offer accreditation programs for child care and school-age programs.
Better Kid Care	Sponsored in part by the Office of Child Development, Better Kid Care is operated by Penn State University, College of Agricultural Sciences, Co-operative Extension. It provides educational materials, learning experiences and programs to practitioners and parents.
Certificate of Compliance	A document issued to a legal entity permitting it to operate a specific type of facility or agency, at a given location, for a specified period of time, and according to appropriate departmental program licensure or approval regulations (55 Pa Code §20.4). For more information visit: http://www.pakeys.org/Organizations/daycareregulations.htm. Certification is a baseline for enrollment in the Keystone STARS program. All Child Day Care Centers and Group Day Care Homes must maintain a certificate of compliance regardless of Keystone STARS involvement.
Certificate of Registration	A document issued by DPW to a legal entity permitting the legal entity to operate a specific type of facility at a specific location for a specific period of time not to exceed two years from the date of issue, according to applicable departmental regulations. A certificate of registration approves the operation of a facility subject to Article X(c) of the Public Welfare Code (62 P.S. §§1070 – 1080; 55 Pa Code §3290.4). For more information visit: http://www.pakeys.org/Organizations/daycareregulations.htm. Registration is a baseline for enrollment in the Keystone STARS program. All Family Day Care Homes must maintain this registration, regardless of Keystone STARS involvement.
Child Development Associate Credential (CDA)	A national credential awarded to an individual who has demonstrated the competence to meet the needs of children and to work with parents and other adults to nurture children's physical, social, emotional, and intellectual growth in a child development framework.
Continuing Education Units (CEU)	Standard unit of measure used to quantify continuing adult education. One CEU equals ten hours of instruction.
Continuous Quality Improvement (CQI)	This plan includes information from the Facility Training/Professional Development Plan and a variety of other sources and determines not only staff professional development needs but also considers budget/finance and other program management priorities.

Early Learning Standards (ELS)	The ELS include a comprehensive set of learning areas: math and logic, language and literacy, person-social, physical-health, approaches to learning, creative arts, science and social studies. Each learning area is comprised of individual standards, indicators (the smaller steps that children progress through to achieve the Standard) examples and supportive practices for teachers.
Environment Rating Scales (ERS)	The Environment Rating Scales (ERS) are designed to assess process quality in an early childhood or school age care group. The scales are used in a variety of ways including for self-assessment by center staff, preparation for national accreditation programs, voluntary improvement efforts by licensing or other agencies and in state Quality Rating and Improvement Systems (QRIS). There are four separate ERS Scales: Infant/Toddler Environment Rating Scale- Revised (ITERS-R), Early Childhood Environment Rating Scale - Revised (ECERS-R), School Age Care Environment Rating Scale (SACERS) and Family Child Care Environment Rating Scale – Revised (FCCERS-R).
Intermediate Unit (IU)	Intermediate units are regional educational service agencies created by the PA State Legislature in 1970 to provide support to local school districts, to expand educational services and to provide cost savings to tax payers by eliminating service redundancy and taking advantage of economy of scale.
Keystone STARS (KS)	Keystone STARS is a system of continuous quality improvement for child care through Standards, Training/Professional Development, Assistance, Resources, Support. Keystone STARS is an initiative of the Office of Child Development to improve, support, and recognize quality child care programs in PA.
National Association For the Education of Young Children (NAEYC)	NAEYC is dedicated to improving the well-being of all young children, with particular focus on the quality of educational and developmental services for all children from birth through age 8.
National Early Childhood Program Accreditation (NECPA)	The National Early Childhood Program Accreditation has been supporting educational programs strive for excellence since 1993. NECPA has been carefully crafted to create broad public understanding of the benefits of high quality early childhood care and education. Coupled with this increased understanding is raised awareness of the "professional expertise" required to deliver that high quality care and an appreciation of the advantages that children receive from accredited centers and schools.
Office of Child Care (OCC)	Formerly the Child Care Bureau, a division of Administration For Children and Families, U.S. Department of Health and Human Services, which administers the Child Care and Development Fund (CCDF) to states, territories, and federally-recognized tribes.
Pennsylvania Child Care Association (PACCA)	PACCA is a statewide, non-profit organization dedicated to facilitating the provision of quality early care and education to the children of Pennsylvania.
Pennsylvania Dept of Education (PDE)	The PDE is charged with numerous program areas and oversees: Pre K-12 Schools, PA Higher and Adult Education, and Teacher Certification.

Pennsylvania Regional Keys	There are six PA Regional Keys that develop and implement a regional quality improvement plan for professional development and technical assistance; encourage participation in Keystone STARS standards and offer guidance through the self-study process; assist programs in accessing financial supports for STARS; conduct outreach campaigns; and provide professional development opportunities and funding.
Private Academic Certificates	In addition to public school certification, there is also private academic school certification. Either certification is appropriate for nonpublic and private academic schools in the appropriate areas. Teachers who teach in a nonpublic school (religious school) *registered* by the Department of Education are not required to be Pennsylvania certified; however, the school can choose to request certification of their teachers. View requirements at http://www.portal.state.pa.us/portal/server.pt/community/private_academic_certificates/8822.
Professional Development Record (PDR)	A document to help educators track their accomplishments and plan their professional growth and development. Provides forms to list employment history, track education and training as it corresponds to the CBK, and prepare annual training or professional development plans that meet their educational needs.
School-Age Child Care (SACC)	Child care provided to school-aged children ranging in age from 5 through 16 years. A SACC program can be incorporated into an established Child Care Center or operate separate as a before and after school program.
STARS Education and Retention Award (ERA)	The intent of ERAs is to assist programs in establishing a stable workforce as they work towards higher levels of quality. In order to reduce turnover, acknowledge highly qualified practitioners and improve the education of early childhood professionals, ERAs are granted to eligible staff. A facility must meet site-specific requirements as well as staff-specific requirements.
STARS Technical Assistance (STARS TA)	A specialized, one-on-one, time-limited, on-site assistance and consultation to help practitioners achieve specific Keystone STARS standards.
Teacher Certification	Teacher certification is the anticipated outcome of the completion of many four-year baccalaureate degree programs approved by the Pennsylvania Department of Education acknowledging completion of requirements and attainment of competencies resulting in eligibility to work in Pennsylvania public or private schools. Pennsylvania considers the education of its children to be among the highest priorities of state government and has dedicated many resources toward that end. Educators prepare for their responsibilities in the schools of the Commonwealth by the completion of (1) state-approved teacher education programs including a student teaching or intern experience, (2) PECT, Praxis I and Praxis II assessments and/or America Council Testing Foreign Language (ACTFL) and (3) application materials documenting that all certificate requirements have been met. Those requirements have been raised significantly in recent years. For information visit: http://www.pde.state.pa.us/portal/server.pt/community/teachers_and_teacher_certifications/7199.



Additional terms are available at:
http://www.pakeys.org/docs/Glossary%20of%20Commonly%20Used%20Terms%20091305.pdf

Pennsylvania Core Knowledge Competencies

for Early Childhood & School-Age Professionals

Office of Child Development and Early Learning
Pennsylvania Department of Education and Department of Public Welfare

Pennsylvania Core Knowledge Competencies

for Early Childhood & School Age Professionals

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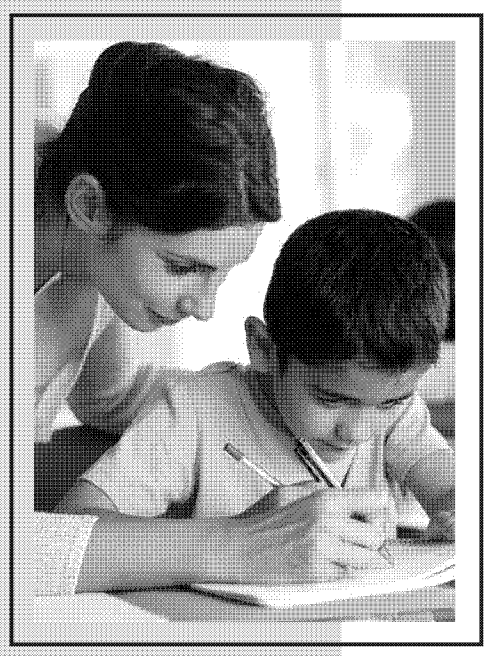

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"If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in."

–Rachel Carson

Introduction

Preface

Pennsylvania's early learning and school-age programs and professional development are supported by a comprehensive quality improvement initiative with a vision:

> ***All Pennsylvania families will have access to high-quality care and education for their children, fostering successful futures in school and in life.***

The Pennsylvania Early Learning Keys to Quality system was established by the Pennsylvania Office of Child Development, now the Office of Child Development and Early Learning (OCDEL) - in 2005 to promote this vision through a quality improvement system by which all early learning and school-age programs and professionals are encouraged and supported to improve child outcomes. Improvements in programming are designed to increase the capacity to support children's learning and development, increase educational attainment among professionals, and enhance professional skills and competencies in support of children's learning and development.

The PA Keys to Professional Development System is a comprehensive statewide framework for professionals serving children and families in all early childhood and school-age settings, including child care, Early Head Start and Head Start, Early Intervention, home visiting, public school, private academic school, and school-age programs. It provides a continuum of professional development opportunities and ongoing support for professionals to improve outcomes for children in early childhood and school-age programs. The PA Keys to Professional Development defines pathways to qualifications and credentials and addresses the needs of adult learners. The system includes core knowledge competencies, professional development record, career lattice, early learning standards, credentials, PA Quality Assurance System (an approval system for instructors and technical assistance consultants), education supports, and links to the Keystone STARS Quality Rating Improvement System.

An essential component of Pennsylvania's professional development system is ***Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals*** (formerly known as the Core Body of Knowledge). It identifies a set of content areas that help define the knowledge expectations for professionals in settings within the early childhood education and school-age field. The exception is home visitors for which a separate set of competencies will be developed. ***Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKC)*** is Pennsylvania's set of core competencies, linked to the learning standards, that specifies the scope of skills and knowledge that guides those who work with children to facilitate child learning and development and support their partnerships with families.

Overview

The role of the early childhood and school-age professional in supporting children's growth and development is critical. While research demonstrates that children learn best when they explore and engage with materials and activities that enhance their skill development and creative thinking processes, the adults who facilitate those experiences are key. Children become confident and successful problem-solvers and learners when they are in the care of skillful adults who provide safe and stimulating environments, guide children's discovery and mastery of the world and help them build strong relationships with both their peers and adults.

While family members are children's first and primary teachers, most children are influenced by other adults who are dedicated to supporting children's early learning experiences. ***Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKC)*** offers a road map for early childhood and school-age professionals. It communicates the critical areas of professional knowledge and skills that are necessary to help children in their care thrive and become successful in school and in life.

Benefits of Having Core Knowledge Competencies

When professionals use core knowledge competencies to guide their assessment of their own professional practice, they are assured of utilizing a framework that represents the full scope of early childhood development. The framework offers up-to-date, research-based information while representing Pennsylvania's philosophies and values and ensures that this information is put into practice. When used in combination with Pennsylvania's early learning standards, the core competencies can serve as a foundation for decisions and practices to be carried out within early learning school-age settings and programs.

Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKC) is a comprehensive resource that specifies the competencies and dispositions that adults who work with children need to know, understand and be able to do. It covers a range of competencies that becomes a valuable tool for individuals as they assess their own knowledge, skill level and chart a course for their own development. It supports students' preparation for entry into the field of early childhood and school-age care as well as professionals' commitment to lifelong learning through ongoing professional growth.

Purpose

Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKC) has been designed to be used by varied professionals:

- **Direct-line Professionals:** Can assess and track their level of knowledge and skill in various content areas and can identify specific areas for future professional development.
- **Program Administrators and Directors:** Can use the *CKC* to develop program policies, specify their own professional development/education requirements, and support staff in developing their professional development/education plans.
- **Family Child Care/Group Child Care Professionals:** Will want to utilize the resource in both the direct-line professional and program administrator roles.
- **Instructors and Professional Development Organizations:** Will plan and organize professional development/education that aligns with Pennsylvania's learning and quality improvement standards and promote professional development/education opportunities relative to these standards. They may also use these competencies to track their level of knowledge and skill and to guide their own professional development.

- **Higher Education Faculty, Staff, and Administrators:** Can assess current program content to determine aligned course development and to coordinate and design additional aligned course content to facilitate transfer and articulation agreements.

- **Federal, State, and Local Agencies:** May use the document as a resource to develop and implement policies for enhancing professionalism in the field.

Overall, the *CKC* document is one element within the framework of a career development system that allows professionals to achieve recognition in the field, provides access to competency-based professional development/education, and promotes compensation commensurate with educational achievement.

Guiding Principles

The Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals (CBK) is based on a number of guiding principles as described below:

- All early childhood and school-age roles and settings are included in the profession and the *CKC* is relevant in all group settings (child care centers, Family child care programs, Head Start, Pre-K programs, schools serving children birth through age 8, nursery schools, Early Intervention programs, faith-based programs, and school-age programs serving children up to age 12)[1].

- Developing and sustaining positive relationships are the foundation for applying the knowledge base and for demonstrating the core competencies. These relationships: adult to child, child to child, professional to parent, professional to professional and professional to community, are essential to the coordination of each child's learning experiences, opportunities and outcomes.

- The family has a key role in nurturing their children's growth and learning as well as supporting the programs in which their children are participating. Respectful and reciprocal relationships are critical.

- Understanding and application of the social and cultural context of children and their families is essential to the creation of developmentally and individually appropriate learning environments and to the development of positive relationships.

- Professionals have a role as designer and builder of the world in which each child lives while in an early childhood or school-age program. They must understand the interplay between children's experiences, environments and relationships along with their well-being, development and learning.

- It is the responsibility of every professional to guide children's behavior and to mentor children's understanding of socially appropriate ways to self-regulate, communicate, and be socially competent in order to become successful and productive members of society.

- Professionals have a responsibility to optimize every child's learning opportunities by providing supportive environments, curricula and policies that include adaptations and accommodations as appropriate.

- Each professional role has room to develop from entry to mastery of knowledge base and competence (for example, there are master-level teachers and entry-level administrators/directors).

- Professionals' movement through the Pennsylvania Career Lattice is individually driven and based on how one chooses to progress through one's current levels of education and experience, as well as current work settings and plans for future career advancement.

1. Home visitors are not included in this definition. A separate set of competencies will be developed for home visitors.

Whether the professional chooses to grow within a particular role or grow into the next role, growth is determined by the professional using the *Core Knowledge Competencies for Early Childhood and School-Age Professionals* as a supportive document to help chart a course of professional development.

- The PA Learning Standards and *Core Knowledge Competencies for Early Childhood and School-Age Professionals* are aligned. The Learning Standards provide guidance for professionals about many of the *CKC* Knowledge Areas and Competencies.

Dispositions

Every profession has a set of attitudes, beliefs and perspectives that distinguish its members as a group. Together they are called professional "dispositions." The early childhood and school-age profession has dispositions that are highly valued among its members.

Although dispositions are an important part of professional practice, they are different from professional knowledge and competencies. Dispositions describe how a person sees all aspects of his or her work in the profession, rather than what is actually known and done. They are more often absorbed by newcomers and nurtured by seasoned veterans within the professional community than instead of being formally taught. Because dispositions apply to all members of the profession and are equally important, they are listed separately.

The model early childhood and school-age professional is one who:

- Delights in and is curious about children and how they grow and learn.
- Appreciates and supports the unique and vital role of parents and families in their children's lives.
- Is eager to learn new knowledge and skills that will support children's development and learning.
- Models the attitudes and behaviors that she/he values in children.
- Values and celebrates the diversity found among children and their families and in the world around them.
- Is willing to ask for help, to learn from others, and to accept constructive criticism.
- Reflects on the personal beliefs and values that influence her/his own attitudes and practices.
- Accepts responsibility for her/his own actions.
- Shows respect for children, families, and colleagues by maintaining confidentiality.
- Communicates clearly, respectfully and effectively with children and adults.
- Responds to challenges and changes with flexibility, perseverance and cooperation.
- Expresses her/his own emotions in healthy and constructive ways.
- Values and nurtures imagination, creativity, and play, both in children and in herself/himself.
- Demonstrates responsible professional and personal habits in working and interacting with others.
- Has a collaborative attitude.

Professionals must make a commitment to lifelong learning. The field continually changes and requires each of us to learn new skills and new information in order to provide the most current practices that are aligned with Pennsylvania's philosophies and values while supporting children's growth and development in partnership with their families.

Adult lifelong learners demonstrate those same positive learning values that they strive to instill in the children in their care. Lifelong learners are inquisitive with an open approach to learning; use a variety of techniques to practice and master new skills; show a respect for researching and understanding new information; and utilize self-reflection as a tool for determining the kinds of information they are seeking.

Framework

Pennsylvania's Core Knowledge Framework consists of the following three components:

Core Knowledge Competencies:
An in-depth review and assessment of the breadth of content that prepares early childhood and school-age professionals to become master teachers and professionals. While every professional should become familiar with the sections and content within the *Core Knowledge Competencies* this will principally be the foundational document for higher education and professional development instructors.

Big Ideas Framework:
A summary of the core competencies presented as Big Ideas and Essential Questions, this will be the primary tool for consideration of long and short term professional development goals and the creation of professional development plans for the individual early childhood educator.

Individual Professional Development Plan and Self-Reflection:
This is the culmination of the review of the Big Ideas Framework and is the summary of the decisions made related to professional development goals. It includes an assessment of how the acquired information is applied to the classroom and reflections on additional goals and steps as appropriate. This is the individual's professional development plan, which will be available online in the near future.

Design

The revised ***Pennsylvania Core Knowledge Competencies for Early Childhood and School-Age Professionals (CKC)*** is designed to be more inclusive of all group settings and updated to reflect revised learning standards and current research on best practices.

Elements that remain the same:

- Knowledge Areas are the same, although, in some Knowledge Areas, content is broken out into sub-categories.
- Three competency levels with sequentially more complex information.
- Content areas align with the Pennsylvania Learning Standards.
- Completion of a self-assessment and reflection.
- Competencies are coded to the Knowledge Areas (K), followed by Competency Level (C). For example, K1.1 C1 refers to the first competency within Knowledge Area 1: Child Growth and Development.

Here's what may look different:

- Content is updated and expanded to reflect the depth and breadth of knowledge that is critical for professionals to understand and know.
- Early childhood and school-age professionals will use the same document. Family child care providers no longer have a separate section.
- The competency levels read across the page to demonstrate the sequencing in skill mastery.
- Administrator/Director information is embedded within each Knowledge Area.
- The **Big Ideas Framework** (a companion document to the *CKC*) is the foundation for the professional's self-assessment and reflection and individual professional development plan (formerly the *PDR Pre-Assessment*).
- Professional dispositions have been added as a critical component of a professional's ethical considerations and quality of practice.
- Appendices offer additional information on definitions, including a further detailing of competencies as indicated by an asterisk (*), and an alignment of the *CKC* to other commonly-used documents.
- Additional specifications about the use of these documents are offered in *"How to Use the Core Knowledge Competencies for Early Childhood and School-Age Professionals."*

Core Knowledge Competencies (CKC)

The *Core Knowledge Competencies* are an in-depth review and assessment of the content that prepares early childhood and school-age professionals to become master teachers and professionals. Every professional should become familiar with the sections and content within the *Core Knowledge Competencies*. The components include:

Rationale: Explains how the content area relates to the early childhood and school-age professionals' day-to-day practice.

Knowledge Areas: Define the depth and breadth of information that a professional must learn in order to be a competent early childhood or school-age professional. Eight knowledge areas identify specialized knowledge that shape early childhood and school-age educators' and administrators' professional practice.

The Knowledge Areas are:

1. ***Child Growth and Development:*** Early childhood and school-age professionals base their practice on an understanding of all of the ways that children change over time, including expected patterns of development and the many ways that individual children can differ.
2. ***Curriculum and Learning Experiences:*** Early childhood and school-age professionals demonstrate their understanding of the interplay between children's experiences, environments and relationships along with their well-being, development and learning. They demonstrate their role as designers and builders of the world in which each child lives while in an early childhood or school-age program.
3. ***Families, Schools and Community Collaboration and Partnerships:*** Early childhood and school-age professionals understand and respect the family, culture and community context in which each child lives. They demonstrate practices that build strong, positive connections to families and community resources for the benefit of children.

4. ***Assessment:*** Early childhood and school-age professionals are able to continually improve each child's care and learning experiences through a comprehensive assessment process that includes the collection and analysis of information about the interplay between environment, their own interactions, the program itself and the children. They understand that every child follows a unique path of growth and development; therefore, they will gather and apply information about each child's progress as part of their regular practice.

5. ***Communication:*** Early childhood and school-age professionals demonstrate use of effective, culturally and linguistically appropriate communication strategies with children and adults while providing communication-rich environments for learning.

6. ***Professionalism and Leadership:*** Early childhood and school-age professionals see themselves as members of a larger professional community and demonstrate commitment to the use of ethical practices, professional standards, and an accepted body of knowledge to guide their practice. They advocate for young children and families and engage in lifelong learning.

7. ***Health, Safety and Nutrition:*** Early childhood and school-age professionals realize the importance of children's physical well-being as a basic and necessary foundation for their growth, development and learning, while understanding the many ways of fostering it.

8. ***Program Organization and Administration:*** Early childhood and school-age professionals demonstrate knowledge of accepted business practices, legal and regulatory requirements, financial obligations, and record keeping while engaging in ongoing continuous quality improvement practices.

Competencies: Are the concepts and facts that a professional must learn in order to become competent in each area of practice. This knowledge becomes the cognitive foundation for the skills and behaviors implemented in the professional's work with children.

Professionals participate in continuous quality improvement practice by acquiring new skills, refining their previously-developed skills and promoting the idea of lifelong learning for professionals who work in the early childhood and school-age profession. Regardless of whether programs work with mixed age groups and the same children over multiple years or similar age children for only one year, the commitment to acquiring the necessary competencies to provide the highest quality learning experiences is the same.

Competency Levels: Competency statements are organized in three levels of understanding, offering professionals an opportunity to assess their level of knowledge within a given Knowledge Area. Professionals progress from one level to another through many pathways, including formalized study, training and professional development, mentoring or coaching, and their own self-reflection on practice.

Each professional may be operating at different Competency Levels in different Knowledge Areas. For example, the same individual may be at Competency Level Two in Healthy, Safety and Nutrition while still working through the Competencies Level One in Child Growth and Development. All practicing professionals would be expected to know Competency Level One; information in Competency Levels Two and Three would be added as their competence grows over time.

Early childhood professionals at:

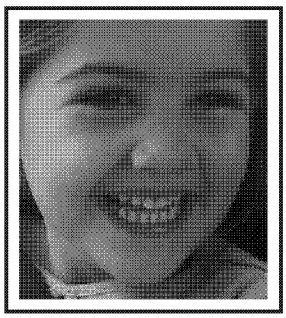
Competencies Level One have an understanding of the content within the Knowledge Area and relates it through their daily practices with children and families. They implement program guidelines and policies; demonstrate a commitment to professionalism and the provision of best practices for children and families in their everyday work. *Level One professionals understand, identify, describe, define, and explain.*

Competencies Level Two demonstrate the skills in Level One. In addition, they demonstrate the ability to apply the content within each Knowledge Area in practice to assure high quality delivery of services for children and families. Level Two mastery includes the ability to adapt environments to accommodate children's individual needs and learning styles. As professionals, Level Two professionals are mentors for others and demonstrate the use of the skills and knowledge to others. *Level Two professionals apply, develop, explore, practice, and implement.*

Competencies Level Three demonstrate the skills in Levels One and Two. In addition, they demonstrate the ability to analyze and assess the information as part of the cycle of continuous quality improvement within the home, classroom and/or program setting. Level Three mastery includes demonstration of leadership skills that advance the use of best practice within the content area in the program setting and in the community. *Level Three professionals analyze, research, critically examine, and design.*

Director and Administrator Competencies: Within each Knowledge Area there are a set of additional competencies for those professionals who are already fulfilling a supervisory role or for those professionals who aspire to achieve an administrative function as part of their career pathway. These additional competencies make the assumption that professionals have achieved the basic competencies at the identified level and will develop supplementary competencies that are specific to leadership and administration. Family child care and Group home providers will also use this section when selecting appropriate professional development opportunities.

Core Knowledge Competencies



How to Use Pennsylvania's Core Knowledge Competencies for Early Learning and School-Age Professionals

"Professional development consists of facilitated teaching and learning experiences that are transactional, collaborative, and designed to support the acquisition of professional knowledge, skills, ethics/values, and dispositions, as well as the application of this knowledge in practice to benefit all children and families." *(PA Professional Development System Framework).*

Pennsylvania's Core Knowledge Competencies for Early Learning and School-Age Professionals has been designed to guide professionals' decisions about their lifelong learning pathway and to enable them to identify and seek out professional development that will help them travel along that pathway.

Suggested Uses

For Higher Education Faculty:

The content within each of the Knowledge Areas details the information that is essential for pre-service candidates and those seeking advanced credits. It is extensive and designed to describe the full range of knowledge and skills that assure sound teaching practices.

Institutions of Higher Education can utilize the *Core Knowledge Competencies (CKC)* document to assess the coursework in their early childhood and school-age programs. It becomes a tool, along with Learning Standards, to develop educational experiences with greater depth and breadth in a specific content area and across the full range of early childhood and school-age competencies. When post-secondary early childhood programs are reviewed in comparison to the scope of the *CKC*, content gaps can be identified and coursework revised. It becomes an ideal resource as colleges seek accreditation or alignment with the NAEYC Standards for Early Childhood Professional Preparation.

Core Knowledge Competencies are a valuable resource from which to write learner objectives and outcomes that enable faculty to match the level of competency with the level of coursework within the degree of the program. The format of the document can also be a model for student assessment, and its use helps to initiate the pre-service candidate to future employment requirements. When tied to a pre-and post-assessment, instructors can adjust class content, as well as modify future coursework to accommodate learners' strengths and where to focus instruction.

The content within the *CKC* becomes the framework from which to ensure articulation with community-based professional development. As faculty considers offering opportunities for early childhood professionals to obtain needed coursework or credits to pursue an advanced step on the Career Lattice, the *CKC* document provides information about the content, and the levels of mastery, that can be used to develop varied levels of coursework.

For Instructors:

The *CKC* provides the Pennsylvania instructor with the focus for the development of professional development sessions and resources that assure the delivery of rich, research-based and current information across all three Competency Levels.

The extent of information within the *CKC* enables instructors to reflect upon their levels of mastery on the topics for which they train or prioritize for training. As they consider the Knowledge Areas and competencies they will prioritize for delivery of content, an honest review of the *CKC* will result in a realistic assessment of one's own knowledge and experience. Even the most experienced trainer will most likely have competencies within Knowledge Areas that inspire them to seek more information.

The Competency Levels in the *CKC* are based upon Bloom's Taxonomy. The verbs in each competency were carefully chosen to illustrate the sequence of skill mastery that occurs over time with experience and learning opportunities. Instructors will use the competencies within the *CKC* when developing objectives for professional development to ensure alignment. This will enable attendees to identify and connect the event with their training goals and seek content that is specific to their needs.

The three Competency Levels enable instructors to design professional development events that address the individual differences and needs of the learner. Just as with the Learning Standards' Continuum of Learning, the *CKC* enables an instructor to view the sequence of skills within a competency and design training that relays information to reach varied levels within one professional development event. While the training may be specifically designed for one level, understanding adult learning principles and the sequence of skills within an area will help instructors formulate content to reach varied audiences and styles of learning.

The *Core Knowledge Competencies* align with the content in the PA Learning Standards. When the *CKC* content is combined with the examples of supportive practices and ways in which children demonstrate the skills that are found in the PA Learning Standards, professional development events will provide participants with a strong understanding of the implementation of best practices. For example, ways in which professionals build strong relationships with families, described in the Knowledge Area that addresses family and community partnerships, can be further understood through the descriptions and examples in the PA Learning Standards addressing the same content.

For Administrators/Directors:
A review of the *CKC* content will provide a picture of the broad scope of knowledge that every early childhood and school-age professional must obtain in order to excel in this dynamic field. Once familiar with the overall content, another review of each of the administrator/director competencies will inform individuals of their own strengths and areas for additional research and preparation and provide guidance towards their own career pathways.

Familiarity with the competencies will help administrators/directors provide guidance to staff to maximize their learning potential and knowledge base. From shared discussions, observations, and a review of past or current professional development, the supervisor will be better able to help the individual staff person prioritize the Knowledge Areas to include an annual individual professional development plan.

When used in combination with the PA Learning Standards, administrators can design programs that ensure all children served are provided with high quality, comprehensive learning experiences in the context of their families' culture and values.

The *CKC* is a valuable resource for administrators' use during program assessment. As can be identified through the *Linkages with Primary Resources*, the *CKC* has been cross-walked to other Pennsylvania regulations and standards and can be used to help determine if additional resources are needed in classrooms, if a Knowledge Area needs focus for group training, or if specific areas within a Knowledge Area should be identified for strategic planning.

How to Use the Big Ideas Framework

The ***Big Ideas Framework*** is a companion document to the *CKC* and is designed to facilitate the regular and ongoing self-assessment and reflection for practicing professionals. Similar to the Big Ideas and Essential Questions for PA's Learning Standards at each grade level, these Big Ideas describe the content within each Knowledge Area and help to categorize the information into key concepts. The Essential Questions further describe the Knowledge Area's focus and can be used as the starting point for self-reflection and assessment. These questions will guide individuals' thinking about their Competency Level of in each Knowledge Area and the kinds of information or types of skills they may want to enhance or acquire.

The Individual Professional Development Plan and Reflection form is the written summary of the important work the professional and supervisor have done together. It details the decisions that have been made about professional development goals and links them to the *Core Knowledge Competencies.* Additionally, it offers the professional an opportunity to assess the learning that has occurred from related professional development experiences and to consider enhancements or additional knowledge that are integrated into practice as a result. This becomes the individual's professional development plan.

Both administrators/directors and direct-line professionals may find varied uses and strategies for implementing the *Big Ideas Framework*. The following suggestions are offered as a guide.

The Process Starts Here!

The beginning of the decision-making process starts with self-assessment and reflection. Thinking about a combination of new learning opportunities, past experiences and the way in which new knowledge can be applied to work experiences to enhance one's work with children and families helps every professional create her/his own specialized professional development plan. This plan must be meaningful for the practitioner's current circumstance and relate to future goals, interests, and short term needs. Self-assessment and reflection, together, offer a way in which strengths and challenges are identified and balanced with new professional development opportunities to improve skills and expand horizons.

Shared Thinking

While self-assessment and reflection is conducted by the professional alone, the next step is to discuss those thoughts with a supervisor or administrator. Together, a meaningful conversation should take place where a summary of this assessment and reflection is shared as the starting point in a discussion about the professional's strengths, challenges, and professional development interests. This confidential conversation must be one in which the pair, together, designs a professional development plan that uses the information from the assessment and reflection, the *CKC* documents and the program's resources and identified needs as the guide.

Administrators'/Directors' Self-Assessment

Before Administrators/Directors can use these resources effectively with staff, they must first use the tool for their own reflection and goal planning. They will use both the *Core Knowledge Competencies* and *Big Ideas Framework*, to fully self-assess their knowledge, understanding, and experience.

- **Step One:** Review the *CKC* to become familiar with format and information. Carefully read the introductory sections to understand the principles, dispositions, and the suggested uses. Review the *Core Knowledge Competencies* to understand the Knowledge Areas, and Competency Levels.

- **Step Two:** Review the Administrator/Directors' competencies in the Knowledge Areas for understanding, knowledge, and experience.

- **Step Three:** Review each Knowledge Area in the *Big Ideas Framework*. Assess and reflect on both the Big Ideas and the Essential Questions. Identify any Essential Questions that may prompt a need for more research and/or training. Prioritize two to three goals from these competencies to include in an annual professional development plan. It is important that administrators/directors complete both sets of Essential Questions. Return to the *CKC* document as often as necessary for reference.

- **Step Four:** Complete the *Individual Professional Plan and Reflection*.

- **Step Five:** Seek out professional development events that will enhance the learning that has been identified through the self-assessment.

Once the administrator/director has completed her/his own self-assessment, identified annual goals, and completed a professional development plan through the *Individual Professional Plan and Reflection*, she or he will be able to support the use of the *CKC's* and *Big Ideas Framework* with staff.

Using the Big Ideas Framework with Professionals Entering the Field

Self-Assessment: For a new professional, *The Big Ideas Framework* is a great introduction to Pennsylvania's comprehensive approach to the early childhood and school-age profession. If they have not already used the resource as part of their pre-service experience, completing a self-assessment using the document in order to become familiar with its format and content is a good first step.

Shared Assessment: Following an individualized assessment, supervisors and new staff persons can use the *Big Ideas Framework* together to ensure that basic concepts and information that are critical for successful provision of quality services to children are understood. A shared assessment of the document will reveal the broad concepts and philosophies that every professional should carry into the work environment. When a supervisor and the new professional briefly review each of the Knowledge Areas together, they can share a discussion about the Competencies that are important for consideration in each of the domains of learning.

Initial Focus of Knowledge Areas: Next, there are critical Knowledge Areas that ensure children's health and safety are safeguarded, and that appropriate developmental support is implemented in every classroom.

- Knowledge Area 1, Child Development
- Knowledge Area 7, Health, Safety and Nutrition

These Knowledge Areas should be prioritized for new professionals. Together, the new staff person and the supervisor should complete a careful review of these Essential Questions with a reference back to the *Core Knowledge Competencies*.

For each Essential Question, the pair should identify the level of experience and training needs. Consideration of the program requirements to meet or maintain program standards should be a part of this discussion and goal development.

Using the *Individual Professional Development Plan and Reflection* form, an overall professional development plan should be developed that incorporates these Knowledge Area prioritizations in addition to other professional development needs that might incorporate the staff person's interests or career pathway goals.

The *Reflection* section at the end of the Individual Professional Development Plan should be used to note insights, new information or thoughts for additional research or training.

Updates should occur periodically throughout the year to document completed professional development. Reflection/Assessment should occur to indicate if the level of understanding has increased on the decision column or if additional training is needed. This review should occur annually, at a minimum.

The *CKC's* present a wonderful framework from which new professionals can develop a portfolio. Using the Knowledge Areas as a guide, documentation of successful activities and instructional experiences will be a valuable resource that can grow as the learner garners more practical work knowledge and experience. The portfolio can also be a compilation of research that is updated regularly and helps to guide understanding of the competencies and their implementation. This portfolio becomes an important data resource for future annual reviews of one's professional development plan, as well as for performance assessments.

Using Big Ideas Framework with Experienced Professionals

The *CKC* comprehensive content and its alignment to the PA Learning Standards offers practicing professionals a unique opportunity to consider their practice in light of a breadth of knowledge that assures every child's successful growth and development. Professionals who gain insight and knowledge in each of the *CKC's* Knowledge Areas and continue their life-long learning quest to acquire additional information will stay current and fresh in their presentation of new ideas to children and families, and will remain strong and vital advocates for the field.

There are three criteria that must be considered when developing an annual professional development plan:

1. The professional's previously completed self-assessments and reflections;
2. Observations, evaluations, and meeting notes from the shared planning meeting with the administrator/director;
3. Program standards, such as Keystone STARS or Head Start Performance Standards.

Reflection/Assessment: For each Knowledge Area, the professional should carefully review the Big Ideas and the Essential Questions listed. Consider the level of understanding for each item targeted for professional development. If more detail about the content is needed during this reflection/assessment, each of the Essential Questions contains links back to the *Core Knowledge Competencies*. Complete a self-assessment and determine areas of interest and need for additional research and training.

Gathering Data: The professional is encouraged to gather additional data to bring to the supervisory discussion. This may include sharing a portfolio that demonstrates accomplishments and achievements. The administrator/director will have also compiled a variety of data sources including observations of the staff person's performance with children and families, feedback from others, along with the staff person's portfolio and self-assessment.

Shared Assessment: The professional and the administrator/director should meet to review the *Big Ideas Framework* together. Together, they will complete a shared assessment and agree on areas of strength and growth.

Individual Professional Development Plan and Reflection: The needs and interests of the professional are *prioritized into 3-5 goals*. A review of program standard requirements for professional development will determine if there is a need for additional goals. This professional development plan should incorporate Knowledge Area prioritizations in addition to other professional development needs that might incorporate the staff person's interests or career pathway goals.

Updates should occur periodically throughout the year to document completed professional development. At least once a year, Reflection/Assessment should occur to indicate if the level of understanding has increased and to identify additional training needs.

How to Use the Individual Professional Development Plan and Reflection

For the Administrator/Director:

At least annually,

- Record the identified professional development goals from both the *Core Knowledge Competencies* and the *Big Ideas Framework.*
- Consider the ways in which knowledge will be obtained related to those goals. This may come from research, conferences, professional development events, higher education coursework, etc.

- Following the professional development, consider the knowledge, skills and insights that have been acquired.
- Assess new strategies that will or have been implemented as a result of the professional development.
- Hold shared meetings with all staff to review and approve individual professional development plans.
- Analyze all staff's individual professional development plans to ensure that the appropriate professional development is being held or attended that supports individual and programmatic goals. Make adjustments as necessary to support continuous quality improvement efforts.

For the Professional:

- Record the identified professional development goals that were identified in the *Big Ideas Framework*. Include the date of the supervisor-staff review and acquire the supervisor's signature.

At least annually,

- Maintain records of the professional development that was obtained related to each of the goals. Include the date and title of the event and the *CKC* code.
- Review the objectives of the professional development events and describe how they relate to the identified goals from the *Big Ideas Framework*.
- Assess the knowledge and insights gained as a result of the professional development and how it pertains to one's work with children and families.
- Attend a meeting with your administrator/director/supervisor to review your individual professional development plan and obtain sign-offs as needed.
- Complete a re-assessment.

Appendices

Professionals that use the ***Core Knowledge Competencies*** will find additional resources in the appendices.

Appendix A: Glossary: A collection of terms and definitions from within the *CKC*:

- Part A: Definitions for terms used within the ***CKC*** document and pertinent to early childhood and school-age practice.
- Part B: Terms identified in the competencies by an asterisk (*) are further defined in this section of the glossary.

Appendix B: Linkages to Primary Resources–A crosswalk that demonstrates the *CKC's* alignment with other state and national documents utilized by early childhood and school-age professionals.

Knowledge Area 1

Child Growth and Development

Rationale: Children's fun, stimulating and successful learning experiences in their early childhood and school-age programs are dependent on their early childhood and school-age professionals' knowledge and application of basic child development. Professionals must understand the inter-dependence of each key area of learning and how to provide meaningful and relevant experiences for children that are developmentally appropriate, individualized to accommodate each child's needs and interests, and be respectful of the families' diverse values and cultures.

The adult working in the early childhood and school-age field will be able to:

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe how child development depends on supportive and reciprocal relationships with families, caregivers, peers and other community members. K1.1 C1	Illustrate for families, caregivers, peers and other community members the impact their reciprocal relationships have on a child's development. K1.1 C2	Examine how classroom practices support child development through positive interactions with families, caregivers, peers and other community members to further develop reciprocal relationships. K1.1 C3
Identify important concepts and principles of child development theory and the theorists associated with the theories.* K1.2 C1	Apply principles and concepts of child development theories in working with children.* K1.2 C2	Analyze how the principles and concepts of child development theories inform professionals about children's development and learning.* K1.2 C3
List issues and policies that impact child development and learning, including: • Inclusion • Diversity • Brain Development • Children and Families At Risk • Poverty K1.3 C1	Illustrate ways knowledge of issues and policies impact practices related to child development and learning, including: • Inclusion • Diversity • Brain Development • Children and Families At Risk • Poverty K1.3 C2	Design strategies to address issues and policies related to practice which intentionally impact child development and learning, including: • Inclusion • Diversity • Brain Development • Children and Families At Risk • Poverty K1.3 C3
Identify the impact of brain development on children's development and learning. K1.4 C1	Apply knowledge of brain development to facilitate children's learning, socio-emotional development, and self-regulation. K1.4 C2	Analyze the degree effectiveness information of brain development and learning is used to guide instructional practices. K1.4 C3
Identify the different domains of child development and how they link to the Key Learning Areas of the PA Learning Standards.* K1.5 C1	Use knowledge of the domains of child development as they relate to the Key Areas of Learning within the PA Learning Standards to implement evidence-based instructional practices.* K1.5 C2	Analyze the degree to which evidence-based instruction and appropriate adaptations and accommodations occur across the different domains of child development and relate to the Key Areas of Learning in the PA Learning Standards.* K1.5 C3

Child Growth and Development

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe how the Learning Standards demonstrate the sequence of child skill development in the continuum of learning across age levels and grades. K1.6 C1	Implement planned activities and assessments that reflect the sequence of development as articulated in the PA Learning Standards across age levels and grades. K1.6 C2	Analyze and assess the extent to which activities and assessments reflect the sequence of development in the PA Learning Standards across age levels and grades. K1.6 C3
Describe how individual children develop and learn at different rates and in various ways. K1.7 C1	Apply knowledge of growth, development, and learning to establish appropriate expectations for individual children. K1.7 C2	Evaluate and modify programs according to the individual needs of children. K1.7 C3
Describe how play fosters opportunities for children to learn and develop communication, problem solving, and creativity skills. K1.8 C1	Provide play environments, experiences and activities that foster communication, problem solving, and creativity. K1.8 C2	Evaluate play environments, experiences and activities in program settings, which facilitate the construction of knowledge through play. K1.8 C3
Identify the developmental patterns of growth that occur from birth through middle childhood, which support competence and self-confidence. K1.9 C1	Develop environments that foster competence and self-confidence birth to middle childhood. K1.9 C2	Evaluate play environments, experiences and activities in program settings, which facilitate the construction of knowledge through play. K1.9 C3
Identify the ways that children's age, development, culture, language and ability differences influence learning in the classroom. K1.10 C1	Select appropriate groupings of children, staff assignments, and transitions based upon children's age, development, culture, language, and ability differences. K1.10 C2	Assess and modify as needed the decisions made in the selection of appropriate groupings of children, staff assignments, and transitions based upon children's age, development, culture, language, and ability differences. K1.10 C3

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe programmatic systems that support reciprocal communication strategies with families about child development including individual children's abilities, interests and needs. D1.1 C1	Adopt programmatic systems to support reciprocal communication strategies with families about child development including individual children's abilities, interests and needs. D1.1 C2.	Assess and modify methods to support reciprocal communication strategies with families about child development, including individual abilities, interests and needs, which facilitate continuous quality improvement. D1.1 C3
Describe curricular elements that support a learning environment based upon research-based evidence in child development and learning.* D1.2 C1	Guide staff in curriculum development that supports an environment based upon research-based evidence in child development and learning.* D1.2 C2	Assess program staff knowledge of child development and adjust professional development plans as necessary to support positive outcomes in children.* D1.2 C3
Define ways that classroom practices are impacted by inclusion, diversity, brain development, children and families at risk and poverty. D1.3 C1	Support program staff in their classroom practices that are impacted by inclusion, diversity, brain development, children and families at risk and poverty. D1.3 C2	Assess the degree to which program staff is using family and community data around the issues of inclusion, diversity, brain development, children and families at risk and poverty when developing policies or practices within the classroom/program. D1.3 C3

Child Growth and Development

COMPETENCY LEVEL 1

Explain to staff, families and the community the impact of brain development on children's development and learning.
D1.4 C1

Define the importance of all staff having a strong foundation in child development and how the developmental domains link to the PA Learning Standards in support of the needs of all learners.*
D1.5 C1

Describe to staff, families, and the community how the PA Learning Standards demonstrate the sequence of child skill development in the continuum of learning across age levels and grades.
D1.6 C1

Explain to staff, families and the community the importance of developing schedules and curriculum that are responsive to individual needs of children and families.
D1.7 C1

Describe the elements that should be present in play environments, experiences and activities that support the development of communication skills, problem solving and creativity.
D1.8 C1

Explain the importance of fostering competence and self-confidence of a child from birth through middle childhood.
D1.9 C1

Explain to staff, families and the community the ways that children's age, development, culture, language and ability differences influence learning in the classroom.
D1.10 C1

COMPETENCY LEVEL 2

All of Level 1

Employ knowledge of brain development to facilitate children's learning, socio-emotional development and self-regulation within the program.
D1.4 C2

Adopt program practices that demonstrate knowledge of the domains of child development to meet the developmental needs of all children, including early childhood age, school-aged, children with special needs and diverse backgrounds.*
D1.5 C2

Apply strategies that support evidence-based child development practices through program scheduling and adoption, adaptation, or creation of responsive curriculum and play in alignment with PA Learning Standards.
D1.6 C2

Develop program schedules and implement curriculum to ensure responsiveness to individual needs of children and families.
D1.7 C 2

Monitor the implementation of instructional practices that support the development of communication skills, problem solving, and creativity.
D1.8 C2

Model effective strategies for staff to support a nurturing environment that fosters self-concept development in children birth to middle childhood.
D1.9 C2

Model effective strategies for staff in the selection of appropriate groupings of children staff assignments, and transitions based on children's age, development, culture, language, and ability differences that align with research-based practices.
D1.10 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Examine strategies/practices for ways to continuously improve instructional practices to support children's learning, socio-emotional development and self-regulation.
D1.4 C3

Develop and evaluate program curriculum and environments using the PA Learning Standards as a framework based on the developmental needs of the children in your care.*
D1.5 C3

Analyze the strategies which support evidence-based child development practices through program scheduling and adoption, adaptation, or creation of responsive curriculum and play in alignment with PA Learning Standards.
D1.6 C3

Create a system to assess the effectiveness of program schedules and curriculum to ensure responsiveness to individual needs of all children and families.
D1.7 C3

Analyze the role of the adult as a facilitator in creating, promoting, and sustaining complex, creative, problem solving during play experiences.
D1.8 C3

Assess effectiveness and make recommendations around how staff supports a nurturing environment that fosters self-concept development in children birth to middle childhood.
D1.9 C3

Assess effectiveness and make recommendations on how staff selects appropriate groupings of children staff assignments, and transitions based on children's age, development, culture, language, and ability differences that align with research-based practices.
D1.10 C3

Knowledge Area 2

Curriculum and Learning Experiences

Rationale: Children construct knowledge when there is a balance of curriculum, instruction and environment that is reflective of children's developmental needs, abilities and interests. Early childhood and school-age professionals must utilize their knowledge of child development and each child's individualized needs and interests to design learning spaces and age, cultural and linguistically appropriate experiences that guide and facilitate children's physical, social and emotional, and cognitive learning.

The adult working in the early childhood and school-age field will be able to:

LEARNING ENVIRONMENT

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1

Describe the components of a responsive learning environment (setting, space, resources, relationships and schedule) and how they support the needs and interests of all learners.
K2.1 C1

Describe ways in which a match between the environment and a child's needs (biology, age, temperament, physical needs) promote positive learning outcomes.
K2.2 C1

Describe ways that a prepared physical environment promotes positive behavior and encourages supportive relationships including, room arrangement, visual cues, temperature, acoustics, schedules, resources, and adaptations and accommodations for diverse learners.
K2.3 C1

Define how both indoor and outdoor space and materials support development and learning outcomes.
K2.4 C1

COMPETENCY LEVEL 2

All of Level 1

Arrange a responsive learning environment (setting, space, resources, relationships and schedules) based on ages, abilities, home culture, and interests and needs of children that are linked to the PA Learning Standards.
K2.1 C2

Implement appropriate strategies to meet individual learning outcomes based on a child's needs (biology, age, temperament, physical needs), which promote positive learning outcomes.
K2.2 C2

Sketch a physical environment, that promotes positive behavior and encourages supportive relationships, including, room arrangement, visual cues, temperature, acoustics, schedules, resources, and adaptations and accommodations for diverse learners.
K2.3 C2

Plan for appropriate use of indoor and outdoor physical space and materials to support comprehensive, developmental learning outcomes.
K2.4 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Evaluate the components of a responsive learning environment (setting, space, resources, relationships and schedules) to determine if it meets the ages, abilities, culture, interests and needs of children and how it is linked to the PA Learning Standards.
K2.1 C3

Analyze the extent to which individual learning outcomes are achieved with intentional program decisions that align a child's needs with the classroom environment.
K2.2 C3

Assess the physical environment to determine the ways that positive behavior and supportive relationships are facilitated for diverse learners, including room arrangement, visual cues, temperature, acoustics, schedules, resources, and adaptations and accommodations.
K2.3 C3

Design indoor and outdoor environments based on assessment information, using a variety of assessment tools that are appropriate for assessing learning. *
K2.4 C3

Curriculum and Learning Experiences

CURRICULUM

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Name the elements of the Standards Aligned System (SAS) and relate how they support student success.* K2.5 C1	Employ the elements of the Standards Aligned System (SAS) to support student success.* K2.5 C2	Examine how the resources in the Standards Aligned System (SAS) portal* support student success. K2.5 C3
Name the components of a curriculum framework as defined in the Standards Aligned System. * K2.6 C1	Utilize the components of a curriculum framework in the development of lesson plans. K2.6 C2	Analyze how a curriculum framework is an integral part of curriculum development and individualization for children. K2.6 C3
Define the programmatic elements of curriculum including scheduling elements, materials, environment, learning materials, assessment, and adaptations to meet individualized needs. K2.7 C1	Employ the programmatic elements of the curriculum to provide content information as defined in PA Learning Standards and incorporate adaptations to meet individualized needs. K2.7 C2	Evaluate the programmatic elements of the curriculum to insure the content is adapted to meet individualized needs as defined by the PA Learning Standards. K2.7 C3
Define how curriculum engages families and at-home experiences as part of the learning process. K2.8 C1	Modify curricular activities to engage children in learning activities which build upon home experiences. K2.8 C2	Construct curriculum which mirrors home and classroom experiences. K2.8 C3
Define the elements of curriculum planning including establishing children's learning outcomes, staff expectations and roles and strategies for employing developmentally, culturally and individually appropriate, standards-based experiences. K2.9 C1	Use a well-developed curriculum to effectively implement clear and developmentally, culturally and individually appropriate learning outcomes, explain expectations and roles for instructional staff, and execute developmentally appropriate strategies and materials linked to the PA Learning Standards. K2.9 C2	Integrate multiple areas of knowledge in effective curriculum design focusing on analysis of the extent to which clear and developmentally, culturally and individually appropriate learning outcomes for all children are implemented, expectations and roles for instructional staff are established, and the extent to which developmentally appropriate strategies and materials are linked to the PA Learning Standards. K2.9 C3
Define how a curriculum encompasses children's approaches to learning, social and emotional development, and academic subjects. K2.10 C1	Modify curriculum to support children's approaches to learning, social and emotional development, and academic subjects. K2.10 C2	Develop curriculum which addresses children's approaches to learning, social and emotional development, and academic subjects. K2.10 C3

INSTRUCTION

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Define learning as a process that integrates all domains of development (emotional, social, language, cognitive, physical, and creative). K2.11 C1	Modify the environment to support learning and development in all domains (emotional, social, language, cognitive, physical, and creative). K2.11 C2	Assess ways to intentionally support individual and group growth and learning in each of the domains (emotional, social, language, cognitive, physical, and creative). K2.11 C3

Curriculum and Learning Experiences

INSTRUCTION

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Make connections, in collaboration with families, between the schedule of activities in the curriculum and individual children's levels of development, participation, interest, engagement, and capacity. K2.12 C1	Connect and employ curriculum activities, based on family input, that include play experiences and reflect individual children's levels of development, participation, interest, engagement, and capacity. K2.12 C2	Assess how appropriate curriculum impacts successful levels of family and child participation, interest and engagement, and promotes positive developmental outcomes. K2.12 C3
Identify strategies, involving both adults and children, designed to help children develop social-emotional skills including self- regulation, conflict resolution, social problem solving and mutual respect. K2.13 C1	Implement guidance strategies involving both adults and children designed to facilitate and support child development of social-emotional skills. K2.13 C2	Analyze the extent to which the use of guidance strategies involving both adults and children facilitates and supports child development of social-emotional skills. K2.13 C3
Identify ways in which play (construction, organizing, and applying knowledge) is the primary instructional mode for supporting children's construction of knowledge. K2.14 C1	Provide opportunities for children to approach learning through play (constructing, organizing, and applying knowledge). K2.14 C2	Evaluate the extent to which intentional play opportunities (constructing, organizing, and applying knowledge) based on the PA Learning Standards facilitate the achievement of learning outcomes for children. K2.14 C3
Name the experiences children need for successful outcomes in school and in life as outlined in the PA Learning Standards and the Guiding Principles.* K2.15 C1	Use knowledge of the content areas rooted in child development to provide high quality experiences for children as outlined in the PA Learning Standards and the Guiding Principles.* K2.15 C2	Assess the experiences provided for children to determine the achievement of designated outcomes in school and in life as outlined in the PA Learning Standards and the Guiding Principles.* K2.15 C3
Name digital media resources that can be used with other teaching tools to reinforce children's learning. K2.16 C2	Combine appropriate digital media resources with other teaching tools to reinforce children's learning. K2.16 C2	Design learning experiences for children using appropriate digital media resources in combination with other teaching tools. K2.16 C3

LEARNING ENVIRONMENT

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify components of a responsive learning environment within the program to determine if it meets the ages, abilities, home culture, language, interests, and needs of all children and how it is linked to the PA Learning Standards. D2.1 C1	Illustrate to teaching staff flexible, creative ways to support learning outcomes through learning environments that are responsive to all children's ages, abilities, interests, home culture, and language and that are linked to the PA Learning Standards. D2.1 C2	Design and implement learning environments based on principles of universal design that are responsive to all children's ages, abilities, interests, home culture, and language. D2.1 C3
Discuss with staff appropriate strategies to meet individual learning outcomes based on a child's needs (biology, age, temperament, physical needs). D2.2 C1	Demonstrate to staff ways to intentionally use appropriate strategies to meet individual learning outcomes based on a child's needs (biology, age, temperament, and physical needs). D2.2 C2	Evaluate the extent to which the program supports the use of appropriate strategies to individualize learning outcomes for children. D2.3 C3

Curriculum and Learning Experiences

LEARNING ENVIRONMENT

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Review with staff ways that the program's physical environment promotes positive behavior and encourages supportive relationships, including room arrangement, visual cues, temperature, acoustics, schedules, resources, and adaptations and accommodations for diverse learners. D2.3 C1	Implement in collaboration with staff, learning environments that promote positive behavior, encourage supportive relationships and provide accommodations and adaptations consistent with the needs of all learners. D2.3 C2	Collect data and analyze learning environments to promote positive behavior, encourage supportive relationships, as well as to ensure that accommodations and adaptations are consistent with the needs of all learners. D2.3 C3
Describe to staff the appropriate use of indoor and outdoor physical space and materials to promote comprehensive, developmental learning outcomes. D2.4 C1	Support staff in the appropriate use of indoor and outdoor physical space and materials to promote comprehensive, developmental learning outcomes. D2.4 C2	Examine indoor and outdoor environments based on assessment information, using a variety of assessment tools that are appropriate for assessing learning.* D2.4 C3

CURRICULUM

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Discuss with staff how the elements of the Standards Aligned System (SAS) support student success. * D2.5 C1	Demonstrate to staff how the elements of the Standards Aligned System (SAS) relate to positive student outcomes.* D2.5 C2	Evaluate staff's knowledge and skill in implementing elements within in the Standards Aligned System (SAS) portal. to support student success.* D2.5 C3
Relate how the curriculum framework as defined in the Standards Aligned System (SAS) supports the development of lesson plans. D2.6 C1	Review staff's use of the components of a curriculum framework in the development of lesson plans. D2.6 C2	Assess and extend the program's implementation of a curriculum framework as an integral part of lesson planning. D2.6 C3
Identify the programmatic elements of curriculum including scheduling elements, environment, learning materials, assessment, and adaptations to meet individualized needs. D2.7 C1	Provide opportunities for teaching staff to implement the programmatic elements of the curriculum to ensure the content is adapted to meet individualized needs as defined by the PA Learning Standards and children's Individual Education Plans (IEPs) and Individual Family Service Plans (IFSPs). D2.7 C2	Build additional opportunities for teaching staff to deepen their knowledge of working with children with differing abilities and to expand their implementation of the intervention strategies and content goals in children's Individual Education Plans (IEPs) and Individual Family Service Plans (IFSPs). D2.7 C3
Explain to staff and families how curriculum includes family engagement and home-school connections. D2.8 C1	Review staff activities to ensure they include family engagement and connections to home experiences. D2.8 C2	Examine program policies for family engagement in the curriculum development and learning process and how the curriculum connects to home experiences. D2.8 C3
Select program curriculum that promotes children's positive learning outcomes through developmentally, culturally, individually appropriate and standards-based experiences. D2.9 C1	Adopt curriculum that supports positive learning outcomes for all children in all developmental domains of child development. D2.9 C2	Analyze a variety of curriculum models and advocate for developmentally effective and evidence-based programming. D2.9 C3

Curriculum and Learning Experiences

CURRICULUM

COMPETENCY LEVEL 1

Outline with staff and families ways in which curriculum supports children's approaches to learning, social and emotional development, and academic subjects.
D2.10 C1

COMPETENCY LEVEL 2

All of Level 1

Document and communicate the ways in which curriculum supports play and enhances children's approaches to learning, social and emotional development, and academic subjects.
D2.10 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Evaluate and modify for continuous quality improvement the ways in which program curriculum supports play and enhances children's approaches to learning, social and emotional development, and academic subjects.
D2.10 C3

INSTRUCTION

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1

Explain to staff the importance of a program curriculum philosophy that integrates all domains of development (emotional, social, language, cognitive, physical, and creative).
D2.11 C1

Describe to staff and families the process used to select individual learning goals to develop appropriate curriculum based on children's ages, abilities, ability differences, culture, language, developmental levels, interests, and capacities.
D2.12 C1

Summarize with staff positive guidance strategies involving both adults and children that facilitate and support development of social-emotional skills.
D2.13 C1

Explain to staff and families the extent to which intentional play opportunities (constructing, organizing, and applying knowledge) based on the PA Learning Standards facilitate the achievement of learning outcomes for children.
D2.14 C1

Discuss with staff and families instructional experiences children need for successful outcomes in school and in life as outlined in the PA Learning Standards and the Guiding Principles.*
D2.15 C1

Explain digital media's value as an instructional resource that supports children's learning.
D2.16 C1

COMPETENCY LEVEL 2

All of Level 1

Collaborate with staff to develop the program's curriculum philosophy that includes all domains of development (emotional, social, language, cognitive, physical, and creative).
D2.11 C2

Guide staff in using observation and assessment data to select individual learning goals for children which include play experiences and reflect children's ages, abilities, ability differences, culture, language, developmental levels, interests, and capacities.
D2.12 C2

Observe staff's implementation of positive guidance strategies involving both adults and children designed to facilitate and support child development of social-emotional skills.
D2.13 C2

Adopt intentional, evidence-based frameworks to teaching strategies or modify existing ones based on the PA Learning Standards, targeting children's approaches to learning through play, social interactions, creativity, initiative, persistence, problem solving, and decision making.
D2.14 C2

Communicate and document to staff and families the importance of making continuous quality improvements to instructional content, practices and materials as outlined in the PA Learning Standards and the Guiding Principles.*
D2.15 C2

Support staff's implementation of digital media as an instructional strategy.
D2.16 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Appraise the program's curriculum philosophy to ensure it is inclusive of all domains of development (emotional, social, language, cognitive, physical, and creative) and modify as needed.
D2.11 C3

Create opportunities for staff and families to generate individual learning goals for children which include play experiences and reflect children's ages, abilities, ability differences, culture, language, developmental levels, interests, and capacities.
D2.12 C3

Analyze the program's positive guidance policies to ensure they are responsive to staff, children, and families.
D2.13 C3

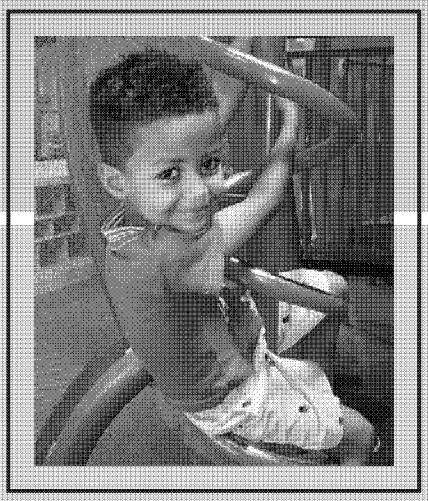
Evaluate the evidence-based framework for teaching strategies which best promote children's approaches to learning through play.
D2.14 C3

Create supportive systems for ongoing evaluation and continuous quality improvements to the instructional practices, curriculum, and learning environment.*
D2.15 C3

Assess and monitor appropriate uses of digital media for children and program staff.
D2.16 C3

Knowledge Area 3

Family, Schools and Community Collaborations and Partnerships



Rationale: The partnerships that early childhood and school-age professionals develop with families are critical to supporting children's successful and confident growth and educational experiences in the out-of-home setting. Children thrive when their learning professionals and family members work together to embed culture and values within the children's school experience and to develop ongoing, respectful and reciprocal communication strategies. Early childhood and school-age professionals must be aware of community resources and help families to make those connections when needed.

The adult working in the early childhood and school-age field will be able to:

COMPETENCY LEVEL 1

Define how the family's relationship context of home, community, and culture, is the primary influence on children's development.
K3.1 C1

Describe differences and complexities in family structure and lifestyles within cultures that influence child development and learning, including beliefs, traditions, child rearing practices, parent-child interaction styles, and discipline.
K3.2 C1

Discuss how personal biases and societal stereotypes impact cultural, racial, linguistic and socio-economic experiences and shape one's own beliefs, values and behaviors.
K3.3 C1

Identify the supports and community resources that families need in raising children, including children with a wide range of abilities.*
K3.4 C1

Describe concerns, stressors, and/or crises related to families.*
K3.5 C1

COMPETENCY LEVEL 2

All of Level 1

Apply an understanding of the cultural context of families and children when creating the environment and planning children's experiences, to guide intentional interactions with families.
K3.1 C2

Partner with individuals who comprise the family structures representative of children in care to maximize developmental outcomes.
K3.2 C2

Interpret the ways in which personal beliefs, values, and behaviors relative to cultural, racial, linguistic, and socio-economic differences relate to daily practices with children.
K3.3 C2

Advocate for policies/procedures which assist families in their efforts to obtain supports needed from schools, agencies and other community resources.
K3.4 C2

Use knowledge about concerns, stressors, and/or crises to enhance interactions with families and provide needed supports.*
K3.5 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Analyze the effectiveness of methods used to assist families in recognizing their strengths, discussing their concerns and needs, and determining their priorities.*
K3.1 C3

Analyze ways to support family structure and families of children in various developmental stages in collaborative efforts on behalf of children.
K3.2 C3

Analyze the degree to which knowledge about personal beliefs related to cultural, racial, linguistic, and socio-economic differences prompt changes in daily practices with children.
K3.3 C3

Evaluate the supports, referrals and other resources provided to families to determine service effectiveness, service gaps and/or to identify additional needs.
K3.4 C3

Evaluate strengths, prioritize needs, set goals, and define resources needed to achieve the outcomes related to family concerns, stressors and/or crises.*
K3.5 C3

Family, Schools and Community Collaborations and Partnerships

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify intentional practices designed to acknowledge and value the strengths of families and to create positive, reciprocal relationships with diverse families.* K3.6 C1	Promote connections among the families of the children in care which value and support the development of reciprocal relationships, particularly across perceived barriers such as; race, language, disability/special needs, and socio-economic status. K3.6 C2	Analyze approaches to working with diverse families based on a strength-based approach to family structures and systems that creates positive, reciprocal relationships through partnerships incorporating: • Participation • Goal Planning • Collaboration • Children and Families At Risk • Program Evaluation K3.6 C3
List examples of ways to assist children and families in making a variety of transitions. K3.7 C1	Employ appropriate strategies involving schools and community agencies to assist children and families in making a variety of transitions. K3.7 C2	Assess the transition activities employed to provide families and children with appropriate assistance in making a variety of transitions. K3.7 C3
Identify the ethical and legal reasons to respect family privacy. K3.8 C1	Demonstrate an understanding of ethical and legal issues related to privacy and confidentiality issues to real-life situations. K3.8 C2	Examine efforts to maintain privacy and confidentiality in line with ethical and legal guidelines. K3.8 C3
List reasons to foster continuity between home and early learning programs, schools, after-school programs and other child-family affiliated agencies. K3.9 C1	Use various strategies to build linkages to foster continuity between home and early learning programs, schools, and after school programs, and other child-family affiliated agencies. K3.9 C2	Evaluate and adjust professional practices employed to build partnerships and improve continuity between home and early learning programs, schools, and after school programs, and other child-family affiliated agencies. K3.9 C3
Identify the connections between the appropriate PA Learning Standards for the age group with which you work, and the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. K3.10 C1	Employ various strategies identified in the PA Learning Standards for the age group with which you work and the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. K3.10 C2	Assess supportive practices employed by the program, addressing each of the age-appropriate PA Learning Standards in the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. K3.10 C3
Describe the key components of the Strengthening Families Protective Factors Framework. K3.11 C1	Communicate and demonstrate linkages between the Strengthening Families Protective Factors Framework and classroom practices. K3.11 C2	Evaluate classroom use of Strengthening Families Protective Factors Framework. K3.11 C3

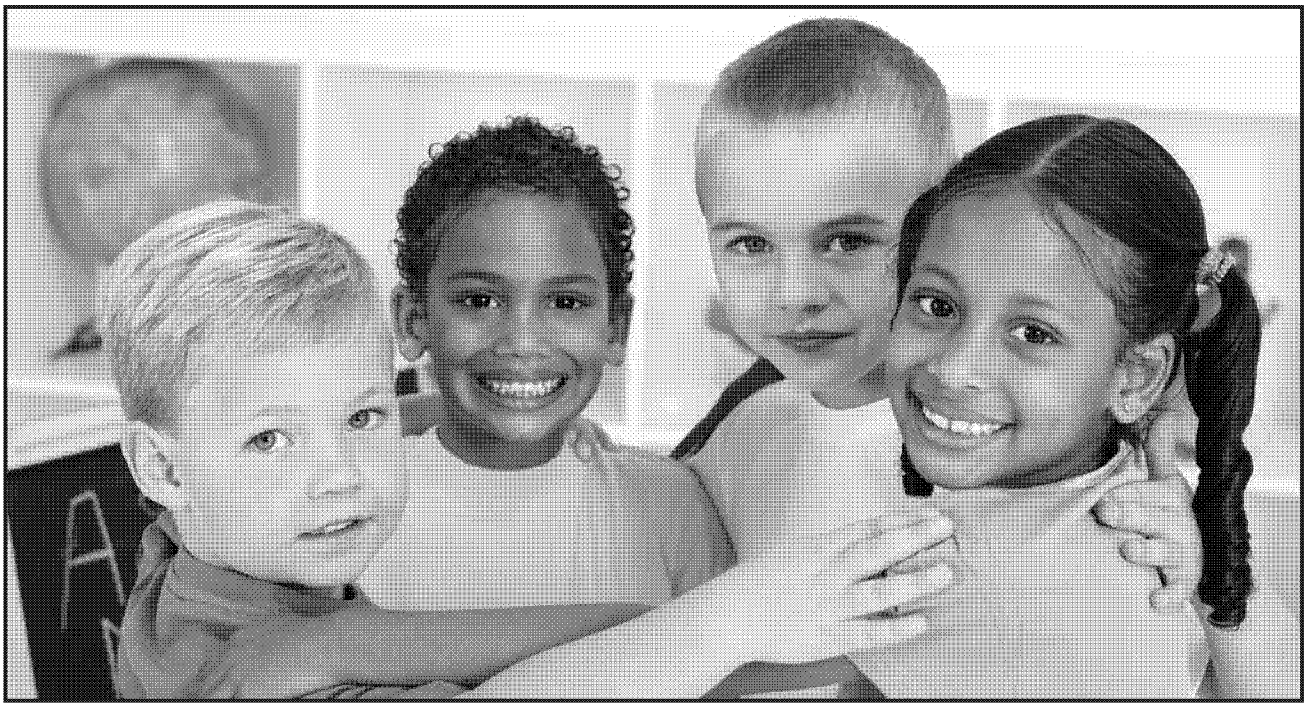
Family, Schools and Community Collaborations and Partnerships

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe for staff, families, and community how the family's relationship with the child, which takes place in the context of home, community and culture, is the primary influence on children's development. D3.1 C1	Adopt practices that involve, sustain, and strengthen respectful and reciprocal relationships with families to support children's development and learning. D3.1 C2	Evaluate and modify practices used to involve, sustain and strengthen respectful and reciprocal relationships with families to support children's development and learning. D3.1 C3
Identify for staff, families, and community the differences and complexities in family structure and lifestyles within cultures that influence child development and learning, including beliefs, traditions, child rearing practices, parent-child interaction styles, and discipline. D3.2 C1	Demonstrate to staff ways to partner with individuals who comprise the family structures representative of children in care to maximize developmental outcomes. D3.2 C2	Analyze the effectiveness of program supports to families to promote collaborative efforts on behalf of children and make changes as necessary. D3.2 C3
Discuss with staff how personal beliefs, values, and behaviors relative to cultural, racial, linguistic, and socio-economic differences relate to daily practices with children. D3.3 C1	Adopt frequent, meaningful opportunities and practices (informal and formal) to engage families from diverse backgrounds in becoming involved in discussions about their child's development and learning. D3.3 C2	Evaluate the degree to which personal biases and stereotypes held by families and staff may influence perceptions and expectations for children's development and learning. D3.3 C3
List the supports, referrals, and other resources provided to families to determine service effectiveness, service gaps and/or to identify additional needs. D3.4 C1	Provide information to families on appropriate social, mental health, educational wellness, and medical service. D3.4 C2	Create and implement a plan describing procedures that include families in the referral process to appropriate social, mental health, educational wellness, and medical service. D3.4 C3
State how staff's knowledge of family concerns, stressors and/or crises impact children's development and learning. D3.5 C1	Demonstrate an understanding of the impact of divorce, abuse, unemployment, deployment, poverty, inclusion, etc. on child development and family systems to provide quality services. D3.5 C2	Create and utilize multiple, strength-based strategies to educate families and staff with challenging issues such as divorce, abuse, unemployment, deployment, poverty, inclusion, etc. D3.5 C3
Explain to staff, families, and the community how family involvement, collaboration, and reciprocal communication support a quality program. D3.6 C1	Communicate and document the importance of involving families in the program and implement a variety of methods to achieve inclusion of families within program operations and practices. D3.6 C2	Design and apply multiple strategies to involve families in the program, including, but not limited to, conferences, parent handbooks, group activities, and community events. D3.6 C3
Identify for staff ways to assist children and families in making a variety of transitions. D3.7 C1	Promote ways to enrich program offerings, materials, staff-child groupings, school readiness, and seamless transition strategies in support of the diverse family cultures represented within the program. D3.7 C2	Evaluate ways that diverse family cultures enrich program offerings, materials, staff-child groupings, school readiness, and seamless transition strategies. D3.7 C3

ADMINISTRATOR / DIRECTOR

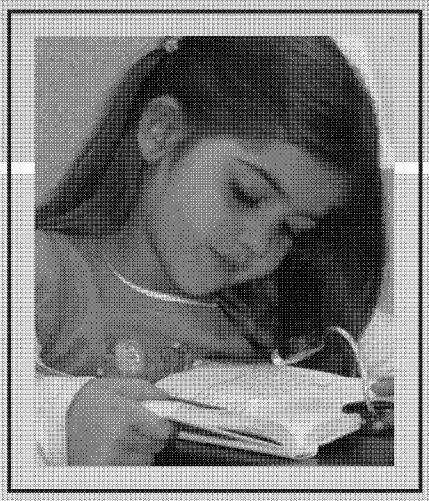
Family, Schools and Community Collaborations and Partnerships

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Relate to staff the ethical and legal reasons to respect family privacy. D3.8 C1	Promote efforts to maintain privacy and confidentiality in line with ethical and legal guidelines with in your program. D3.8 C2	Evaluate program policies and staff practices and make recommendations on ways to improve privacy and confidentiality policies and procedures in line with ethical and legal guidelines. D3.8 C3
Define for staff the reasons to foster continuity between home and early learning programs, schools, after-school programs, and other child-family affiliated agencies. D3.9 C1	Implement multiple strategies and create varied opportunities to work collaboratively with families, school districts, and other child-family affiliated agencies. D3.9 C2	Design and implement plans and procedures using multiple strategies to involve and work collaboratively with diverse families in a variety of ways, including: engaging families, addressing barriers, facilitating referrals to schools, responding to diverse community interests, and mobilizing community resources. D3.9 C3
Express to staff the connections between the appropriate PA Learning Standards for the age group with which you work, and the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. D3.10 C1	Monitor staff and provide feedback as they employ various strategies identified in the PA Learning Standards for the age group with which you work and the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. D3.10 C2	Generate additional supportive practices addressing each of the age-appropriate PA Learning Standards in the Key Learning Area—Partnerships for Learning: Families, Learning Environments and Communities. D3.10 C3
Describe the key components of the Strengthening Families Protective Factors Framework .and the relationship to program goals. D3.11 C1	Communicate and demonstrate linkages between the Strengthening Families Protective Factors Framework and program practices. D3.11 C2	Evaluate classroom/program use of Strengthening Families Protective Factors Framework. D3.11 C3



Knowledge Area 4

Assessment



Rationale: A comprehensive assessment approach within an early childhood or school-age program combines assessment of children, the environment, staff, and the program itself to ensure continuous quality and responsiveness to its children and families, and the community. Early childhood and school-age professionals must be knowledgeable about the types of assessments and their uses in order to implement regular and systematic methods for observing, documenting, and interpreting data, ensuring that children receive individualized and developmentally appropriate experiences to support their growth and learning.

The adult working in the early childhood and school-age field will be able to:

COMPREHENSIVE ASSESSMENT SYSTEM

COMPETENCY LEVEL 1

Define the various assessment methods that, when combined, make a comprehensive assessment system.
K4.1 C1

Identify ways in which assessment is used to make instructional, environmental and relational decisions and how they relate to continuous quality improvement.
K4.2 C1

Define ethical practices for assessment and confidential management of information.
K4.3 C1

Review the results of environmental assessments to understand potential modifications of the instructional setting.
K4.4 C1

Recognize the importance of participating in regular staff evaluation, including self-reflection, supervisory discussions of strengths and areas for improvement and desired professional development.
K4.5 C1

Describe the elements and participants of a programmatic assessment.
K4.6 C1

COMPETENCY LEVEL 2

All of Level 1

Utilize each of the assessment methods to understand the depth of program operation.
K4.1 C2

Use assessment data to inform decision making for instructional, environmental, and relational purposes.
K4.2 C2

Practice ethical assessment and confidential management of information.
K4.3 C2

Modify instructional settings in response to the results of environmental assessments.
K4.4 C2

Use results from staff evaluations to make changes to instructional techniques and to identify professional development goals.
K4.5 C2

Participate in program assessment.
K4.6 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Combine data from the assessment methods to analyze program implementation.
K4.1 C3

Synthesize and analyze assessment data for making instructional, environmental and relational decisions for continuous quality improvement.
K4.2 C3

Analyze the degree to which assessment information is used and managed in appropriate ways.
K4.C3

Analyze the results of environmental assessments to consider programmatic changes such as scheduling, new equipment, etc.
K4.4 C3

Assess results of staff evaluations in relation to the development of long term and short term professional goals.
K4.5 C3

Design in collaboration with other program staff short and long term program goals that support continuous quality improvement in response to the results of the program assessment.
K4.6 C3

Assessment

CHILD ASSESSMENT

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify the types and characteristics of valid and reliable child assessments, their purposes, and their uses for obtaining information about children. K4.7 C1	Employ valid and reliable child assessments to collect data for making decisions about children. K4.7 C2	Create program plans for collecting valid and reliable data to make decisions about children. K4.7 C3
Explain the critical importance of authentic assessment in guiding decisions around young children's development, and learning. K4.8 C1	Arrange and modify the environment, materials and activities to provide opportunities for gathering authentic information about the ways in which children develop, learn and progress. K4.8 C2	Evaluate authentic assessment techniques and select those most suited to particular children, situations, and goals to inform intentional teaching practices. K4.8 C3
Describe the components of quality assessment.* K4.9 C1	Implement assessment as part of the teaching team to obtain information about children's development and learning including data from the components of quality assessment.* K4.9 C2	Synthesize information about student learning gathered from assessment data collected through the components of quality assessment.* K4.9 C3
Describe ways to use information from child assessment in planning children's environments and learning experiences. K4.10 C1	Interpret information from child assessment data to scaffold learning, recognize students having difficulty, identify student challenges and strengths, and plan appropriate interventions in collaboration with colleagues. K4.10 C2	Evaluate and adjust professional practices to modify environments and maximize children's learning based on child assessment and shared decision making. K4.10 C3
Name the ways in which families are included in the child assessment process including conducting, sharing of results and goal-setting. K4.11 C1	Engage families in the child assessment process, including conducting, sharing of results and goal-setting. K4.11 C2	Assess the family partnership approach for conducting, sharing the results of assessment information and goal-setting. K4.11 C3
Describe how screening and assessment tools can provide information that will identify children's possible developmental delays. K4.12 C1	Use screening and assessment tools to gather data that will help determine if children have possible developmental delays. K4.12 C2	Analyze data from screening and assessment tools to determine if children may have possible developmental delays. K4.12 C3
List professional reasons for partnering with both agencies that provide specialized services and families to support children's successful learning experiences. K4.13 C1	Participate as part of a team in the development, implementation and monitoring of an Individual Family Service Plan/ Individual Education Plan, or care plan, for children with special needs with the permission of the family. K4.13 C2	Advocate for participation as a member of the Individual Family Service Plan/ Individual Education Plan, or care plan team, pending parental approval. K4.13 C3

Assessment

OBSERVATION, REPORTING AND DOCUMENTATION

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify ways in which teachers' observations of children's experiences are a foundational component of assessment and can be used to document growth and learning. K4.14 C1	Employ various forms of recording observational information such as anecdotal records, running records, checklists, video or audio recording and others to document children's growth and learning. K4.14 C2	Create strategies for recording observational information to understand and document children's growth and learning. K4.14 C3
Define ways to observe and record information that is free of bias and culturally and linguistically sensitive to recognize the abilities of all children. K4.15 C1	Use observation and recording techniques that are culturally and linguistically sensitive, reduce bias, and recognize the abilities of all children. K4.15 C2	Evaluate assessment techniques, and modify if necessary, to ensure cultural and linguistic sensitivity, reduction of bias, and recognition of the abilities of all children. K4.15 C3
Name artifacts that can be gathered to document children's growth and development in both informal and formal assessments. K4.16 C1	Implement informal and formal assessments, using a variety of artifacts, to monitor children's learning and development. K4.16 C2	Evaluate informal and formal assessments to determine the effectiveness of these tools in assessing children's learning and development. K4.16 C3
Define how portfolio assessment is one intentional process to document children's development and learning. K4.17 C1	Use portfolio assessment strategies to document children's development and learning. K4.17 C2	Evaluate portfolio artifacts to determine if changes in portfolio assessment practices are needed. K4.17 C3

COMPREHENSIVE ASSESSMENT SYSTEM

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Discuss with staff the various assessment methods that, when combined, make a comprehensive assessment system. D4.1 C1	Promote staff implementation of a variety of assessment methods to understand the depth of program operation. D4.1 C2	Interpret data from various assessments completed to analyze program implementation. D4.1 C3
Explain to staff ways in which information attained from assessment and observation results is used to make instructional, environmental and relational decisions and how they relate to continuous quality improvement. D4.2 C1	Provide instructional activities to assist staff in acquiring a working knowledge of formative, summative, benchmark and diagnostic assessments, including child observation practices to support informed curriculum development. D4.2 C2	Design and implement professional development for improving staff assessment skills and implementation of assessment procedures to improve program quality and professional practices. D4.2 C3
Relate to staff ethical practices for assessment and confidential management of information. D4.3 C1	Promote staff's ethical assessment practices and confidential management of information. D4.3 C2	Analyze the degree to which assessment information is used and managed in appropriate ways by program staff. D4.3 C3
Review with staff the results of environmental assessments checking for any identified needs in the instructional setting. D4.4 C1	Modify in collaboration with staff instructional settings within the program in response to the results of environmental assessments. D4.4 C2	Examine with staff the results of environmental assessments to consider programmatic changes such as scheduling, new equipment, etc. D4.4 C3

Assessment

ADMINISTRATOR / DIRECTOR

COMPREHENSIVE ASSESSMENT SYSTEM

COMPETENCY LEVEL 1

Arrange to hold regular staff evaluations, including staff self-reflection, supervisory discussions of strengths and areas for improvement and desired professional development.
D4.5 C1

Explain to staff the importance of programmatic assessment as part of the continuous quality improvement process.
D4.6 C1

COMPETENCY LEVEL 2

All of Level 1

Support staff in implementing the results of their staff evaluation to make changes to instructional techniques and to identify professional development goals.
D4.5 C2

Promote staff's participation in program assessment and the ongoing review of the developed goals to determine results.
D4.6 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Examine annually the results of individual staff evaluations to collaboratively develop long term and short term professional goals.
D4.5 C3

Assess the program's system for reviewing continuous quality improvement goals for progress and change that relates to the program assessment goals.
D4.6 C3

CHILD ASSESSMENT

COMPETENCY LEVEL 1

Express to staff and families the importance of conducting a variety of valid and reliable child assessments, their purposes, and their uses for obtaining information about children to make informed programmatic decisions in support of children's development.
D4C1.7

Define for staff authentic assessment and how it supports informed decisions about children's development and learning.
D4C1.8

Define for staff the components of quality assessment.*
D4.9 C1

Relate to staff the importance of using information from child assessments as a basis from which to plan children's environments and learning experiences.
D4.10 C1

Explain to staff the importance of the partnership with families in conducting and reviewing child assessment information and designing goals.
D4.11 C1

COMPETENCY LEVEL 2

All of Level 1

Support teaching staff in the use of appropriate methods of child assessment in line with PA Learning Standards and Standards Aligned Systems (SAS) and Pennsylvania required child assessment systems.
D4C2.7

Support staff understanding of the ways in which the environment, materials and activities work together to provide opportunities to gather authentic assessment information.
D4C2.8

Assist staff teams to work together to obtain assessment information about children's development and learning from multiple sources and dimensions.
D4.9 C2

Assist staff in utilizing child assessment data in curriculum planning with reference to the PA Learning Standards and the Standards Aligned System (SAS).
D4.10 C2

Promote ways to partner with families for effective and informed child assessment.
D4.11 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Create strategies to support staff use of formative, summative, benchmark and diagnostic assessments, including child observation, in making decisions about curriculum design and teaching strategies based on assessment data.
D4C3.7

Evaluate programmatic policies that support staff's use of authentic assessment techniques as part of their intentional teaching practice.
D4C3.8

Evaluate the program's policies that support staff processes for gathering assessment information from multiple sources and dimensions to monitor children's progress and to make informed instructional decisions.
D4.9 C3

Create a system to review staff curriculum development for consistent inclusion of data collected from child assessments and observations within the framework of the PA Learning Standards and the Standards Aligned System (SAS).
D4.10 C3

Design and implement strategies to build partnerships with families for effective child assessment.
D4.11 C3

Assessment

CHILD ASSESSMENT

COMPETENCY LEVEL 1

Explain to staff the importance of the partnership with families in conducting and reviewing child assessment information and designing goals.
D4.11 C1

Explain to staff the steps of screening and assessment for children's developmental delays and how this information is shared with other professional agencies and families.
D4.12 C1

Review with staff the agencies within the community with whom partnering will occur, to provide specialized services to families for supporting children's successful learning experiences.
D4.13 C1

COMPETENCY LEVEL 2

All of Level 1

Promote ways to partner with families for effective and informed child assessment.
D4.11 C2

Support staff in attaining required skills in using screening and assessment tools to collect data on children with possible developmental delays.
D4.12 C2

Support staff's participation as part of a team in the development, implementation, and monitoring of an Individual Family Service Plan/ Individual Education Plan, or care plan, for children with special needs, with the permission of the family.
D4.13 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Design and implement strategies to build partnerships with families for effective child assessment.
D4.11 C3

Evaluate program's processes for reviewing of child assessment data to recognize when further evaluation by another professional is indicated.
D4.12 C3

Evaluate community collaborations and partnerships to assure program's participation in Individual Family Service Plan/ Individual Education Plan development, implementation, and monitoring.
D4.13 C3

OBSERVATION, REPORTING, AND DOCUMENTATION

COMPETENCY LEVEL 1

Explain to staff the ways in which observational information is used to understand and document children's growth and learning.
D4.14 C1

Identify a variety of observation and recording techniques and choose methods that are culturally and linguistically sensitive, reduce bias, and recognize the abilities of all children.
D4.15 C1

List with staff a variety of artifacts that are used in both informal and formal assessments to document children's growth and development.
D4.16 C1

Identify for staff the elements of a portfolio and its benefits for documenting children's development and learning.
D4.17 C1

COMPETENCY LEVEL 2

All of Level 1

Support staff's methods for improving observational assessment procedures and for using observational assessment to modify and improve successful teaching strategies and professional practices.
D4.14 C2

Communicate to staff the importance of using observational assessment tools and practices that are free of cultural and stereotypical biases.
D4.15 C2

Interpret for staff the differences and uses of both informal and formal assessments and the artifacts that support both types.
D4.16 C2

Support staff's use of portfolio assessment strategies to document children's development and learning.
D4.17 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Evaluate policies and procedures that support staff's use of observation as a means of assessing children's growth and learning.
D4.14 C3

Evaluate all assessment tools to ensure that they are fair and free of cultural and stereotypical biases.
D4.15 C3

Assess program policies to ensure processes exist to include both informal and formal assessments as part of the child assessment strategy.
D4.16 C3

Evaluate staff's use of the portfolio as a means for documenting children's development and learning.
D4.17 C3

Knowledge Area 5

Communication

Rationale: Professionals' strong interpersonal communication skills and knowledge about ways in which children acquire language and literacy skills are critical ingredients in today's early childhood and school-age classrooms. Professionals must use effective communication strategies, including the use of digital media and literacy-rich environments, to cultivate their relationships with families, peers, and children and to support children's learning and interactions with others.

The adult working in the early childhood and school-age field will be able to:

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1

Define communication as a process in which verbal and non-verbal messages are sent and received to facilitate the development of positive relationships between and among staff, children, families and community members.
K5.1 C1

Define the elements that characterize effective verbal (including sign, picture exchange, assistive technology) and non-verbal (tactile, gestures, visual, assistive technology) communication.
K5.2 C1

Describe the ways in which communication styles and vocabulary must be adapted to meet the needs of the listener, based on culture, primary language and cognitive strengths and/or limitations.
K5.3 C1

Define the ways in which the environment (physical, temporal, human/nurturing) communicates positive messages of acceptance, warmth, and comfort to children, families, and professionals.
K5.4 C1

Describe the ways in which the development of vocabulary and reading skills impact children's successful communication skills.
K5.5 C1

COMPETENCY LEVEL 2

All of Level 1

Use communication as a process in which verbal and non-verbal messages are sent, received, processed and perceived as the basis for facilitating ongoing relationships between and among staff, children, families and community members.
K5.1 C2

Communicate effectively by using spoken and written language, sign, and/or assistive devices, as appropriate.
K5.2 C2

Adapt a communication style and vocabulary to meet the needs of the listener, based on culture, primary language and cognitive strengths and/or limitations.
K5.3 C2

Modify the environment to communicate positive messages of acceptance, warmth, and comfort to children, families, and professionals.
K5.4 C2

Provide daily experiences, using the PA Learning Standards as a guide, where children practice and develop vocabulary and reading skills.
K5.5 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Evaluate personal communication effectiveness with professionals, children, families and community members by formally and informally requesting feedback about the congruency between the messages sent and messages received.
K5.1 C3

Evaluate program communication effectiveness between and among professionals, children, families and community members by formally and informally requesting feedback about the congruency between the messages (spoken, written, sign, assistive devices) sent and messages received.
K5.2 C3

Analyze feedback data to determine developmental and cultural appropriateness of communication and adapt approaches to meet individual needs of each participant based on culture, primary language and cognitive strengths and/or limitations.
K5.3 C3

Design strategies for evaluating the environment to determine the degree to which the environment successfully communicates positive messages of acceptance, warmth, and comfort to children, families, and professionals.
K5.4 C3

Generate new classroom environments and daily experiences to expand opportunities for children to practice and develop vocabulary and reading skills.
K.5.5 C3

Communication

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Participate in discussions about creating experiences to meet children's communication needs by providing a communication-rich environment.* K5.6 C1	Implement experiences which provide children with varied opportunities to interact in a communication-rich environment.* K5.6 C2	Research new strategies to expand a communication-rich environment.* K5.6 C3
Describe how professionals can support communication that can be understood by each child through the use of verbal and non-verbal techniques that encourage children's expressive and receptive language.* K5.7 C1	Implement programs which support, extend and scaffold communication that is understood by each child through the use of verbal and non-verbal techniques that encourage children's expressive and receptive language.* K5.7 C2	Analyze communication components aimed at supporting, extending, and scaffolding communication to determine outcomes for each child in the program.* K5.7 C3
Describe environments that provide opportunities to support and extend children's communication skills.* K5.8 C1	Organize an environment that provides opportunities to support and extend children's communication skills.* K5.8 C2	Generate new ideas about quality environments which support and extend children's communication skills.* K5.8 C3
Define reasons for fostering reciprocal communication with colleagues and families to implement classroom goals that meet children's needs. K5.9 C1	Adopt a system of reciprocal communication with colleagues and families when developing or revising classroom goals to ensure children's needs are met. K5.9 C2	Identify new strategies to improve reciprocal communication within the classroom, among colleagues and families, to ensure children's needs are met. K5.9 C3
Summarize the variety of ways to communicate with children and adults.* K5.10 C1	Demonstrate the variety of ways to communicate with children and adults.* K5.10 C2	Design and organize experiences which support a variety of ways to communicate with children and adults.* K5.10 C3
Identify the adult factors/interactions that influence a child's development of good communication (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently). K5.11 C1	Communicate effectively with children (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently). K5.11 C2	Assess strategies and skills that employ effective communication practices with children (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently). K5.11 C3
Identify equipment, materials, and resources that support and extend children's communication skills. K5.12 C1	Select equipment, materials and resources that support and extend children's communication skills. K5.12 C2	Experiment with innovative ways to use equipment, materials, and resources that support and extend children's communication skills. K5.12 C3
Describe the purpose of Pennsylvania's diverse communication systems which provide professionals with data such as: Early Learning Network (ELN) system, the Standards Aligned System (SAS) portal, and the Pennsylvania Key website, and how it supports their work in the classroom. K5.13 C1	Navigate Pennsylvania's diverse systems of communicative technologies which provide professionals with data such as: Early Learning Network (ELN) system, the Standards Aligned System (SAS) portal, and the Pennsylvania Key website. K5.13 C2	Compile data acquired through Pennsylvania's diverse systems of communicative technologies and utilize this information to inform classroom practices. K5.13 C3
Describe ways in which varied digital media (phones, smartphones, computers, cameras, etc.) can be used to support children's communication skills. K5.14 C1	Use digital media in age-appropriate ways as part of a communication rich environment. K5.14 C2	Analyze digital media, applications, and activities to ensure they are age-appropriate and enriching for children. K5.14 C3

Communication

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe for staff the communication process, in which verbal and non-verbal messages are sent and received, to facilitate the development of positive relationships between and among staff, children, families, and community members. D5.1 C1	Demonstrate in program goals and professional practices a variety of responsive communication methods that support diversity among families, staff, children, schools, and communities, in which various communication styles are addressed. D5.1 C2	Design and implement an evidence-based framework for responsive internal and external communication with diverse families, staff, children, schools, and communities that addresses various communication styles, elaborates resources, recognizes barriers, uses current technology, and models cooperative communication for mediating challenging situations. D5.1 C3
Explain to staff the elements that characterize effective verbal (including sign, picture exchange, assistive technology) and non-verbal (tactile, gestures, visual, assistive technology) communication. D5.2 C1	Promote effectiveness of program communication between and among professionals, children, families, and community members. D5.2 C2	Evaluate the effectiveness of program communication by examining the sources of evidence and making modifications as indicated. D5.2 C3
Review with staff the ways in which communication styles and vocabulary must be adapted to meet the needs of the listener based on culture, primary language and cognitive strengths and/or limitations. D5.3 C1	Apply effective techniques and resources to communicate and negotiate across potential cultural and linguistic barriers (e.g. verbal and print messages, translations into primary family language, and signing and/or assistive devices as appropriate). D5.3 C2	Analyze program approaches with sensitivity to meeting the needs of diverse families including English Language Learners, families with low socio-economic opportunities, families from various cultures, families leading alternative lifestyles, and families who have ability differences, to refine, modify, and improve communication. D5.3 C3
Recognize the ways in which the environment (physical, temporal, human/nurturing) communicates positive messages of acceptance, warmth, and comfort to children, families, and professionals. D5.4 C1	Model the ways in which the environment (physical, temporal, human/nurturing) communicates positive messages of acceptance, warmth, and comfort to children, families, and professionals. D5.4 C2	Assess, in collaboration with staff, children, and families, the extent to which environments convey positive messages of acceptance, warmth and comfort. D5.4 C3
Outline with staff the ways in which the development of vocabulary and reading skills impact children's success in written and oral communication. D5.5 C1	Provide developmentally appropriate materials to support vocabulary and reading skill development in children. D5.5 C2	Evaluate staff knowledge and implementation of activities/materials, which are supported by the PA Learning Standards, and promote vocabulary and reading skill development in children. D5.5 C3
Define for staff the ways in which programs create varied experiences which provide children opportunities to interact in a communication rich environment.* D5.6 C1	Develop, in collaboration with staff, experiences which provide children with varied experiences to interact in a rich communication environment.* D.5.6 C2	Evaluate the ability of staff to design communication-rich environments that support children's language and literacy skills development.* D5.6 C3
State for staff the value of supporting communication that can be understood by each child through the use of verbal and non-verbal techniques that encourage children's expressive and receptive language. D5.7 C1	Prepare with staff input programs which support, extend and scaffold communication that is understood by each child through the use of verbal and non-verbal techniques that encourage children's expressive and receptive language. D5.7 C2	Examine the ability of staff to use communication that is understood by each child through the use of verbal and non-verbal techniques that encourage children's expressive and receptive language. D5.7 C3

Communication

COMPETENCY LEVEL 1

Point out for staff environments that provide opportunities to support and extend children's communication skills.*
D5.8 C1

Describe program practices that provide opportunities for colleagues and families to communicate information about children's abilities, interests, and needs.
D5. .9 C1

Outline for staff the variety of communication strategies that can be used with children and adults.*
D5.10 C1

Explain to staff and families the adult factors/ interactions that influence a child's development of good c ommunication (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently).
D5.11 C1

List needed equipment, materials, and resources that support and extend children's communication skills.
D5.12 C 1

Select classroom data using the diverse professional internet-based communication systems to inform program policies and classroom practices.
D5.13 C1

Discuss with staff and families ways to use digital media to support children's communication skills.
D5.14 C1

COMPETENCY LEVEL 2

All of Level 1

Promote ways for staff to provide increased supports within the environment that generate individualized plans that promote the development of children's communication skills.*
D5.8 C2

Communicate and document the importance of regular collaborative discussions and decision-making among staff and families.
D5.9 C2

Demonstrate for staff the variety of communication strategies that can be used with children and adults.*
D5.10 C2

Demonstrate for staff and families the adult factors/ interactions that influence a child's development of good communication (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently).
D5.11 C2

Provide equipment, materials, and resources that support and extend children's communication skills.
D5.12 C2

Research various program communication methods and compare information on the functionality, patterns, opportunities, and barriers of the methods used to improve data collection within the program.
D5.13 C2

Provide the appropriate professional development around varied digital media to support children's communication skills.
D5.14 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Design with staff quality environments that provide opportunities to support and extend children's communication skills.*
D5.8 C3

Develop a framework that provides opportunities for open communication, team discussion, and decision-making with colleagues and families.
D5.9 C3

Evaluate, through classroom observations, the effectiveness of staff skills and strategies using instructional supports that support the use of a variety of communication strategies.*
D5.10 C3

Assess the staffs' interactions with children that demonstrate effective communication practices with children (e.g., listen attentively and sensitively respond, speak and write clearly, and read fluently).
D5.11 C3

Generate a list of additional equipment, materials, and resources needed that promote and extend children's communication skills to support the continuous quality improvement process.
D5.12 C3

Assess program and staff technological abilities to access and use the diverse professional internet-based communication systems and support continuous improvements to program and staff capabilities.
D5.13 C3

Research various age appropriate digital media options and work with staff to prioritize what technology should be available within the program.
D5.14 C3

Knowledge Area 6

Professionalism and Leadership

Rationale: Today's early childhood and school-age professionals must demonstrate a commitment to the profession that extends beyond the learning environment in which they work. In addition to the provision of ethical and high quality learning experiences for children, a pledge to lifelong learning and advocacy for the children and families they serve assures the field its very reputation of an essential societal profession.

The adult working in the early childhood and school-age field will be able to:

PROFESSIONALISM

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1

Define the dispositions for working in the early childhood field (birth to grade 4).*
K6.1 C1

List the variety of roles professionals assume in the early childhood field.*
K6.2 C1

Engage in supportive working relationships with colleagues and peers.
K6.3 C1

Name the ways in which early childhood professionals can engage in formal and informal self-assessment opportunities to strengthen professional growth and to establish long-term and short-term professional development goals.
K6.4 C1

Participate, as a lifelong learner, in opportunities for professional development and growth at the local, state, and national level through a variety of means.
K6.5 C1

COMPETENCY LEVEL 2

All of Level 1

Compare the early childhood profession (birth to grade 4) with other professions.*
K6.1 C2

Execute effectively the multiple roles that early childhood professionals assume.*
K6.2 C2

Utilize a team approach to support children's successful growth and development and families' satisfaction.
K6.3 C2

Demonstrate knowledge and use of self-assessment tools to enhance skills and dispositions and refine professional practices (including self- reflection, portfolios, professional development records, journaling, and others).
K6.4 C2

Engage in continual professional development relative to early childhood education and school-age programs to inform and enhance practice.
K6.5 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Advocate for the early childhood field (birth to grade 4) as a distinct profession, which embodies ethical/professional interactions and codes of conduct.*
K6.1 C3

Assess professional growth in the variety of roles assumed by early childhood professionals and how this contributes to career planning.*
K6.2 C3

Analyze the collaborative approach to ensure child, staff, and family satisfaction in the delivery of services.
K6.3 C3

Plan for continuous self-assessment and self-development based on strengths and challenges in the professional role of a lifelong learner.
K6.4 C3

Synthesize information and participate in interdisciplinary collaboration, including engagement with a variety of professionals and organizations involved in early childhood education and school-age programs, to share new ideas and perspectives.
K6.5 C3

Professionalism and Leadership

ETHICS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify the relevant professional codes, standards, regulations, guidelines, position statements, evidence-based practices and state and federal regulatory processes that support the early childhood field. K6.6 C1	Demonstrate high standards of competence and integrity, and exercise sound judgment in the practice of the profession, by internalizing the codes of conduct and using professional codes, standards, guidelines and regulatory processes. K6.6 C2	Analyze data and reflect upon the relevant professional codes, guidelines, standards, and regulatory processes which govern your professional role to plan for continuous program improvement, including the review of current research and policy relevant to child and youth development. K6.6 C3
Define cultural competence in educational programming in the context of standards, guidelines and codes of ethics to improve learning outcomes for children. K6.7 C1	Engage in cross cultural collaboration across disciplines and settings in an ethical manner to improve learning outcomes for children. K6.7 C2	Transmit cross cultural knowledge, skills and dispositions in ethical, collaborative ways through modeling, motivating and mentoring in order to analyze the effect that knowledge transmission has on learning outcomes for children. K6.7 C3
Define the steps for action research within the classroom to address a classroom challenge or support continuous quality improvement (CQI) efforts.* K6.8 C1	Engage in action research to address a classroom challenge or support continuous quality improvement (CQI) efforts.* K6.8 C2	Evaluate how action research within the classroom supports professional problem solving for challenging issues through strategic action planning steps.* K6.8 C3

ADVOCACY AND LEADERSHIP

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
List and describe leadership styles, skills, competencies, and dispositions that an early learning or school-age administrator/director/teacher may possess.* K6.9 C1	Demonstrate knowledge of the skills, styles, dispositions, and competencies that an effective leader uses to supports an early learning or school-age program.* K6.9 C2	Reflect and assess growth in leadership skills, styles, dispositions, and competencies and continue to seek professional develop opportunities to expand upon these to support continuous quality improvement within your program.* K6.9 C3
Define the role of the early childhood professional as an advocate that identifies central policy issues in the field and promotes support for early childhood education. K6.10 C1	Participate in informed and ethical advocacy activities in the community and professionally that: • Articulate well-developed perspectives on the challenges facing the early childhood profession including the impact of public policy • Advocate for sound educational practices and policies • Advocate for appropriate services and funding K6.10 C2	Synthesize multiple sources of knowledge and multiple perspectives to engage in ethical advocacy to ensure best practices to meet the needs of young children. K6.10 C3
Recognize the early childhood profession as a distinct discipline with a mission, history, values, knowledge base, code of ethics, and standards and guidelines for programs, children and professionals. K6.11 C1	Use information about the early childhood profession as a distinct discipline to provide information to families, schools, and to the community. K6.11 C2	Advocate for the early childhood field (birth to grade 4) as a distinct research based discipline that is standards based and supports young children's success in school and life. K6.11 C3
Define mentoring and coaching, the differences between them, and how they are used. K6.12 C1	Utilize mentoring or coaching strategies with co-workers to support their continuous quality improvement within the program. K6.12 C2	Create a classroom environment that utilizes skills and knowledge gained from a mentor/coach and supports best practice and meets the needs of all children and families. K6.12 C3

Professionalism and Leadership

ADMINISTRATOR / DIRECTOR

PROFESSIONALISM

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Share written program policies using NAEYC's Code of Ethical Conduct as a reference to outline expectations for all program staff, modeling ethical behavior at all times.* D6.1 C1	Demonstrate ethical/professional behavior, set standards and expectations for staff and families and act as role model.* D6.1 C2	Create a system of documentation of expectations and periodic staff performance evaluations, in which to inform all staff of the specific requirements in professional behavior and skills.* D6.1 C3
Identify with staff the various teaching-learning skills that are assumed by early childhood professionals and the types of professional development or career options that support each of those roles. D6.2 C1	Discuss with the staff the different teaching-learning skills, roles and strategies that professionals assume and the needed, related professional development. D6.2 C2	Evaluate program staff current teaching-learning skills, roles, and strategies and cooperatively design ways to support their professional development, extend their learning and enhance their teaching-learning effectiveness to support their career development. D6.2 C3
Recognize the importance of utilizing a team approach to support children's successful growth and development and families' satisfaction. D6.3 C1	Apply multiple strategies to promote professionalism among staff, including participatory management style that values knowledge and experience of all staff members. D6C2.3	Create and maintain a professional, inclusive, collaborative, and trusting environment in the workplace. D6C3.3
Define the importance of developing knowledge and the use of self-assessment tools to enhance skills and dispositions, for refining professional practices (including self-reflection, portfolios, professional development records, journaling, and others). D6.C1.4	Apply organizational theory and use the appropriate leadership style to lead staff through the processes of program evaluation, quality improvement, and professional development. D6.4 C2	Prioritize and plan for continuous quality improvement through consistent program evaluation and ongoing professional development chosen in collaboration with staff, in support of the Professional Development plan. D6.4 C3
Identify to staff and families the benefits of continual professional development relative to early childhood education and school-age programs to inform and enhance practice. D6.5 C1	Apply knowledge of credentialing, teacher certification, and induction when mentoring and advising program staff on their professional growth and development. D6.5 C2	Justify staff use of the PA Professional Development Record, referencing the Career Lattice, to advance professional development. D6.5 C3

ETHICS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Outline for staff and families the high standards of competence and integrity, and exercise sound judgment in the practice of the profession by internalizing the codes of conduct and using professional codes, standards, guidelines, and regulatory processes. D6.6 C1	Use available local, state and national resources that establish regulatory and professional standards for quality programs. D6.6 C2	Evaluate for consistency in maintaining all regulatory and professional standards to provide a quality program. D6.6 C3

Professionalism and Leadership

ETHICS

COMPETENCY LEVEL 1

Support staff as they engage in cross-cultural collaboration, across disciplines and settings in an ethical manner, to improve learning outcomes for children.
D6.7 C1

Provide professional development opportunities for staff to gain knowledge and experience in conducting an action research project.*
D6.8 C1

COMPETENCY LEVEL 2

All of Level 1

Collect and review research-based articles that demonstrate for staff and families how to transmit cross-cultural knowledge, skills, and dispositions in ethical, collaborative ways.
D6.7 C2

Demonstrate the ability to design and use action research that can be used to improve individual or program quality, inform practice, remediate problems, and discover solutions for challenging situations and/or continuous quality improvement (CQI) efforts.*
D6.8 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Analyze the effectiveness of the cultural collaboration within your program and make quality improvements when necessary, with the input of staff, children, families, and the community.
D6.7 C3

Assess if additional inquiry steps should be implemented within program policies and/or practices to continue improvements made to program quality and solutions offered in areas of need, as depicted through the results of the action research project.*
D6.8 C3

ADVOCACY AND LEADERSHIP

COMPETENCY LEVEL 1

Model for staff ways to reflect and assess growth in leadership skills, styles, dispositions, and competencies while continuing to seek professional develop opportunities to expand upon these in support of continuous quality improvement within your program.*
D6.9 C1

Outline for staff and families the role of the early childhood professional as an advocate that identifies central policy issues in the field and promotes support for early childhood education.
D6.10 C1

Describe a vision and mission for a high quality program for children and families.
D6.11 C1

Select appropriate staff to develop as mentors/coaches within your program to support staffs' continuous quality improvement within the program.
D6.12 C1

COMPETENCY LEVEL 2

All of Level 1

Practice self-reflection skills continuously to seek professional growth and high standards in personal values, skills, and leadership styles.*
D6.9 C2

Communicate support in a variety of ways for the children and families being served, as well as the early childhood community at large.
D6.10 C2

Communicate and document the program's goals that advocate for children, families, staff, and board members.
D6.11 C2

Assign mentors/coaches as appropriate to support staffs' continuous quality improvement within the program.
D6.12 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Evaluate personal values, skills, and leadership styles and reflect upon how these traits need to be developed to meet the changing needs of your program.*
D6.9 C3

Create a program environment that advocates for children, families, and the early childhood community to appropriate stakeholders and decision makers.
D6.10 C3

Design with stakeholders and support staff and implement the program vision and mission through interpretation and communication of the program's philosophy to advocate for children, families, staff, and board (if applicable) to meet strategic goals.
D6.11 C3

Evaluate the effectiveness of mentoring and coaching strategies occurring within the program and identify additional areas of support required.
D6.12 C3

Knowledge Area 7

Health, Safety and Nutrition

Rationale: Children's healthy and safe experiences in the early years are the foundation for their successful growth and learning. Early childhood and school-age professionals must work in partnership with children's families and be knowledgeable about their community to ensure that children's and nutritional needs are met so that they are able to develop socially, emotionally, cognitively, and physically. Children must feel safe in their learning environments and professionals must adhere to relevant regulations and recommended practices in the context of families' cultural traditions and children's special needs.

The adult working in the early childhood and school-age field will be able to:

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Identify the sources of health, safety, and nutrition standards and regulations that apply to the early childhood or school-age program.* K7.1 C1	Demonstrate a consistency in following required health, safety, and nutrition practices in compliance with applicable mandates and standards.* K7.1 C2	Evaluate the current practices for effectiveness and compliance with applicable health, safety, and nutrition mandates and standards through instituting corrective actions in areas of need and consulting outside experts as needed or required.* K7.1 C3
HEALTH		
Describe the recommended sanitation practices that reduce the spread of germs. K7.2 C1	Incorporate into daily routines the prescribed sanitation practices related to the reduction of the spread of disease. K7.2 C2	Evaluate current sanitation practices within your classroom for effectiveness in minimizing transmission of disease and make modifications as needed. K7.2 C3
Name essential health habits and fitness activities for children that are individually, age, and ability appropriate.* K7.3 C1	Incorporate and model health and fitness activities as part of the daily routine. K7.3 C2	Evaluate implementation of health and fitness activities as part of the daily curriculum, and develop a plan for expanding activities based on current best practices. K7.3 C3
Describe ways to ensure children's healthy participation in daily activities, including daily health checks and review of their records. K7.4 C1	Reviews ways that children are assessed to ensure they are healthy and able to participate in daily activities and routines. K7.4 C2	Assess policies and procedures that ensure children's healthy participation in the life of the program.* K7.4 C3
List health care prevention practices and discuss accepted measures for managing acute and chronic illnesses in children.* K7.5 C1	Demonstrate the use of preventive practices and management of acute and chronic illnesses in children.* K7.5 C2	Evaluate policies for the development and implementation of individualized plans that meet the health-related needs of children, in cooperation with families and external authorities.* K7.5 C3
Identify and describe all elements that should be contained in children's health records. K7.6 C1	Maintain health records that are complete and current with all required elements. K7.6 C2	Analyze and recommend modifications to the processes and policies used to maintain complete and current health care information on children and staff. K7.6 C3

Health, Safety and Nutrition

SAFETY

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe the critical role the professional plays in the supervision of children and list ways to supervise children at all times, including procedures for release of children. K7.7 C1	Demonstrate appropriate supervision procedures and policies at all times. K7.7 C2	Assess child supervision practices and make changes as needed and required to protect children and minimize risk. K7.7 C3
Identify and report health and safety hazards in the program environment, in line with reporting procedures. K7.8 C1	Use knowledge of health and safety standards and practices to reduce hazards in the program's indoor and outdoor environments. K7.8 C2	Analyze observational data and incident reports on the program environment; take corrective action through health and safety adaptations and modifications. K7.8 C3
Define the elements of an emergency preparedness plan and emergency drills. K7.9 C1	Participate in emergency drills regularly, according to the emergency preparedness plan. K7.9 C2	Evaluate the implementation of the emergency preparedness plan to determine if the process used is feasible and appropriate for evacuation of all children. K7.9 C3
Identify the signs and symptoms of child abuse and neglect. K7.10 C1	Interpret the differences between physical, sexual, and emotional abuse and neglect. K7.10 C2	Assess the ability of colleagues to recognize the signs and symptoms of child abuse and neglect. K7.10 C3
Name and adhere to the laws and responsibilities associated with being a mandated reporter for suspected child abuse and neglect. K7.11 C1	Relate the challenges associated with being a mandated reporter for suspected child abuse and neglect. K7.11 C2	Develop strategies to effectively report suspected child abuse and neglect, in compliance with mandated reporting requirements. K7.11 C3

NUTRITION

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe the dietary needs associated with age-related development and ways to accommodate children's and families' special needs and preferences. K7.12 C1	Provide input to ensure the provision of nutritious meals that meet required guidelines and accommodate children's and families' special needs and preferences. K7.12 C2	Evaluate meal plans and menus to ensure that they meet guidelines for sound nutrition, including special dietary concerns. K7.12 C3
Describe ways to provide safe, healthy, and enjoyable feeding and mealtime experiences. K7.13 C1	Demonstrate safe, healthy, and enjoyable feeding and mealtime experiences. K7.13 C2	Develop with family's ways to incorporate their mealtime practices into family-style eating policies. K7.13 C3
Explain the importance of using safe food handling procedures at all times. K7.14 C1	Practice safe food handling procedures at all times. K7.14 C2	Review national and state research on best practices to keep nutrition and safe food handling policies current. K7.14 C3

Health, Safety and Nutrition

ADMINISTRATOR / DIRECTOR

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Review regularly with staff the health, safety and nutrition standards and regulations that apply to the early childhood or school-age program.* D7.1 C1	Implement an evidenced-based framework to ensure compliance with current health, safety, and nutrition standards.* D7.1 C2	Create an infrastructure focused on continuous quality improvement that utilizes the expertise and resources of the community, including health specialists.* D7.1 C3
HEALTH		
Identify recommended sanitation practices being used in the program that reduce the spread of germs. D7.2 C1	Demonstrate to staff the recommended sanitation practices that reduce the spread of germs. D7.2 C2	Monitor current sanitation practices of staff for effectiveness in minimizing transmission of disease and make modifications as needed. D7.2 C3
Discuss with staff, children and families, the importance of incorporating health and fitness activities into the daily routine of the early learning program. D7.3 C1	Modify program policies and practices to ensure compliance with local, state, and national health/safety standards, and include age-appropriate health and fitness activities in curriculum. D7.3 C2	Develop, implement and assess program policies to ensure compliance with local, state, and national health/safety standards, and incorporate health and fitness activities in daily curriculum for every child. D7.3 C3
Share with staff best practices that ensure children's healthy participation in daily activities, including daily health checks and review of their records. D7.4 C1	Communicate and document effective and research-based health and safety practices to be implemented within your program, which reflect current DPW certification regulations, as well as Caring for Our Children and American Academy of Pediatric policies. D7.4 C2	Assess current practices for effectiveness and conformity with national health and safety standards for early learning and school-age programs and institute corrective actions where needed, including determining the need for obtaining, and using the help of outside expertise.* D7.4 C3
State program practices and policies that support the management of health related issues of children.* D7.5 C1	Use community health resources to benefit children, families, staff and the program.* D7.5 C2	Develop a plan to infuse community health resource information into various areas of the program to deepen knowledge and more fully support children, families, and staff needs.* D7.5 C3
Explain to staff the importance of maintaining health records that are complete and current with all required elements. D7.6 C1	Develop and implement procedures to ensure appropriate exchanges and maintenance of staff and child health information. D7.6 C2	Assess and modify procedures collaboratively with staff to ensure appropriate exchanges and maintenance of staff and child health information. D7.6 C3

Health, Safety and Nutrition

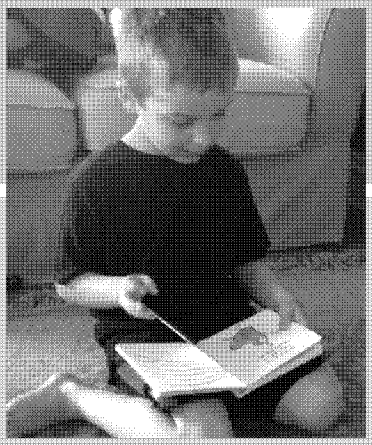
SAFETY

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Point out the critical role the professional plays in the supervision of children and list ways to supervise children at all times, including procedures for release of children. D7.7 C1	Model for staff appropriate supervision procedures and policies. D7.7 C2	Design systems to ensure that appropriate child supervision is occurring in all areas of the program. D7.7 C3
Use knowledge of health and safety standards and practices to adequately train staff on the importance of reducing hazards in the program environment. D7.8 C1	Implement program policies to promote safety practices in monitoring indoor and outdoor environments for health and safety hazards. D7.8 C2	Evaluate policies and procedures for continuous monitoring of the environment, both indoor and outdoor, for health and safety hazards. D7.8 C3
Discuss and review regularly the effectiveness of the current emergency plan for the program. D7.9 C1	Schedule and hold emergency drills on a regular basis according to the emergency preparedness plan and DPW certification regulations. D7.9 C2	Examine periodically program implementation of the emergency preparedness plan to determine if the process used is feasible and appropriate for evacuation of all children. D7.9 C3
Review with staff regularly the signs and symptoms of child abuse and neglect. D7.10 C1	Promote to staff and families the importance of knowing the signs and symptoms of child abuse and neglect. D7.10 C2	Assess the ability of staff to recognize the signs and symptoms of child abuse and neglect. D7.10 C3
Identify the laws and responsibilities associated with being a mandated reporter for suspected child abuse and neglect. D7.11 C1	Communicate and document in staff and parent policy handbooks the laws and responsibilities associated with being a mandated reporter for suspected child abuse and neglect. D7.11 C2	Comply fully with the laws and responsibilities associated with being a mandated reporter for suspected child abuse and neglect. D7.11 C3

NUTRITION

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Explain to staff and families the dietary needs associated with age-related development and discuss ways to accommodate children's special nutritional needs and families' preferences. D7.12 C1	Implement, with staff and family input, program menu and food policies that ensure nutritional value of snacks and meals, that are inclusive of children's special nutritional needs and family preferences. D7.12 C2	Evaluate program menu and food policies to ensure nutritional value of snacks and meals, and are inclusive of children's special nutritional needs and family preferences. D7.12 C3
Share with staff and families ways to provide safe, healthy and enjoyable feeding and mealtime experiences. D7.13 C1	Implement program policies and classroom practices that incorporate safe, healthy and enjoyable feeding and mealtime experiences. D7.13 C2	Revise as necessary program policies and classroom practices that incorporate safe, healthy, and enjoyable feeding and mealtime experiences. D7.13 C3
Recognize the importance of using safe food handling procedures and support staff in their implementation of the procedures. D7.14 C1	Provide to staff instructional resources, materials, and guidelines on safe food handling procedures. D7.14 C2	Design program policies and procedures that promote safe food handling practices, based on current national and state research. D7.14 C3

Program Organization and Administration



Rationale: Successful early childhood and school-age programs are those with forward-thinking leaders who design and manage systems that foster a positive organizational climate that supports staff, children, and families. Skilled administrators/directors adopt a continuous quality improvement philosophy that utilizes data, current research, and best practice to provide responsive services for the children and families in their care.

The adult working in the early childhood and school-age field will be able to:

PROGRAM ORGANIZATION AND ADMINISTRATION

EARLY CHILDHOOD & SCHOOL-AGE PROFESSIONALS

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Discuss and outline the elements of vision, mission, and strategic plan.* K8.1 C1	Relate how the program's vision, mission, and strategic plan support your daily work in the program.* K8.1 C2	Evaluate the extent to which your knowledge of the program's vision, mission, and strategic plan align with your work in the program and make recommendations to the program administrator when there is a disconnect.* K8.1 C3
Define and outline the elements and purpose behind a business plan. K8.2 C1	Interpret how your program's current business plan impacts staff policies, procedures, and decisions made. K8.2 C2	Evaluate how effectively the program's business plan supports and provides guidance to program staff. K8.2. C3
Define and outline the elements and purpose behind a risk management plan.* K8.3 C1	Interpret how your program's current risk management plan impacts staff policies, procedures, and decisions made. * K8.3 C2	Evaluate how effectively the program's risk management plan supports and provides guidance to program staff. * K8.3 C3
Name two or more financial tools that support your program's policies and practices. The list may include, but is not limited to: • Budget (revenue and expenditures) • Audits • Monthly bank statements • Investment reports K8.4 C1	Demonstrate how your program's selection of financial tools supports policies and practices. K8.4 C2	Differentiate which program policies and procedures are supported by sound financial tools and practices, and share with program administrator. K8.4 C3
Describe the elements of a basic budget: • Budget categories • Line Item K8.5 C1	Interpret how your program's budget impacts classroom decisions on materials selected and/or purchased for a classroom. K8.5 C2	Propose classroom needs/wants based upon knowledge of the budget to make the best use of program resources. K8.5 C3

Program Organization and Administration

PROGRAM ORGANIZATION AND ADMINISTRATION

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
List components of a book keeping system (revenue and expenditures) and its purpose.* K8.6 C1	Illustrate how revenue and expenditures impact programmatic and classroom purchasing decisions. K8.6 C2	Adjust/revise classroom material and resource requests based upon an awareness of available funds, with the support of the program administrator. K8.6 C3
Describe the basic components in a financial plan. K8.7 C1	Illustrate how a financial plan impacts programmatic and classroom purchasing decisions. K8.7 C2	Propose classroom or programmatic needs/wants based upon knowledge of the financial plan to make the best use of program resources. K8.7 C3
Describe policy and procedure documents that are used in early learning or school-age programs.* K8.8 C1	Implement and support family and staff policies and procedures to support consistency within your program.* K8.8 C2	Examine current staff and family policies and procedures and propose changes as necessary.* K8.8 C3

PERSONNEL

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Name and explain types of employment status and labor laws that guide hiring and employment practices.* K8.9 C1	Practice your program's employment policies to ensure that state and national wage and labor laws are being followed.* K8.9 C2	Evaluate where incompliance may exist with state and national wage and labor laws.* K8.9 C3
State the components of an employee handbook and how it supports positive communication within the agency.* K8.10 C1	Employ your knowledge of employee policies so that there is consistency and understanding of rules and regulations among staff and families.* K8.10 C2	Examine and propose changes to employee policies where necessary to improve communication among staff/ administration and families, and to maintain compliance with state, local, and national requirements.* K8.10 C3
Name the various local, state and national laws and regulations that govern employment practices, ADA, Labor (Wage and Hour Laws), anti-discrimination, and harassment laws. K8.11 C1	Interpret the importance of various local, state and national laws and regulations that govern employment practices and apply them to daily work situations. K8.11 C2	Evaluate the extent to which your program is in compliance with local, state, and national laws and regulations as they relate to job descriptions, staff policies, and performance review procedures. K8.11 C3
Relate the role that performance reviews play in support of quality improvement within programs: • Curriculum aligns with ELS and best practice resources. • Professionalism with staff, children, and families. • Compliance with health and safety regulations. • Competency self-assessment. K8.12 C1	Perform daily job roles that align with performance review criteria: • Curriculum aligns with ELS and best practice resources. • Professionalism with staff, children, and families. • Compliance with health and safety regulations. • Competency self-assessment. K8.12 C2	Generate evaluations on staff supervised and self-assessment of own job performance based upon job descriptions, program policies, and work cooperatively with administration to develop individual CQI plans using the core competencies. K8.12 C3

Program Organization and Administration

PERSONNEL

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe the components of PA's professional development system, the benefits of the online professional development calendar, and how it supports a professional's educational plan and goals. K8.13 C1	Choose professional development opportunities that support individual and program needs checking regularly for professional development updates on the online professional development calendar. K8.13 C2	Assess one's professional development and staff supervised to ensure that staff is in line with program and individual needs. K8.13 C3
Recognize the relevance and purpose of staff meetings and a community of practice framework and how they support communication of program priorities. K8.14 C1	Participate in staff meetings to support program priorities and promote positive group dynamics and a community of practice K8.14 C2	Plan collaboratively with administration in development of staff meetings to support a community of practice. K8.14 C3

TECHNOLOGY AND MARKETING

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe the elements and value of reciprocal communication. K8.15 C1	Support reciprocal communication among co-workers and administration in sharing new program ideas, new professional development offerings, and other resources that may be available for continuous quality improvement of individual and program practices and policies. K8.15 C2	Assess and share with administration the effectiveness of the communication network to enhance program quality. K8.15 C3
Recognize various key data management and technology components that are utilized in early learning and school-age programs in PA.* K8.16 C1	Use the various data management and technology components required or recommended for child outcomes reporting in your classroom to support best practices in curriculum development.* K8.16 C2	Analyze child and program data within your classroom to develop and implement continuous quality improvement plans that support best practices within the classroom.* K8.16 C3
List and describe the elements of your program's marketing plan that aligns with the program's mission statement and philosophy.* K8.17 C1	Prepare a sample marketing plan that represents your classroom's strengths and uniqueness within the program/ community.* K8.17 C2	Compare marketing plans of various programs within your community and share analysis with administration.* K8.17 C3

Program Organization and Administration

PROGRAM ORGANIZATION AND ADMINISTRATION

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Discuss and outline the elements of various vision, mission and strategic plans and how each supports programmatic goals.* D8.1 C1	Categorize program operations based on the program's vision, mission, and strategic plan. D8.1 C2	Evaluate program operations based on current program vision, mission, and strategic plan, and make revisions as needed to reflect changes made. D8.1 C3
Describe the purpose of a business plan and how it guides programmatic decisions.* D8.2 C1	Write a program business plan based upon the support and/or approval of any of the following stakeholders: staff, families, program boards, community groups, regulatory agencies, or other groups that may have a say in the decision-making process and outcome. D8.2 C2	Evaluate the business plan's effectiveness in making decisions critical to program operations and continuous quality improvement of program and make changes as required. D8.2 C3
Identify the purpose and components of a risk management plan and describe how it can be utilized in programs.* D8.3 C1	Implement risk management policies and procedures that meet compliance with required guidelines and communicate/document for staff and families. D8.3 C2	Evaluate and revise (as necessary) risk management policies and procedures in compliance with required guidelines. D8.3 C3
List various financial concepts and tools that support development of policy and practices. D8.4 C1	Research financial concepts and tools and decide which ones to utilize within your program. D8.4 C2	Create a financial plan and budget using sound concepts and tools. D8.4 C3
Describe the basic components of an annual operating budget and how it impacts day-to-day operations. D8.5 C1	Write and implement a balanced annual program budget based on needs and resources, communicating to staff ways to conserve and make good use of resources. D8.5 C2	Analyze and monitor an annual program budget based on needs and resources and adjust accordingly to ensure a balance between revenue and expenses. D8.5 C3
Outline financial record and book keeping systems and explain their purpose in documenting business income and expenses. D8.6 C1	Implement appropriate methods for accurate monitoring of income and expenses.* D8.6 C2	Evaluate the methods used and revise record and book keeping systems to ensure accurate financial reporting. D8.6 C3
Identify the elements of a financial plan and its connection to informed decision making. D8.7 C1	Write a financial plan based upon needs and resources to support programmatic goals. D8.7 C2	Review and assess the goals of a financial plan to ensure it relates to the current economic and fiscal climate of the program. D8.7 C3
Describe policy and procedure documents that may be used in early learning or school-age programs.* D8.8 C1	Research and communicate to stakeholders the documents within the organization that state required or suggested policies and procedures that are compliant with local/state/national standards and best practices.* D8.8 C2	Evaluate and modify policy and procedure documents that are compliant with local/ state/national standards, and best practices.* D8.8 C3

Program Organization and Administration

ADMINISTRATOR / DIRECTOR

PERSONNEL

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Name and explain types of employment status and labor laws that guide hiring and employment practices.* D8.9 C1	Implement and follow employment policies that reflect standard labor and employment laws.* D8.9 C2	Examine program policies and pursue professional development opportunities to maintain current and accurate knowledge of labor/employment laws and adjust policies as required.* D8.9 C3
State the components of an employee handbook and how it supports positive administrator/staff communication.* D8.10 C1	Develop and implement an employee handbook.* D8.10 C2	Evaluate and update employee handbook to maintain accuracy and compliance with local/state/national requirements and best practices.* D8.10 C3
List possible strategies that support the hiring, developing, motivating, and retaining of staff within programs that are in compliance with applicable state and federal hiring/labor laws, anti-discrimination laws, tax codes, contracts liability, and ADA. D8.11 C1	Employ multiple strategies for staff hiring, developing, motivating, retaining, and appropriate separation that are in compliance with applicable state and federal hiring/labor laws, anti-discrimination laws, tax codes, contracts liability, and ADA. D8.11 C2	Develop, review, and revise job descriptions, staff policies, and performance review procedures as necessary. D8.11 C3
Outline ways performance reviews support quality improvement within programs. D8.12 C1	Communicate and implement with staff the criteria upon which staff performance reviews are based, and include the requirement of having a completed, current Individual Professional Development plan based on the core competencies. D8.12 C2	Supervise, evaluate, and share staff performance based on job descriptions, staff/program policies, Teacher Effectiveness Rubrics, and cooperatively create individual continuous quality improvement plans using the core competencies. D8.12 C3
Describe the components of PA's professional development system, the benefits of the online professional development calendar, and how it supports a professional's educational plan and goals. D8.13 C1	Promote staff professional development that supports individual and program needs, checking regularly for professional development updates on the online calendar. D8.13 C2	Monitor, assess, and facilitate the professional development of staff in line with program and individual needs. D8.13 C3
Recognize the relevance and purpose of staff meetings and how they support communication of program priorities. D8.14 C1	Convene and facilitate staff meetings to support program priorities and promote positive group dynamics. D8.14 C2	Develop a Community of Practice strategy to collaboratively review with staff program priorities as stated in program vision, mission and strategic plan, modifying as a group program vision, mission, and strategic plan as needed. D8.14 C3

TECHNOLOGY AND MARKETING

COMPETENCY LEVEL 1	COMPETENCY LEVEL 2 **All of Level 1**	COMPETENCY LEVEL 3 **All of Level 1 & Level 2**
Describe the elements and value of reciprocal communication. D8.15 C1	Support reciprocal communication among staff in sharing new program ideas, new professional development offerings and other resources that may be available for continuous quality improvement of individual and program practices and policies.* D8.15 C2	Create systemic network among program staff for sharing and responding to professional development information, suggestions for continuous quality improvement, and other resources to enhance program quality. D8.15 C3

Program Organization and Administration

TECHNOLOGY AND MARKETING

COMPETENCY LEVEL 1

Recognize various key data management and technology components that are utilized in early learning and school-age programs in PA.*
D8.16 C1

List and describe the elements of a marketing plan that aligns with a program's mission statement and philosophy.*
D8.17 C1

COMPETENCY LEVEL 2

All of Level 1

Use the various data management and technology components required or recommended for child outcomes reporting and to support continuous quality improvement within programs.*
D8.16 C2

Develop and implement a marketing plan that represents your program's strengths and uniqueness within the community.
D8.17 C2

COMPETENCY LEVEL 3

All of Level 1 & Level 2

Analyze child and program data to develop and implement continuous quality improvement plans that support programmatic goals.*
D8.16 C3

Complete a periodic assessment on the effectiveness of the marketing plan by looking at current enrollment data, usefulness of marketing materials, and potential outreach opportunities.
D8.17 C3

APPENDICES

Glossary

The glossary provides the reader with definitions to pertinent words and terms within *Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals* in two ways.

- **Part One** includes general definitions that are related to all Pennsylvania programs and professionals.
- **Part Two** refers to terms or related information that may be found in specific Knowledge Areas. The definitions in this glossary further explain the Competency.

Administrator/Director: The professional within an early learning or school-age program that oversees the day to day operations, administration, and supervision.

Big Idea: Describes the content within the Knowledge Area and helps to categorize the information into key concepts.

Career Lattice: A guide to the education levels required for many different positions in the early care and education field. The Career Lattice encourages professionals to attain credentials and degrees and to plan their educational pathway according to the position that they are interested in attaining.

Collaboration: In Pennsylvania early learning and school-age programs, collaboration is known as agencies that work together, including the sharing of resources or services, to support children and families.

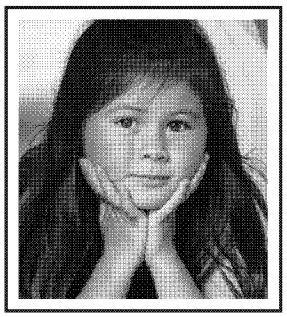
Competency: The concepts and facts that a professional must learn in order to become proficient in each area of practice. This knowledge becomes the cognitive foundation for the skills and behaviors implemented in the professional's work with children.

Competency Level: A continuum of skills in each of the Knowledge Areas with Level One being basic or developing knowledge, to Level Three being more advanced knowledge and experience of the content.

Comprehensive Assessment System: A coordinated and comprehensive system of multiple assessments that organizes information about the process and context of young children's learning and development in order to make informed instructional and programmatic decisions. Assessments within a comprehensive system include, at a minimum, screening, formative assessments, environment assessments, and measures of adult-child interactions.

Continuum: The Early Learning Standards Continuum of learning demonstrates the sequence of learning across the age levels from birth through age twelve.

Glossary



Culture: The customary beliefs, social forms, and material traits of a racial, religious or social group.

Curriculum: The entire range of experiences provided in an educational setting, including content, goals, philosophical underpinnings, teaching strategies, and assessment practices.

Curriculum Framework: Specifies what is to be taught for each Key Learning Area and includes Big Ideas, Concepts, Competencies, and Essential Questions aligned to Standards, and for older grades, Assessment Anchors and, where appropriate, Eligible Content.

Developmentally Appropriate: Learning environment and teaching strategies that are based on theories and research about the growth and development of children.

Direct Line Professional: An individual whose primary responsibility is directly with children in an early learning or school-age setting.

Disposition: A set of attitudes, beliefs and perspectives that distinguish individuals as members of a group. Dispositions describe how a person sees all aspects of the work rather than what is known and done.

Diversity: Recognizing, valuing and respecting difference; believing and respecting that that each family has its own structure, roles, values, beliefs, and coping styles.

Early Childhood: The period of human development from birth to through age eight.

Essential Question: Helps to further frame the practitioner's reflection and understanding of the concepts and content within each Knowledge Area.

IEP (Individualized Education Plan): Written individualized plans for children with disabilities aged 3 and older as required under the Individuals with Disabilities Education Act (IDEA).

IFSP (Individualized Family Services Plan): Written individualized plans for children with disabilities from birth to age 3 as required under the Individuals with Disabilities Education Act (IDEA). An Individualized Family Service Plan (IFSP) documents and guides the early intervention process for children with disabilities and their families.

Key Learning Area: The domains of learning that assure children's holistic development. They include cognitive, physical, social-emotional, language and approaches to learning.

Knowledge Area: Key categories of specialized knowledge that shape all early childhood educators' professional practice.

Learning Standards: There are separate sets of Learning Standards for different age levels in Pennsylvania. The Learning Standards for Early Childhood begin at infant-toddler and continue through 2nd grade. Academic standards provide guidance for the later grades. Learning standards are research-based and denote age-appropriate expectations for children who are leaving that age level. The standards describe what children should be able to know and do.

Learning styles: The varying environmental factors and personal preferences that affect approaches to, and the processing of, learning.

Partnership: In Pennsylvania early learning programs, a partnership is considered an arrangement between programs where there is an agreed upon formal relationship and funding of some kind exchanges hands.

PQAS (Pennsylvania Quality Assurance System): A system for certifying individuals who provide professional development and technical assistance to early childhood and school-age professionals in Pennsylvania. The Pennsylvania Quality Assurance System (PQAS) maintains a registry of approved Instructors and Consultants to help ensure that professional development and technical assistance activities meet quality standards.

Professional: Pennsylvania uses this term to denote all of the professionals who work in the early childhood and school-age field. This includes classroom teachers and assistants, early interventionists, and administrators. It is intended to be inclusive and all adults who work with children, regardless of age or setting, should visualize themselves as a professional. In Pennsylvania, this term is synonymous with practitioner.

Professional Development: Facilitated teaching and learning experiences that are transactional, collaborative, and designed to support the acquisition of professional knowledge, skills, ethics/values, and dispositions as well as the application of this knowledge in practice to benefit all children and families.

Program: An organized early learning or school-age setting that is inclusive of various environments including child care, Head Start, Early Intervention, nursery schools, home-based and school-based programs.

Program Assessment: A review of data gathered from varied tools designed to assess programs.

Provider: An agency that offers early learning or school-age programs to children and families.

Professional Development Record: A place to document employment history, professional development, and to develop an annual professional development plan in the context of the PA Early Learning Career Lattice.

Scaffolding: The process of graduated assistance given during the learning process which is tailored to the needs of the child and helps to raise the level at which the child is capable of working.

School-Age: Children who are attending kindergarten through age twelve are considered school-age in Pennsylvania. School-Age children from kindergarten through age eight are in the Early Childhood stage of development.

Standards Aligned System (SAS): A collaborative product of research and good practice that identifies six distinct elements which, if utilized together, will provide schools and districts a common framework for continuous school and district enhancement and improvement. The elements are: standards, assessment, curriculum framework, instruction, materials and resources and safe and supportive schools.

Technical Assistance (TA): The provision of targeted and customized supports by a professional(s) with subject matter and adult learning knowledge and skills to develop or strengthen processes, knowledge application, or implementation of services by recipients.

Whole child approach: Every school, community, classroom, educator, student, and family has unique challenges and strengths, and has a role to play in ensuring that each student is healthy, safe, engaged, supported, and challenged. Collectively we have the knowledge, skills, and abilities to meet these challenges and share these strengths (ASCD—Association for Supervision and Curriculum Development).

Expanded Competencies Glossary

Child Growth and Development

K1.2: Theories and Theorists:

- Attachment Theory (John Bowlby, Mary Ainsworth);
- Behavioral (George Sugei, Mary Louise Hammeter, Lise Fox, Harry Wong);
- Cognitive-Developmental (Jean Piaget);
- Developmentally Appropriate Practices (Sue Bredekamp, Carol Copple, NAEYC);
- Ecological (Urie Bronfenbrenner);
- Humanistic (Abraham Maslow);
- Information Processing (Schiffler, Golman, McClellan);
- Multiple Intelligences (Howard Gardner)Play (Friedrich Froebel, Jean Piaget, Lev Vygotsky);
- Psycho-Social (Erick Erickson); Social-Cultural Theory (Lev Vygotsky).

K1.5: Key Learning Areas of the PA Learning Standards for Early Childhood:

- Approaches to Learning Through Play;
- Cognitive Thinking and General Knowledge: Mathematical Thinking and Expression, Scientific Thinking and Technology, and Social Studies Thinking;
- Creative Thinking and Expression;
- Health, Wellness and Physical Development;
- Language and Literacy Development;
- Partnerships for Learning;
- Social Emotional Development.

Curriculum and Learning Experiences

K2.4: Tools for assessing the learning environment include (This is not an exclusive list):

- Environment Rating Scale (ERS);
- Teaching Pyramid Observation Tool (TPOT);
- The Pyramid Infant Toddler Observation Scale (TPITOS);
- Classroom Assessment Scoring System (CLASS):;
- Early Language and Literacy Classroom Observation (ELLCO).

K2.5: Elements of Pennsylvania's Standards Aligned System:

- Standards;
- Assessment;
- Curriculum Framework;
- Instruction;
- Materials and Resources;
- Safe and Supportive Schools.

K2.6: Elements of the Curriculum Framework include:

- Big Ideas;
- Essential Questions;
- Competences and Concepts.

K2.15: Experiences outlined in the Learning Standards that support successful outcomes for children:

- Define the knowledge of the content areas rooted in child development to provide high quality experiences for children;
- Identify meaningful curriculum based on children's identified individual needs;
- Name meaningful activities that support children in making connections between previous learning experiences and new knowledge;
- List learning activities and provide differentiated learning opportunities to meet the needs of children in line with learning goals;
- Identify instructional practices that promote competence in the content areas and facilitate successful learning;
- Define essential concepts, inquiry, tools, and structure of content areas, including resources, to deepen children's understanding;
- Define understanding in the content areas develops through interaction with materials, peers, and supportive adults in settings where children have opportunities to construct their own new learning;
- Describe how engagement in challenging content areas builds children's confidence in their ability to be successful in all content areas.

Families, Schools, and Communities

K3.4: Needed supports and resources for children with a wide range of abilities may include:

- The education and special education process, including the legal rights of families;
- Parent education and support groups;
- Child development;
- Health services; social and economic services;
- Access to linguistic interpreters; transition across settings.

K3.5: Family concerns and stressors include:

- Families who have children with disabilities;
- Who are living in poverty;
- Domestic violence issues, including child abuse;
- Mental health needs;
- Learning English as a second language;
- Changes in family circumstances (birth, death, loss of job, military deployment, incarceration, divorce or marriage, etc.);
- Substance abuse issues;
- Homeless.

K3.6: Intentional practices to value strengths of diverse families include:

- Value the strength, knowledge and passions that families bring to the program;
- Greet families by name at arrival and departure;
- Use a warm tone of voice and welcoming body language with children and families, including smiling;
- Communicate regularly about their child in positive, non-judgmental, linguistically and culturally appropriate and encouraging formats;
- Request that families share information about their experiences with their child;
- Provide opportunities for families to participate in evaluation and decision making, to share their skills, talents and strengths, to get to know and support each other, to participate in regularly scheduled conferences with families to discuss their child's progress;
- Identify other programs and services that are important to the child and/or family;
- Work on mutually agreed upon practices and goals;
- Thank families regularly for their contributions to their child and your program.

Assessment

K4.9: Components of assessment include:

- Observation;
- Multiple dimensions of experiences;
- Multiple sources;
- Multiple instruments;
- Multiple points of assessment;
- Engagement of children in self-assessment.

Communication

K5.6: Communication rich environments should seek:

- Input and feedback;
- Reflective listening;
- Reciprocal feedback;
- Sensitive responses;
- Visual, verbal, and physical cues.

K5.7: Verbal and non-verbal techniques that encourage children's expressive and receptive language include:

- Talking with children at eye level;
- Encouraging children to communicate to express reflexively through crying, cooing, body movements, facial movements;
- Extending reflexive communication by identifying emotions being expressed and shaping sounds into words, words into sentences and sentences into conversations;
- Intentionally using a complex and content-rich vocabulary to name, label, define, request, describe and explain;
- Using vocabulary to facilitate concept development; providing opportunities for children to communicate intentionally through gestures and words and to convey needs, desires and ideas;
- Helping children to communicate to connect with others to form relationships, share feelings, request, protest, greet, take leave, respond, comment, and question.

K5.8: Environments that provide opportunities to support and extend children's communication skills include:

- Providing many opportunities for children to interact with adults and peers;
- Listening and responding to children;
- Reading to young children; talking with children;
- Defining colloquialisms for children in terms understood by larger society;
- Rhyming and singing with children;
- Narrating to children about their experiences;
- Responding to children on an individual basis considering their needs, temperament, waking and sleeping cycles, and activity levels (Source: Annual additions 2007, 2008 Literacy).

K5.10: Communication formats:

- Build children's vocabulary;
- Make connections to prior knowledge;
- Enhance concept development;
- Facilitate higher level thinking;
- Increase the level of communication;
- Make connections with families;
- Value the home language of the family.

Professionalism and Leadership

K6.1: Dispositions:

- Delights in and is curious about children and how they grow and learn;
- Appreciates and supports the unique and vital role of parents in their children's lives;
- Is eager to learn new knowledge and skills that will support young children's development and learning;
- Models the attitudes and behaviors that she/he values in children;
- Values and celebrates the diversity found among children and their families and in the world around them;
- Is willing to ask for help, to learn from others, and to accept constructive criticism;
- Reflects on the personal beliefs and values that influence her/his own attitudes and practices; accepts responsibility for her/his own actions;
- Shows respect for children, families, and colleagues by maintaining confidentiality;
- Communicates clearly, respectfully and effectively with children and adults; responds to challenges and changes with flexibility, perseverance and cooperation;
- Expresses her/his own emotions in healthy and constructive ways;
- Values and nurtures imagination, creativity and play, both in children and in herself/himself; demonstrates responsible professional and personal habits in working and interacting with others;
- Has a collaborative attitude.

K6.2: The multiple roles that early childhood professionals assume include:

- Advocate;
- Collaborator;
- Communicator;
- Decision Maker;
- Educator;
- Emerging Leader;
- Lifelong Learner;
- Organizer;
- Planner;
- Relationship Builder

K6.8: Steps for conducting classroom action research and planning include:

- Identify a challenge or vision;
- Determine factors that may provide opportunities or obstacles to implementation;
- Name questions that must be addressed;
- Indicate assistance needed; define how success will be measured;
- Indicate strategies that will be utilized;
- List action steps required for implementation;
- Provide a timeline.

K6.9: Leadership style, skills and competencies include:

- Develop and follow established policies to support the program and ensure they are followed;
- Are concerned with effectiveness of decisions and efficiency of process;
- Create systems; are goal and task driven;
- Focus on relationships, rules and policies, vision and mission;
- Seek opportunities for planning and organizing; are willing to take risks;
- Seek stability; are long range and short term planners; support change and CQI, motivate and inspire others;
- Have a passion for the cause; focus on setting and achieving high and realistic goals (professional and organizational); recognize own strengths/weaknesses;
- Hold strong principles, beliefs, and values.

K6.12: The difference between mentoring and coaching:

- **Mentoring** is a one-on-one informal developmental relationship where an experienced mentor supports a less experienced individual by providing relevant information, guidance, and encouragement;
- **Coaching** is a deliberate process using focused conversations to create an environment that results in individual growth, purposeful action, and sustained progress.

Health, Safety, and Nutrition

K7.1: Sources of health, safety and nutrition standards include:

- Department of Public Welfare (DPW) Certification Regulations;
- Labor and Industry Standards;
- National Association for the Education of Young Children (NAEYC) Standards;
- Caring for Our Children Standards;
- National Playground Standards;
- Head Start Performance Standards;
- Keystone STARS Standards;
- PA Department of Education (PDE) Teacher Certification Guidelines;
- PA Learning Standards, Child and Adult Food Program;
- Early Childhood Education Linkage System (ECELS).

K7.5: Preventative health care practices for managing acute and chronic illnesses include:

- Universal precautions;
- Immunization schedules;
- Well child check-up;
- Medication and administration;
- Child specific medical needs.

D7.1: Framework to ensure compliance with standards includes (Administrators/Directors):

- Monitoring health and safety practices;
- Mandated reporting;
- Nutrition records and practices;
- Identifying community health resources;
- Ensuring appropriate exchange of staff and child health information;
- Preparing safety and emergency management plans.

Program Administration

K8.1: Elements to consider for a vision, mission, and strategic plans are:

- Vision: one to three sentence statement perceiving and creating a better place, situation, or circumstance in the future for an organization and/or the individuals it supports;
- Mission: a one to three sentence statement that states the purpose of the organization that guides the actions and decision making in support of the overall goal;
- Strategic Plan: needs assessment, plan for services, short/long range goals, marketing/enrollment, marketing projections, financial plans, strategies to achieve goals.

K8.3: A risk management plan may include:

- List of identified risks (i.e. competitors, hazardous businesses/materials in the area);
- Chart with assigned roles, procedures and checklist for identified risks;
- Types of Insurance (i.e. Business Liability, Workers Compensation, Contact list of brokers and agents used);
- Current emergency preparedness plan.

K8.6: Components of a bookkeeping system may include:

- Revenue - tuition, fundraising revenue; registration; fees; late fees, program fees, donations;
- Expenditures – capital expenses, bills, flexible spending (i.e. petty cash).

D8.6: Sources of evidence to monitor a bookkeeping system may include (Level 2):

- Bank statement reconciliation;
- Other financial statements/investment records;
- Prior year audits;
- Prior year tax returns;
- Policies to ensure checks and balances (i.e. dual signatures for payment approvals/checks.

K8.8: Policy and procedure documents may include:

- Family/parent handbooks;
- Employee manuals;
- Department of Public Welfare regulations;
- Americans with Disabilities Act (ADA);
- Workers Compensation Law;
- Occupational Safety and Health Administration (OSHA) requirements.

K8.9: Types of employment status and labor laws that guide hiring and employment practices may include:

- Employment classification (i.e. full/part time status, hourly wage, salary vs. contract);
- Substitutes;
- Volunteers;
- "At-will" employment;
- Wrongful termination;
- Discrimination;
- Willful misconduct;
- Fair Labor Standards Act; minimum wage requirements;
- Americans with Disabilities Act (ADA).

K8.10: Some components of an employee handbook include:

- Salary range; employee benefits and compensation;
- Employment policies and procedures (i.e. grievance procedures, probationary period, annual reviews, disciplinary policies, sexual harassment, etc.);
- Resignation policy;
- Overtime policy;
- Leaves of absence policy;
- Sick leave and vacation;
- Confidentiality;
- Conflict resolution procedures;
- Mandated reporter policies;
- Employee code of conduct/ethics statement.

K8.16: Key management and technology components can include:

- Basic computer literacy skills (i.e. Microsoft Office programs, EXCEL spreadsheets, ACCESS databases, etc.);
- Tools used for data collection in PA (i.e. Environment Rating Scale (ERS) assessments,
- Program Administration Scale (PAS), Classroom Assessment Scoring System (CLASS), Office of Child Development and Early Learning (OCDEL) recognized authentic assessment tools, Ages and Stages Questionnaire (ASQ), etc.).

K8.17: Some components of a marketing plan could include:

- SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats);
- Competitive analysis; marketing image/branding;
- Publicity strategies;
- Target market;
- Area needs.

Linkages to Primary Resources

The Core Knowledge Competencies is one of a number of important documents in existence in Pennsylvania and nationally related to early childhood and school-age programming and preparation of its professionals. To support its use across all early learning and development programs, Pennsylvania was committed to creating core competencies that support, align with, and complement these documents.

Document	Focus	Content	Format
PA: Core Knowledge Competencies	**Birth through age 12 professionals**	**Professional development and skills**	**8 areas of professional practice 3 levels of competency**
PA Learning Standards for Early Childhood	Children, birth through kindergarten	Essential skills and concepts for young children to have learned by entry into next age level	8 Key Learning Areas, Approaches to Learning Through Play; Cognitive Thinking: Mathematical Thinking and Expression, Scientific Thinking and Technology, Social Studies Thinking; Creative Thinking And Expression, Early Literacy Foundations; Health Wellness and Physical Development; Partnerships for Learning; Social and Emotional Development Individual documents by age level: infant-toddler, pre-kindergarten, kindergarten
PA Academic Standards	Students, 1st through 12th grade	Essential skills and concepts for students should know and be able to do as a result of instruction	Reading, Writing, Speaking and Listening; Mathematics; Science and Technology and Engineering Education; Environment and Ecology; Civics and Government; Economics, Geography, History, Arts and Humanities; Health, Safety and Physical Education; Family and Consumer Sciences; World Languages; Career Education and Work; Student Interpersonal Skills; (Driver's Education not applicable to birth through age 12 children)
Pennsylvania Child Care Regulations	Child care centers, group homes and Family Child Care Programs	Programmatic regulations, including staff qualifications and professional development requirements	General requirements, facility persons, staff-child ratio, physical site, fire safety, equipment, program, admissions, child health, adult health, nutrition, transportation, child records, adult records, head start, special exceptions, school-age programs
Pennsylvania Chapter 49-2 Standards for the Teaching Profession	Pre-kindergarten to 4th grade early childhood certificate candidates	Program framework for pre-k to 4th grade educators' professional knowledge and skills embedded within higher education coursework	Professional Core including Development, Cognition and Learning, Subject Matter Pedagogy Content, Assessment, Family and Community Collaboration Partnerships, Professionalism; Candidate Competencies; Field Experiences and Student Teaching

Document	Focus	Content	Format
PA: Core Knowledge Competencies	**Birth through age 12 professionals**	**Professional development and skills**	**8 areas of professional practice 3 levels of competency**
Pennsylvania's Keystone Stars Standards	Early childhood and school-age programs	Performance standards that guide quality improvement efforts through standards, training and professional development, assistance, resources and support	Four levels that build on the previous level (STAR 1-2-3-4) using standards in the areas of: Staff Qualifications and Professional Development, Learning Program, Partnerships with Family and Community, and Leadership and Management; Includes a Career Lattice
Head Start Performance Standards	Head Start and Early Head Start grantees	Programmatic standards that guide compliance with the Head Start Act	45 CFR 1304 contains child development and health services, family and community partnerships, program design and management and implementation and enforcement 45 CFR 1306 contains information on staff qualifications and training
NAEYC Teacher Preparation Standards	Early Childhood professionals, birth through 8	Core standards used across degree levels to prepare candidates in programs that don't require licensure	Two sets of standards: Initial and Advanced that include content in seven standards: Promoting Child Development and Learning, Building Family and Community Relationships, Observing, Documenting and Assessing to Support Young Children and Families, Using Developmentally Effective Practices, Using Content Knowledge to Build Meaningful Curriculum, Becoming a Professional, Early Childhood Field Experience
CDA Competency Goals and Functional Areas	Early Learning Professionals: Infant-Toddler, Preschool, Family Child Care, and Home Visitor	Competency standards towards a credential	Thirteen Functional Areas within Six Competency Goals: safe and healthy learning environment; physical and intellectual learning competence; social and emotional development and positive guidance; productive relationships with families; purposeful responsive program, commitment to professionalism.
Council for Exceptional Children: Division for Early Childhood (DEC)	Birth Through 8 Early Intervention professionals	Standards to prepare professionals who work with children with special needs	Content for both knowledge and skills within ten Standards including Foundations, Development and Characteristics of Learners, Individual Learning Differences, Instructional Strategies, Learning Environments/Social Interactions, Language, Instructional Planning, Assessment, Professional and Ethical Practice, Collaboration

Acknowledgements

The task of creating Pennsylvania's Core Knowledge Competencies for Early Childhood and School-Age Professionals was a multi-year endeavor guided by many talented, passionate, knowledgeable and committed early childhood and school-age professionals from a wide variety of disciplines and with a broad range of expertise. Stakeholders included postsecondary education faculty; educators representing Child Care, PA Pre-K Counts, K-12, Early Intervention, and Head Start; Environment Rating Scale assessors; professional development and technical assistance consultants; and representatives from Pennsylvania's Office of Child Development and Early Learning.

Additionally, we thank and appreciate the work of other states that have developed similar documents which provided guidance and inspiration to Pennsylvania. Especially valuable were documents from Ohio and South Carolina.

October 2013

pennsylvania
OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Keystone STARS Technical Assistance

November 1, 2011
Issue 4 (Revised)

Research Brief

Keystone STARS is Pennsylvania's quality improvement system in which early learning programs and providers are encouraged and supported to meet specific, evidence-based quality performance standards. These standards are designed to enrich child development and increase outcomes by improving the quality of early learning childcare programs. The standards of Keystone STARS improve quality by targeting four key content areas:

- Staff qualifications and professional development
- The learning environment
- Partnerships with families and communities
- Leadership and management.

Participants in STARS can earn a quality rating score from a STAR 1 to a STAR 4, where higher STAR levels indicate better quality of childcare at the facility.

STARS Technical Assistance (TA) is an intensive, one-on-one service provided to early learning providers intended to help the facility meet the specific Keystone STARS standards and move up STAR levels. It is administered through the six Regional Keys in partnership with consultants who have the knowledge, skills, and experience necessary to guide Keystone STARS programs in the content areas. In 2009-2010, Pennsylvania fully implemented the Keystone STARS Technical Assistance Quality Assurance and Accountability System to ensure consistency and quality in TA across the state.

The goal of STARS TA is to establish and support the implementation of an action plan that will assist eligible providers in meeting the appropriate standards of quality and in moving up to higher STAR levels. This brief presents research findings which demonstrate that childcare providers receiving TA are more likely to advance STAR levels compared to Keystone STARS providers that did not.

There were 672 providers that received some form of STARS Technical Assistance and participated in Keystone STARS for all of fiscal year 2009-2010. Over half of these providers (365) successfully completed the TA action plan by the end of the fiscal year, averaging just over 18 hours of direct consultation. One third of the providers (218) were still actively receiving technical assistance by the end of the fiscal year, with an average of 16 hours of consultation. The remaining 89 providers had withdrawn or deferred their TA plan after receiving an average of less than eight hours of consultation.

TA and Quality Improvement

Administrative records were analyzed to investigate the relationship between STARS TA and quality improvement. STAR movement of childcare providers receiving TA were compared to movement among providers that did not receive this support. STAR level movement was measured by comparing the STAR level of the provider at the beginning of FY 2009-2010 (or at time of request for TA) to the STAR level on June 2011. All childcare providers (78) with an initial STAR level of STAR 4 were not included in the analysis given that they are unable to advance any further. Odds and odds ratios were calculated for STAR level movement for 505 STARS providers receiving TA compared to 2,255 providers not receiving assistance.

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Findings

Half of childcare providers (50.5%) receiving TA achieved a higher STAR level compared to one third of all other Keystone STARS providers (32.2%). Table 1 below presents the odds of moving up a STAR level given receipt of STARS TA.

Table 1: Odds of Moving up a STAR Level after TA in FY 2009-2010

	# Received TA	% Move Up	# Did not Receive TA	% Move Up	Odds Ratio	95% Confidence Limits
Overall	505	50.5%	2255	32.2%	2.2*	(1.8, 2.6)
Completed	317	54.6%	2255	32.2%	2.5*	(2.0, 3.2)
Still active	188	43.6%	2255	32.2%	1.6*	(1.2, 2.2)
Provider Type[a]						
Family	57	70.2%	450	35.8%	4.2*	(2.3, 7.7)
Group	28	53.6%	192	19.3%	4.8*	(2.1, 11.0)
Center	420	47.6%	1613	32.7%	1.9*	(1.5, 2.3)
STAR Level[ab]						
Start with STARS	19	94.7%	292	88.7%	2.3	(0.3, 17.7)
STAR 1	178	66.3%	1161	25.3%	5.8*	(4.1, 8.1)
STAR 2	216	41.7%	557	18.5%	3.2*	(2.2, 4.4)
STAR 3	92	31.5%	245	28.6%	1.2	(0.7, 1.9)

Note: [a] Provider Type and STAR Level statistics include providers that completed TA and who were still active at the end of the fiscal year. [b] STAR Level represents STAR rating at the time TA is requested. * $p < 0.01$.

Overall, the findings reveal that the odds of advancing a STAR level for providers receiving TA are 2.2 times greater than the odds for providers not receiving TA; the odds are higher for those who completed their TA action plan. When examining the odds ratios by provider type and STAR level, the largest effects are found for family and group childcare providers and those who start at lower STAR levels. The segment of providers with the largest effect was STAR 1 facilities whose odds of moving up were nearly six times greater when receiving TA. Across all provider types and levels, providers receiving TA had higher rates of moving up a STAR level.

TA Sticky Factor 2010-2011

To further assess the effectiveness of TA, Keystone STARS introduced the "sticky factor" to determine how well a childcare facility has retained the knowledge and skills provided by the consultant. Sticky factor is the measure of the change that remains three to six months or longer after the TA consultant has completed services and closed the plan. The Regional Key TA Manager collects this information by conducting a follow-up survey to the program that has received services to determine if each goal continues to be met/not met at that point in time. Goals marked as "Met" are considered achieved or "sticking" and goals marked as "Not Met" are considered not sticking. Fifty percent or more of all Action Plan goals must be met in order for the action plan to be considered "sticky."

Table 2: Percent of Action Plans Sticky by STAR Level in FY 10-11

	# Providers evaluated	% Action plans Sticky
Start with STARS	12	75.0%
STAR 1	39	87.2%
STAR 2	64	87.5%
STAR 3	27	92.6%
STAR 4	22	95.5%

Table 2 shows the percentage of TA action plans that were found to be sticky based on 164 plans that were closed and evaluated in the fiscal year 2010-2011. Overall, there is a positive trend based on quality of care. Although lower STAR level provider were more likely to move up STAR level when receiving TA, the higher STAR level providers were more likely to meet a greater percent of their TA action plan goals. Future work will use 2011-2012 STAR movement data to examine the relationship of sticky TA to quality improvement.

pennsylvania
OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Research Brief

February 2013, Volume 2, Issue 2

Keystone STARS Technical Assistance

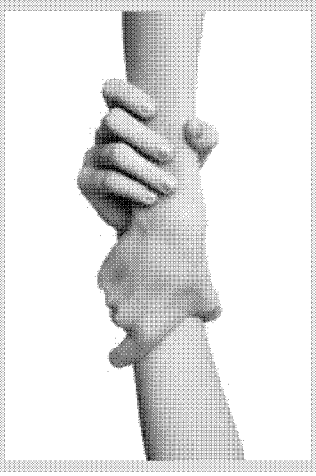
Research Overview

Purpose: To confirm the effectiveness of technical assistance on quality improvement and to examine the relationship between Keystone STAR movement and number of hours of consultation received.

Participants: (a) 425 STARS facilities that completed their Technical Assistance action plans and were evaluated to see if goals were met and (b) a matched comparison group of 808 STARS facilities.

Methods: Propensity score matching to create the matched comparison group; logistic regression model to conduct the analysis.

Findings: (Movement) There is significant evidence suggesting that TA is effective in helping facilities advance STAR levels and improve the quality of their programs. (Sticky factor) As STAR level increases, the percentage of successful action plans increases as well. (Dosage) Although some insight is provided on the number of hours of consultation that may be necessary, results are not conclusive.



Keystone STARS is Pennsylvania's quality rating and improvement system in which early learning programs are encouraged and supported to meet specific, evidence-based quality performance standards. These standards are designed to enrich child development and enhance outcomes by improving the quality of early learning child care programs. The Keystone STARS standards improve quality by targeting four key content areas:

- Staff qualifications and professional development
- The learning program (child observation, curriculum, classroom environment)
- Partnerships with families and communities
- Leadership and management (business practices)

Participants in Keystone STARS can earn a quality rating score from a STAR 1 to a STAR 4, where higher STAR levels indicate better quality of child care at the facility.

STARS Technical Assistance (TA) is an intensive, one-on-one service provided to early learning providers intended to help the program meet the specific Keystone STARS standards and move up STAR levels. Prior analysis on TA from fiscal years 2009-2010 and 2010-2011 revealed that the odds of advancing a STAR level for facilities receiving TA were 2.2 times higher than the odds for facilities not receiving TA. Further analysis was conducted around providers receiving TA in 2011-2012 to confirm the effectiveness of TA on quality improvement, and additionally to examine the relationship between STAR movement and number of hours of consultation received.

In the 2011-2012 fiscal year (July 1 – June 30), 425 STARS facilities completed their Technical Assistance action plans and were evaluated to see if goals were met. The count of providers receiving TA by initial STAR level and region is presented in Table 1 below.

Table 1: Count of STARS Providers Receiving TA 2011-12 (Closed-Evaluated Action Plan)

STAR Level†	Central	Northeast	Northwest	South Central	Southeast	Southwest	Total
Start with STARS	0	2	3	3	7	0	**15**
STAR 1	4	16	30	21	39	7	**117**
STAR 2	9	25	19	40	57	9	**159**
STAR 3	8	21	7	15	27	2	**80**
STAR 4	2	6	5	22	17	2	**54**
Total	**23**	**70**	**64**	**101**	**147**	**20**	**425**

† STAR level at the time Technical Assistance is requested

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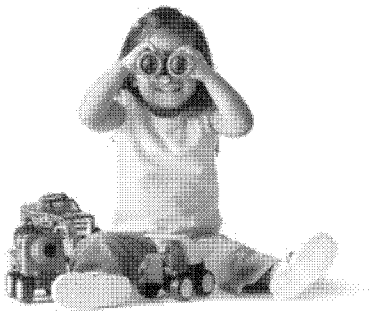
Methods

For this analysis, propensity score matching was used to create a comparison group for analyzing the effectiveness of Technical Assistance on STAR movement. Propensity score matching involves using known characteristics to predict the probability that a program receives treatment, which in this case is Technical Assistance. This probability is known as the propensity score. The propensity scores are then used to generate a comparison group of programs who did not receive TA, but are essentially equivalent to programs who did receive TA based on the variables used in the model. The variables included in the propensity score model consisted of provider type (child care center, family child care home, group child care home), STAR level, county, and length of time in Keystone STARS. The resulting comparison group is made up of 808 Keystone STARS providers. A logistic regression model was applied to estimate the effect of Technical Assistance on STAR movement and to produce odds ratios.



Findings

Movement

The results in Table 2 show that 49% of providers who received Technical Assistance moved up to a higher STAR level compared to 22% of providers who did not receive TA. The logistic regression model with STAR movement as the response variable produced an odds ratio of 4.3 (p-value <.0001, 95% Confidence Interval = [3.23, 5.74]), controlling for initial STAR level, provider type, and region. So, the odds of moving up a STAR level for providers receiving TA is 4.3 times higher than the odds of moving up a STAR level for providers not receiving TA. Similar to the previous analysis of TA, there is significant evidence suggesting that TA is effective in helping facilities advance STAR levels and improve the quality of their programs.

Table 2: STAR Movement vs. Technical Assistance

	# Programs	# Programs Moved Up STAR Level	% Programs Moved Up
Received TA	425	208	49%
Did not receive TA	808	180	22%

Note: Count of providers who did not move up a STAR level includes providers who dropped out of Keystone STARS. Count of providers who moved up a STAR level includes providers who maintained a STAR 4.

Table 3 breaks down odds ratios by provider type and STAR level. Note that the number of programs not receiving TA refers to the comparison group only, not the entire Keystone STARS population. Technical Assistance was discovered to be effective across all provider types. It was most effective for group child care homes where 50% of providers receiving TA moved up a STAR level compared to 9% for the comparison group. TA was also found to be most effective for the lower STAR levels, as a significantly higher percentage of programs at the Start with STARS, STAR 1, and STAR 2 levels improved their quality rating after receiving Technical Assistance. Although STAR 3 and STAR 4 programs also had a higher percentage of STAR movement after receiving TA, the odds ratios were not statistically significant.

Table 3: Percent Move Up and Odds Ratios by Provider Type and STAR Level

	# Receiving TA	% Move Up with TA	# Not Receiving TA	% Move Up without TA	Odds Ratio	95% CI for Odds Ratio
Provider Type						
Child Care Center	337	48.1%	653	23.4%	3.0*	2.3 - 4.0
Family Child Care	64	53.1%	110	40.3%	4.3*	2.2 - 8.4
Group Child Care	24[†]	50.0%	45	8.9%	10.3*	2.8 - 37.7
STAR Level						
Start with STARS	15[†]	85.7%	22	40.9%	8.7*	1.6 - 48.5
STAR 1	117	57.3%	218	11.0%	10.8*	6.2 - 19.0
STAR 2	159	40.9%	308	13.6%	4.4*	2.8 – 6.9
STAR 3	80	23.8%	162	16.7%	1.6	0.8 – 3.0
STAR 4	54	81.5%	98	79.6%	1.1	0.5 – 2.6

*Indicates statistically significant at 1% significance level. [†]Fisher's Exact test used given small sample size

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Findings continued…

Sticky factor

Sticky factor is the measure of the change that remains at the program three to six months after the TA consultant has completed services and closed the action plan. The Regional Key TA Manager conducts follow-up to determine if a program is continuing to meet the goals established in their action plan. At least fifty percent of the goals must be met in order for the TA action plan to be considered sticky. In Table 4, the percent of action plans that were designated as sticky are presented by STAR level. As STAR level increases, it can be seen that the percentage of successful action plans increases as well. These results were found to be statistically significant (correlation r = 0.10, p-value = .0412).

Table 4: Percent of Action Plans Sticky by STAR Level 2011-2012

	# Providers Evaluated	% Action Plans Sticky
Start with STARS	15	73.3%
STAR 1	117	88.0%
STAR 2	159	88.7%
STAR 3	80	93.8%
STAR 4	54	92.6%
Total	**425**	**89.4%**

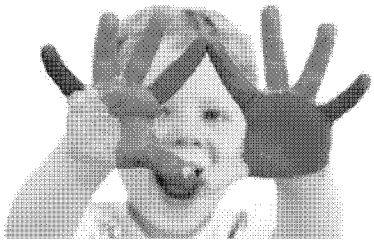
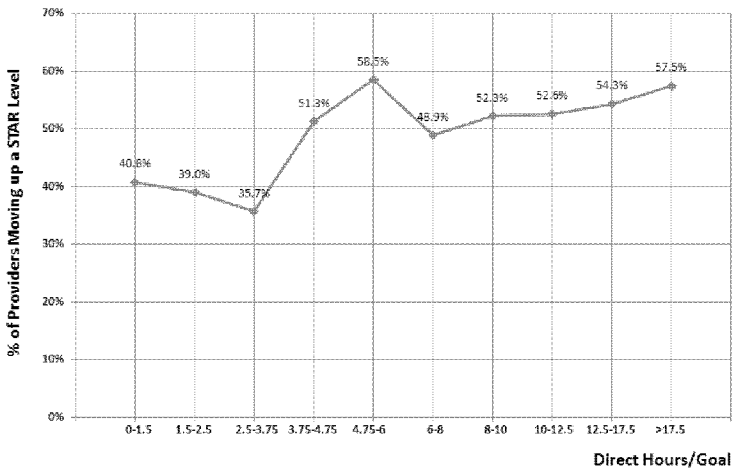


Figure 1: % of Providers Moving up a STAR level vs. # of Direct hours/Goal



Dosage

In the 425 action plans of 2011-2012, TA consultants spent an average of 17.9 hours of direct interaction per action plan and 5.5 hours of indirect interaction per action plan. Given that each action plan can have one or several goals, these statistics reduce to an average of 8.3 hours of direct interaction per goal and 2.5 hours of indirect interaction per goal. Figure 1 below plots the relationship between the number of direct hours received per goal and the percent of programs moving up a STAR level. The percentage of programs moving up a STAR level increases as the number of hours increases until it peaks at 4.75 – 6 hours. At this point, of the programs receiving 4.75 to 6 hours of direct interaction per goal, 58.5% of them moved up to a higher STAR level. The percentage drops immediately above six hours before beginning to level off. Figure 1 did not produce any statistically significant results, but it may suggest that a minimum of 4.75 to 6 hours of direct interaction is needed to effectively improve quality.

Conclusions

Consistent with previous findings, there is strong evidence to show that Technical Assistance is effective in helping facilities improve the quality of their program and achieve higher STAR ratings. Comparing programs receiving TA in 2011-2012 to the comparison group generated through propensity score matching, it was determined that the odds of STAR movement are 4.3 times higher for programs receiving Technical Assistance. The lower STAR levels (Start with STARS, STAR 1, STAR 2), benefitted the most from consultation. The higher STAR levels, however, were more likely to continue meeting the goals of their action plan several months after receiving service. Analysis of the relationship between dosage and movement did not produce conclusive results although it provided insight on the number of hours of consultation that may be necessary to achieve best results. Additional years of data would be needed to further evaluate the impact of amount of consultation on STAR movement. Furthermore, it will be beneficial in future analyses to examine hours based on the specific goal being addressed, as different types of goals may require fewer or longer hours.

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OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Child Name: First_____Middle _____Last _____

Teacher Name: _____

School District: _____

School: _____

Length of day: Full Day ⬭ Half Day/AM ⬭ Half Day/PM ⬭

PAsecureID: _____

Student's DOB: _____

Student's gender: Male ⬭ Female ⬭

Student's Race/Ethnicity:
⬭ American Indian/Alaskan Native (not Hispanic) ⬭ Black or African American (not Hispanic) ⬭ Hispanic (any race)
⬭ White (not Hispanic) ⬭ Multi-Racial (not Hispanic) ⬭ Asian (not Hispanic) ⬭ Native Hawaiian or other Pacific Islander (not Hispanic)

Student's Pre-K experience (if known):
Head Start ⬭ Pre K Counts ⬭ Child Care/STARS ⬭ Child Care/ non-STARS ⬭ Other ⬭ Unknown ⬭

LEP/ELL status: Yes ⬭ WIDA level _____ No ⬭

Written IEP/504 Yes ⬭ No ⬭

School ENTRY date: _____

How many days has this student been:

	Don't Know	Always (45 days)	Often (15 – 44 day)	Sometimes (3 – 14 days)	Rarely (1 – 2 days)	Never (0 days)
#31: over- or underdressed for school-related activities?	⬭	⬭	⬭	⬭	⬭	⬭
#32: sent to the nurse for illness?	⬭	⬭	⬭	⬭	⬭	⬭
#33: absent?	⬭	⬭	⬭	⬭	⬭	⬭
#34: late (follow school policy)?	⬭	⬭	⬭	⬭	⬭	⬭

Domain: Social and Emotional Development

Indicator 1: Emotional Regulation

Standard: Student expresses emotions appropriately to adults and peers.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Labels feelings OR acts appropriately when others are happy, sad, angry or afraid.	Expresses feelings that are appropriate to the situation.	Reacts appropriately to situations that elicit strong emotions.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Names feelings of a character in a story. ➢ Sees child crying and gives them a hug. ➢ Sees child laughing and says, "Jimmy is happy today."	**Examples** ➢ Child scrapes knee and cries. ➢ Says, "That makes me mad" when a child takes a toy while reaching to take the toy back. ➢ Claps loudly and screams "woo-hoo" when hearing about a field trip to the zoo. ➢ When visiting parent leaves classroom, child sits alone with head on table for a few minutes then resumes classroom routine.	**Examples** ➢ After being pushed down by another child, says, "that wasn't nice" and walks away. ➢ After spilling the milk, child asks, "Where's a towel? I need to clean this up." ➢ When visiting parent leaves classroom, child resumes classroom routine with ease.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 1:	Emotional Regulation	PA Kindergarten Inventory

DRAFT

Domain: Social and Emotional Development

Indicator 2: Self Awareness

Standard: Student demonstrates awareness of self and one's own preferences.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Demonstrates strong preferences for people, toys, and activities.	Chooses materials and activities independently demonstrating confidence in own abilities.	Differentiates between own preferences/abilities and those of others.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Child exclusively plays in dramatic play when given a choice. ➢ Child plays with same peer consistently. ➢ Child brings stuffed friend to school every day.	**Examples** ➢ After writing name on paper, shows to teacher and says, "Look, I wrote my name." ➢ "I can kick that ball really far, watch." ➢ "I choose sand table. I am going to build the best sand castle."	**Examples** ➢ "I'm a good block builder and he's good at drawing pictures." ➢ "We're both five years old, but you can skip and I can't." ➢ "I'll trade you my chips for your pretzels because you like them more than me."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 2:	Self-Awareness	PA Kindergarten Inventory

DRAFT

Domain: Social and Emotional Development

Indicator 3: Conflict Resolution

Standard: Student distinguishes between appropriate and inappropriate ways to resolve conflict.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident ⬭	Emerging ⬭	Evident ⬭	Exceeds ⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	When faced with a conflict, expresses one's own needs and desires, but needs assistance to generate possible solutions.	Suggests simple solutions to conflict which are most often based upon own needs and desires.	Suggests solutions to conflict while considering the needs and desires of self and others.
	Examples ➢ When playing a math game with a peer, screams, "I want to roll the dice" and looks to teacher. ➢ Tells teacher, "Mitra is at the front of the line and it's my turn to be line leader." ➢ When child wants a turn at the easel, but all easels are being used, moves to teacher and says, "I need an easel."	**Examples** ➢ "I need a turn with that book. Give it to me when you are done." ➢ "I want to play on the computer. When the timer goes off it will be my turn." ➢ "Here you can use my special pencil, if I can go first."	**Examples** ➢ "We both want a turn with the book. Should we flip a coin?" ➢ "Haddie, Michelle wants to play too. Give her a doll." ➢ When peers are arguing, child says, "Stop fighting; let's use our words."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 3:	Conflict Resolution	PA Kindergarten Inventory

DRAFT

Domain: Social and Emotional Development

Indicator 4: Behavior Regulation

Standard: Student is aware of limits and expectations and adjusts behavior accordingly.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Shows understanding of rules, but often tests boundaries.	Follows the rules and routines of the classroom/school with occasional reminders.	Applies a familiar rule in multiple settings.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Child moves to another area, when clean up cue is given. ➢ Says, "No" when asked to join group for activity. ➢ Child goes to music center even though it is full. When asked how many are allowed, says, "Four."	**Examples** ➢ "Only four people allowed at science center." ➢ Cleans up when cue is given. ➢ Engages in morning routine upon entering classroom (signs in, hangs up coat, goes to circle).	**Examples** ➢ Uses inside voice while walking in the hallway. ➢ Listens attentively to a special guest. ➢ Reminds peers to use walking feet while on a field trip.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 4:	Behavior Regulation	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 5: Print Concepts/ Letters

Standard: Student recognizes and names some upper and lower case letters of the alphabet.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Recognizes AND names at least 8 letters, most frequently those in their own name.	Recognizes and names 8-12 upper case letters AND 8-12 lower case letters.	Recognizes and names 13 or more upper case letters AND 13 or more lower case letters.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ While playing a letter game, Haddie recognizes the letters in her own name, and the letters "o," "s," and "c."	**Examples** ➢ Charles named 20 letters in one minute on an assessment of letter naming fluency which included both upper and lower case letters. ➢ Elizabeth says the letters of her name as she writes the corresponding upper case letter on the sign in sheet. A few days later, the teacher notices her correctly identifying 10 lower case letters.	**Examples** ➢ Sam named 26 upper case letters and 14 lower case letters on an assessment of letter recognition.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 5:	Print Concepts/Letters	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 6: Print Concepts/ Words

Standard: Student recognizes that letters make words and that words convey meaning.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Identifies name when printed in the environment OR some other common environmental print.	Recognizes AND reproduces name OR other common environmental print in order to convey meaning.	Identifies and attempts to reproduce familiar and unfamiliar words to convey meaning.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Finds name from list of classmates when choosing a center. ➢ Kelly follows the environmental print song, singing each restaurant when their logo is pointed out. ➢ Recognizes a stop sign and says, "That says STOP."	**Examples** ➢ Writes name on art work. ➢ Jorge labels his house on a drawing copying "casa" from the word wall.	**Examples** ➢ Sounds out simple words and writes them phonetically. ➢ Telsa retrieves a book on bears from science center and copies the words, "bear, hibernate, winter" to label her drawing of a bear in a cave.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 6:	Print Concepts/Words	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 7: Phonological Awareness

Standard: Student demonstrates understanding of spoken words, syllables, and sounds.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident ⬭	Emerging ⬭	Evident ⬭	Exceeds ⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Recognizes rhyming words OR when words begin with the same sound. **Examples** ➢ Michaela says, "Molly starts with 'M', just like my name." ➢ Says, "Cat, Hat, Bat, Mat" when asked what words rhyme with Pat.	Isolates and pronounces the initial sounds in spoken single-syllable words. **Examples** ➢ Staci claps as she says, /st/-/a/-/c/, "my name starts with /st/. ➢ While playing a game in literacy center, Greg connects various letters sounds to the –/at/ sound to form multiple words, and then he says the completed word.	Isolates and pronounces initial, medial vowel, and final sounds in spoken single-syllable words. **Examples** ➢ Muriel sounds out the word "dog," saying each letter sound /d/ /o/ /g/. Then she says, "Dog." She does this for several other words. ➢ Yokov draws a line separated by a space for each word in his dictated sentence "My mom likes roses."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 7:	Phonological Awareness	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 8: Phonics

Standard: Student associates letters with their sounds.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Demonstrates one-to-one letter sound correspondence for up to 5 letters.	Demonstrates one-to-one letter sound correspondence for 6-10 letters.	Demonstrates one-to-one letter sound correspondence for more than 10 letters.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Child writes the initial letter for words beginning with /d/, /b/, and /s/. ➢ During a group game, Harlin recognizes the letter "H" and says my name starts with "H" and makes the H sound.	**Examples** ➢ Sounds out and writes the beginning letters for 10 letters over the course of two weeks. ➢ During a small group rhyming game, child identifies 6 letters and their corresponding sounds to create 6 new words.	**Examples** ➢ In literacy center, Suri matches 15 sounds to the correct letters when playing an electronic phonics game.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 8:	Phonics	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 9: Text Analysis

Standard: Student demonstrates comprehension of text, both informational and literature.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Relates text to personal experiences. **Examples** ➢ When listening to *The Goose Got Loose* during shared reading, Francis shouts out, "I saw a goose yesterday." ➢ Jensen points to a picture of a firefighter in a book he has chosen during quiet time, and says, "My daddy's a firefighter."	Recalls details of a text (informational or story) by answering questions about a text. **Examples** ➢ When asked where the story took place, Gretchen answers, "in the forest." ➢ When asks who remembers what "nocturnal" means, Allistar says, "stays awake at night, like the bat in the book." ➢ Draws a picture representing the parts of a flower after a group reading of *Parts of a Flower*. ➢ Puts sequence cards of a recently read story in order.	Uses details from text including the illustrations to support answers to questions about a text (informational or story). **Examples** ➢ When asked how she knew the story took place in a forest, Gretchen replies, "remember the picture of the trees and it was dark." ➢ Kayla predicts that Jack and Annie will travel back in time and solve a mystery. When asked why she thinks this, Kayla says, "I have read these books before and that is what always happens. The only thing I don't know is what the mystery will be about this time."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 9:	Text Analysis	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 10: Text Structure

Standard: Student demonstrates knowledge of text structure.

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Uses beginning book handling skills.	Uses parts of a book (title, front cover, back cover, illustrations) to engage with text.	Uses parts of book (title, front cover, back cover, illustrations, table of contents) to assist in comprehension and use of text.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Henigan holds book in correct position but does not engage in word tracking. ➢ Julie points to words, tracking left to right, while pretending to read a story to a baby doll during dramatic play.	**Examples** ➢ Says, "Look, I got the Three Little Pigs" while pointing at front cover. ➢ Petru uses text illustrations to retell a familiar story to a friend.	**Examples** ➢ Nancy uses the table of contents to find information about a fruit bat. ➢ Ayesha uses the front cover to predict what will happen in the story; she then uses the illustrations within the story to check her prediction.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 10:	Text Structure	PA Kindergarten Inventory

DRAFT

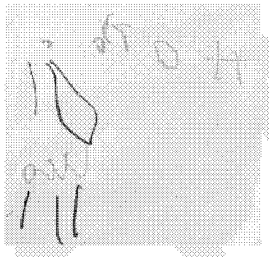
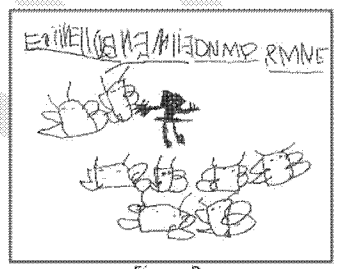
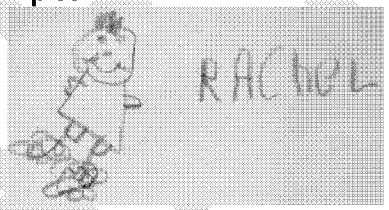
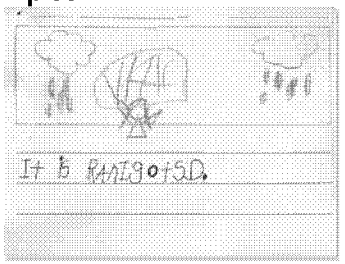
Domain: English Language Arts

Indicator 11: Stages of Writing

Standard: Student demonstrates age appropriate writing skills.

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Writes letters or letter like shapes.	Reproduces own name and/or simple words, with most letters correct.	Uses some spacing and punctuation in writing attempts.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples**   Figure B, Phase 1	**Examples** 	**Examples** 

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Domain: English Language Arts

Indicator 12: Writing Process

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Standard: Student engages in the writing process by choosing a topic of focus and then dictates, draws or writes a related story.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Establishes "who" and "what" a narrative will be about (PLANNING) but does not follow through as intended (FOLLOW THROUGH).	Establishes "who" and "what" a narrative will be about (PLANNING) AND tells, draws or writes a related story (FOLLOW THROUGH).	Establishes "what" writing will be about (PLANNING) AND tells, draws or writes using descriptive words and specific details (FOLLOW THROUGH).
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Zephyr plans to write about Cinderella and the prince, but then draws a picture of apple trees. ➢ Xavier answers the question, "What is your favorite food" with "cheeseburger" but then draws a picture of pizza.	**Examples** ➢ Xavier answers the question, "What is your favorite food" with "cheeseburger" and then draws a cheeseburger. ➢ Cynthia says she wants to tell a story about her weekend. She then dictates, "I went to the arts festival with my mom and dad. We ate French fries."	**Examples** ➢ Jasper dictates a detailed story about his visit to the zoo. He includes descriptions of a lion, elephant and monkeys. ➢ Deborah draws a picture of her summer vacation and retells details of her trip, recalling names of places visited and souvenirs obtained.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 12:	Writing Process	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 13: Expressive Language

Standard: Student expresses thoughts, feelings and ideas; speaking clearly enough to be understood by most audiences.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Speaks in simple sentences (2-3 words) (using dominant language) that can be understood by those familiar with the child's speech patterns.	Speaks in descriptive sentences (using dominant language) that can be understood by most audiences.	Connects detailed sentences (using dominant language) to expand a thought or idea.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Jesse says, "Necessito el bano" when he needed to use the bathroom. ➢ The substitute teacher indicated she had difficulty understanding Teresa's request. ➢ Stanley says "Me do it."	**Examples** ➢ Brandon said, "I was scared about school, but, you know, it's pretty fun." ➢ Joe signs "I would like more milk, please. I like chocolate milk."	**Examples** ➢ Carlton says, "I like to play with Gladys because we both like trains. Gladys lets me play with Thomas sometimes. I like Percy more because he's green. Green's my favorite color."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 13:	Expressive Language	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 14: Receptive Language

Standard: Student acts upon or responds to dominant spoken language** showing understanding of intent.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Responds appropriately to specific statements (one step directions) and/or questions.	Responds appropriately to simple statements (including two-step directions) and questions.	Responds appropriately to complex statements (including multi-step directions) and questions.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Throws trash in trash can when asked "Will you please throw this away?" ➢ Hangs up coat in cubby when asked. ➢ Helen points to the baseball when the teacher asks her what her favorite sport is. **consider this indicator met if child has hearing deficit and responds to signed language	**Examples** ➢ Bernard brings his friend a shovel when his friend says he needs something to dig a hole in the sand pit. ➢ Ingrid gets scissors and cuts on the dotted line as instructed by teacher. **consider this indicator met if child has hearing deficit and responds to signed language	**Examples** ➢ After an oral telling of a story, Zachariah answers questions about the story using specific details from the story. ➢ Lisa is provided the directions to a new game in her home language and follows the directions when playing the game. **consider this indicator met if child has hearing deficit and responds to signed language

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 14:	Receptive Language	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 15: Collaborative Communication

Standard: Student participates in collaborative conversations with peers and adults.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Uses receptive AND expressive language strategies to engage in reciprocal conversations of one or two exchanges with familiar adults or peers. **Examples** ➢ Keon and Janai are eating snack. Keon says "do you like carrots?" Janai responds "yes". Keon says "me too." ➢ After bumping into Ryan, Tamula says "I'm sorry Ryan". Ryan proclaims he is going to tell Mr. Klunk. Tamula responds "Ryan I said I'm sorry."	Uses receptive AND expressive language strategies to engage in extended reciprocal conversations with familiar adults or peers. **Examples** ➢ Sally enters the classroom and says "Morning Ms. Walker. Guess what I did last night?" After Ms. Walker responds Sally continues saying "we went to the circus and saw clowns". The conversation continues with two more exchanges. ➢ At lunch, Erika asks Susan "What you have?" Susan responds "I have carrots and a ham sandwich." Erika says "I like carrots." The conversation continues with two more exchanges.	Uses receptive AND expressive language strategies to engage in extended reciprocal conversations with familiar and unfamiliar adults or peers. **Examples** ➢ The farmer at the apple orchard asks if there are any questions. JaQuan asks the farmer, "How do you get the apples that are at the top of the tree?" The farmer responds and JaQuan says "then do you take the apples to the barn?" The conversation continues with three more exchanges.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 15:	Collaborative Communication	PA Kindergarten Inventory

DRAFT

Domain: English Language Arts

Indicator 16: Conventions of English Language

Standard: Student demonstrates command of the conventions of Standard English when speaking.
****ELL/DLL student's should be scored on their English proficiency for this indicator*

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident ⬭	Emerging ⬭	Evident ⬭	Exceeds ⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Communicates in English with single words, short memorized phrases or incomplete sentences.	Communicates in English with complete sentences about a variety of topics and concepts with limited grammatical errors.	Communicates in English with complete sentences that use increasingly complex vocabulary and sentence structures with limited grammatical errors.
	Examples ➢ At small group time, Christian glues buttons onto his collage. Christian taps Ms. McCormick on the arm and says "Look" while pointing to the collage. ➢ On the playground Juan runs up to Mr. Bell and points at his untied shoe and says, "tie shoe, tie shoe, tie shoe." ➢ In art area, Lisa says, "Need paper, please."	**Examples** ➢ When Miguel got off of the school bus, he said to the bus driver "thanks, Mr. Dave. See you later." ➢ Bryson says, "We goed to Hersheypark this weekend."	**Examples** ➢ During a read aloud, Mary exclaims "that bear is humongous! He must have eaten a lot of food before hibernating." ➢ During lunch Ms. Smith asks Jamal "what kind of sauce is on your sandwich?" Jamal replies "this is delicious barbecue sauce."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 16:	Conventions of English Language	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 17: Counting

Standard: Student knows the count sequence.

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Attempts to count to twenty, but may skip numbers, repeat numbers, or place numbers in an incorrect order.	Counts to 20.	Counts past 20.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ During circle time, Kaden begins to count his peers "1,2,3,5,6,7,9,11." ➢ At the math center, Bill lines up the unifix cubes and counts them "1,3,4,4,6."	**Examples** ➢ Walking down the steps to the playground, Brayden counts to 20. ➢ In the math center, Julia counts out 20 bears to put in her bowl.	**Examples** ➢ While jumping rope on the playground, Susan counts 25 jumps. ➢ While passing out napkins during snack, Nykeesha counts out 28 napkins.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 17:	Counting	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 18: Naming Numbers

Standard: Student knows number names.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Recognizes and names some numbers.	Recognizes and names numbers 1-10	Recognizes and names numbers 0-20 or above.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Joe chooses a number puzzle during math time. He takes out all of the pieces 1 – 10. While assembling the puzzle, he identifies1, 2, 5, and 10.	**Examples** ➢ While completing a floor puzzle numbered 1-10, Cindy names the number on each puzzle piece as she places it into the puzzle. ➢ Mary chooses the number 5 from a pile of calendar stickers to label today's date. She has been able to complete this task on other occasions with different numbers.	**Examples** ➢ While playing memory with cards numbered 0-20, Dwayne and Marie identify all numbers. ➢ Using a number chart posted in the classroom, Lydia names numbers 0 – 20 during math time.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 18:	Naming Numbers	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 19: Operations and Algebraic Thinking

pennsylvania OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Standard: Student understands addition as putting together and adding to, and understands subtraction as taking apart and taking from.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Adds or takes away objects from a group and communicates that the group has more or has less. **Examples** ➢ Steve and Azayah have built a train track in the block area. Steve has two cars on the track and Azayah adds her car and says "look Steve, now it's bigger." ➢ At lunch, Paul has served himself one chicken nugget and adds two more to his plate saying "now I have more chicken nuggets."	Combines OR separates up to 6 objects AND identifies the number of objects remaining. **Examples** ➢ Three boats are floating in the water at the water table. Kyan says "there are three boats on the river and here comes the big ship." Kyan adds a big boat to the water and says "now there are four boats on the river." ➢ Three children are standing in a hula hoop. Sara jumps into the hoop and says "now there are four friends in the hula hoop."	Combines OR separates more than 6 objects AND identifies the number of objects remaining. **Examples** ➢ Christine is painting at the easel. Christine says "I have four colors on my paper. I am adding two more colors. Wow, now I have 6 colors on my paper – it looks like a rainbow." ➢ During math time, Paris says "I see 5 blue squares and 1 red square. If I put the squares together I would have 6 squares."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 19:	Operational and Algebraic Thinking	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 20: Identifying Shapes

Standard: Student identifies shapes.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Uses one or more, but not all of the following (squares, circles, triangles, rectangles) to label objects.	Names squares, circles, triangles, AND rectangles.	Names squares, circles, triangles, rectangles AND some 3-dimensional shapes (e.g. hexagons, cubes, cones, cylinders, and spheres).
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ After taking out all of the pieces from a shape puzzle, Tyran names the circle and the square. ➢ At the art table, Becky names the circle and triangle shape cutter.	**Examples** ➢ During small group Brooke, identifies the square, circle, triangle and rectangle as she removes cut out shapes from her baggie. ➢ David is painting at the easel. He paints a triangle, square, circle and rectangle and correctly names each shape.	**Examples** ➢ Bobby has previously identified the following shapes: square, circle, triangle and rectangle. In the block area Bobby fills a dump truck with cubes, cones and cylinders, naming each shape as he does so.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 20:	Identifying Shapes	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 21: Positional Words

Standard: Student shows understanding of the relative position of objects.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Follows directions that use positional words.	Uses appropriate vocabulary to describe the position of objects (position OR order).	Uses appropriate vocabulary to describe the position of objects (position AND order)
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Sonny places the ball in the ball bin when asked. ➢ Chloe sits next to a classmate when directed to do so.	**Examples** ➢ Sally places items inside the dollhouse. She says "the refrigerator needs to be next to the stove. That's what it is like at my house." ➢ Three children are playing in the block area getting ready for a car race. Billy says "I will be first, David will be second and Tyrone will be last."	**Examples** ➢ Tom says "I am the line leader so I am first." On another day, Tom says, "I'm going in front of Mary." ➢ Alexis and Coby are using the flannel board to create a map of the playground. Alexis says "the first thing we put on our map is the swings. The second thing we need is the sandbox which goes next to the swings."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 21:	Positional Words	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 22: Measurement

Standard: Student uses measurable attributes to compare objects.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Uses words that demonstrate an understanding of measureable attributes.	Compares two objects with a measurable attribute in common.	Orders objects with a measurable attribute in common.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Bill makes a road out of wood blocks and says, "My road is so long." ➢ Felize comments, "This pumpkin is big and heavy."	**Examples** ➢ While at the water table, Jacob and Lana have matching cups. Jacob fills his container almost full and Lana fills her container half way. Jacob says, "Mine has more." ➢ After the teacher records the height of each student for "all about me" books, Bryson comments, "Jordan and I are the same size."	**Examples** ➢ Samantha lines up stacking cups from smallest to largest. ➢ Olivia says, "Let's line up with the shortest in front and the tallest in back."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 22:	Measurement	PA Kindergarten Inventory

DRAFT

Domain: Mathematics

Indicator 23: Data

Standard: Student classifies, counts and compares quantities.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Sorts up to 10 objects using one attribute.	Classifies up to 10 objects using one attribute and determines which category has "more of"/"less of" the attribute.	Classifies up to 10 objects using two attributes and describe results using "more of"/"less of."
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Given a pile of 10 unifix cubes, Len sorts the cubes by color. ➢ During science, Miguel sorts the leaves by jagged or smooth edge.	**Examples** ➢ Savannah empties her baggie of colored apple shapes. She sorts the apples according to color and says "I have more red apples than green and there aren't as many green apples as yellow ones."	**Examples** ➢ Jeremiah sorts buttons into two groups by the number of holes in the button. Then Jeremiah sorts the two piles into big and small buttons resulting in four piles of buttons. Jeremiah points to the pile of small, two holed buttons and says "This pile has the most buttons."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 23:	Data	PA Kindergarten Inventory

DRAFT

Domain: Approaches to Learning

Indicator 24: Curiosity and Initiative

Standard: Student shows interest in a growing range of topics, ideas, and tasks.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Demonstrates interest in a particular topic, object, or experience. **Examples** ➢ Jackson approaches a familiar peer and asks, "Can I play with you?" ➢ When the teacher guides Camille to literacy center, Camille says, "but I want to go to music again." ➢ Bert chooses to play a familiar computer game during center time.	Shows interest in new experiences by watching others, handling materials, or asking questions. **Examples** ➢ Mrs. Henry added turkey basters and remains at the water table modeling how they could be used. Shelby approaches and begins experimenting with the turkey basters mimicking what Mrs. Henry is doing. ➢ Helen explores the new materials that have been added to the science center. Then she asks, "What's this do?"	Uses a variety of strategies to learn more about things of interest (both familiar and unfamiliar). **Examples** ➢ Joyce expresses an interest in volcanoes and seeks out books on this topic while at the library. ➢ After engaging with the pumpkins that had been added to the science center, Neil asks the teacher to help him look up more information about pumpkins on the computer. ➢ Kelly creates different configurations of ramps, using a variety of materials in the block area.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 24:	Curiosity and Initiative	PA Kindergarten Inventory

DRAFT

Domain: Approaches to Learning

Indicator 25: Stages of Play

Standard: Student uses play to construct knowledge, plan and meet goals, and negotiate interactions with others.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Acts out familiar scenarios; may use materials or objects to represent other objects	Acts out a familiar scenario with two or more children assigning and/or assuming roles and discussing actions.	Plans and negotiates complex play scenarios that may continue over several days.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ On the playground, Jan and Brandi begin to play beauty shop. Brandi finds a pine cone and begins using it as a hair dryer. ➢ Lynne picks up a block pretending it is a phone and says "hi Mom."	**Examples** ➢ On the playground, Juan, Judy and Tino plan a game of baseball. Juan says "I will be the catcher, Tino you be the pitcher and Judy can be the batter." ➢ In the dramatic play area, Deb tells Justin "you be the Dad" and to Christian "you be the baby". Deb says "Christian you are hungry so cry now."	**Examples** ➢ Using the outdoor climber as a bus, Tracey, Billy, Homer, and Martina pretend they are taking a field trip. They assign roles and revisit this scenario over the next few days. ➢ Cindy and Oscar plan for a tea party. They create invitations and hand them out to other students. The next day, Oscar says, "It's time for the tea party." And he and a few classmates play tea party.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 25:	Stages of Play	PA Kindergarten Inventory

DRAFT

Domain: Approaches to Learning

Indicator 26: Engagement, Attention and Persistence

Standard: Student attends to tasks, activities, projects and experiences for an extended period of time, even if challenging and despite interruptions.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Engages in self-selected activity but becomes distracted or loses interest without adult encouragement.	Persists in a self-selected activity even in a distracting environment or when task becomes challenging.	Engages in a task that presented a previous challenge OR that was not self-selected.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Zackary attempts to complete a puzzle, but quickly chooses another activity when he is unable to put the puzzle together. ➢ Louanne moves from activity to activity during choice time without engaging in any activity for a sustained period of time.	**Examples** ➢ Gabby searches for magnetic letters to spell her name. She says "there is no y in here." Gabby goes over to the shelf, finds more letters and looks through until she finds a y. ➢ Sebastian continues with his project even after all his classmates have finished and have begun choice time.	**Examples** ➢ After experiencing difficulty with his coat zipper in the morning, Charlie attempts to zip his own coat at the end of the day. ➢ Antoinette persists with a teacher-led reading activity even though it is challenging.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

DRAFT

Domain: Approaches to Learning

Indicator 27: Task Analysis

Standard: Student organizes complex information and thought into small steps and goals.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Completes steps of a simple task provided by adult.	Breaks simple tasks into steps and completes them one at a time.	Develops plans for completing tasks by establishing goals and then carries out plans to meet those goals.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Upon arrival, completes the regular morning routine, hanging up his coat, washing his hands and signing in.	**Examples** ➢ Xavier separates the beads into piles by color before beginning to place them on the string in a pattern. ➢ Marsha explains the daily routine to the substitute teacher.	**Examples** ➢ Cindy and Oscar plan for a tea party. Oscar says, "we need to make invitations to invite our friends." They create invitations and hand them out to other students. The next day, Oscar says, "It's time for the tea party." And he and a few classmates play tea party.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 27:	Task Analysis	PA Kindergarten Inventory

DRAFT

Domain: Approaches to Learning

Indicator 28: Reasoning and Problem Solving

Standard: Student attempts to accomplish challenging tasks by employing different strategies as needed.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.* **Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	Attempts to solve simple problems using trial and error OR by imitating a strategy used by an adult or peer. **Examples** ➢ Zach watches another child use a stick to dig a hole in the sandbox using a stick, and then tries that on his own. ➢ Nellie uses trial and error to complete a puzzle.	Attempts to solve problems in more than one-way, recognizing when help is needed. **Examples** ➢ After several attempts to build a block structure independently, Levi asks a peer to hold the base while he secures the top section with tape. ➢ After listening to a social story, Ingrid provides three different solutions to the problem presented in the story.	Determines why an attempt was unsuccessful and experiments with alternate strategies. **Examples** ➢ After attempting to build a block structure, Nikki says, "this block is too small to be at the bottom. It makes it too wiggly." She then chooses a larger block for the base. ➢ When a ball gets stuck in a tree, Trisha unsuccessfully tries to knock it down with a tennis ball. Oliver says, "that ball's too small, try the soccer ball."

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 28:	Reasoning and Problem Solving	PA Kindergarten Inventory

DRAFT

Domain: Health, Wellness and Physical Development

Indicator 29: Control and Coordination– Fine Motor

Standard: Student demonstrates coordination, strength and muscle control when manipulating small objects or tools.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Explores and manipulates large objects using both hands.	Explores and manipulates smaller objects using hands, fingers and wrists.	Shows dexterity and detail in fine motor movements requiring increasing finger strength and control.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Sarah uses a handled-dough cutter to cut out a circle pressing down with both hands. ➢ Talia pulls apart large interlocking blocks when cleaning up after math time. ➢ In the sand table, Jeremiah adds water to the sand. He pushes the sand to form a mountain.	**Examples** ➢ James uses scissors to snip paper into smaller pieces. ➢ During center time, Marquita strings large-holed beads onto a string shoelace. ➢ Carrie writes and draws awkwardly when using an appropriate pencil grip. ➢ Michelle buttons her coat independently.	**Examples** ➢ At the art center, Roberto chooses a cutting exercise and is able to cut a straight line, a zig zag line and cuts out a circle while staying on the line. ➢ Winnie makes a bracelet using small-holed beads and fishing line. ➢ Jolie writes and draws accurately using an appropriate pencil grip. ➢ Eric zips his pants and buckles his belt after using the restroom. ➢ Christopher demonstrates that he can independently tie his shoes.

2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 29:	Control and Coordination – Fine Motor	PA Kindergarten Inventory

DRAFT

Domain: Health, Wellness and Physical Development

Indicator 30: Control and Coordination – Gross Motor

Standard: Student demonstrates coordination of body movements.

1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Performs basic movements with confidence and ease.	Performs a variety of complex movement skills with confidence and ease.	Participates in movement sequences that combine a variety of skills.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ Cindy jumps from one carpet square to another. ➢ Brian kicks the ball from a stationary position. ➢ Kiki throws a ball to her peer. ➢ Nancy navigates her wheelchair through the classroom.	**Examples** ➢ When Carlos throws the baseball, he steps forward with one foot and follows through with the throw. ➢ Linda demonstrates she is able to go up and down stairs alternating feet without holding on to the rail or the wall. ➢ Jeremiah runs and kicks the ball.	**Examples** ➢ While playing hopscotch, Jaraz jumps on the appropriate squares using both one and two feet. ➢ Patrice is able to use her legs and body to swing independently. ➢ Todd completes an obstacle course with ease.

2. Record evidence for this rating here:

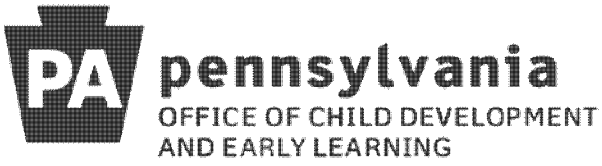
3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

The 2012 Pennsylvania Kindergarten Entry Inventory Pilot

May 2013



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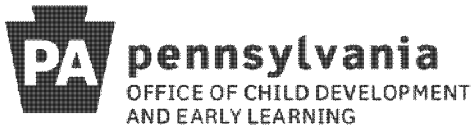

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Introduction

As Pennsylvania builds a high-quality and accountable system of early childhood programs, parents, teachers and state administrators have expressed a need for information on the status of children's skills and abilities as they enter kindergarten. This report provides information about the development and pilot of the Pennsylvania Kindergarten Entry Inventory.

Purpose

The Pennsylvania Kindergarten Entry Inventory is intended to be used by kindergarten teachers on a voluntary basis to record a students' demonstration of skills and serve as an indicator of individual student needs in the cognitive and non-cognitive key learning areas of: social and emotional development; language and literacy; mathematics; approaches to learning; and health, wellness and physical development. This tool will serve to report to parents, guide teacher instruction, and inform policy by providing a picture of student outcomes upon entry into the kindergarten classroom and across the commonwealth. The Pennsylvania Kindergarten Entry Inventory is an observational snapshot of children entering kindergarten and should not be administered in pull-out sessions, used as an assessment of children, or for placement of children.

The Pennsylvania Kindergarten Entry Inventory is comprised of thirty items. Response categories include Unable to Observe, Not Yet Evident, Emerging, Evident, and Exceeds. The response category of Unable to Observe is used when a teacher does not have the opportunity to observe a skill; a developmental disability prevents the development of the skill, or other (as determined and documented by the teacher). The response category of Not Yet Evident is defined as the student rarely or never exhibits the behaviors listed under the other scoring categories or needs significant support to achieve these behaviors. The response categories of emerging, evident, and exceeds are defined by the observable behavioral indicators listed within the tool. Behavioral indicators progress based on a continuum of skill/concept development. The response categories of Emerging, Evident, and Exceeds provide examples of specific observable behaviors to assist in determining a skill level.

In addition to the thirty questions, teachers also assess the frequency with which students arrive at school over or underdressed, too tired or sick to do school work, hungry, or late. The response categories for this set of questions are Never, Rarely, Sometimes, Often, Always, and Don't Know.

Pennsylvania Learning Standards for Early Childhood

Pennsylvania's work to gather information about the status of children at kindergarten entry is linked to the development of a continuum of early learning standards. These standards outline the state's expectations for children at significant age intervals, and form the basis for an outcomes reporting tool that may be used to answer the question of what children know and are able to do when they enter kindergarten. These standards start with infant-toddler, and maintain

alignment through pre-kindergarten, kindergarten, and grades 1 and 2, ultimately linking to Pennsylvania's grade 3 academic standards. Pennsylvania supports a standards aligned system incorporating standards, assessment, curriculum framework, instruction including interventions, materials and resources, and safe and supportive schools. The Pennsylvania Kindergarten Entry Inventory is unique in that its foundation is Pennsylvania standards.

Rather than reporting student progress on all of the Pennsylvania learning standards, 30 standards from five key learning areas were identified as salient indicators for determining kindergarten readiness, a predictor of later school success. School readiness is a process that begins at birth and follows a continuum of learning that supports academic competence in early learning skills, while forming a bridge between children, families, schools and communities. The Pennsylvania Learning Standards for Early Childhood can be found at http://www.portal.state.pa.us/portal/server.pt/community/departmental_offices/7235/p/1188258.

History

In March of 2011, Pennsylvania's Office of Child Development and Early Learning convened stakeholder workgroups to develop recommendations for an instrument that could be used in a pilot study to determine the status of children as they enter kindergarten. In pilot year one – phase one, the workgroup developed the first version of the Pennsylvania Kindergarten Entry Inventory known at that time as SELMA. Phase two of pilot year one included both a pre-pilot and focus groups. In April 2011, 27 Kindergarten teachers used the tool without formal training and completed a feedback survey on the process of using the tool. Administrators and teachers were invited to attend one of three focus groups that were held throughout the commonwealth over a 2-day period. Focus group participants, who were not familiar with the tool, were asked in advance to review SELMA, the guide, and the optional forms. During pilot year one – phase three, the tool was piloted. The 2011 SELMA pilot consisted of 7 participating school districts including 51 Kindergarten teachers. Over 1,000 children had outcomes reported back to the Office of Child Development and Early Learning by way of a unique identification number. The overall feedback included extensive commendations, concerns (length of the tool, length of time to complete), and additional questions.

Discussion of 2011 Pilot

Analysis of pilot data suggested that SELMA was an internally reliable tool for collecting a snapshot of a child's skills and abilities at kindergarten entry, in four discrete domains of Pennsylvania's Learning Standards. Further evidence was needed to understand the instrument's utility and validity for making instructional decisions locally, and for evaluating the efficacy of early childhood programs statewide. Feasibility of large scale use also needed to be studied. Analysis of the student data also suggested areas of needed improvement for training and support; specifically, revisions and enhancements needed for English language learners in the two cognitive domains (language and math), and for children in half-day kindergarten classes in the two non-cognitive domains (social-emotional development and approaches to learning). In

response the Office of Child Development and Early Learning needed to further clarify training materials and develop alternative forms of evidence which teachers could use, as needed, for these two groups to more reliably identify student skills, knowledge, and abilities.

Following the 2011 pilot, after teachers had submitted entry data for their students, the Office of Child Development and Early Learning conducted a feedback survey and follow up conference calls with the pilot participants to determine the usability of the SELMA tool. Forty-four of 52 pilot participants submitted feedback surveys and 37 participants joined in conference calls. Summarized feedback provided several recommendations for tool revisions:

- Reduce the number of indicators to those most predicative of later school success and those most easily captured at kindergarten entry.
- Move reporting date to earlier in the school year (end of September/beginning of October) to provide a balance between conducting an authentic measure and providing a true snapshot of skills at kindergarten entry.
- Add an "unable to observe" field to capture skills which teachers do not have a chance to observe within the first few weeks of school or for children who would not be expected to exhibit a skill due to a disability, for example.

The Office of Child Development and Early Learning used these recommendations to make refinements to the Pennsylvania Kindergarten Entry Inventory and pilot the revised tool in the fall of 2012 with a larger sample of participants. A detailed summary of pilot year one can be found on the OCDEL research site (www.ocdelresearch.org → Reports → Kindergarten Entry Inventory).

Inventory Changes

The Pennsylvania Kindergarten Entry Inventory was revised based on pilot participant feedback and a statistical analysis of the reported outcomes. In addition, recommendations from the Federal government concerning the addition of a Health, Wellness and Physical Development domain were considered and the Health, Wellness and Physical Development domain was added. The addition of this domain provides a more comprehensive understanding of students' school readiness and looks at the independent factors of hunger, attendance, and wellness. Revisions to Pennsylvania's Kindergarten Entry Inventory included the following targeted changes:

1. Reduced the number of indicators. The revised inventory now consists of 30 standard indicators from 5 domains versus 76 indicators from 4 domains.

2. Included explicit details for the specific populations of English Language Learners and children with special needs.

3. Included an "unable to observe" option to the response categories.

4. Changed the reporting deadline to earlier in the school year. In pilot year one, the reporting deadline was November 15. Kindergarten teachers agreed that this date did not allow for a snapshot of a child's skill level upon entry but included skills that were taught

during the first quarter of the school year. The reporting deadline was changed in the 2012 pilot. Data was collected in the first 45 days from the start of school, with a reporting date of October 19.

5. Developed a database to collect information related to the Kindergarten Entry Inventory. The database collected student demographic information in addition to scores and related supporting narratives for the 30 Pennsylvania Kindergarten Entry Inventory indicators.

2012 KEI Pilot

A pilot of the Pennsylvania Kindergarten Entry Inventory was conducted to field test and establish initial reliability of the revised tool. An invitation to participate was disseminated through PENN*LINK and through a BUILD announcement. PENN*LINK is the official electronic mail service for the Pennsylvania Department of Education (PDE). Originally established in 1986 and now fully integrated with the Internet, PENN*LINK manages the delivery of e-mail among the Department of Education Local Education Agencies school districts, charter schools, intermediate units, and vocational technical schools/career and technology centers. The Office of Child Development and Early Learning also targeted recruitment of private licensed kindergarten programs as PENN*LINK does not reach this audience.

Sixty-six school districts (including cyber and charter schools) and 17 private licensed kindergartens participated in pilot year two. A total of 219 teachers reported outcomes on 4,030 students (30 extended day; 3,339 full-day; and 661 half day) through use of the electronic database. Full-day teachers were asked to complete the Pennsylvania Kindergarten Entry Inventory for all of their students; half-day teachers were given the option to report outcomes on one or both classes.

2012 KEI Pilot Training

The Office of Child Development and Early Learning staff developed a webinar training module for kindergarten teachers and administrators on the administration and use of the Pennsylvania Kindergarten Entry Inventory. The webinar training was offered ten times during August 2012. A total of 288 teachers and administrators participated. The pilot training covered administration of the tool, identification and uses of sources of evidence (i.e. portfolio samples of student work, videos, photographs, and standardized- and curriculum-based assessment), practice administering and rating children using model scenarios, and a take home exercise to establish reliability. A total of 249 teachers completed the reliability assignment and submitted their completed kindergarten entry outcomes to the Office of Child Development and Early Learning. Teacher data was compared to a "gold standard" developed by a panel of developers, and

reliabilities were calculated for teachers as the percent agreement. In order to meet reliability, teachers needed to have a score of 75 percent or above[1]; 55 percent of teachers met reliability. Overall, reliability was good in three of the five domains: social and emotional development (70.0 percent); language and literacy (84.3 percent); and mathematics (73.3 percent). The other two domains had low reliability: approaches to learning (60.5 percent) and health, wellness and physical development (54.2 percent). Teachers were provided their results on the reliability assignments with an explanation of the "gold standard" ratings. Teachers were encouraged to crosswalk their answers and to contact the Office of Child Development and Early Learning with any questions. On a feedback survey following the completion of the pilot, 80 percent of teachers felt that the training prepared them to achieve reliability on the tool. Pilot participants requested additional training in the following areas: dialogue with other teachers; more reliability practice; gathering observations; additional clarification on the skill levels; more examples; and video clips of students.

Accommodations and Appropriateness for the Population

The Pennsylvania Kindergarten Entry Inventory captures information regarding a child's Individualized Education Plan and 504[2] status. Accommodations for children with special needs are permissible and expected as teachers complete the Pennsylvania Kindergarten Entry Inventory. This includes children with culturally and linguistically diverse needs. Additionally, the Pennsylvania Kindergarten Entry Inventory also captures information about the English language proficiency level determined through administration of the World Class Instructional Design and Assessment Measure of Developing English Language, a nationally-recognized assessment tool built on the principles of language development, which assesses student progress in English language acquisition.

Every page of the Pennsylvania Kindergarten Entry Inventory includes this notation: Students receiving accommodations provided as part of his or her Individualized Education Plan or 504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support. Use of native language is encouraged and "English Language Learners/Dual Language Learners should be scored on their English proficiency" is included in the Conventions of English Language item.

Data Analysis

Descriptive Statistics

In order to align question responses between the Key Learning Area and frequency of arrival at school questions, the following coding was used:

1	Not Yet Evident	Always

[1] Two indicators were not included in the scoring of the reliability assignment as there was not sufficient evidence provided to accurately score these items. Score determinations needed to match for 21 out of the 28 indicators to meet reliability.

[2] Section 504 of the Rehabilitation Act of 1973.

2	Emerging	Often
3	Evident	Sometimes
4	Exceeds	Rarely or Never
0	Unable to Observe	Don't Know

Notably, given the nature of the questions, the coding for the key learning areas and frequency of arrival at school question sets are inverted. Tables 1-4 (Appendix A) show descriptive statistics for the full sample, students with Individualized Education/504 plans, students who are English Language Learner/Dual Language Learners, white versus non-white students, male versus female students, and students who attend kindergarten for a half versus a full day. In addition to the question numbers 1-30, the Key Learning Area is noted as a letter as indicated below: S= social and emotional development; EL= language and literacy; M= mathematics; A= approaches to learning; and H= health, wellness, and physical development.

EL-5 was the question with the highest average (mean) rating and EL-7 was the question with the lowest average rating for the full sample. EL-5 had the highest average rating for students with IEPs/504s, and A-28 had the lowest mean rating for the Individualized Education/504 subgroup. For the English Language Learner/Dual Language Learner subgroup, questions H-29 and EL-7 had the highest and lowest mean ratings, respectively. EL-5 also had the highest mean ratings for white and non-white students, male and female students, and students attending both a half and full day of programming. EL-7 also had the lowest mean rating for white and non-white students, male and female students, and students attending full-day kindergarten. A-28 had the lowest mean rating for students attending half day kindergarten.

Standard deviation, which describes how much dispersion exists about the mean, was highest for EL-8 for the full sample, white and non-white students, males and females, and those attending both half and full days. EL-5 had the highest standard deviation for the Individualized Education/504 and English Language Learner/Dual Language Learner subgroups.

Skewness describes the extent to which a distribution is balanced about its mean, or whether it has long tails on either side of the distribution. A negative skew has a tail that is longer on the left side of the distribution than the opposite side (indicating more high ratings) and a positive skew has a tail that is longer on the right side (indicating more low ratings). The most negatively skewed question for all subgroups was EL-5, and the most positively skewed question was A-28 for the full sample and English Language Learner/Dual Language Learner subgroups, and A-27 for the Individualized Education/504 subgroups. For many questions the skewness changes from negative to positive from the full sample to the Individualized Education/504 and English Language Learner/Dual Language Learner subgroups. With few exceptions, for all other subgroups analyzed, skewness changes direction between the full sample and comparison groups (e.g. from negative to positive). EL-7 changes from a positive skew for the full sample to a negative skew for the half day sample, back to a positive skew for the full day sample. S-1 switches from a negative to slightly positive skew between the white and non-white subgroups (indicating a distribution of higher ratings for white students). The same shift occurs on items M-19, M-21, and M-23. Within the half day/full day subgroups, two items switch directions of

skew: EL-7 shifts from slightly negative to positive, M-19 and H-30 switch from a positive to a negative skew. Again, a switch from negative to positive skewness indicates a change in the distribution towards increased lower ratings, and switch from positive to negative indicates a change in the distribution towards increased higher ratings.

Kurtosis describes the peakedness of a distribution about its mean, and can be both negative and positive. Highly kurtic distributions are the most peaked and negatively kurtic distributions have rounded shapes about the mean. EL-5 had the most peaked distribution for the full sample, and all subgroups excluding English Language Learner/Dual Language Learner students for which the item with the highest kurtosis is M-21. No question had positive kurtosis for the Individualized Education/504 plan subgroup indicating more disperse ratings for all questions. The question with the most negative kurtosis was EL-8 for the full sample, white and non-white students, males and females, and half and full day students. M-17 had the most negative kurtosis for students with Individualized Education/504 plans, and EL-5 had the most negative kurtosis for English Language Learner/Dual Language Learner students.

The frequency of arrival at school questions all have very high means, highly skewed (indicating a distribution heavily weighted toward high ratings) and leptokurtic (indicating a tightly clustered and highly peaked distribution about the mean). Similarly, there are not significant differences between the full sample, by gender, white or non-white students, half or full day attendees, students with Individualized Education/504 plans, or English Language Learner/Dual Language Learner students within this set of ratings. The means are tightly clustered, and there is no change in direction of skewness from the full sample to subgroups in any case.

Table 5: Rating Proportions

Rating	S1	S2	S3	S4	EL5	EL6	EL7	EL8	EL9	EL10
1	0.042	0.022	0.054	0.021	0.068	0.052	0.145	0.15	0.074	0.054
2	0.266	0.258	0.415	0.236	0.101	0.213	0.38	0.263	0.317	0.321
3	0.48	0.551	0.434	0.482	0.14	0.532	0.324	0.235	0.48	0.515
4	0.212	0.17	0.097	0.261	0.691	0.204	0.151	0.352	0.13	0.11
Rating	EL11	EL12	EL13	EL14	EL15	EL16	M17	M18	M19	M20
1	0.032	0.074	0.02	0.021	0.039	0.012	0.032	0.041	0.101	0.026
2	0.247	0.26	0.202	0.239	0.29	0.173	0.275	0.261	0.35	0.247
3	0.543	0.574	0.542	0.542	0.516	0.633	0.22	0.431	0.388	0.592
4	0.178	0.093	0.236	0.198	0.155	0.182	0.474	0.267	0.161	0.135
Rating	M21	M22	M23	A24	A25	A26	A27	A28	H29	H30
1	0.03	0.053	0.058	0.026	0.04	0.018	0.035	0.043	0.017	0.016
2	0.302	0.272	0.329	0.279	0.346	0.354	0.423	0.469	0.21	0.249
3	0.497	0.486	0.483	0.61	0.532	0.497	0.463	0.389	0.508	0.496
4	0.172	0.189	0.129	0.085	0.083	0.131	0.079	0.099	0.266	0.239

Table 5 shows the proportion of each rating per item. These data align with the highest and lowest mean items, and shapes of the distribution for each question. Figure 1 is also useful in considering an items "difficulty" under the item response theory presented in later sections.

Reliability

The 30 items in the survey show high levels of internal reliability. Cronbach's alpha, the standard measure of internal reliability for survey analysis ranges from 0 to 1, with 1 representing perfect internal consistency. For all items (constructs), Cronbach's alpha = 0.969. Within the S, EL, M, A, and H constructs, Cronbach's alpha also demonstrates high internal consistency.

Table 6: Internal and Construct Reliability

Construct	Cronbach's Alpha
30 Items (All Questions)	.969
Social and Emotional Regulation	.846
English Language Arts	.935
Mathematics	.904
Approaches to Learning	.883
Health, Wellness, and Physical Development	.094

Thus, with the exception of the Health, Wellness, and Physical Development construct, the Kindergarten Entry Inventory survey as a whole and all constructs are highly internally reliable, meaning they could stand alone as survey items to assess the particular Key Learning Area. Additionally, there is also no loss in the internal reliability of the instrument based upon Individualized Education/504 eligibility, English Language Learner/Dual Language Learner status, gender, race, or half versus full day kindergarten. The Health, Wellness, and Physical Development construct (2 items) would not pass the traditional threshold of internal reliability—between .80 and .90—and could not be used as a stand-alone assessment.

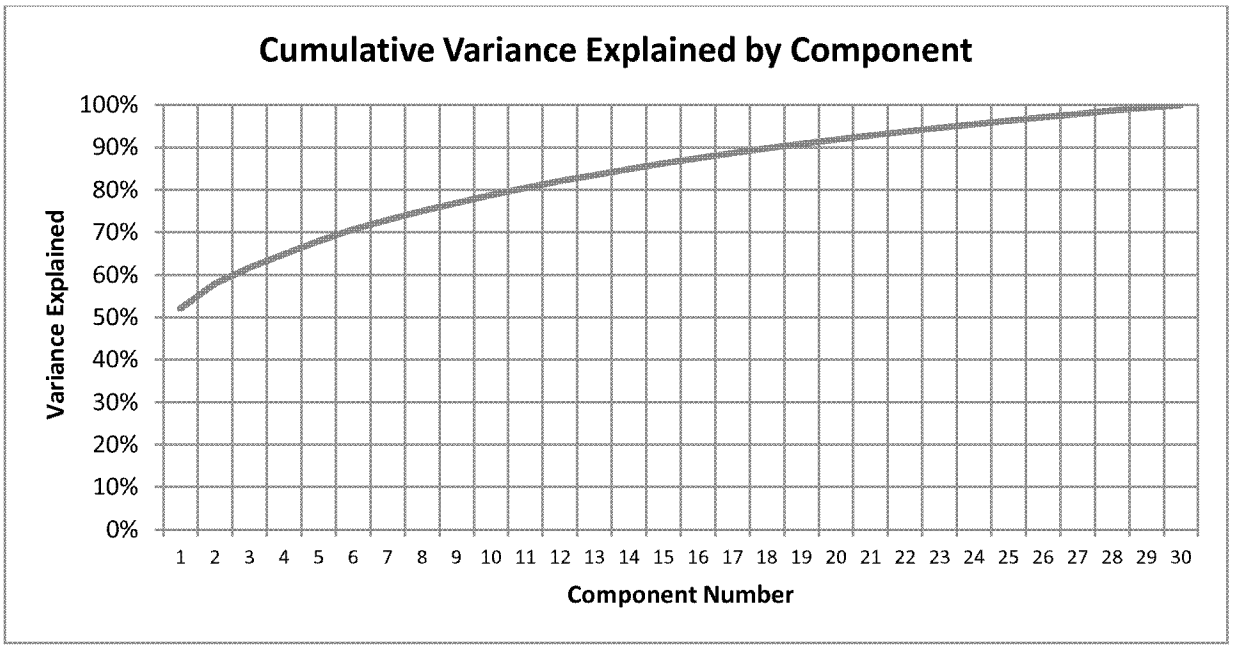
Table 7: Internal Reliability by Subgroup

Subgroup	Cronbach's Alpha
IEP/504	.959
ELL/DLL	.952
Males	.964
Females	.965
White	.964
Non-White	.970
Half Day KG	.965
Full Day KG	.965

Dimensionality

Principal Components Analysis is designed to assess covariance among a set of observed variables in order to reduce dimensionality (the extent to which a set of unobserved latent variables) are related to the observed variables. In this case we are interested in determining whether this set of latent variables overwhelmingly influence any set of items such that, for example, particular items or constructs may be excluded from the inventory.

Figure 1: PCA of the Covariance Matrix



Analysis of the results demonstrates high dimensionality in the Kindergarten Entry Inventory. While the typical cutoff for Eigenvalues is 1 in indicating components and, in this case, would suggest that the Kindergarten Entry Inventory has two dimensions, the proportion of variance explained by two dimensions (57 percent) is insufficient for evaluative purposes. Only at the inclusion of 19 factors does the covariance explained reach the threshold of over 90 percent of variance explained. See figure 1 above. Therefore, it would not be statistically appropriate or advisable to reduce items in the Kindergarten Entry Inventory based upon this analysis of dimensionality.

Pairwise Item Association

Before latent model analysis is discussed it is useful to test the extent to which survey items are related to one another, with the expectation that all items should be strongly associated as they are collectively measuring one or more constructs. Table 8 below shows item pairs, i and j with p- values greater than 0.10. There are 17 pairs, all of which include item H-29. This would support elimination of this item from the survey, (and possibly the Health Wellness, and Physical Development construct as a whole given the low Cronbach's alpha level for these two items.) Eliminating item H-29 would increase the internal reliability of the Kindergarten Entry Inventory from 0.9686 to 0.9715 and is the only item for which elimination increases the overall level of internal reliability. Eliminating both H-29 and H-30 leads to a slight reduction in overall reliability, from 0.9686 to 0.9671.

Table 8: Pairwise Associations with High p-values ($p > 0.10$)

Pair #	Item i	Item j	X^2 p-value
1	S-1	H-29	0.892
2	S-5	H-29	0.665

3	EL-8	H-29	0.627
4	EL-11	H-29	0.564
5	EL-16	H-29	0.319
6	S-2	H-29	0.308
7	S-3	H-29	0.305
8	M-22	H-29	0.275
9	S-4	H-29	0.26
10	EL-15	H-29	0.202
11	EL-19	H-29	0.178
12	M-21	H-29	0.168
13	EL-13	H-29	0.148
14	EL-6	H-29	0.131
15	A-28	H-29	0.129
16	EL-10	H-29	0.126
17	EL-12	H-29	0.122

Inter-Item Association

Table 9 (Appendix B) shows the inter-item correlations of all survey items, using Kendall's Tau-β rank correlation coefficients. This correlation measure is non-parametric, and given the non-normal distribution of many items (evident when looking at descriptive statistics such as skewness and kurtosis), and is preferable for ordinal variables. Items with significant rank agreements are starred, with the following interpretations: a correlation coefficient of 1.00 means perfect rank agreement between items; coefficient of -1.00 represents perfect rank disagreement between items; and a coefficient of 0.00 means that the two items are independent. Items with correlation coefficients above 0.50 are highlighted. Items along the shaded diagonal are associations between the same item, and have perfect rank agreement.

Given the high internal reliability of the instrument, and construct validity for all except the Health Wellness, and Physical Development items, we would expect to see significant correlations of a high magnitude (greater than .50) for items within the same construct. This is the case, with significant and high agreement along the diagonal (which represents items in close order proximity on the Kindergarten Entry Inventory).

The correlation coefficients were, on average, lowest for the Health Wellness, and Physical Development items, which supports previous findings (e.g. Cronbach's alpha tests of internal reliability).

We would also expect to see results similar to these correlation coefficients when looking at the ordered logistic regression (which is detailed in a later section.)

Graded Response Model

Item difficulty was assessed using a graded response theory model. Unlike the Rasch model for dichotomous "right or wrong" responses, the graded response model accounts for polytomous (e.g. ordinal) ratings. As these are ratings of students, and cannot be "right or wrong" per se, the interpretation is a slight departure from the standard item response theory framework. The proper interpretation is, thus, which items were the hardest for the students to be rated highly on, assuming inter-rater reliability. The item with the highest difficulty was EL-9, and the item with the lowest difficulty (excluding H-29, which should not be included in the index), was M-18.

Table 10: Cut Points and Item Discrimination

	Cut point 1	Cut point 2	Cut point 3	Item-Discrimination
S1	-2.651	-0.742	1.163	1.757
S2	-2.96	-0.824	1.304	2.023
S3	-2.433	-0.125	1.875	1.789
S4	-3.986	-1.196	1.138	1.169
EL5	-2.327	-1.425	-0.719	1.639
EL6	-2.294	-0.859	1.108	2.134
EL7	-1.494	0.086	1.423	2.015
EL8	-1.514	-0.307	0.54	1.878
EL9	-1.892	-0.343	1.414	2.707
EL10	-2.19	-0.433	1.59	2.461
EL11	-2.826	-0.853	1.335	1.752
EL12	-2.016	-0.588	1.831	2.109
EL13	-2.924	-1.033	0.951	2.244
EL14	-2.784	-0.847	1.076	2.511
EL15	-2.481	-0.59	1.353	2.212
EL16	-3.174	-1.198	1.178	2.347
M17	-2.939	-0.736	0.116	1.634
M18	-2.777	-0.771	0.95	1.604
M19	-1.769	-0.135	1.412	2.076
M20	-3.482	-1.01	1.862	1.321
M21	-2.575	-0.554	1.227	2.456
M22	-2.225	-0.573	1.233	2.121
M23	-2.197	-0.365	1.556	2.103
A24	-2.753	-0.686	1.838	2.218
A25	-2.534	-0.404	1.915	2.049
A26	-3.128	-0.458	1.56	1.938
A27	-2.478	-0.135	1.835	2.439
A28	-2.37	0.049	1.706	2.297
H29	-106.876	-32.271	26.631	0.038
H30	-4.084	-1.101	1.25	1.224

Table 10 shows the difficulty of each item, as well as the levels of discrimination for each cut point, e.g. "not yet evident" versus "evident" and "evident" versus "exceeds." We would expect higher (positive) discrimination index at the third cut point, indicating a higher level of difficulty at that rating level, a lower (negative) index at the first cut point, and either a weakly negative or positive index at the second cut point. Overall, items did discriminate between different skill

levels, and the only question for which there is a negative index level at the third cut point is EL-5, which is the easiest item on the inventory for the full sample and the majority of subgroups. Notably, no item had a negative discrimination, indicating that the each item's difficulty mirrored the overall difficulty of the Kindergarten Entry Inventory.

Ordered Logit Model

Logit regressions come from a family of models where assumptions of a normal cumulative density function are not valid. Logit and Probit are the most commonly utilized, and within these models, the choice between binary, ordered, and multinomial models is the most important analytical consideration. Given that the survey items are ranked responses (e.g. "grades") an ordered model was appropriate. The choice to use a logit versus a probit model was derived from the fact that the all covariates (item pairings) have the same proportional probabilities, and no variables are assumed to be normally distributed. The benefit of running this set of models in addition to Kendall's Tau-β is analogous to the value added from running an OLS regression on normally distributed dependent and independent variables versus testing correlations, though the results not be markedly dissimilar.

In this case, we are assessing the statistical significance of ratings on each of 29 independent variables (items) and ratings on 1 dependent variable (a single item). Coefficients can be positive or negative. Positive coefficients indicate that a change of one rating level for any of the 29 items is associated with high probability of change in the same direction for that one particular item (dependent variable). Negative coefficients indicate that a decrease in one rating level on any for the 29 items is associated with a high probability of a change in the opposite direction for that one particular item (dependent variable).

Table 11 (Appendix C) shows the results of 30 ordered logit regressions. The dependent variables are shown in the left most column, and the regression results are displayed across the column, corresponding to each item. Levels of statistical significance are shown in green (99%), blue (95%), and grey (90%). Within each significant cell, a plus or minus sign indicates the direction of the coefficients.

Given the nature of the Kindergarten Entry Inventory we would expect to see statistically significant and positive relationships between items of the same construct, as well as other related items, e.g. between the language and math constructs, where literacy skills may affect mathematics skills. As is the case for interpreting the Inter-Item Correlation Matrix (table 9) we should see strong and positive inter-item significance along the diagonal within constructs. This is certainly the case. It is also reassuring to see, that, for the most part, there is not wide variation in the direction of coefficients down the columns for each item, or across the rows for each item. This implies to a high degree of statistical certainty that each item's association with the other 29 items is consistent.

Next Steps

Following the 2012 pilot, the Office of Child Development and Early Learning conducted a feedback survey and follow-up conference calls with pilot participants. Participants provided feedback in the following areas: using the tool; training and supports; Kindergarten Entry Inventory software; and next steps. While the majority of teachers (81 percent) spent time outside of regular working hours to complete, 24 percent felt that the tool was easy to complete. Ninety-five percent of teachers stated that they were able to use their current assessment tools to complete the inventory, including Dynamic Indicators of Basic Early Literacy Skills, curriculum-based assessments, performance assessments, and checklists. Student Interpersonal Skills, Approaches to Learning, and Health, Wellness, and Physical Development were the most difficult domains to collect. As these areas represent non-cognitive skills, they are more subjective in nature, and therefore, more difficult to observe consistently.

Pilot participants stated the following as benefits of using the Kindergarten Entry Inventory: it provided a complete baseline for each student; it compliments present assessments; it enables an early picture of the skill levels and what to focus on more in instruction; it helps in preparing for parent conferences; it assisted in filling out the report card; it helped to identify 'at risk' students.

The Pennsylvania Department of Education's (PDE) Office of Child Development and Early Learning, in partnership with the Office of Elementary and Secondary Education will be piloting year three of the Kindergarten Entry Inventory. Participation and feedback in this pilot is critical in establishing the usability of the electronic database used to upload and report student outcomes. As part of the pilot, participants will be asked to participate in a series of training webinars; complete a reliability assignment; and submit feedback about the usability of the tool and database.

Appendix A: Descriptive Statistics

Table 1 – Descriptive Statistics for Full Sample, Students with IEPs/504s, and Students who are ELL/DLL

	N	Mean			Standard Deviation			Skewness			Kurtosis		
	All	All	IEP/504	ELL/DLL	All	IEP/504	ELL/DLL	All	IEP/504	ELL/DLL	All	IEP/504	ELL/DLL
Inappropriate Dress	3755	3.96	3.95	3.96	.257	.230	.189	-7.009	-5.361	-4.997	55.373	31.265	23.402
Tired_Sick	3757	3.92	3.84	3.86	.333	.434	.438	-4.746	-3.023	-4.007	24.729	10.839	19.186
Hungry	3610	3.95	3.94	3.98	.263	.233	.135	-6.571	-3.826	-7.278	49.766	12.752	51.925
Late	3752	3.92	3.91	3.97	.371	.390	.165	-5.026	-4.739	-5.828	27.390	23.982	32.572
S1	4006	2.86	2.46	2.35	.792	.798	.738	-.259	.130	-.378	-.435	-.419	-.639
S2	4016	2.87	2.54	2.58	.705	.684	.596	-.181	-.034	-.302	-.208	-.198	-.221
S3	3997	2.57	2.22	2.10	.740	.757	.690	.062	.217	.038	-.347	-.244	-.461
S4	4021	2.98	2.54	2.74	.762	.800	.817	-.256	.112	-.398	-.556	-.478	-.199
EL5	4012	3.46	3.10	2.98	.925	1.143	1.196	-1.534	-.812	-.685	1.071	-.906	-1.140
EL6	4017	2.89	2.57	2.47	.782	.829	.832	-.450	-.075	-.204	-.050	-.526	-.550
EL7	3966	2.48	2.15	1.84	.918	.880	.883	.079	.411	.817	-.819	-.500	-.128
EL8	3930	2.79	2.43	2.03	1.082	1.141	1.036	-.285	.116	.611	-1.251	-1.396	-.836
EL9	3985	2.67	2.27	2.16	.793	.798	.856	-.216	.068	.237	-.355	-.544	-.661
EL10	3879	2.68	2.41	2.16	.739	.776	.720	-.222	-.019	.341	-.179	-.411	.125
EL11	3898	2.87	2.56	2.64	.732	.788	.727	-.277	-.184	-.363	-.133	-.364	.011
EL12	3661	2.69	2.32	2.30	.741	.813	.756	-.513	-.239	-.405	.110	-.816	-.860
EL13	4002	2.99	2.40	2.38	.719	.727	.755	-.310	.285	.169	-.189	-.124	-.227
EL14	4017	2.92	2.43	2.44	.718	.709	.686	-.223	.396	.394	-.249	-.080	-.042
EL15	3964	2.79	2.25	2.21	.746	.752	.698	-.199	.182	.019	-.260	-.255	-.333
EL16	4011	2.98	2.54	2.32	.635	.658	.589	-.273	-.115	.060	.350	-.176	-.257
M17	3905	3.13	2.74	2.43	.927	.957	.939	-.513	.235	.494	-1.116	-1.385	-.719
M18	3964	2.93	2.63	2.38	.828	.869	.928	-.290	.050	.073	-.642	-.755	-.842
M19	3107	2.61	2.26	2.04	.874	.932	.718	-.066	.269	.494	-.698	-.782	.462
M20	3985	2.84	2.62	2.34	.679	.685	.803	-.291	-.265	-.167	.154	-.039	-.655
M21	3899	2.81	2.43	2.15	.745	.718	.719	-.107	.164	.514	-.434	-.191	.475

M22	3585	2.81	2.50	2.32	.799	.811	.786	-.274	-.126	-.145	-.372	-.472	-.615
M23	3784	2.68	2.39	2.08	.769	.848	.793	-.160	-.031	-.020	-.331	-.648	-1.130
A24	4003	2.75	2.45	2.48	.638	.688	.619	-.332	-.077	-.532	.274	-.230	-.342
A25	3875	2.66	2.22	2.26	.686	.719	.665	-.178	.096	.056	-.101	-.296	-.152
A26	3993	2.74	2.40	2.60	.700	.676	.625	.089	.567	.090	-.485	.117	-.298
A27	4013	2.58	2.22	2.24	.686	.622	.576	.096	.461	-.057	-.285	.626	-.385
A28	3965	2.54	2.13	2.17	.729	.713	.631	.280	.321	.737	-.358	.075	1.380
H29	4012	3.02	3.05	3.00	.736	.675	.729	-.288	-.142	-.433	-.437	-.521	.134
H30	3928	2.96	2.58	2.77	.741	.737	.660	-.167	.025	-.127	-.602	-.308	-.028

Table 2 – Descriptive Statistics for White versus Non-White Students

	N	Mean			Standard Deviation			Skewness			Kurtosis		
	All	All	White	Non-White	All	White	Non-White	All	White	Non-White	All	White	Non-White
Inappropriate Dress	3755	3.96	3.96	3.94	.257	.239	.304	-7.009	-7.418	-5.948	55.373	62.780	38.110
Tired_Sick	3757	3.92	3.93	3.88	.333	.309	.426	-4.746	-5.003	-4.087	24.729	27.437	17.912
Hungry	3610	3.95	3.96	3.92	.263	.237	.357	-6.571	-6.948	-5.458	49.766	56.034	33.034
Late	3752	3.92	3.93	3.83	.371	.330	.534	-5.026	-5.444	-3.567	27.390	32.327	12.898
S1	4006	2.86	2.91	2.71	.792	.769	.816	-.259	-.291	.007	-.435	-.350	-.675
S2	4016	2.87	2.92	2.74	.705	.689	.725	-.181	-.191	-.099	-.208	-.167	-.288
S3	3997	2.57	2.63	2.42	.740	.722	.753	.062	.047	.150	-.347	-.343	-.287
S4	4021	2.98	3.02	2.84	.762	.757	.766	-.256	-.283	-.123	-.556	-.576	-.524
EL5	4012	3.46	3.51	3.25	.925	.886	1.020	-1.534	-1.668	-1.084	1.071	1.558	-.154
EL6	4017	2.89	2.92	2.75	.782	.765	.811	-.450	-.456	-.342	-.050	.018	-.285
EL7	3966	2.48	2.54	2.27	.918	.912	.912	.079	.026	.244	-.819	-.819	-.749
EL8	3930	2.79	2.86	2.60	1.082	1.075	1.074	-.285	-.371	-.058	-1.251	-1.198	-1.267
EL9	3985	2.67	2.71	2.51	.793	.774	.822	-.216	-.226	-.134	-.355	-.289	-.515
EL10	3879	2.68	2.73	2.55	.739	.729	.736	-.222	-.223	-.189	-.179	-.143	-.243
EL11	3898	2.87	2.90	2.77	.732	.735	.748	-.277	-.282	-.327	-.133	-.176	-.062
EL12	3661	2.69	2.75	2.52	.741	.704	.774	-.513	-.574	-.204	.110	.441	-.368
EL13	4002	2.99	3.05	2.79	.719	.703	.754	-.310	-.334	-.180	-.189	-.139	-.315
EL14	4017	2.92	2.96	2.77	.718	.704	.743	-.223	-.239	-.167	-.249	-.208	-.274

EL15	3964	2.79	2.84	2.64	.746	.731	.765	-.199	-.210	-.168	-.260	-.225	-.297
EL16	4011	2.98	3.03	2.80	.635	.620	.654	-.273	-.251	-.244	.350	.397	.152
M17	3905	3.13	3.18	2.96	.927	.914	.950	-.513	-.571	-.261	-1.116	-1.084	-1.220
M18	3964	2.93	2.96	2.79	.828	.815	.845	-.290	-.291	-.185	-.642	-.659	-.647
M19	3107	2.61	2.64	2.47	.874	.867	.842	-.066	-.088	.014	-.698	-.683	-.582
M20	3985	2.84	2.86	2.70	.679	.656	.717	-.291	-.200	-.448	.154	.066	.160
M21	3899	2.81	2.86	2.62	.745	.726	.769	-.107	-.137	.035	-.434	-.385	-.442
M22	3585	2.81	2.87	2.65	.799	.782	.789	-.274	-.329	-.138	-.372	-.263	-.394
M23	3784	2.68	2.75	2.40	.769	.752	.786	-.160	-.221	.063	-.331	-.230	-.417
A24	4003	2.75	2.79	2.65	.638	.621	.636	-.332	-.369	-.187	.274	.458	-.062
A25	3875	2.66	2.70	2.49	.686	.673	.680	-.178	-.201	-.066	-.101	-.029	-.217
A26	3993	2.74	2.77	2.60	.700	.696	.702	.089	.064	.179	-.485	-.492	-.351
A27	4013	2.58	2.63	2.45	.686	.682	.669	.096	.046	.234	-.285	-.279	-.146
A28	3965	2.54	2.58	2.42	.729	.725	.720	.280	.252	.460	-.358	-.405	-.064
H29	4012	3.02	3.01	3.07	.736	.730	.748	-.288	-.271	-.307	-.437	-.414	-.608
H30	3928	2.96	2.98	2.91	.741	.740	.732	-.167	-.164	-.206	-.602	-.664	-.337

Table 3 – Descriptive Statistics for Male versus Female Students

	N	Mean			Standard Deviation			Skewness			Kurtosis		
	All	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
Inappropriate Dress	3755	3.96	3.96	3.95	.257	.228	.284	-7.009	-7.553	-6.516	55.373	65.393	47.212
Tired_Sick	3757	3.92	3.92	3.93	.333	.345	.320	-4.746	-4.662	-4.832	24.729	24.004	25.430
Hungry	3610	3.95	3.95	3.95	.263	.259	.267	-6.571	-6.503	-6.637	49.766	49.597	49.970
Late	3752	3.92	3.91	3.92	.371	.380	.362	-5.026	-4.971	-5.085	27.390	26.891	27.939
S1	4006	2.86	2.76	2.96	.792	.797	.774	-.259	-.184	-.333	-.435	-.451	-.379
S2	4016	2.87	2.80	2.94	.705	.707	.696	-.181	-.166	-.193	-.208	-.179	-.240
S3	3997	2.57	2.49	2.66	.740	.728	.742	.062	.134	-.019	-.347	-.278	-.364
S4	4021	2.98	2.85	3.12	.762	.762	.737	-.256	-.173	-.340	-.556	-.449	-.652
EL5	4012	3.46	3.40	3.51	.925	.968	.875	-1.534	-1.386	-1.708	1.071	.558	1.750
EL6	4017	2.89	2.84	2.94	.782	.789	.770	-.450	-.389	-.516	-.050	-.162	.106
EL7	3966	2.48	2.41	2.55	.918	.923	.907	.079	.156	.004	-.819	-.808	-.801

EL8	3930	2.79	2.70	2.89	1.082	1.096	1.059	-.285	-.174	-.401	-1.251	-1.312	-1.150
EL9	3985	2.67	2.61	2.73	.793	.794	.787	-.216	-.176	-.259	-.355	-.391	-.298
EL10	3879	2.68	2.62	2.74	.739	.761	.711	-.222	-.186	-.236	-.179	-.283	-.066
EL11	3898	2.87	2.80	2.94	.732	.745	.710	-.277	-.297	-.231	-.133	-.108	-.228
EL12	3661	2.69	2.61	2.77	.741	.758	.712	-.513	-.463	-.551	.110	-.126	.405
EL13	4002	2.99	2.93	3.06	.719	.738	.692	-.310	-.281	-.314	-.189	-.238	-.165
EL14	4017	2.92	2.83	3.01	.718	.742	.680	-.223	-.164	-.235	-.249	-.347	-.160
EL15	3964	2.79	2.72	2.86	.746	.764	.721	-.199	-.155	-.224	-.260	-.335	-.174
EL16	4011	2.98	2.93	3.04	.635	.650	.615	-.273	-.275	-.246	.350	.267	.423
M17	3905	3.13	3.09	3.18	.927	.943	.907	-.513	-.433	-.598	-1.116	-1.211	-.995
M18	3964	2.93	2.93	2.92	.828	.845	.809	-.290	-.308	-.271	-.642	-.693	-.584
M19	3107	2.61	2.60	2.62	.874	.889	.857	-.066	-.034	-.102	-.698	-.756	-.631
M20	3985	2.84	2.83	2.84	.679	.690	.667	-.291	-.275	-.306	.154	.077	.240
M21	3899	2.81	2.77	2.86	.745	.759	.729	-.107	-.056	-.153	-.434	-.495	-.351
M22	3585	2.81	2.78	2.84	.799	.809	.786	-.274	-.236	-.312	-.372	-.441	-.288
M23	3784	2.68	2.63	2.74	.769	.786	.748	-.160	-.131	-.175	-.331	-.391	-.266
A24	4003	2.75	2.71	2.80	.638	.659	.612	-.332	-.335	-.297	.274	.170	.353
A25	3875	2.66	2.57	2.75	.686	.695	.665	-.178	-.185	-.142	-.101	-.167	-.074
A26	3993	2.74	2.65	2.84	.700	.694	.693	.089	.261	-.083	-.485	-.488	-.318
A27	4013	2.58	2.50	2.67	.686	.683	.679	.096	.180	.016	-.285	-.223	-.280
A28	3965	2.54	2.49	2.60	.729	.726	.727	.280	.299	.265	-.358	-.257	-.460
H29	4012	3.02	3.01	3.03	.736	.739	.733	-.288	-.283	-.293	-.437	-.441	-.432
H30	3928	2.96	2.93	2.99	.741	.767	.713	-.167	-.165	-.151	-.602	-.661	-.562

Table 4 – Descriptive Statistics for Half-Day versus Full-Day Students

	N	Mean			Standard Deviation			Skewness			Kurtosis		
	All	All	Half Day	Full Day	All	Half Day	Full Day	All	Half Day	Full Day	All	Half Day	Full Day
Inappropriate Dress	3755	3.96	3.97	3.95	.257	.265	.284	-7.009	-8.955	-6.749	55.373	94.879	50.980
Tired_Sick	3757	3.92	3.96	3.91	.333	.349	.320	-4.746	-5.914	-4.558	24.729	37.826	22.709
Hungry	3610	3.95	3.98	3.95	.263	.276	.267	-6.571	#####	-6.259	49.766	#####	45.194
Late	3752	3.92	3.95	3.91	.371	.383	.362	-5.026	-7.361	-4.744	27.390	57.779	24.372

S1	4006	2.86	2.88	2.86	.792	.807	.774	-.259	-.303	-.249	-.435	.012	-.508
S2	4016	2.87	2.85	2.87	.705	.717	.696	-.181	-.206	-.180	-.208	.157	-.270
S3	3997	2.57	2.58	2.57	.740	.757	.742	.062	.080	.061	-.347	-.274	-.387
S4	4021	2.98	3.01	2.98	.762	.762	.737	-.256	-.265	-.255	-.556	-.610	-.545
EL5	4012	3.46	3.66	3.41	.925	.948	.875	-1.534	-2.276	-1.428	1.071	4.143	.734
EL6	4017	2.89	2.94	2.88	.782	.808	.770	-.450	-.442	-.432	-.050	.927	-.205
EL7	3966	2.48	2.54	2.47	.918	.930	.907	.079	-.093	.112	-.819	-.597	-.850
EL8	3930	2.79	2.90	2.77	1.082	1.090	1.059	-.285	-.332	-.273	-1.251	-1.204	-1.265
EL9	3985	2.67	2.75	2.65	.793	.809	.787	-.216	-.108	-.216	-.355	-.210	-.408
EL10	3879	2.68	2.74	2.67	.739	.744	.711	-.222	-.070	-.240	-.179	-.268	-.179
EL11	3898	2.87	2.77	2.89	.732	.736	.710	-.277	.024	-.337	-.133	-.422	-.052
EL12	3661	2.69	2.76	2.67	.741	.759	.712	-.513	-.594	-.487	.110	.711	.001
EL13	4002	2.99	3.06	2.98	.719	.725	.692	-.310	-.391	-.291	-.189	.177	-.247
EL14	4017	2.92	2.92	2.92	.718	.734	.680	-.223	-.154	-.229	-.249	.064	-.313
EL15	3964	2.79	2.77	2.79	.746	.766	.721	-.199	-.246	-.196	-.260	.181	-.345
EL16	4011	2.98	3.00	2.98	.635	.652	.615	-.273	-.232	-.272	.350	1.303	.208
M17	3905	3.13	3.25	3.11	.927	.935	.907	-.513	-.681	-.481	-1.116	-.894	-1.151
M18	3964	2.93	3.03	2.91	.828	.846	.809	-.290	-.306	-.269	-.642	-.298	-.715
M19	3107	2.61	2.62	2.61	.874	.879	.857	-.066	.150	-.092	-.698	-.710	-.700
M20	3985	2.84	2.90	2.82	.679	.695	.667	-.291	-.347	-.267	.154	.857	.039
M21	3899	2.81	2.83	2.81	.745	.769	.729	-.107	-.230	-.088	-.434	.271	-.548
M22	3585	2.81	2.84	2.80	.799	.826	.786	-.274	-.252	-.264	-.372	.202	-.488
M23	3784	2.68	2.81	2.66	.769	.792	.748	-.160	-.306	-.112	-.331	.380	-.437
A24	4003	2.75	2.76	2.75	.638	.651	.612	-.332	-.461	-.313	.274	.515	.218
A25	3875	2.66	2.68	2.65	.686	.693	.665	-.178	-.011	-.201	-.101	-.225	-.093
A26	3993	2.74	2.75	2.74	.700	.703	.693	.089	.096	.088	-.485	-.466	-.488
A27	4013	2.58	2.60	2.58	.686	.689	.679	.096	.067	.102	-.285	-.264	-.288
A28	3965	2.54	2.47	2.56	.729	.745	.727	.280	.505	.235	-.358	-.139	-.405
H29	4012	3.02	3.12	3.00	.736	.725	.733	-.288	-.580	-.231	-.437	-.176	-.470
H30	3928	2.96	2.88	2.97	.741	.746	.713	-.167	.048	-.209	-.602	-.752	-.561

Appendix B: Inter-Item Correlations Matrix

Table 9: Inter-Item Correlations Matrix (Kendall's Tau-β)

	S1	S2	S3	S4	EL5	EL6	EL7	EL8	EL9	EL10	EL11	EL12	EL13	EL14	EL15	EL16	M17	M18	M19	M20	M21	M22	M23	A24
S1	1.000	.638**	.576**	.466**	.346**	.411**	.391**	.379**	.505**	.454**	.382**	.423**	.484**	.522**	.506**	.464**	.353**	.321**	.394**	.267**	.442**	.415**	.407**	.472**
S2	.638**	1.000	.578**	.425**	.325**	.429**	.420**	.402**	.512**	.491**	.408**	.444**	.509**	.525**	.529**	.493**	.340**	.346**	.419**	.291**	.479**	.455**	.431**	.527**
S3	.576**	.578**	1.000	.498**	.296**	.412**	.416**	.379**	.456**	.456**	.361**	.397**	.447**	.489**	.487**	.438**	.336**	.352**	.390**	.298**	.461**	.409**	.407**	.461**
S4	.466**	.425**	.498**	1.000	.291**	.361**	.305**	.298**	.385**	.373**	.322**	.386**	.317**	.440**	.306**	.310**	.288**	.279**	.291**	.212**	.338**	.286**	.299**	.348**
EL5	.346**	.325**	.296**	.291**	1.000	.500**	.398**	.505**	.433**	.436**	.396**	.398**	.401**	.370**	.357**	.382**	.450**	.436**	.378**	.343**	.366**	.369**	.378**	.304**
EL6	.411**	.429**	.412**	.361**	.500**	1.000	.588**	.556**	.553**	.560**	.586**	.521**	.457**	.472**	.436**	.454**	.449**	.495**	.503**	.400**	.478**	.468**	.466**	.423**
EL7	.391**	.420**	.416**	.305**	.398**	.588**	1.000	.631**	.550**	.566**	.463**	.455**	.432**	.458**	.434**	.433**	.453**	.497**	.544**	.402**	.503**	.459**	.504**	.423**
EL8	.379**	.402**	.379**	.298**	.505**	.556**	.631**	1.000	.539**	.557**	.463**	.447**	.434**	.426**	.398**	.418**	.467**	.501**	.509**	.380**	.467**	.454**	.465**	.392**
EL9	.505**	.512**	.456**	.385**	.433**	.553**	.550**	.539**	1.000	.662**	.500**	.559**	.537**	.549**	.533**	.532**	.439**	.451**	.564**	.373**	.546**	.523**	.532**	.526**
EL10	.454**	.491**	.456**	.373**	.436**	.560**	.566**	.557**	.662**	1.000	.508**	.529**	.502**	.534**	.522**	.521**	.431**	.473**	.517**	.411**	.549**	.498**	.521**	.515**
EL11	.382**	.408**	.361**	.322**	.396**	.586**	.463**	.463**	.500**	.508**	1.000	.534**	.410**	.432**	.391**	.435**	.371**	.412**	.480**	.341**	.445**	.463**	.440**	.390**
EL12	.423**	.444**	.397**	.386**	.398**	.521**	.455**	.447**	.559**	.529**	.534**	1.000	.489**	.513**	.471**	.470**	.413**	.387**	.515**	.347**	.488**	.508**	.503**	.485**
EL13	.484**	.509**	.447**	.317**	.401**	.457**	.432**	.434**	.537**	.502**	.410**	.489**	1.000	.603**	.641**	.670**	.407**	.389**	.463**	.346**	.509**	.481**	.465**	.486**
EL14	.522**	.525**	.489**	.440**	.370**	.472**	.458**	.426**	.549**	.534**	.432**	.513**	.603**	1.000	.618**	.579**	.412**	.417**	.470**	.369**	.531**	.476**	.465**	.528**
EL15	.506**	.529**	.487**	.306**	.357**	.436**	.434**	.398**	.533**	.522**	.391**	.471**	.641**	.618**	1.000	.614**	.363**	.368**	.455**	.349**	.531**	.471**	.446**	.536**
EL16	.464**	.493**	.438**	.310**	.382**	.454**	.433**	.418**	.532**	.521**	.435**	.470**	.670**	.579**	.614**	1.000	.386**	.392**	.443**	.370**	.518**	.472**	.463**	.470**
M17	.353**	.340**	.336**	.288**	.450**	.449**	.453**	.467**	.439**	.431**	.371**	.413**	.407**	.412**	.363**	.386**	1.000	.596**	.464**	.410**	.449**	.431**	.447**	.379**
M18	.321**	.346**	.352**	.279**	.436**	.495**	.497**	.501**	.451**	.473**	.412**	.387**	.389**	.417**	.368**	.392**	.596**	1.000	.497**	.490**	.462**	.430**	.454**	.366**
M19	.394**	.419**	.390**	.291**	.378**	.503**	.544**	.509**	.564**	.517**	.480**	.515**	.463**	.470**	.455**	.443**	.464**	.497**	1.000	.409**	.596**	.617**	.641**	.477**
M20	.267**	.291**	.298**	.212**	.343**	.400**	.402**	.380**	.373**	.411**	.341**	.347**	.346**	.369**	.349**	.370**	.410**	.490**	.409**	1.000	.460**	.385**	.407**	.355**
M21	.442**	.479**	.461**	.338**	.366**	.478**	.503**	.467**	.546**	.549**	.445**	.488**	.509**	.531**	.531**	.518**	.449**	.462**	.596**	.460**	1.000	.604**	.606**	.527**
M22	.415**	.455**	.409**	.286**	.369**	.468**	.459**	.454**	.523**	.498**	.463**	.508**	.481**	.476**	.471**	.472**	.431**	.430**	.617**	.385**	.604**	1.000	.636**	.494**
M23	.407**	.431**	.407**	.299**	.378**	.466**	.504**	.465**	.532**	.521**	.440**	.503**	.465**	.465**	.446**	.463**	.447**	.454**	.641**	.407**	.606**	.636**	1.000	.478**
A24	.472**	.527**	.461**	.348**	.304**	.423**	.423**	.392**	.526**	.515**	.390**	.485**	.486**	.528**	.536**	.470**	.379**	.366**	.477**	.355**	.527**	.494**	.478**	1.000
A25	.476**	.507**	.496**	.336**	.294**	.408**	.439**	.384**	.488**	.470**	.378**	.455**	.496**	.514**	.551**	.468**	.370**	.368**	.497**	.353**	.547**	.481**	.487**	.604**
A26	.464**	.496**	.484**	.453**	.309**	.421**	.435**	.402**	.477**	.453**	.415**	.460**	.419**	.548**	.432**	.412**	.380**	.389**	.441**	.321**	.474**	.439**	.437**	.512**
A27	.479**	.503**	.508**	.413**	.331**	.478**	.489**	.437**	.527**	.533**	.408**	.483**	.476**	.584**	.515**	.465**	.416**	.420**	.490**	.381**	.535**	.496**	.487**	.525**
A28	.459**	.505**	.501**	.383**	.314**	.447**	.455**	.413**	.538**	.501**	.392**	.455**	.458**	.539**	.518**	.469**	.378**	.387**	.501**	.356**	.522**	.488**	.462**	.543**
H29	-.005	.001	.018	.008	-.003	.002	.003	.009	.030*	.013	.002	.022	.018	.011	-.015	.001	.040**	.008	.003	.030*	.023	.014	.002	.024
H30	.386**	.377**	.332**	.274**	.224**	.332**	.330**	.286**	.377**	.370**	.304**	.374**	.378**	.409**	.417**	.360**	.289**	.256**	.391**	.258**	.403**	.394**	.369**	.410**

Appendix C: Ordered Logit Regression Analysis

Table 11: Ordered Logit Regression Analysis

	S1	S2	S3	S4	EL5	EL6	EL7	EL8	EL9	EL10	EL11	EL12	EL13	EL14	EL15	EL16	M17	M18	M19	M20	M21	M22	M23	A24	A25	A26	A27	A28	H29	H30
S1		+	+	+					+	-				+	+		+	-												+
S2	+		+	+									+		+	+				-		+		+		+		+		
S3	+	+		+	-		+			+		-			+									+	+			+		-
S4	+	+	+		+		-			+	+	+		-	+				-	-					-	+				
EL5	+		-	+		+	-	+		+	+																			
EL6					+		+	+		+	+	+		+				+				-								
EL7			+	-	-	+		+	+	+			-					+	+				+	-			+	+		-
EL8					+	+	+		+	+	+		+					+	+		+	+	-			+	-			-
EL9							+	+		+	+	+	+	+		+		-	+	-	+		+	+				+	-	+
EL10			+	+		+	+	+	+		+	+			+	+	-	+	-	+	+			+		-	+			+
EL11				+	+	+		+	+	+		+			-	+		+				+	+	-	-	+				+
EL12			-	+		+			+	+	+		+	+			+	-	+				+	+						+
EL13		+			+		-	+	+			+		+	+	+						+				-		-	+	+
EL14	+		+	-					+			+	+		+	+	+	+	+		+						+	+		
EL15	+	+	+	-	+					+	-	+	+			+								+	+	-				
EL16		+			+				+	+	+		+	+	+				-		+	+						+		
M17	+				+		+		+	-		+		+				+		+	+	+							+	+
M18	+				+	+	+	+	+	+	+	-		+	-		+		+											+
M19				-	-		+	+	+	-		+						+			+	+	+		+			+	-	
M20		+		-	+	+			-	-						+	+	+			+		+	+						
M21					-		+	+	+	+						+	+	+	+	+		+	+		+		+			+
M22		+		-							+	+				+	+		+		+		+				+			
M23							+		+		+	+	+						+	+	+	+		+	+				-	+
A24		+	-		-		-		+	+	-	+		+						+			+		+	+		+		+
A25		+	+	-							-				+				+		+		+	+		+	+	+		+
A26		+		+						-	+		+	+	-									+	+		+	+	+	
A27					+	+	+	-		+				+							+				+	+		+		
A28		+	+							+			-		+				+					+		+	+			+
H29					-									+	-		+		-				-		+					
H30	+		-				+	-	-	+	+		+		+		+	-		+	+		+	+	+			+		

90% Significance 95% Significance 99% Significance

Appendix D: Inventory Design

Key Learning Area/Domain	Indicator
Social and Emotional Development	1. Emotional Regulation
	2. Self-Awareness
	3. Conflict Resolution
	4. Behavior Regulation
English Language Arts	5. Print Concepts/Letters
	6. Print Concepts/Words
	7. Phonological Awareness
	8. Phonics
	9. Text Analysis
	10. Text Structure
	11. Stages of Writing
	12. Writing Process
	13. Expressive Language
	14. Receptive Language
	15. Collaborative Communication
	16. Conventions of English Language
Mathematics	17. Counting
	18. Naming Numbers
	19. Operations and Algebraic Thinking
	20. Identifying Shapes
	21. Positional Words
	22. Measurement
	23. Data
Approaches to Learning	24. Curiosity and Initiative
	25. Stages of Play
	26. Engagement, Attention and Persistence
	27. Task Analysis
	28. Reasoning and Problem Solving
Health, Wellness and Physical Development	29. Control and Coordination – Fine Motor
	30. Control and Coordination Gross Motor

Appendix E: Inventory Template

Domain: Mathematics

Indicator 17: Counting

Standard: Student knows the count sequence.

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1. Indicate the developmental skill level the child has mastered.

Not Yet Evident	Emerging	Evident	Exceeds
⬭	⬭	⬭	⬭
Student rarely or never exhibits the behaviors listed under the other scoring categories OR needs significant support to achieve these behaviors.*	Attempts to count to twenty, but may skip numbers, repeat numbers, or place numbers in an incorrect order.	Counts to 20.	Counts past 20.
**Students receiving accommodations provided as part of his or her IEP/504 plan should be scored under the scoring category which reflects the student's behavior with this necessary support.*	**Examples** ➢ During circle time, Kaden begins to count his peers "1,2,3,5,6,7,9,11." ➢ At the math center, Bill lines up the unifix cubes and counts them "1,3,4,4,6."	**Examples** ➢ Walking down the steps to the playground, Brayden counts to 20. ➢ In the math center, Julia counts out 20 bears to put in her bowl.	**Examples** ➢ While jumping rope on the playground, Susan counts 25 jumps." ➢ While passing out napkins during snack, Nykeesha counts out 28 napkins.

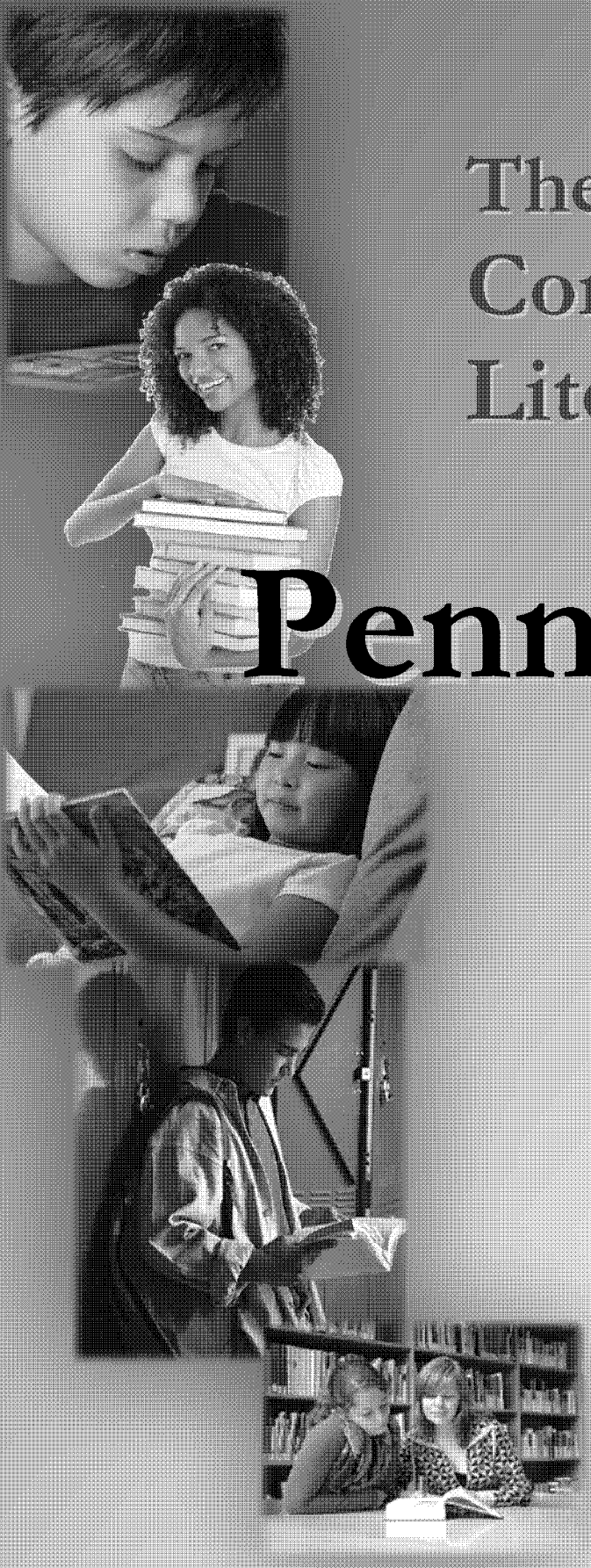
2. Record evidence for this rating here:

3. Unable to determine a skill level:

⬭ I have not had opportunity to look for this skill. ⬭ Child has a developmental disability that would prevent the development of this skill

⬭ Other, please explain: _____

Indicator 17:	Counting	PA Kindergarten Inventory



The Comprehensive Literacy Plan

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Using the Pennsylvania Comprehensive Literacy Plan: Keystones to Opportunity

The Pennsylvania Comprehensive Literacy Plan (PaCLP) was written to provide guidance to stakeholders about their roles in developing an integrated, aligned, and comprehensive set of literacy experiences for children (Birth-grade 12). Educators will find specific information about developing, implementing, and evaluating an evidence-based school literacy program. The document also addresses the important role of parents, librarians, those who work in community agencies, etc., who make important contributions to the development of literacy learning. Below are suggestions for using this document.

1. The document is a dynamic one and the PA Department of Education will continue to add resources that can enhance its comprehensiveness and usability. Given this fluidity, we recommend that readers access the document electronically (www.pdesas.org ; click on *Instruction* and then the *Keystones to Opportunity* tab). By doing so, they can use the hyperlinks to connect to resources that provide elaboration and explanation about various topics. The document will be updated on a regular basis and may include video clips of exemplary classroom practices for the guiding principles and essential elements, suggestions for the classroom teacher, and ideas for partnering with various stakeholders.

2. The PaCLP does not need to be read cover to cover. Often a specific need or interest drives individuals to pursue a particular topic. For example, the preschool teacher interested in oral language development can go directly to Essential Element 2, Oral Language, which addresses the key role of oral language in literacy development. In that section, readers will find research findings, instructional implications, and a list of resources, which include links to electronic materials. The secondary teacher of content can focus on Essential Element 6, Disciplinary Literacy, and again find similar information. Higher education faculty and those preparing teachers can find links to key documents prepared by the PA Department of Education.

3. The PaCLP can be used by those applying for grants from the PA Department or Education as it serves as a blueprint for comprehensive literacy development, birth-grade 12. Schools that are writing grant proposals can use the contents of the PaCLP to identify goals, specific instructional strategies, or assessment approaches. In addition, they can consult references and resources in the document that may be helpful in writing a well-designed grant proposal.

4. The PaCLP can serve as the basis for curriculum development in a school or district. Schools can use the document to determine to what extent their literacy program addresses the guiding principles and essential elements described in the document. The *Needs Assessment Tool* in this document (www.pdesas.org ; click on *Instruction* and then the *Keystones to Opportunity* tab) can be used as a guide for educators about how to make decisions that will improve their literacy program Birth-Grade 12.

The PaCLP is meant to serve as a basis for professional development that will assist schools in developing a comprehensive, aligned, and coherent literacy plan. Such professional development can be provided for various stakeholders, e.g., those in leadership positions, those who teach reading or content area subjects, specialized personnel including reading specialists, special educators, speech and language teachers, as well as parents, and community leaders. Specific ideas for possible use of the document follow.

a. Establish a leadership team or curriculum committee that can use the *Needs Assessment Tool* (www.pdesas.org ; click on *Instruction* and then the *Keystones to Opportunity* tab) to assess the quality of the current literacy program. Based on data and the results of the discussions, decisions about materials, assessment strategies, resources, professional development, etc., can be made. Decisions about ways to partner with other stakeholders can also be made.

b. Base professional development on the goals and established needs of students in a specific school, identifying topics that will enable educators to develop the skills and competencies to address those needs.

c. Use the content of the document itself for professional development. Choose a specific topic and provide opportunities for teachers to address that topic in depth. In other words, that topic can serve as the primary focus of professional development. For example, in addressing the topic of disciplinary literacy (Essential Element 6), teachers might read that section in the document and hold discussions about its content. They might also select one or more of the references or additional resources and use those as a basis for a book club or study group. In other words, each of the guiding principles and essential elements can serve as the basis for long-term, comprehensive professional development.

The Pennsylvania Comprehensive Literacy Plan: Keystones to Opportunity

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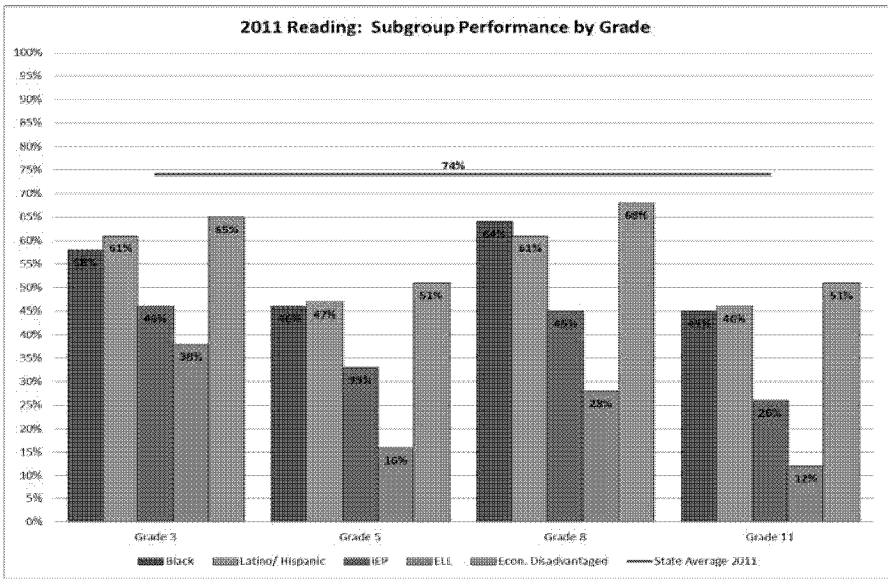

Figure 2. Subgroup Performance by Grade

Figure 2 indicates that achievement for students of poverty and those identified as Black, Latino/Hispanic, English Language Learners, or eligible for special education, although improving, is still a concern and must be addressed if we are to educate all students to be college and career ready (PDE, 2010).

Vision. All students in Pennsylvania from birth through Grade 12 will become well-educated citizens with a command of literacy that prepares them for the challenges of the 21st century and enables them to achieve their personal and professional goals.

Mission. The Pennsylvania Comprehensive Literacy Plan (PaCLP) will provide guidance to stakeholders about their roles in developing an integrated, aligned, and comprehensive set of literacy experiences for students. The plan will identify and describe (1) essential evidence-based notions about the **content** of literacy (birth-Grade 12) and (2) **processes** by which all stakeholders (e.g., parents, care-takers, educators, community members, etc.) involved in students' literacy learning can facilitate that learning in a coherent and consistent manner.

The Audience

The PaCLP provides guidance for the Pennsylvania Department of Education (PDE) and its constituents, including educators at the local and regional levels, parents, and community members. It describes ways by which parents, caretakers, librarians, and other community members and agencies can facilitate student learning. Specifically, the plan identifies important content, processes, and resources that will enable teachers, administrators, and university personnel to plan, develop, and evaluate instructional programs that support equitable and high quality literacy instruction for all students.

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Definition of Literacy

In the *Academic Standards for Reading, Writing, Speaking, and Listening* (2011), the Pennsylvania State Code defines literacy as follows:

> The language arts--Reading, Writing, Speaking, and Listening — are unique because they are processes that students use to learn and make sense of their world. Students do not read "reading; " they read about history, science, mathematics and other content areas as well as topics that interest and entertain them. Similarly, students do not write "writing;" they use written words to express their knowledge and ideas and to inform or entertain others. Because of the unique nature of the language arts, all teachers in a school use Reading, Writing, Speaking, and Listening...[to] assist their students in learning them through multiple classroom situations in all the subject areas. (§ 4.83)

Although many dictionaries define literacy as the ability to read and write, the definition of literacy has evolved and expanded over the past several decades. In the 21st century, literacy includes the ability to locate, evaluate, use, and communicate through a wide range of resources including text, visual, audio, and video sources. In other words, literate individuals demonstrate independence; build strong content knowledge; respond to the varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; and come to understand other perspectives and cultures (Common Core State Standards Initiative, 2010). To develop individuals with such 21st century literacies requires instruction that is integrated and helps students understand how to access, evaluate, synthesize, and contribute to information (National Council of Teachers of English [NCTE], 2007). To ensure academic success, such instruction must occur in the context of all academic disciplines and is the responsibility of all teachers.

Pennsylvania Framework for Literacy

Pennsylvania has a history of commitment to quality literacy instruction. The Pennsylvania Literacy Framework (Pennsylvania Department of Education [PDE], 2000) was the third in a series of documents that has guided literacy instruction since 1979. These initial documents describe a model of literacy that indicates its multi-faceted nature as meaning-making, social, language-based, and human or personal. The PaCLP provides an update to those previous documents, building on the research evidence in the field.

Standards in Pennsylvania

Pennsylvania sets high expectations to ensure that students are prepared to succeed in a competitive global environment. Standards describe what students should know and be able to do from early childhood through high school. The PDE convened stakeholders to

develop content and process standards in fourteen different subject areas. The Pennsylvania Academic Standards for Reading, Writing, Speaking and Listening (2011) are divided into three separate levels: Pre-K – Grade 3, Elementary (Grades 3 – 8), and Secondary (Grades 8 – 12). In addition to the PA Academic Standards for Reading, Writing, Speaking and Listening, Pennsylvania has also adopted the Common Core State Standards that are aligned closely with the current academic standards.

These standards are designed to meet the needs of all students and serve as the foundation for this comprehensive literacy plan. The Standards that guide literacy instruction in Pennsylvania are briefly described below.

Standards for Reading, Writing, Speaking and Listening (Birth – Grade 12)

The Learning Standards for Early Childhood are designed to address the needs of young children. They are divided into Infant-Toddler, Pre-Kindergarten and Kindergarten. The Learning Standards for Early Childhood were revised in 2009 to ensure that they are more consistent, better aligned across ages, and better connected to the academic standards. The PDE Learning Standards for Early Childhood include clearly sequenced skills from infancy through kindergarten, an emphasis on the process of learning, a greater infusion of active learning strategies, and recognition of the impact of culture and diversity on learning.

The Pennsylvania Academic Standards for Grades PreK through 12 indicate what students should know and be able to do at the end of each grade level in the areas of listening, reading, writing, and speaking. The standards provide the targets for instruction and student learning essential for success in all academic areas, not just language arts. All teachers are expected to use the standards as they define the skills and strategies employed by effective readers and writers. The standards provide clear expectations in the following areas:

- Reading independently
- Reading, analyzing and interpreting text
- Reading, analyzing and interpreting literature-fiction and non-fiction
- Types and quality of writing
- Speaking and listening
- Research
- Characteristics and functions of the English language
- Information, communication and literacy technology

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Common Core State Standards

Pennsylvania has adopted the Common Core State Standards (Common Core State Standards Initiative, 2010). The Common Core State Standards (CCSS) are closely aligned with the existing PA Academic standards. The CCSS requires a greater emphasis on informational text, text complexity, digital literacy, discussion and argumentation. The PDE has developed a "transition" plan to assist schools in the implementation of the CCSS and to make any needed curricular changes.

Pennsylvania's Standards Aligned System

In order to more fully describe the elements within an educational system that are necessary for high levels of student achievement, Pennsylvania developed an online resource: the Standards Aligned System (SAS). The SAS website provides resources for understanding and for implementing six critical components of the educational system. The intentional interaction of the articulated components increases the likelihood of student success. The elements include:

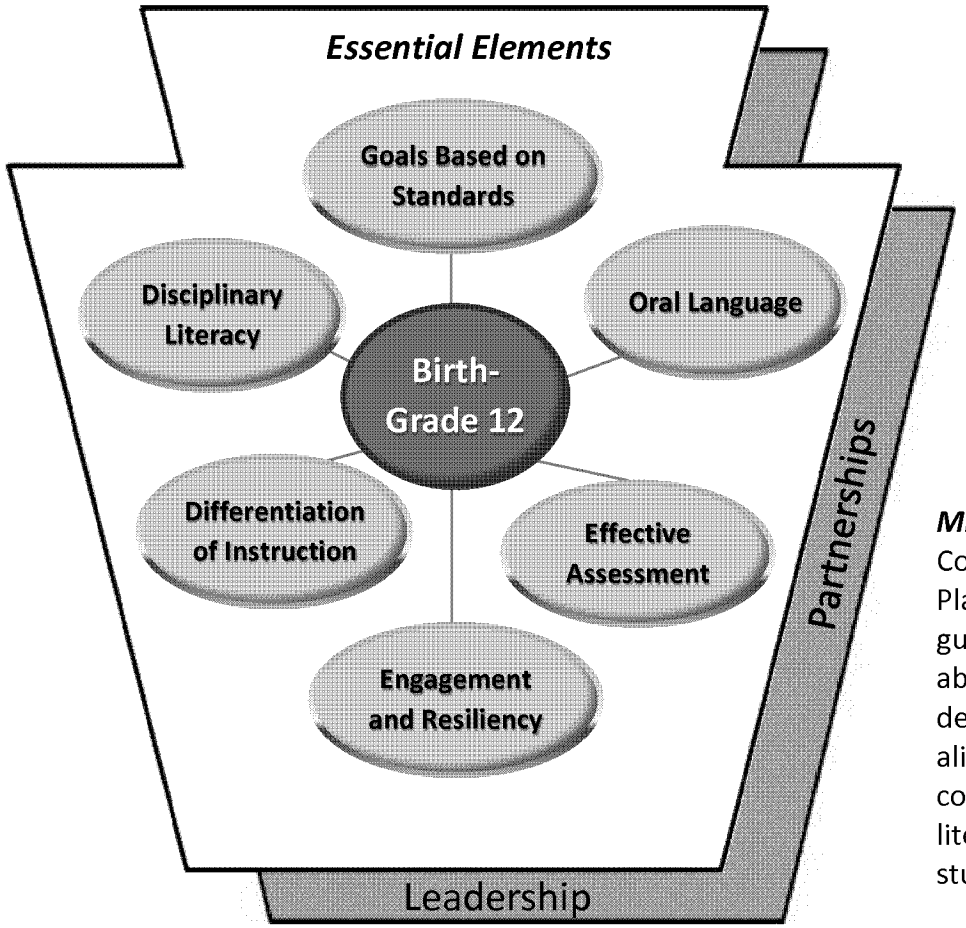
- Curriculum Framework
- Clear Standards
- Fair Assessments
- Instruction
- Interventions
- Materials and Resources

Overview of Plan

In Part II, the Guiding Principles that represent the beliefs and assumptions underlying the PaCLP are described. In Part III, the Essential Elements that provide the building blocks for the PaCLP are identified and explained. Each of the Essential Elements includes a definition and rationale for its inclusion, implications for instruction, and a list of resources for educators. As this dynamic plan continues to be developed, specific examples of cases, videos, and audio material will be provided to assist educators in their instructional efforts. In Part IV, specific information about the resources, policies, and documents available to constituents is provided, as is a set of recommendations for implementing the PaCLP. In that section, an action plan for implementation is also described.

The graphic on the next page illustrates the relationship of the Guiding Principles to the Essential Elements. The Guiding Principles serve as the foundation or base of the Pennsylvania Plan and support the Essential Elements of a comprehensive literacy plan (Birth-Grade 12). Keystones to fulfilling the state's literacy vision and mission require both strong leadership and partnerships.

Pennsylvania Comprehensive Literacy Plan: Keystones to Opportunity



Vision. All students in Pennsylvania from birth through Grade 12 will become well-educated citizens with a command of literacy that prepares them for the challenges of the 21st century and enables them to achieve their personal and professional goals.

Mission. The Pennsylvania Comprehensive Literacy Plan (PaCLP) will provide guidance to stakeholders about their roles in developing an integrated, aligned, and comprehensive set of literacy experiences for students.

Guiding Principles that support the PaCLP

- Literacy is the foundation for all learning
- Multiple perspectives: linguistic, cultural and personal
- High expectations for all learners
- Evidence-based decision making
- 21st Century teaching

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Part II: Guiding Principles

The five guiding principles described below represent the beliefs and assumptions underlying the PaCLP.

Five Guiding Principles

1	**Literacy is a critical foundation for all learning and serves as a "keystone" for opportunity and success. The Standards for literacy must promote high level learning for all students to ensure that they are prepared to meet the challenges of the 21st century. Because literacy is an important skill in itself and serves as a tool for learning, it is an essential at all levels (Birth-Grades 12). Moreover, to enhance literacy learning of students, there must be shared responsibility of educators, parents and caretakers, and the broader community.**
2	**Student learning, motivation, and access to educational opportunities are increased when linguistic, cultural, and personal experiences are valued, understood, represented in the curriculum and classroom practice, and used to help students make connections between what they know and what they are learning. Multiple perspectives and experiences provide opportunities for students to learn about their own as well as the culture of others.**
3	**There must be high expectations for all learners and a belief that all are capable of gaining literacy skills that enable them to be successful as adults. Instruction must address the full range of learners, must be differentiated to meet each child's needs, and requires a well-integrated system connecting general, compensatory, gifted, and special education.**
4	**Evidence-based decision-making must be at the heart of all instructional decisions related to literacy development.**
5	**Educators must be prepared to teach effectively in the schools of the 21st century and be provided with continuing professional development support that enables them to be lifelong learners.**

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Guiding Principle 1

Literacy is a critical foundation for all learning and serves as a "keystone" for opportunity and success. The Standards for literacy must promote high level learning for all students to ensure that they are prepared to meet the challenges of the 21st century. Because literacy is an important skill in itself and serves as a tool for learning, it is an essential at all levels (Birth-Grades 12). Moreover, to enhance literacy learning of students, there must be shared responsibility of educators, parents and caretakers, and the broader community.

As mentioned previously, although literacy can be defined simply as the ability to read and write, it is much more than that. For example, the National Assessment of Adult Literacy (White & Dillow, 2003) defines literacy as being both task-based and skill-based. Task-based literacy refers to one's ability to use literacy to function in society, achieve one's goals, and develop one's knowledge and potential.

Skill-based literacy refers to those foundational skills (e.g., word reading) and higher-level literacy skills that one needs to accomplish literacy tasks. In the PaCLP, we address both foundational skills and task-based skills, recognizing the importance of helping students gain the competence with literacy that enables them to apply their skills in authentic situations, both in and out of school. As Schmoker (2011), indicates, "authentic literacy is integral to both what and how we teach" (p. 11). Literacy is, in fact, the "spine" that holds everything together (Phillips & Wong, 2010).

In the PaCLP, all of the language arts—reading, writing, speaking, and listening—are considered essential capabilities of literate adults. Moreover, literate adults in the 21st century are those who are prepared to engage in a diverse, quickly changing "flat world" in which skills with technologies, problem solving, collaboration, and analysis are central to individual and community success (Friedman, 2005). In order to meet this goal of preparing the literate adult, teachers of content have a responsibility to understand how literacy affects the learning of their discipline and how they can use literacy instruction to strengthen students' learning in their classrooms. Schools must work with parents, caretakers, and communities so that there is an understanding of the importance of their roles in building language and literacy skills and enhancing students' motivation to engage in literacy tasks.

The demands in the 21st century are great:

- More jobs will require some postsecondary education, and this expectation will require that graduates be able to read and comprehend challenging content and apply their reading to problem solve (Haynes, 2011).

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- Technology is changing the way we read, write, teach, and learn. Students of today, described as "digital natives," are surrounded by technology and they think and learn in different ways (Prensky, 2001). Technology, therefore, is not only changing the way that students learn, but also the nature of schools and teaching.
- Because of technology, students will need to have a greater sense of themselves as members of the global community. They will need to have a deeper understanding of and appreciation for peoples of various cultures. They will also need the language and literacy skills that enable them to compete successfully in an economy that is influenced by world events.

Yet, too many students in the U.S. today dropout of high school, or fail to quality for entry to or graduate from institutions of higher learning (McLoyd, 1998). All students must have opportunities to learn, access to teachers, and the academic support they need in order to increase the numbers of graduates who are college and career ready (Haynes, 2011). In other words, as described in the Position Statement by the International Reading Association's Commission on Adolescent Literacy (Moore, Bean, Birdyshaw, & Rycik, 1999),

> "Adolescents entering the adult world in the 21st century will read and write more than at any other time in human history. They will need advanced levels of literacy to perform their jobs, run their households, act as citizens, and conduct their personal lives. They will need literacy to cope with the flood of information they will find everywhere they turn. They will need literacy to feed their imaginations so they can create the world of the future." (p. 3)

Such an approach to literacy instruction should be consistent, aligned, and shared by all—not only those responsible for teaching the language arts, but also those who teach academic subjects such as science, social studies, and math. It requires a commitment from parents and caregivers to provide students with the experiences, world knowledge, and dispositions they need to be successful literacy learners. Furthermore, it requires that those involved in agencies or entities responsible for promoting literacy learning (e.g, libraries, community centers, etc.) become knowledgeable about *how* they can promote literacy for those they serve. It requires that the institutions that prepare teachers address the need for all those entering the field of education to become knowledgeable about how to best provide literacy instruction in their respective fields. Finally, it requires that schools and the agencies that support them (i.e., intermediate units, PaTTAN, and PDE) provide the professional development opportunities that assist teachers in developing and implementing the very best literacy instruction for students in PA schools.

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Guiding Principle 2

Student learning, motivation, and access to educational opportunities are increased when linguistic, cultural and personal experiences are valued, understood, represented in the curriculum and classroom practice, and used to help students make connections between what they know and what they are learning. Multiple perspectives and experiences provide opportunities for students to learn about their own as well as the culture of others.

Where Pennsylvania Stands: In 2009-10, 50,738 ELL students were enrolled in PA schools. There are over 200 language groups represented in PA schools, with Spanish as the most commonly spoken non-English language. (U. S. Department of Education, 2010)

Language and culture shape learning styles and behaviors. Students of various cultural and linguistic backgrounds bring diverse cultural orientations to learning unique to what they have experienced in their homes (Philips, 2003). Students influenced in more collectivist cultures may be more oriented toward collaboration, group interaction, and oral discourse, while students raised in individualistic cultures may be more oriented toward personal achievement, competition, and ownership (Trumball, Rothstein-Fisch, & Greenfield, 2000). . A multi-cultural education approach that explicitly values diversity and supports culturally contextualized teaching will help students access curriculum (Gay, 2004; Charity-Hudley & Mallinson, 2011). Immigrant students educated in their home countries may also bring with them the varied histories, knowledge, and experiences specific to that country and its education system. By using the rich "funds of knowledge" students bring to the classroom, educators can foster the attainment of new knowledge while validating the students' home knowledge (Gonzalez, Moll & Amanti, 2005).

Valuing the language of the home is important to the success of students. Language is tied to culture and to identity; It is tied to family and rich histories. According to Fishman (2007), culture is expressed through language, and when language is lost, those things that represent a way of life, a way of valuing, and human reality are also lost. However, if you talk to members of a particular culture about language loss, they do not address the symbolism of the language but rather talk about the sacredness of language, the sense of kinship associated with language, and their moral commitment to language (abstract). In other words, in the classroom, native language can be utilized as a resource for clarification of difficult tasks and as a means of enriching the learning experience for all students. Specific information about language variation and language development of English Language Learners follows:

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- **Language Variation** (e.g., African American English, Southern English Varieties, Chicano English). Research in the field of linguistics maintains that language variation is normal, and that while educators may view non-standardized varieties of English as informal, mis-educated, or error-ridden, differences in non-standardized English varieties of English, such as African American English (AAE), are "not the same as language deficits, errors, mistakes or confusions. Non-standardized varieties of English are as rule-governed, patterned and predictable in their linguistic structure as are standardized varieties" (Charity-Hudley & Mallinson, 2011, p. 2). Research shows that listeners often rank speakers of standardized varieties as being smarter and of a higher status while speakers of non-standardized varieties of English are often viewed as less intelligent, having less social status, and are often associated with more negative traits than standardized speakers of English (Lippi-Green, 1997). Non-standardized English speakers are also shown to perform lower on standardized tests (Charity-Hudley & Mallinson, 2011). Valuing and understanding the diverse linguistic experiences and skills of culturally and linguistically diverse students is a first step to engaging students and supporting their success; however, additional preparation in understanding language variation and development is important for all educators in supporting the success of culturally and linguistically diverse students.

- **English Language Learners (ELLs) and Language Development.** ELLs have to learn content and language simultaneously; thus, they have "double the work" (Short & Fitzsimmons, 2007). According to World-Class Instructional Design and Assessment, second language development occurs along a language development continuum ranging from entering (level 1) to bridging (level 5), each with specific linguistic characteristics. In order for ELLs to progress in language development and content mastery, they must have access to meaningful language and concepts (Lau v. Nichols, 1974; Krashen, 2004). Meaningful access to the curriculum requires that students have access to reading materials and content at their proficiency level, thereby providing multiple opportunities for success.

Where Pennsylvania Stands: Growth in ELL population in PA schools from 1997-98 to 2007-08 was 114.5%. The total population growth was -1.1% for the same period.
http://www.ncela.gwu.edu/t3sis/state/pennsylvania/data

Misperceptions of language variation, second language development, and cultural orientations to school can lead to detrimental experiences and lowered opportunity for students who are culturally and linguistically diverse, as evidenced by over-representation of African Americans and ELLs in Special Education, lower track classes, and dropout rates (Coutinho & Oswald, 2006). This disparity has critical implications for educators who, in order to help eliminate the achievement gap (more recently referred to as an "opportunity gap"), must understand the importance of

language and culture as they impact school interactions, literacy development, identity development, and academic achievement (DeShano da Silva, Huguley, Kakli, & Rao, 2007).

When educators believe the language variation students bring to the classroom is wrong, their beliefs have negative effects on the students' identity and learning and may suggest something is wrong with the students or their family (Delpit, 2006). At the same time, having an appreciation for and understanding of language variation does not "preclude the need for students to be taught Standard or Academic English, not as a replacement for their home, first, or indigenous languages, but as a complement to them." (Gay, 2010, p. 84) Smitherman (2006) summarizes as follows:

> ….I know of no one, not even the most radical minded linguist or educator (not even the Kid herself!) who has ever argued that American youth, regardless of race/ethnicity, do not need to know the language of wider communication in the U.S. (aka "Standard English"). (p. 142)

Guiding Principle 3

There must be high expectations for all learners and a belief that all are capable of gaining literacy skills that enable them to be successful as adults. Instruction must address the full range of learners, must be differentiated to meet each child's needs, and requires a well-integrated system connecting general, compensatory, gifted, and special education.

Foundational to this principle is the commitment to providing all children access to high quality literacy instruction that is both evidence-based and aligned to a progression of well-articulated standards. Teachers are faced with educating groups of students who continue to become more and more diverse (Capps et al., 2005). Consequently, formal instruction in literacy is often strongly impacted by economic disadvantages and language barriers, as well as a myriad of physical, mental, social, and emotional challenges often presented by many students in this diverse group.

Since the early 1970s, Section 504 of the Rehabilitation Act and the Education for All Handicapped Children Act (later transformed into the Individuals with Disabilities Education Act) has required that schools integrate students with disabilities into the mainstream of education as much as possible. In addition to students with disabilities, this group includes an increasing number of students from diverse cultural backgrounds (Hodgkinson, 2002). For example, an analysis of the 2009 results from the report of the Program for International Student Assessments (PISA) states that "30% of the schools in the US have more than a quarter of their students from

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immigrant backgrounds" (Organisation for Economic Co-operation and Development (OECD), 2010, p. 35). Cultural differences displayed by these students are often incompatible with the existing school cultures and directly influence teaching and learning (Gay, 1994). Many of these same students face language barriers that further complicate learning to read and write in English. Additionally, socioeconomic disadvantages may affect the learning of a significant number of students. Although the US does not necessarily have a greater proportion of socio-economically disadvantaged students than other advancing countries, "socio-economic disadvantage translates more directly to poor educational performance in the United States than is the case in many other countries" (OECD, 2010, p. 35). The result is an increasingly diverse population of students, many of whom face learning challenges and ALL of whom must achieve the highest levels of literacy skills possible.

First and foremost, ensuring these high levels of literacy requires high literacy expectations for ALL students, including those with learning challenges. This requirement necessitates a shared belief that all students have potential and therefore CAN acquire such skills. Results from the PISA analysis suggest "schools and countries where students work in a climate characterized by expectations of high performance and the readiness to invest effort, good teacher-student relations, and high teacher morale tend to achieve better results, on average across countries..." (OECD, 2010, p. 38). Oakes (2003) refers to these expectations as a "college-going school culture" and contends that in such a culture,

> educators believe that all of their students can learn at very high levels. A school culture that expects all students to spend time and effort on academic subjects and emphasizes that effort will pay off fosters high levels of academic achievement. (p.2)

Moreover, it has been clearly demonstrated that students' performance is affected by those around them (Edmonds, 1986; Levin, 1988; Rutter, Maughan, Mortimore, & Ouston, 1979; Slavin, Karweit, & Madden, 1989). In addition, depending on the context, teacher perceptions are not always accurate and at times underestimate the literacy capabilities of students from diverse backgrounds (Ready & Wright, 2011). Such students often lack confidence in their own abilities to read and write; therefore, they put forth very little effort. Conversely, students who are led to believe in their own abilities put forth more effort, which results in greater success. According to Mehan (2007), all other conditions for success flow from this culture of high expectations.

Unfortunately, simply believing in and conveying students' potential to acquire literacy skills is not enough. It is equally important that teachers understand and value learning differences in literacy acquisition. In addition to providing high quality literacy instruction, they must be prepared to intervene with instructional supports that enable students to meet the high expectations that are set for them. Teachers must recognize that background knowledge,

motivation, and purpose play an important role in literacy acquisition of all students, particularly students with learning challenges.

Finally, high expectations and intervention strategies in the general education classroom often must be coupled with specialized supports from outside the regular classroom (Oakes, 2003). Well-prepared specialists must be available to assess specific literacy needs, recommend targeted interventions, and employ highly intensive instruction when required. A coordinated system of care and support must begin early and continue as the child progresses through school. While early intervention is key to future success, it is also true that personalized literacy instruction for many students must continue throughout high school. Plans for students need be no less robust at the high school level as they are in the early years. Once in place, ongoing monitoring and adjusting are necessary to ensure continued growth and avoid eventual plateaus or even digressions in performance that educators often come to expect.

In sum, teaching literacy skills to all students is an immeasurably complex task. For the growing numbers of students with learning challenges, this challenge begins with high expectations for each individual student coupled with an artful coordination of a tiered system of strategies and services. No one entity working on its own or in isolation can provide the necessary programming. For this reason, careful attention must be given to ensuring that instructional supports and services are woven into a cohesive and coherent plan—a plan that spans the grades and intentionally addresses significant transitions along the way. Policy makers, administrators, and teachers must share the commitment to understanding diversity and its impact on literacy acquisition, fostering high expectations for all students, and providing a concomitant system of personalized support for students with diverse literacy needs. This ever-increasing need calls for well-coordinated efforts that begin with teacher preparation and continues through ongoing professional development for practicing teachers and administrators.

Guiding Principle 4

Evidence-based decision-making must be at the heart of all instructional decisions related to literacy development.

Evidence-based education is defined as "the integration of professional wisdom with the best available empirical evidence on making decisions about how to deliver instruction" (Whitehurst, 2002, slide 3). The federal No Child Left Behind Act (NCLB) of 2001 defines scientifically based research as "research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (NCLB, 2002, p. 1964). In addition to being scientifically based, such practices and events must be coupled with professional wisdom that ensures what has been established through rigorous research can be adapted to local contexts and circumstances.

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In order to accomplish this task, teachers must use various sources of data—summative, formative, benchmark, and diagnostic—to obtain a comprehensive and personalized view of the literacy needs of the students they serve. After a thorough analysis of the data, professional wisdom must be used to match individual student needs as closely as possible to evidence-based literacy practices (International Reading Association, 2002). These practices should be those that have undergone scientifically based study and have been determined to be successful in improving literacy acquisition. Once appropriate practices have been identified and employed, teachers must continue to gather relevant and specific assessment data that reflect the ongoing effectiveness of the practices. In doing so, teachers must answer crucial questions: How do I know if it's working? If so, what's next? If not, how can I remedy it? Continual monitoring and adjusting are essential to this process. In essence, this recursive process must include three essential elements: (a) collecting and analyzing assessment data to determine students' level of functioning and need; (b) matching student needs to evidence-based practices; and (c) monitoring progress and continually adjusting the match between need and research-based practices.

The success of this process requires several important considerations. First and foremost, those responsible for planning and delivering instruction must not only have access to relevant data regarding their students, but they also must be "data literate." While schools today are often data-rich, responsible use of data requires guidance and instruction on the value, analysis, and interpretation of information gleaned from data. Therefore, carefully designed learning is essential, beginning with those in teacher preparation programs. It is in these programs that teachers must be prepared to think like scientists and begin to be reflective about their actions and observations. Therefore, specialized and contextually relevant professional development about the interpretation and use of data must be provided for practicing teachers and administrators.

According to Stanovich and Stanovich (2003), "scientific thinking in practice is what characterizes reflective teachers – those who inquire into their own practice and who examine their own classrooms to find out what works best for them and their students" (p.4).

Equally important to knowing how to interpret student assessment data is the understanding of what it means to employ "evidence-based practices" and where to find information on practices that have stood the test of rigorous research. According to Stanovich and Stanovich (2003):

> One factor that has impeded teachers from being active and effective consumers of educational science has been a lack of orientation and training in how to understand the scientific process and how that process results in the cumulative growth of knowledge that leads to validated educational practice. (p. 5)

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According to Shavelson and Towne (2002), a study is scientific when:

1. Pose significant questions that can be investigated empirically.
2. Link research to relevant theory.
3. Use methods that permit direct investigation of the question.
4. Provide a coherent and explicit chain of reasoning.
5. Replicate and generalize across studies
6. Disclose research to encourage professional scrutiny and critique. (p. 52)

Again, those in teacher preparation programs as well as practicing teachers must be provided with experiences that enable them to develop an awareness and understanding of those practices that have been judged to be scientifically based. Since NCLB required the implementation of "scientifically-based" practices in the early 2000s, there has been an increasing body of research pointing to such practices. The following are among the many resources that educators may use to obtain research-based information:

- International Reading Association
  http://www.reading.org/
- National Reading Panel
  www.nationalreadingpanel.org/
- The Literacy Research Initiative (LRI)
  http://lincs.ed.gov/research/research.html
- The Promising Practices Network
  http://www.promisingpractices.net
- Doing What Works
  http://dww.ed.gov/site/
- National Center for Education Research (NCER)
  http://ies.ed.gov/ncer/
- The What Works Clearinghouse
  http://www.w-w-c.org/
- Institute of Education Sciences
  http://ies.ed.gov/aboutus/
- Briefs for families on evidence-based practices
  http://cecp.air.org/familybriefs/
- IDEAS that work: Research in special education
  http://ericec.org/osep-sp.html

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Finally, an obvious but often overlooked requirement for implementing evidence-based instruction is time that is *intentionally* allotted for data analysis, opportunities to explore research-based practices, and sessions for reflection on what is and is not working in classrooms. In order for educators to think like scientists, they must be given the time and preparation in order to do so.

Stanovich and Stanovich (2003) compare effective, evidence-based teaching to the work of architects, which applies many foundational (research-based) principles of engineering to the structure and design of buildings:

> Architects wish to design beautiful buildings and environments, but then must also apply many foundational principles of engineering and adhere to structural principles. If they do not, their buildings, however beautiful they may be, will not stand. Similarly, a teacher seeks to design lessons that simulate students and entice them to learn – lessons that are sometimes a beauty to behold. But if the lessons are not based in the science of pedagogy, they, like poorly constructed buildings, will fail. (pp. 3-4)

Evidence-based decision-making doesn't just happen: Ensuring that it is at the core of all literacy instruction requires a commitment of time, staff development, and resources on the part of teachers, administrators, and policymakers.

Guiding Principle 5

Educators must be prepared to teach effectively in the schools of the 21st century and be provided with continuing professional development support that enables them to be lifelong learners.

Quality teaching has been identified as the most significant variable associated with student learning (Darling-Hammond et al., 2009; Hanushek, 1992; Rivkin, Hanushek, & Kain, 2005). Yet, research findings indicate that poorer school districts and minority children get the least qualified, least knowledgeable teachers (Darling-Hammond, 1999). Given the importance of teacher expertise in all schools, it is crucial that new teachers, at all levels from Pre-Kindergarten to Grade 12, be prepared to be successful educators. Likewise, recognizing that new teachers are not finished products, but rather highly qualified novice educators, there must be opportunities in schools to help these beginning educators grow professionally. As such, job-embedded professional development must be an integral part of every school's comprehensive planning. In other words, teachers must have opportunities to self-reflect, work with their colleagues in such

ways that they grow individually, and work together as a means of improving the school as a whole and developing the best education for the students they serve.

Preparing Teachers

Although much has been written about teacher education in general, research about the preparation of teachers for teaching reading has not been a priority of literacy researchers until recently (Anders, Hoffman, & Duffy, 2000; Roller, 2001). Recent work analyzing research specifically on reading teacher education drew the following conclusions: university teaching practices in which teacher education candidates have opportunities to apply what they are learning, see demonstrations of practice, and receive explicit explanations and examples are important (Risko et al. (2008). In other words, those learning to teach must be given opportunities to apply what they are learning to practice in simulated and real classroom situations. As Moats indicated in the title of her 1999 report, teaching reading *IS* rocket science. Moats (1999) identified four essential areas of emphasis: (a) psychology of reading and reading development; (b) knowledge of the structure of the English language; (c) applying best practices in all aspects of reading instruction; and (d) using validated, reliable, and efficient assessments to inform classroom teaching of reading and writing. To put it in the words of Schulman (1986), teachers must have an in-depth knowledge of content (the what of instruction), general pedagogy (general notion of how to teach, e.g., active engagement, etc.), and content pedagogy (knowing how to teach a specific subject or area, in this case, reading). The newly released *Standards for Reading Professionals* (International Reading Association, 2010) identify six standards that apply to not only the teacher of reading, but also to the middle and high school content teacher who has responsibility for helping students "engage in and learn not only the content but also the reading and writing demands of the discipline" (p. 41). These Standards are:

- Standard 1: Candidates understand the theoretical and evidence-based foundations of reading and writing processes and instruction.
- Standard 2: Candidates use instructional approaches, materials, and an integrated comprehensive balanced curriculum to support student learning in reading and writing.
- Standard 3: Candidate use a variety of assessment tools and practices to plan and evaluate effective reading and writing instruction.
- Standard 4: Candidates create and engage their students in literacy practices that develop awareness, understanding respect, and a valuing of differences in our society.
- Standard 5: Candidates create a literate environment that fosters reading and writing by integrating foundational knowledge, instructional practices, approaches and methods, curriculum materials, and the appropriate use of assessments.

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- Standard 6: Candidates recognize the importance of, demonstrate, and facilitate professional learning and leadership as a career-long effort and responsibility. (IRA, pp. 7-15)

Where Pennsylvania Stands: Recognizing the importance of pre-service, education, Pennsylvania has developed new guidelines for institutions preparing teachers. These guidelines require that teacher candidates have additional coursework related to addressing the needs of English Language Learners and those students who might qualify for special education services. The guidelines incorporate the recent research findings about early literacy in the guidelines for Teachers of Young Children. Pennsylvania's General Standards and Specific Program Guidelines for State Approval of Professional Educator Programs can be viewed at: http://www.portal.state.pa.us/portal/server.pt/community/institutional_program_approval/8817

Professional Development of Teachers

The novice teacher arriving at the schoolhouse door is not a finished product. According to Snow, Griffin, and Burns (2005), learning to teach is a developmental process, with teacher development a progression through the stages of pre-service, apprentice, novice, experienced, and master teacher. Teachers at each of these stages must be engaged in learning, assessing, and reflecting about their work. Professional learning, then, is the cornerstone for strengthening the capacity of educators and building interdisciplinary learning communities to deliver higher literacy standards for every child. The path to sustainable literacy outcomes for all students rests on an investment in quality and shared professional learning toward the goal of becoming "practice-centered" (DuFour, DuFour, & Eaker, 1998). Professional learning, as opposed to just teaching, must become a school's top priority, as schools redefine themselves as communities, professional work places, learning organizations, and democratic communities (Institute for Educational Leadership, 2001; Conley, 1997).

Leadership, infrastructure, resources, and the ability of professionals to access outside training and technical assistance are essential characteristics of effective professional learning (Jaquith, Mindich, Chung Wei, & Darling-Hammond, 2010). These findings are supported by the work of the National Implementation Research Network (NIRN) where "professional learning" was identified as having a significant impact on implementation/school improvement outcomes (Fixsen, Naoom, Blase, Freedman, & Wallace, 2010). Hiring and supporting educational practitioners who demonstrate qualities such as "highly responsive to training and feedback" and "practice-centered" has become an essential practice (Fixsen et al., 2010). Building the instructional skills of educators has consistently been identified as one of the six most commonly

employed interventions among the world's most improved school systems (Mourshed, Chijioke, & Barber, 2010). In schools with well-developed professional development plans, high quality leadership is evident. These leaders provide teachers with opportunities to collaborate with their peers, reflect on their teaching, and participate in decision-making about creating and meeting student goals. In these schools, the importance of human and social capital is understood (Leana & Pil, 2006). In other words, individual teachers, their expertise and experience are valued. Further, there is a culture that provides teachers with the opportunity to work with and learn from their peers. In these schools, distributed leadership is actualized. They are schools where distributed leadership is actualized (Spillane, Halverson, & Diamond, 2001).

Where Pennsylvania Stands: Pennsylvania has a system of robust supports that can be used by schools to guide systems change and transform teaching and learning in order to enhance student growth and achievement. With the adoption of its Standards Aligned System (the what) and Response to Instruction and Intervention Framework (the how), Pennsylvania is nicely poised to scale research-based literacy instructional, curriculum and assessment practices to new and improved levels. However, we continue to need intensive effective and ongoing professional learning opportunities for teachers to enable them to understand how to use these systems as a means of enhancing assessment and instructional efforts. The ultimate goal is to provide the focused, intensive, and ongoing professional development that will result in improved literacy outcomes for all students, regardless of race, class, or disability status.

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Part III: Essential Elements

In this section, we describe the six essential elements, providing a rationale for each of them and then suggesting implications for practice.

The Six Essential Elements

1	**Literacy programs (Birth-12) require a well-articulated, coherent set of goals based on standards as identified by Pennsylvania Department of Education. Articulation is needed between all levels, but especially at important transition points, (i.e., pre-school to kindergarten; elementary school to middle school; and middle school to secondary school). Such programs also require an understanding that each of the language arts contributes to the learning of the other disciplines.**
2	**Oral language is the foundation for literacy development. Speaking and listening are the tools of communication that become the basis for the written word.**
3	**Effective assessment is a key component of quality teaching and learning and is important for literacy instruction and student learning. Teachers, schools, districts, and the state need the knowledge and understanding of how to use data-driven decision-making to inform instructional practices and improve student learning.**
4	**Fostering engagement and academic resiliency are keys to developing literate students.**
5	**Differentiation of instruction is key to enhancing students' ability to learn. Teachers must be able to plan instruction that accounts for the differences that exist in students' skills, interests, cultures, and experiential backgrounds.**
6	**The development of a literate individual requires that educators in all of the academic disciplines incorporate literacy instruction as a means of enhancing students' ability to learn the content of the discipline.**

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ESSENTIAL ELEMENT 1: Standards

Literacy programs (Birth-12) require a well-articulated, coherent set of goals based on standards as identified by Pennsylvania Department of Education. Articulation is needed between all levels, but especially at important transition points, (i.e., pre-school to kindergarten; elementary school to middle school; and middle school to secondary school). Such programs also require an understanding that each of the language arts contributes to the learning of the other disciplines.

RATIONALE

Importance of Standards to guide curriculum and instruction. Research evidence has contributed to a deeper understanding of how to improve student learning and overall literacy achievement in schools (Good & Brophy, 1986; Levine & Lezotte, 1990, Scheerens & Bosker, 1997, Marzano, 2000). Although there are many factors that contribute to student learning (e.g., monitoring student work, parental involvement, and school climate), one of the factors highlighted in these various research reports is the importance of a "guaranteed and viable curriculum" (Marzano, 2003, p. 22). Essential goals and content for all students should be identified; moreover, these goals should enable all students to gain the necessary skills of "a literate person in the twenty-first century" (Common Core State Standards Initiative [CCSS], 2010, p. 3). Standards provide schools with necessary information for identifying what students need to know and be able to do at each grade level. These end-of-year expectations provide school districts with a defined cumulative progression of literacy skills. In addition, the Common Core State Standards (CCSS) adopted by Pennsylvania Department of Education (PDE) provide another resource for identifying increasingly challenging content relevant for developing the literacy curriculum. These standards provide key information about the importance of using complex materials in the classroom, especially informational texts in both English language arts classrooms and in the academic disciplines.

> In a complex and sometimes even dangerous world, their ability to read will be crucial. Continual instruction beyond the early grades is needed."
> — International Reading Association (Moore et al., 1999, p. 3)

Alignment and articulation. At the same time, individual schools must take into consideration their local context—including teacher knowledge, student needs, district curriculum, and resources—to make decisions about how to meet or address the standards. By reviewing standards and discussing how they can be used to develop both curriculum and instructional practices, districts can develop a plan for literacy that is coherent and articulated across the grades. Too often, teachers in schools make independent decisions about what and to what extent material should be covered. As indicated by Stevenson and Stigler (1992), such

inconsistent practices create a learning gap for students. Some topics or skills are addressed by individual teachers and omitted by others; some teachers have different expectations about what students should learn; or student assignments in various classrooms differ in their level of challenge or difficulty. In these cases, it is difficult to know what content students have had an opportunity to learn as they move through the grades. By using a well-articulated set of goals, schools can create equal opportunities for access to a challenging literacy curriculum for all students.

An integrated model. According to the CCSS (2010), the processes of communication are closely connected; thus, teachers can more effectively and efficiently develop reading, writing, speaking, and listening skills by taking advantage of these connections. Students can write about what they read; they can also discuss (speak and listen) with others their responses to various selections. At early levels, students can read what they have written and use these experiences for developing a sense of the alphabetic principle and the importance of reading as a meaning-making endeavor.

In the following charts, the foci of instruction for Birth-5, Kindergarten-grade 5, and Grades 6-12 for Reading, Writing, Listening, Speaking, and Language are identified in summary form. In the implications sections, resources are identified, including specific standards documents adopted by PDE. Additional ideas for instructional practice are also described.

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Reading: Focus of Instruction

Birth to Age 5	Grades K-5	Grades 6-12
Early development of essential competencies enhances and enriches the development of "conventional literacy skills" in the years before formal schooling begins. Many experiences with oral language, engagement in listening and speaking, development of print concepts, and book awareness provide the consistent repetitions of early concepts needed to become a reader. Phonological awareness is an important building block that leads to successful reading. Experiences that build world and word (vocabulary) knowledge of preschoolers serve as a fundamental building block. Beginning readers use a variety of information to acquire meaning from text. Learners benefit from opportunities with pictures, symbols, letter/sound correspondence (phonics), and familiar words.	The learning focus for K-5 students begins with the development of the foundational skills (See CCSS, 2010, Foundational Skills (K-5): • print concepts • phonological awareness • phonics and word recognition • fluency At the same time, there must be an emphasis on the development of vocabulary and comprehension so that students see reading as a meaning-making process. "The foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines." (CCSS, 2010, p. 15) As beginning readers increase their knowledge of word-solving strategies, they develop strategies to link prior knowledge to new information in books, leading to the ability to comprehend, evaluate and appreciate text.	"The skills that students learn up until fourth grade are absolutely critical to later success, but they are simply not enough. Adolescent literacy is a shifting landscape where the heights get higher, the inclines steeper and the terrain rockier…" (Carnegie Counsel on Advancing Adolescent Literacy [CCAAL], 2010, p. 10) *Time to Act* (CCAAL, 2010) describes the changes students encounter as they transition to secondary grades: • *Texts become longer* – Students need to develop reading stamina. • *Word complexity increases* – Students need to develop technical and all-purpose academic vocabularies, with increasing demands on word recognition, pronunciation, fluency, and meaning-making. • *Sentence complexity increases* – Students need to understand complex relationships among ideas signaled through connective works set in long and complicated sentences. • *Structural complexity increases* – Students need to recognize and use text structure to identify several logical relationships between ideas.

	"To build a foundation for college and career readiness, students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and information texts" (CCSS, 2010, p. 10). Literacy demands change and intensify quickly after third grade. Upper elementary students are expected to learn new words, new facts, and new ideas from reading, as well as to interpret and summarize the texts they read. Combining literacy skills and content knowledge requires a new level of sophistication. Learning gradually shifts to deeper comprehension in the intermediate grades supplemented with instruction in word study and fluency as needed. Instruction should be differentiated: Good readers will need less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.	• *Graphic representations become more important* – Students must synthesize information from graphs, charts, tables, illustrations, and equations, with written text to grasp the full meaning of content-area texts. • *Conceptual challenge increases* – Students must synthesize from one task to another and from one set of concepts to another, and build logical relationships across multiple aspects of a given conceptual domain with the information they glean from texts. The overarching goal is stated clearly in the final Reading Anchor Standard: "Read and comprehend complex literary and informational texts independently and proficiently" (CCSS, 2010, p. 10). Reading at the middle and high school level is characterized by increasing text complexity and focus on informational text. Interacting with text through close reading, analysis, and interpretation is essential. A deep reading of text should engage the reader in interacting with the text to discern not only the craft of the writer but the connectivity to other texts and the ability to cite evidence to support a conclusion.

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IMPLICATIONS FOR READING

Birth to Age 5

The Infant-Toddler and Pre-Kindergarten Learning Standards for Early Childhood provide parents and educators with the guidelines for content that can be taught prior to the kindergarten year.

Important implications for instruction include:

- Very young children benefit from a great deal of teacher support in the form of modeled instruction. In reading, this includes the Read Aloud, where teachers or parents read a story to the child, thinking aloud to model their thought processes.
- Reading to young children exposes learners to various skills and strategies that must be developed for successful reading.
- Re-reading familiar books allows young learners to participate in the reading. This can help to develop a positive disposition toward reading and literacy, as well as provide guided practice as children build a repertoire of literacy skills and strategies.
- Emergent learners need to have access to a variety of books. Independent 'pretend reading' leads to practice with text reading. This can also enhance oral language and vocabulary development.

Grades K-5

The Pennsylvania Academic Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students. Excellent literacy instruction in the primary grades is essential for preventing future reading difficulties.

Important implications for instruction include:

- Teach the foundational skills (print concepts, phonological awareness, phonics, fluency) explicitly and provide opportunities for students to apply what they are learning. Appendix A (CCSS, 2010) contains supplementary information that provides significant and detailed information to support the teaching of phoneme-grapheme correspondences, the progression of phonological awareness, and orthography.

- Coordinate and integrate the teaching of word-identification skills and comprehension skills/strategies.

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- Provide explicit instruction that enables students to apply problem-solving, monitoring, and self-correcting strategies when they are reading. Such strategies may include: re-reading, previewing a text, asking questions, reading aloud, using story structure, using text aids, marking texts, using context, writing in response to reading, discussing text with others (Dorn & Soffos, 2005, p. 42)
- Provide opportunities for students to read and discuss a variety of interesting and appropriate texts from multiple genres.
- Recognized that reading, writing, speaking, and listening are closely intertwined. Thus, classroom practices should be planned so they emphasize these connections (e.g., writing in response to reading).
- There are evidence-based practices that support students in the classroom and enable educators to effectively implement standards-based instruction. See the Pennsylvania Response to Instruction and Intervention Initiative.
- Refer to the Institute of Education Sciences' (IES) *Improving Reading Comprehension in Kindergarten through 3rd Grade: A Practice Guide* (Shanahan et al., 2010). Five specific recommendations include:
  - Teach students how to use reading comprehension strategies.
  - Teach students to identify and use the text's organizational structure.
  - Guide students through focused, high-quality discussion on the meaning of text.
  - Select texts purposefully to support comprehension development.
  - Establish an engaging and motivating context in which to teach reading comprehension

Grades 6-12

The Pennsylvania Academic Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Expose students to a variety of texts for a variety of purposes, providing explicit explanations and guidance as needed so that learners can comprehend texts across the content areas.
- Teach specific strategies for navigating informational text across content areas.
- Increase text complexity to develop strategic readers with strong analytical skills.

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- Provide instruction in the analysis and evaluation of a variety of texts to determine theme, style, likenesses, etc.
- Provide opportunities for students to examine text from a literary perspective to understand the craft of the writer.
- Refer to the IES's publication entitled *Improving Adolescent Literacy: Effective Classroom and Intervention Practices: A Practice Guide* (Kamil, Borman, Dole, Kral, Salinger, & Torgeson, 2008). This guide recommends that educators:
  - Provide explicit vocabulary instruction.
  - Provide direct and explicit comprehension strategy instruction.
  - Provide opportunities for extended discussion of text meaning and interpretation.
  - Increase student motivation and engagement in literacy learning.
  - Make available intensive individualized interventions for struggling readers that can be provided by qualified specialists.

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Writing: Focus of Instruction

Birth to Age 5	Grades K-5	Grades 6-12
Beginning writers need encouragement and instruction in composing stories and text using pictures, scribbles, letter-like forms, and letters. Emergent writers may also write familiar words and label pictures. As children develop understanding of letter-sound correspondence, they may attempt to phonetically spell words. Preschoolers need opportunities to develop their ability to communicate in writing through a variety of genres and styles.	Kindergarten students begin with pre-writing, and by the end of fifth grade, students are expected to experience writing narrative, persuasive, and informational text. The Common Core State Standards: Writing K-5 (2010) identify the following 4 categories: 1. Text types and purposes 2. Production and distribution of writing 3. Research to build and present knowledge 4. Range of writing Provide students with explicit instruction and opportunities to devote significant time and effort to writing, producing numerous pieces over short and extended periods throughout the year. The primary goal of instruction is to develop students' ability to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveying real and imagined experiences and events. Students need support in learning to appreciate that a key purpose of writing is to communicate clearly to an external,	Good writing skills are essential for effective communication. As stated in Graham and Perin (2007), "writing skill is a predictor of academic success and a basic requirement for participation in civic life and in the global economy" (p. 3). Students should have opportunities to write in persuasive, informative, and narrative modes, with guidance as needed. Students should write routinely over extended periods (time for research, reflection, and revision) and shorter periods (a single sitting or a day or two) for a range of tasks, purposes, and audiences. Effective writers employ detail in their writing, sustain a focus, and produce well-organized writing suited to purpose. They are able to gather information, evaluate sources, and cite evidence. Writing should be used as a tool for learning, not just showing what was learned, in all disciplines. Writers need to be strategic in creating the writing appropriate to task, whether

	sometimes unfamiliar, audience and adapting the form and content of their writing to accomplish a particular task and purpose. Students need support to build knowledge on a subject through research projects and to respond analytically to literary and informational sources.	on-demand writing or drafting and redrafting over time. Technology is one of the tools to employ to support the writing process.

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IMPLICATIONS FOR WRITING

Birth to Age 5

The Infant-Toddler and Pre-Kindergarten Learning Standards for Early Childhood provide parents and educators with the guidelines for content that can be taught prior to the kindergarten year.

Important implications for instruction include:

- Modeling the act of writing for young children will foster an emerging understanding of what writers do. When adults write messages for children, learners begin to see that writing is 'talk written down,' — that our messages can be recorded and read back later.
- Oral language is the building block to writing: When children understand they can write what they say, they have endless opportunities for composition. When adults guide students in their writing approximations, children can gain new understandings about composition, concepts about print, and phonics.
- Spelling approximations provide young learners with essential learning opportunities. When children write letters to represent sounds, they are practicing and building phonics skills. This practice ultimately leads to increased fluency in writing, as it can lead to conventional spelling of high frequency words (Bear, Invernizzi, & Templeton 2007). Young children often develop this ability spontaneously; however, modeled instruction and guided practice enhance this, and all other, learning.
- Provide preschoolers with daily opportunities to explore writing materials and conventions in a purposeful and meaningful manner.

Grades K-5

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts, provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Provide students with systematic and explicit instruction in quality of writing as appropriate per the individual student's instructional level.
- Allot time daily for students to write with guidance for a variety of purposes (e.g., quick writes, reader response, summarization, etc.).

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- Model writing of narrative, informational, and persuasive/argument writing during course of the school year.
- Focus on the writing process as a means of producing and improving writing.
- Provide opportunities for research and the creation of short and long research projects, employing technology where appropriate.

Grades 6-12

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Provide opportunities for students to write daily for a variety of purposes.
- Develop student writers through modeling and explicit instruction in narrative, informational, and persuasive writing.
- Focus on the writing process as a means of producing and improving writing.
- Provide opportunities for research and the creation of short and long research projects, employing technology where appropriate.

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Speaking and Listening: Focus of Instruction

Birth to Age 5	Grades K-5	Grades 6-12
Young children express themselves and their knowledge of the world through spoken language. The overarching goal is to ensure that learners are capable of speaking and listening so that they are capable of sharing ideas and understand those of others. The primary goals for listening and speaking include teaching preschoolers how to converse about a topic, to convey understanding, and to ask questions in an effort to clarify meaning. Students need many opportunities to talk with others, such as their parents, caretakers, teachers, and peers. Early learners need support and scaffolding from adults to help them elaborate and expand on what they have said. Young children need experiences and guidance in how to listen to others.	Speaking and listening are important prerequisites for learning to read and write; furthermore, they have intrinsic value as modes of communication. Students must have opportunities to take part in a variety of rich structured conversations with small groups, an individual partner, or the whole class. Students must be able to "contribute accurate, relevant information, respond to and develop what others have said, make comparisons and contrasts, and analyze and synthesize a multiple of ideas in various domains" (CCSS, 2010, p. 22).	Speaking and Listening focus on two areas: (a) Comprehension and Collaboration and (b) Presentation of Knowledge and Ideas. Students need to become good speakers and listeners whether engaged in one-on-one, small group, or whole class interactions. Listening attentively, responding thoughtfully, and building upon the ideas of others creates effective communicators. Specific ideas from The CCSS (2010, pp. 49-50): -Students need the opportunity to participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. -Students must have many opportunities to participate in a variety of rich, structured conversations as part of a whole class, in small groups, and with a partner.

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IMPLICATIONS FOR SPEAKING AND LISTENING

Birth to Age 5

Educators and parents of children from birth to age 5 can gather essential information from Pennsylvania's Infant-Toddler and Pre-Kindergarten learning standards to plan instruction. See the Essential Element of Oral Language in this document for additional information.

Important implications for instruction include:

- Children learn to speak by listening to and interacting with more knowledgeable others. Through conversations, teachers can model good speaking and listening skills. When children participate in oral language activities, they learn to apply the good speaking and listening skills that have been modeled.
- Teaching must be responsive and intentional. Teachers and childcare providers need to plan opportunities to model effective conversational conventions, such as turn-taking, asking questions, and providing complete responses.
- Authentic oral language activities, such as "Show and Tell" or "Buzz Groups," provide students with opportunities to share their own experiences. They become more successful when opportunities for guided practice are provided.

Grades K-5

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Instruct students on the importance of collaborating, being a good listener, supporting ideas with facts (depending on grade level), and using media in effective communication.
- Model effective turn-taking, collaboration, and listening skills. Provide guided practice in listening and speaking skills as well as feedback to students.
- Provide opportunities for students to engage in one-on-one, small group, and whole class conversations. This task can be accomplished through whole class discussion or center time activities.

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Grades 6-12

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Provide instruction on the importance of collaborating, being a good listener, supporting ideas with facts, and using media in effective communication.
- Model effective turn-taking, collaboration, and listening skills.
- Provide guided practice in listening and speaking that allows the teacher to provide feedback to students. This exercise ultimately leads to self-regulated learning.
- Provide opportunities for students to engage in one-on-one, small group, and whole class conversations throughout the school day.

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Language: Focus of Instruction

Birth to Age 5	Grades K-5	Grades 6-12
A primary goal for young learners (birth through age 5) is to expose children to good models of effective language use. This exposure will help children to develop understanding prior to receiving explicit language instruction in kindergarten and beyond. Young learners need to understand that language is a tool for communication. The development of vocabulary is a key goal for the development of literacy and language in young children. Young children need many experiences and opportunities to use spoken language and gestures to convey a message. Emergent learners begin to approximate writing as a means of sharing their ideas, and 'pretend read' in an effort to gain meaning from written text.	The language strand is comprised of three focus areas: • Conventions of Standard English • Knowledge of Language • Vocabulary Acquisition and Use Students must gain control over many conventions of standard English grammar, usage, and mechanics as well as learn other ways to use language to convey meaning effectively. They must also be able to determine or clarify the meaning of grade-appropriate words encountered through listening, reading, and media use; come to appreciate that words have non-literal meanings, shadings of meaning, and relationships to other words; and expand their vocabulary in the course of studying content.	The language strand is comprised of three focus areas: • Conventions of Standard English • Knowledge of Language • Vocabulary Acquisition and Use The conventions of standard English include grammar, usage, and mechanics as well as the ability to use language to convey meaning effectively. Understanding how language functions in different contexts, making effective choices for meaning, and comprehending more completely when reading or listening are all key concepts for the knowledge of language. The area of vocabulary acquisition includes determining or clarifying the meaning of words through context clues, understanding word relationships and nuances in meanings, and acquiring and using content specific words.

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IMPLICATIONS FOR LANGUAGE

Birth to Age 5

The Pennsylvania State Standards and the Early Learning Standards provide the content that needs to be addressed at each age level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Children need ample opportunities to play with language as they acquire literacy skills. They should be immersed in oral language opportunities, including authentic conversations and planned sharing experiences.
- Adults should demonstrate accurate conventions in speaking, acting as a model of standard language use.
- Children should also have opportunities to see their spoken language, and the speech of others, written down. This experience will facilitate the acquisition and development of early reading and writing skills. For example, teachers can write dictated messages for students in a group or individual setting.
- Students should be immersed in books and other texts (including their own writing) so that they can practice reading the messages written by them and others. Teachers and/or parents should read a variety books to young children and provide books for independent browsing and exploration.

Grades K-5

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Focus on the use of language as a tool for communication - as a means for writers to express themselves with style and clarity, as a means for speakers to express ideas clearly, and as a means for readers to understand the author's explicit and implicit message.
- Recognize that reading, writing, speaking, listening and language are closely intertwined. As a result of this relationship, many of the classroom implications are

connected. There are some research-based, evidence-based practices that support students in the classroom. See Pennsylvania Response to Instruction and Intervention Initiative (RtII) for classroom instructional strategies.

- Support the language development of English Language Learners (ELLs). See Best Practice for ELLS: Vocabulary Instruction and Pennsylvania English Language Proficiency Standards.

Grades 6-12

The Pennsylvania State Standards and the Common Core State Standards for English Language Arts provide the content that needs to be addressed at each grade level. These standards are the expectations we should have for all students.

Important implications for instruction include:

- Focus on the use of language as a tool for communication – as a means for writers to express themselves with style and clarity, as a means for speakers to express ideas clearly, and as a means for readers to understand the author's explicit and implicit message.
- Refer to the Common Core State Standards for English Language Arts for further information.

The extensive research base on vocabulary learning and teaching provides us with important guidelines that inform instruction (Harmon & Wood, 2008). This research summary highlights relevant studies that support several key understandings of vocabulary learning and teaching. Harmon and Wood (2008) describe the following are six key understandings for all teachers across age levels and content areas:

- Word knowledge is important for learning.
- Word knowledge is complex.
- Metacognition is an important aspect of vocabulary learning.
- Effective vocabulary instruction moves beyond the definitional level of word meanings.
- Vocabulary learning occurs implicitly in classrooms across disciplines.
- Vocabulary learning occurs through direct instruction.

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Links to Resources for Reading, Writing, Speaking, Listening and Language

Birth to 5

The EFL Playhouse

- Resources for young English Language Learners

KidSource

Literacy Achievement Research Center at Michigan State University

School-Home Links Reading Kit

- U.S. Government ideas for kindergarten

TeAchnology

- Resources for Early Childhood Language Arts

Webbing into Literacy: A Head Start Program

Grade K-5

Florida Center for Reading Research (FCRR)

Improving Reading Comprehension in Kindergarten Through 3rd Grade

- Guide from the Institute of Education Sciences' What Works Clearinghouse that recommends five steps to helping educators improve early reading comprehension instruction for young readers.

International Reading Association

IRIS Center for Training Enhancements

- Free online interactive resources that translate research about the education of students with disabilities into practice. Materials cover a wide variety of evidence-based topics, including behavior, RTI, learning strategies, and progress monitoring.

Literacy Achievement Research Center at Michigan State University

Pennsylvania Training and Technical Assistance Network

Teaching is Rocket Science: What Expert Teachers of Reading Should Know and Be Able To Do

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Grades 6-12

Adolescent Literacy: Position Statement of the International Reading Association

College and Career Readiness Anchor Standards for Speaking and Listening

Literacy Achievement Research Center at Michigan State University

National High School Center: Topics for High School Improvement

Secondary Section of the National Council of Teachers of English

Thinkfinity

Notable Features of the Common Core State Standards (CCSS)

Because the CCSS (2010) provide some unique features beyond those provided in the Pennsylvania Academic Standards, each is described below.

CCSS Approach to Text Complexity

Success in the workforce or in post-secondary education requires being able to independently read a high volume of complex texts. Various indicators show that many high school graduates are not prepared to do this task because they have not had experience with texts of the same complexity as they will encounter in colleges, technical schools, and the workplace. They have also not worked with the same volume of expository texts, as opposed to narrative texts, that they will encounter in post-secondary schools or the workplace. A study of ACT results showed that student success in college was not more closely linked to student ability to answer higher-order questions such as inferences, but was instead linked to the ability to read high complexity text. The CCSS are designed to ensure that students have sufficient exposure to high complexity texts across text genres and content areas (CCSS, 2010).

The CCSS (2010) use a three-part model to measure text complexity:

1. **Qualitative evaluation** of text is based on aspects of text best measured by human readers, text purpose, structure, language use, and knowledge demands.

2. **Quantitative evaluation** of text addresses text readability as measured by word length, word frequency, sentence length, and text cohesion. These factors are more effectively measured text formulas run by computer.

3. **Reader and task considerations** refer to variables specific to a reader such as motivation, prior knowledge, and prior experience. These factors are best measured by educators who know both the text and the student (CCSS, 2010).

Appendix A of the CCSS (2010) contains samples of annotated texts. These examples include a sample of the text, the assigned grade level, text complexity band, an explanation based on the texts' qualitative and quantitative evaluations, and a discussion of reader and task considerations. These examples show how the three-part text complexity model works in application to specific texts (CCSS, 2010).

Exemplars of Reading Texts

One of the most notable features of the CCSS (2010) is the provision of exemplar texts. The CCSS include specific examples of texts that students should be able to master in specific grade bands. There is not an expectation that teachers use all or only the exemplar texts, but the exemplar texts provide clear examples of the nature and complexity what is expected of students in the different grade bands. Appendix B of the CCSS contains these exemplar texts, and it also includes sample performance tasks by grade band and genre. Appendix B includes the following types of exemplar texts:

	Grade Bands: K-1 and 2-3	Grade Band: 4-5	Grade Bands: 6-8 and 9-10 and 11-CCR
Exemplars included in the CCSS	• Stories • Poetry • Read-Aloud Stories • Read-Aloud Poetry • Informational Texts • Read-Aloud Informational Texts	• Stories • Poetry • Informational Texts	• Stories • Drama • Poetry • Informational: English Language Arts • Informational: History/Social Studies • Informational: Science, Math, and Technical Subjects

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Reading Standards: Foundational Skills

Included with the CCSS (2010) Reading Standards for K-5 are foundational skills for K-5 students that focus on key aspects of learning to read. The foundational skills focus on print concepts, phonological awareness, phonics and word recognition, and fluency (CCSS, 2010).

Appendix A also contains supplementary information that provides significant and detailed information to support the teaching of phoneme-grapheme correspondences, the progression of phonological awareness, and orthography (CCSS, 2010).

CCSS – Writing

The CCSS (2010) focus on three types of writing: argument, informational/explanatory, and narrative. An argument is a reasoned, logical text designed to demonstrate that a writer's proposition is valid. Informational/explanatory text is intended to describe or explain a topic. Its purpose is to clarify, while an argument text is intended to persuade. Narrative text conveys experience and uses time as a structure. Narrative texts can address content areas such as biographies in history/social studies, and accounts of experiments in science.

The CCSS (2010) place special emphasis on the writing of arguments based on substantive topics or issues. The ability to do this well is important for both college and career readiness. The CCSS (2010) point out that an argument is a text designed to make its point through logic and reasons, as opposed to the emotional approaches that might be found in persuasive writing. A number of studies highlight that a student's ability to write a logical, reasoned argument supported by relevant facts is key for academic success. The ability to write an argument is also critical for career success, since the work of many professions is to address issues through research, reflection, and decision-making and then sharing the results of that process with others. Knowing how to write a high quality argument text will also prepare students to evaluate the argument texts created by others, and this is a skill that is vital in the information age (CCSS, 2010).

Samples of Student Writing

Appendix C in the CCSS (2010) contains student writing samples across the grade levels. These samples are annotated to demonstrate the criteria for quality writing at each grade level, and all samples meet the quality expected for the grade level. They are produced in different settings and include in-class work, on-demand assessments, and research projects. These samples are very useful resource for making the CCSS writing standards clear and explicit, and they show what quality writing in the different writing types looks like across the grade levels.

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Reading and Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects

Another notable feature of the CCSS (2010) is the creation of reading and writing standards for grades 6-12 that are specific to content areas. With the CCSS's increased emphasis on the reading and writing of content-specific informational texts, these standards provide additional specificity for the kinds of reading and writing that students should learn during content area instruction. These standards are organized into three grade bands: Grades 6-8, Grades 9-10, and Grades 11-12. There are separate reading standards created for history/social studies, and science and technical subjects. The writing standards address all content areas.

Alignment of CCSS Expectations and National Assessment of Educational Progress (NAEP)

The CCSS' (2010) increased emphasis on the reading of informational texts and on the writing of informational texts, especially arguments, is aligned to the NAEP's increased emphasis on informational texts. Note the increasing emphasis on the use of informational texts in the two tables below.

Distribution of Literary and Informational Passages by Grade in the 2009 NAEP Reading Framework (CCSS, 2010, p. 5)

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

Distribution of Communicative Purposes by Grade in the 2011 NAEP Writing Framework (CCSS, 2010, p. 5)

Grade	To Persuade	To Explain	To Convey Experience
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

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References for Essential Element 1

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ESSENTIAL ELEMENT 2: Oral Language

Oral language is the foundation for literacy development. Speaking and listening are the tools of communication that become the basis for the written word.

RATIONALE

Infants emerge into a world full of sounds. Their growing brains are hard-wired to be particularly sensitive to the sounds of the language that their caregivers are using. This need is intrinsic and is necessary for infants to negotiate the world and make sense of their experiences (Moats, 2010). By 10 months of age, infants are sensitized to and can distinguish between all the phonemes (speech sounds) in their own language and those in other languages (Gopnick, Meltzhoff, & Kuhl, 1999). As babies move from cooing to babbling, they recognize combinations of sounds, and typically between 12 and 18 months, they begin to use words. Between 24-36 months, young children learn how to put words together to make phrases and sentences. By listening and interacting with the adults in their environment, children learn all the components of our rule-ordered language system. From the individual sounds of language, to the meaning of words and word parts, to the various ways words are put together in sentences, as well as the rhythm and intonations of the language—young children integrate all the components of the communication system. It is these very structures that are the basis for written language and form a foundation for literacy development: *It is both from and through speech that children come to understand written language* (Adams, 1990).

Literacy is an achievement that relies on language proficiencies at many levels, from basic sounds to the complexities of text structures and literary devices. Language proficiency and reading achievement are highly correlated (Mehta, Foorman, Branum-Martin, & Taylor, 2005; Goodson, Layzer, Simon, & Dwyer, 2009). Young children's language skills, including vocabulary and complex language, along with phonological awareness and letter knowledge are the most important and unique predictors of reading ability (Snow, Burns, & Griffin, 1998; Goodson et al., 2009). The more children have experience with language and literacy before they begin formal schooling, the better equipped they are to succeed in reading (Snow et al., 1998). The school experience should enable children to refine and build on the language of their homes and communities.

Children come to school with marked differences in language and vocabulary. They come with language patterns that have been influenced by their culture and family. In their landmark study of young children just learning to talk, Hart and Risley (1995) found that the amount of "talkativeness" in families distinguished students who were "language rich." When the data were extrapolated, the difference in the number of words heard between an average 4-year-old child from a professional family and an average 4-year-old from a low-income family was 30 million

words (Hart & Risley, 1995). Hart and Risley (1995) found strong correlations between young children living in homes with verbal parents and both higher IQ and better vocabulary scores. In a later study, Hart and Risley (2003) found that vocabulary use at age 3 was predictive of measures of language skills at ages 9-10, as well as with reading comprehension scores in third grade.

Language continues to develop during the primary years. However, the gap between children with advanced language skills and restricted language skills grows wider during the elementary years. In the upper elementary grades, those who enter fourth grade with significant vocabulary deficits show increasing problems with reading comprehension, even if they have good reading (word identification) skills (Beimiller, 2005). As students get older, reading vocabulary measures correlate higher with reading comprehension than do measures of oral vocabulary (Tannenbaum, Torgeson, & Wagner, 2006). These measures take into account both word-reading skills and the knowledge of word meanings.

Although it is essential to understand the development of language for all students, those working with English Language Learners (ELLs) need knowledge that is even more specialized. The ELLs' proficiency in his or her first language has many implications for second language literacy development. Students who are literate and educated in their first language can transfer linguistic knowledge and conceptual knowledge. Students who read in their native language already have phonemic awareness and basic literacy skills, and therefore need to be taught only the forms that differ in the second language. They may benefit from the use of translated materials and bilingual dictionaries. Students who are not literate in their native language have a greater challenge, as they must learn to read in a language that they are unable to understand (i.e., ELLs who are not proficient in their native language will have more difficulty learning to read English than will native English speakers). Language transfer impacts ELLs in several ways, with some being advantageous and others, disadvantageous. ELLs may transfer cognates and familiar grammatical structures. Yet, unfamiliar or differing structures may cause errors in word order. In order to understand the impact of the first language(s), it is helpful to consider how similar the first language(s) is in comparison to

Factors that Affect Language Transfer

- Alphabet
- Letter Recognition
- Phonetic relationships (e.g., the letter p in Ukrainian sounds like /r/ in English)
- Sounds that are not mutual or don't exist in one of the languages
- Grammar structures, exceptions to typical grammar rules, or grammar patterns that don't exist in one of the languages (e.g., some languages do not have a past tense verb form)
- Language functions that are not mutual
- Cultural functions (e.g., indirect vs. direct communication styles, social hierarchy in language, etc.)
- Idioms or figurative language

English. Consider, for example, the different challenges for native speakers of Spanish, as opposed to Arabic.

Language transfer issues coupled with developing proficiency in English and limited vocabulary may result in the production of student errors, such as encoding and decoding errors, pronunciation errors, omissions in speaking and writing, awkward word order, etc. Students may struggle to retain information and to comprehend it. Some of these errors may mirror those seen in students with learning disabilities; however, they should not be confused as such because they are a normal part of second language development. Such issues can be alleviated through direct instruction in English, the use of graphic and mnemonic supports, and increased exposure and interaction with English (Kauffman, 2007).

IMPLICATIONS

General

Oral language and vocabulary can be developed and enhanced in three main ways: (a) listening to the language and being engaged in conversations, (b) being read to, and (c) reading independently. Parents, caregivers and teachers at all levels should:

- Talk to students. Engage them in conversation.
- Model language patterns.
- Deliberately use rich vocabulary and discuss word meanings.
- Provide time for and encourage conversations between students.
- Read to students and talk about what is being read.
- Encourage wide and independent reading.
- Value and encourage students to use their home language.

Birth to Age 5

The amount of talk in the young child's life is critical for oral language development, intellectual growth, and reading development. As children learn to take turns in the dance of conversation, their language abilities grow even more. Practicing language is as important as hearing it.

- Talk, talk, talk to the infant, the baby, and the young child.
- Get close to the infant/young child so that he or she can see facial expressions, watch lip movements, and hear the voice clearly.

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- Imitate the sounds the baby is making and add new ones.
- Introduce play with sounds and nursery rhymes, finger plays, jingles, and songs.
- Confirm and clarify the child's attempts at using new words.
- Elaborate on what children say and extend their utterances.
- Describe shared experiences with new and rich vocabulary.
- Use varied vocabulary and words that are robust in meaning (e.g., "ferocious" dinosaurs, a group of children make a "commotion"). Children love big words! Mealtimes provide a wonderful opportunity for this type of conversation.
- Discuss the meaning of words.
- In preschools and daycare settings, provide a curriculum that provides rich opportunities for talk between teacher and children.
- Read, read, and read some more to the child. Interact with the child around the text (Whitehurst, 1992).
- Spend some time each day with an individual child, talking with that child about topics of interest. Such time provides opportunities for assessing the child's language and for fostering its growth.
- Foster strong relationships between home, care and education settings.

Kindergarten through Fifth Grade

Oral language and vocabulary develop when teachers and parents:

- Talk to and with students, providing extended opportunity for discussion.
- Provide many opportunities for conversation between students. Use partnering, think/pair/share, small group, and whole class formats in the classroom.
- Foster word consciousness and teach students strategies for learning words on their own.
- Use explicit, robust vocabulary instruction and are intentional about the words chosen (Beck, McKeown, & Kuncan, 2002).
- Create many opportunities for read alouds about a wide range of topics and include all genres.
- Foster discussion among children using open-ended questions about the text.
- Expect wide independent reading. Offer students opportunity to choose their own materials.
- Make available various genres of text, including narrative, informational, poetry, biographies, etc.

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- Teach the importance of collaborating, being a good listener, and supporting ideas with facts.
- Develop a school-wide plan for vocabulary instruction across all domains (White & Kim, 2009).
- See the Common Core State Standards (2010) for additional instructional implications.

Sixth through Twelfth Grade

Literacy demands intensify as secondary students are expected to learn new words, new facts, and new ideas from reading. They must use their literacy skills to learn new content. Teachers in all content areas should:

- Use text-based collaborative learning that involves students interacting with one another around a variety of texts and a variety of topics.
- Include direct vocabulary instruction in language arts as well as content area courses. Teach independent word-learning strategies.
- Take advantage of the social interaction among students as a means of learning through discussions in the classroom.
- Provide opportunities for students to engage in one-to-one, small group, and whole class conversations. Content for the conversations can come from what is important in various domains.
- Teach the importance of collaborating, being a good listener, building on the ideas of others, and articulating ideas clearly, supporting those ideas with facts.
- Use active participation strategies so that all students are engaged in the classroom discourse.
- Use writing as a tool to help students think about and refine word choice, sentence structure, and pragmatics.
- Encourage wide independent reading in a variety of genres.
- See Common Core State Standards (2010) for additional instructional implications.

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Additional Annotated Resources

Galinsky, E. (2010). *Mind in the making: The seven essential life skills every child needs.* New York, NY: HarpersCollins.

The chapter on communication (Chapter 3) discusses the course of how children learn to communicate. Children are born primed to communicate. The author explores "parent-speak, parent-look, and parent-gesture" and the positive effect they have on a child's ability to learn and detect words, learn to communicate, recognize and say words, and process language. The author states that when employers were asked what competencies and skills fall below expectations with new hires, the two top concerns were identified as spoken communication skills and written communication skills, thus pointing out the importance for children to not only acquire tools of language, but to later learn to use the tools with power and precision to communicate effectively.

Learning Point Associates. (2010). *Access to print materials improves children's reading: A meta-analysis of 108 most relevant studies shows positive impacts.* Washington, D.C.: Author. Retrieved from *http://www.rif.org/assets/documents/RIFandLearningPointMeta-OnePager.pdf*

Learning Point Associates was commissioned by Reading Is Fundamental, to conduct a meta-analytic research synthesis of children's book ownership and lending programs to determine the effect of access to print materials on educational outcomes for children. An analysis of 44 studies found that access to print materials: improves children's reading performance, helps children learn the basics of reading, causes children to read longer and produces improved attitudes about reading among children.

Lin, C. (2001). *Early literacy instruction: Research applications in the classroom.* Retrieved from *http://www.readingrockets.org/article/397?theme=print*

The author reviewed various research studies and identified essential elements of effective early literacy classroom instruction. These elements include; phonics and phonemic awareness, positive adult-child relationships, print-rich environment, integrated language explorations in the curriculum, reading and writing activities and varied teaching strategies according to children's needs. Research shows that there is a link between early literacy and later career and academic success. Teachers, families and communities have a shared responsibility to ensure that children become competent readers and writers.

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Lonigan, C. J., & Shanahan, T. (2002). *Developing early literacy: Report of the National Early Literacy Panel* [Executive Summary]. Washington, D. C.: National Institute for Literacy. Retrieved from http://lincs.ed.gov/publications/pdf/NELPSummary.pdf

The National Early Literacy Panel (NELP) was convened to look at the implications of instructional practices used with children from birth to age 5. The authors discuss six variables that correlate with later literacy; alphabet knowledge, phonological awareness, rapid automatic naming (RAN) of letters or digits, RAN of objects or colors, writing or writing name and phonological memory. Additional important variables include; concepts about print, print knowledge, reading readiness, oral language and visual processing. Instructional practices that enhance early literacy skills are also discussed and include: code-focused interventions, shared-reading interventions, parent and home programs, preschool and kindergarten programs and language-enhancement interventions.

Additional Resources

Bardige, B. S. (2005). *At a loss for words: How America is failing our children and what we can do about it.* Philadelphia, PA: Temple University Press.

Bardige, B. S., & Segal, M. (2005). *Building literacy with love: A guide for teachers and caregivers from birth-age 5.* Washington, D.C.: Zero to Three Press.

Bennett-Armistead, V. S., Duke, N. K., & Moses, A. M. (2005). *Literacy and the youngest learner.* New York, NY: Scholastic Inc.

Hart, B. & Risley, T. R. (2002). *The social world of children learning to talk*. Baltimore, MD: Paul H. Brookes Publishing Company.

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Neuman, S. B., & Roskos, K. (2007). Nurturing Knowledge: Building a Foundation for School Success by Linking Early Literacy to Math, Science, Art and Social Studies. New York, NY: Scholastic, Inc.

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Web Resources

Access to Print Materials Improves Children's Reading: A Meta-Analysis of 108 Most Relevant Studies Shows Positive Impacts

Age-Appropriate Speech and Language Milestones

- This website is from the Lucile Packard Children's Hospital at Stanford. It lists age-appropriate speech and language milestones with associated programs.

Center for Early Literacy Learning (CELL) Videos

- These videos are designed for the teacher, parent, trainer, coach, and home visitor. Each video introduces and illustrates a key component of the CELL Early Literacy Learning Model. The home visitor may use a video to introduce and illustrate a component with a parent. The trainer may use a video to introduce, illustrate, or practice a component with teachers. The videos are for use by teachers and with parents as indicated.

Developmental Milestones: Understanding Words, Behavior, and Concepts

- This website lists milestones in understanding words, behavior, and concepts in the language development of children.

Early Beginnings: Early Literacy Knowledge and Instruction

- This resource, developed by the national Institute for Literacy, provides instructional guidance for early childhood caregivers, teachers, and leaders. Based on the research findings of the National Early Literacy Panel's report, this document lists early predictors of reading success, learning activities, and suggestions for professional development.

How Does Your Child Hear and Talk?

- This website from the American Language-Speech-Hearing Association contains information on the development of communication skills from birth to five years. It describes the typical milestones in a child's development.

The Importance of Oral Language

- Jerry Aldridge reviews various articles on oral language and studies done in classroom…could be a helpful summary of classroom practice to increase oral language.

Improving Reading Comprehension in Kindergarten Through 3rd Grade: A Practice Guide

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Language Development Chart

- The Child Development Institute contains information on the wide range of the development of language in children from birth to age 8. Includes links to extra resources.

Learning to Talk and Listen: An Oral Language Resource for Early Childhood Caregivers

- Based on the findings of the National Early Literacy Panel's report, this resource emphasizes the importance of language development in the Pre-K years and the connection to early reading. It provides helpful instructional examples and strategies to use with Pre-K children to enhance their development of early language.

More Time to Talk: Language Building Tips for Center-Based Child Care Providers

PDE Standards Aligned System.

- For more specific supportive practices, select the tab entitled "Clear Standards," select "Download PDFs," and then select "Download Standards." Amongst the available files, you will find the following:
    - Pennsylvania Learning Standards for Early Childhood for Infants and Toddlers (p. 78-88)
    - Pennsylvania Learning Standards for Pre-Kindergarten (p. 58-61).
    - Pennsylvania Learning Standards for Early Childhood-Kindergarten (p. 63-72), Pennsylvania Learning Standards for Early Childhood-First Grade (p. 44-54) and Pennsylvania Learning Standards for Early Childhood-Second Grade (p. 44-54).

Preschool Language and Literacy: Use Interactive and Dialogic Reading

- This resource provides information and instructional tools to support the implementation of interactive and dialogic reading, both of which have strong evidence of positive results for children, particularly those with low language skills. This site provides video clips, PowerPoint slides, and tools to assist early childhood caregivers in using this strategy.

Summary of the National Early Literacy Panel

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ESSENTIAL ELEMENT 3: Effective Assessment

Effective assessment is a key component of quality teaching and learning and is important for literacy instruction and student learning. Teachers, schools, districts, and the state need the knowledge and understanding of how to use data-driven decision-making to inform instructional practices and improve student learning.

RATIONALE

Evidence from effective schools research indicates the use of assessment results for identifying student, classroom, and school needs is highly related to school success (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Marzano, 2000). Taylor, Pearson, Peterson, and Rodriguez (2005), who worked with multiple schools to improve literacy instruction, found that when teachers were helped to understand how data could be used to improve literacy instruction, their instructional practices and student learning were enhanced. In schools where data are used effectively, teachers administer, analyze, and use the results of both formal and informal assessment tools to assess student strengths and needs, as well as plan and evaluate instruction. Administrators and teachers use grade level and school results to make curricular decisions and to select materials for school-level decisions. School districts make decisions about long-term planning and resource allocation based on assessment results. They also use the results of assessment to inform parents and the community about school strengths and areas for improvement. In other words, assessment is needed for multiple purposes and for multiple audiences. Assessment can be used for providing information about student performance at individual, classroom, school, and system-wide levels. Furthermore, it can be used to provide outcome data for accountability purposes and information that can improve the system.

Given its multiple purposes, a strong multi-dimensional assessment system is imperative to developing and implementing an effective literacy program for all students at all levels. Moreover, aligning assessments to concise and powerful standards allows students, parents, and educators to gauge and monitor students' performance (National Research Council, 1996). Assessment is not beneficial unless it aligns closely with the goals and instruction of the school. Thus, there is a need for a well-aligned system of assessment that measures what is essential at specific grade levels and, at the same time, enables schools to look longitudinally at the achievement of students. A comprehensive assessment plan should include summative, formative, benchmark, and diagnostic tests, each of which is used for specific purposes. (See the Pennsylvania Standards Aligned System (SAS) Framework for more information.)

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A comprehensive assessment plan prevents a reliance on testing in which a single test score determines student placement, educational policy, or teacher evaluation. The International Reading Association, or IRA, (1999) addresses the inherent problems with making decisions based on a single measure and acknowledges the importance of varied assessments for the purposeful collection of data to inform instruction. In a benchmark study, Valencia and Buly (2004) gave diagnostic tests to students who had failed the fourth grade statewide reading assessment measure, assessing students' skills in word identification, meaning, and fluency. Few were weak in all three areas, but others were strong in some and weak in another. According to Valencia & Buly (2004), different instruction was needed for these various profiles of students. Moreover, Valencia and Buly (2004) cautioned educators from using the results of a single outcome measure to make instructional decisions about students. They found that assessments and instruction have a dynamic reciprocity in both measuring progress and providing informative data to shape effective and responsive instruction.

Morsy, Kieffer, & Snow (2010) recommended a system that includes standardized tests alongside of on-going formal and informal measures. An important feature of such an assessment system is its ability to identify deficiencies and provide multiple sources of evidence to measure the influence of instruction. Thus, appropriate interpretation and context of test data are imperative to improving teaching and learning (International Reading Association [IRA] & National Council of Teachers of English [NCTE], 2007). A robust system with thoughtful, appropriate interpretation allows educators to determine the effectiveness of instruction in advancing student achievement to grade-level benchmarks. Pennsylvania Department of Education's Standards Aligned System (SAS) includes "Fair Assessments" as one of the six areas essential for promoting student achievement, exemplifying the need for alignment among assessment, instruction, and clear standards.

One of the most important uses of assessment is its value in informing instruction. Literacy researchers have found that classroom-based assessments were systematically used on a regular basis in effective schools (Cunningham, 2006; Taylor, Pearson, Clark, & Walpole, 1999). Educators in these schools used results to identify needs, group students, and make decisions about instruction. Teachers could talk with great insight about what students could and could not do in various components of literacy.

In sum, assessment is the systematic and thoughtful interpretation of the results that afford responsive, data-driven practice. In a position statement about assessment, the National Association for the Education of Young Children (NAEYC) and National Association of Early Childhood Specialists in State Departments of Education (NAECS/SCE) highlight the importance of reliable, valid, and fair assessments to improve student learning (2003). To that end, educators need to be knowledgeable and develop expertise about the purpose of a measurement, literacy development, and effective pedagogical practices.

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There is overwhelming consensus among national professional organizations of the importance of literacy assessment (IRA, 1999; IRA & NCTE, 2007; National Association for the Education of Young Children [NAEYC] & National Association of Early Childhood Specialists in State Departments of Education [NAECS/SDE], 2003). In 2007, IRA and NCTE updated a policy document entitled *Standards for the Assessment of Reading and Writing*. In 2009, NAEYC and IRA joined forces to publish a document, *Where We Stand: On Learning to Read and Write,* that addressed literacy assessments for early learners. According to these organizations, policies about assessment for young learners should emphasize more comprehensive assessment tools and responsive teaching. They also highlight the importance of such assessments for young English Language Learners (ELLs).

Assessing the ELL Student

The key to assessing ELLs is to assess what they know, not what they do not know (English). Some things to consider is how ELLs might show or demonstrate what they know, given that language structures and test formats may be barriers to students' abilities to understand the task or question, or to producing the answer. Some guiding ideas include:

- Assess what has been taught
- Assess in the same way you taught (e.g., visuals, manipulatives, scaffolds, graphic organizers, etc.)
- Design assessments to reflect the language proficiency of students
- Allow for performance-based assessments, re-tellings, oral reports, poster presentations, and other assessment formats that reduce the language demand
- Test the concept, not necessarily language

IMPLICATIONS

General

An effective assessment system must be congruent with and based on the standards, curriculum, and instruction of a school or district. The Pennsylvania SAS provides a comprehensive approach for student achievement. The assessment portion of SAS encompasses elements of assessments for federal and state initiatives, as well as classroom-based assessments for Local Education Agencies (LEAs). The four types of assessments recommended are summative, formative, benchmark, and diagnostic. The following charts include definitions of each type of assessment and examples of such measures.

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Types of Assessments

Summative Assessments seek to make an overall judgment of progress made at the end of a defined period of instruction. They occur at the end of a school level, grade, or course, or are administered at certain grades for purposes of state or local accountability. They are designed to produce clear data on the student's accomplishments at key points in the student's academic career.

Examples:

- Pennsylvania System of School Assessment (PSSA)
- Keystone End of Course Exams
- End-of-unit exams
- Final exams

Formative Assessments are classroom-based assessments that allow teachers to monitor and adjust their instructional practices in order to meet individual student needs. Teachers use formative assessment strategies during instruction to provide feedback to students. This feedback allows teachers to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes. Formative assessments can occur during lessons or observations of students in classrooms, or they can consist of more formalized instruments that also require qualitative analysis by teachers.

Examples:

- Running records, response logs, graphic organizers, curriculum based measures
- Observational tools: thumbs-up, eye contact, exit slips, questioning, discussion, think-pair-share

Benchmark Assessments are designed to provide feedback to both the teacher and the student about how the student is progressing towards demonstrating proficiency on state grade level standards. Well-designed benchmark assessments are standards-based assessments that measure the degree to which a student has mastered a given concept. These assessments measure concepts, skills, and/or applications. Benchmark assessments are reported by referencing the standards, not other students' performance. They also measure performance regularly, not only at a single moment in time.

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Examples: • Vendor Developed – 4Sight, Acuity, Assess2Know DIBELS®Next, AimsWeb (R-CBM, MAZE and Early Literacy Assessments) • District/School Developed – common assessments administered across a grade level with a common rubric that benchmarks achievement by referencing state standards
Diagnostic Assessments determine each student's strengths, weaknesses, knowledge, and skills. Administering diagnostic assessments permits the instructor to intervene at the point where students begin to struggle (such as in RTII) or remediate students that fall far below grade level. Diagnostic assessments allow teachers to adjust the curriculum to meet pupils' unique needs. Examples: • GRADE, Classroom Diagnostic Tools (CDT), CORE: Multiple Measures; Developmental Reading Assessment (DRA)

A highly developed assessment system includes authentic reading and writing tasks, a balanced approach to using formal and informal assessments, classroom-based evidence, growth over time, and more involvement of students in the evaluation of their own work. Teachers can use assessment before, during, and after instruction to provide feedback and adjust ongoing teaching and learning to improve student achievement and to provide appropriate challenge for all students at their instructional levels. Students also can be asked to self-evaluate their work as a means of developing their knowledge and understanding of what they do and do not know. These assessment practices are in line with 21st century learning skills and will contribute to the success of Pennsylvania students in a world that requires complex literacy skills and abilities.

A well-developed assessment system can contribute to school district and system improvement. (This document contains an Appendix that can serve as a resource for creating an Assessment and Analysis Plan.) A school system that adopts a systemic approach that emphasizes the importance of a school-wide assessment system is well-positioned to use assessment data to inform teaching and learning practices. This assessment system should include assessment tools that are congruent with the district's goals and curriculum. Multiple assessment tools are used in a system-wide assessment to ensure an accurate picture of student achievement. Stakeholders should use the results of assessment data in a variety of ways. For example:

- Parents and families can be kept informed of plans for teaching and learning and the progress being made by their children;
- School leaders can use the information for school-wide planning, to support their teachers, and determine professional development needs; and

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- Pennsylvania school boards can use the results of assessments to assist in their decision-making for school improvement.

In 2010, The Pennsylvania State Board of Education (PDE) determined that all LEAs would design an assessment system to do the following:

- Determine the degree to which students are achieving academic standards and their progress towards college and career readiness,
- Improve curriculum and instructional practices using assessment results grounded in both what students have learned and areas of need;
- Provide information requested by PDE regarding the achievement of academic standards; and
- Provide summary information, including results of assessments to the general public.

To support districts in the development of their assessment system, Pennsylvania provides guidance, resources, and materials. The Bureau of Assessment and Accountability is responsible for the development, administration, scoring. and reporting of the state's assessment system. State assessments include the following:

- Pennsylvania State System of Assessment (PSSA)
- Pennsylvania System of School Assessment-Modified (PSSA-M), an assessment based on modified academic achievement standards
- Pennsylvania Alternate System of Assessment (PASA), for students with the most significant cognitive disabilities.
- Keystone End of Course Exams.

The Bureau provides direction to schools and districts on assessment and accountability programs, evaluates school/student progress, and reports school performance for compliance with the No Child Left Behind Act of 2001 (2002). Other functions include the development of assessment anchors to better align curricula, instruction and assessment practices throughout the state; coordination of test development, administration, and reporting; and providing technical assistance for statewide and local assessment systems.

Resources for assessment are also available on Pennsylvania's SAS website. For instance, the Diagnostic Testing Tool for Language Arts will soon be available to every district in the Commonwealth at no cost. This tool can aid educators in identifying students' needs and strengths at the grade level, classroom level, and individual student level. On SAS, teachers can also create assessments through the "Assessment Creator" or look for a variety of resources through the "Reference Materials" tab.

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Assessment Resources for Essential Element 3

Pennsylvania Department of Education Resources

- 4Sight
- Academic Standards and Assessment; Reading, Writing, Speaking and Listening and Mathematics
- The Bureau of Assessment and Accountability
- Keystone Exams
- Pennsylvania Benchmark Assessment Initiative
- Pennsylvania System of School Assessment (PSSA)
- PVAAS
- Standards Aligned System – Assessment

Other Professional Resources

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ESSENTIAL ELEMENT 4: Engagement and Resiliency

Fostering engagement and academic resiliency are keys to developing literate students.

RATIONALE

Engagement and academic resiliency are two important factors for developing literate students and motivating them to learn. If students are motivated to learn, they can develop the stamina to continue to learn and become productive citizens. In this section, engagement and academic resiliency are described, which is followed by a discussion about various topics (namely culture, the role of libraries, and technology) that are important for helping to promote engagement and academic resiliency.

Engagement is "the level of cognitive involvement that a person invests in a process" (Kelley & Clausen-Grace, 2009, p. 313). A highly engaged student is mentally, emotionally, and even physically involved in a task, while a disengaged student is barely aware of the task (Kelley & Clausen-Grace, 2009). Effective literacy programs focus on developing students who are engaged, interested, and motivated to read and write. Without such interest and motivation, the learning process is hindered. Engaged readers use skills and strategies to interact with text and are able to discuss text selections with peers and teachers (Guthrie & Wigfield, 2000; Morrow as cited in Kelley & Clausen-Grace, 2009). They approach reading with confidence and with the expected outcome of understanding what they have read. Reading brings pleasure for engaged readers who seek to expand their interests (Guthrie, 2001). Campbell, Voelkl, and Donahue (as cited in Kelley & Clausen-Grace, 2009) found that engaged readers demonstrate higher levels of reading achievement than those students who struggle to stay engaged with academic tasks.

Students' engagement may waver depending on content, task, and text (Kelley & Clausen-Grace, 2009). In addition, students' beliefs about themselves, especially self-efficacy (i.e., students' belief in their capacities to read successfully), have implications for engagement in reading as well as reading frequency and comprehension (Wigfield, Guthrie, Tonks, & Perencevich, 2004). The extent to how well students have completed tasks and the feedback and encouragement they receive can impact their efficacy beliefs.

Furthermore, engagement in reading has helped students overcome obstacles, such as low family income and a less varied educational background (Guthrie & Wigfield, 2000). In fact, Guthrie (2004) found that more highly engaged readers from homes with fewer materials or educational advantages routinely out-performed less engaged readers from more advantaged home environments. Reading motivation predicts both the amount of reading and reading comprehension (Guthrie, Wigfield, Metsala, and Cox, 1999). According to Guthrie (as cited in

Allington, 2009), the correlation between engaged reading and comprehension was stronger than any demographic characteristics on the National Assessment of Educational Progress. Research consistently shows that more access to books results in more reading, and students who read more become better readers, writers, and also show improvements in vocabulary and grammar (Krashen, 2004). Engaged learners work in a motivated way; they employ whatever skills and strategies they have with effort, persistence, and an expectation of success (Guthrie & Wigfield, 1997). Purposeful reading that is intrinsically motivated will help develop engaged readers.

Intrinsically motivated readers are engaged in reading as a meaningful, enjoyable, self-enhancing pursuit. Guthrie and Wigfield (1997) found that by age 10, students have gained a repertoire of cognitive strategies for finding books of interest, getting the main idea, self-monitoring, understanding, and remembering what they have read that is personally significant. They read more than three times as much as children who scored at the bottom third on levels of motivation, spending more than thirty minutes per day reading for their own enjoyment. Intrinsic motivation energizes avid reading and creates self-improving readers. Self-improving readers are active, motivated to seek books of their own interests, and read to satisfy their curiosity. These motivations empower students to use their cognitive strategies to more fully enjoy stories or exposition (Guthrie & Wigfield, 1997). These authors found that students from Grades 3 to 8 decline in intrinsic motivation to read (Guthrie & Wigfield, 1997). Further, students may like reading but not be intrinsically motivated to read frequently.

When students are read to, they gain an appreciation for reading and develop an intrinsic motivation to read. According to Routman (1991),

> reading aloud improves listening skills, builds vocabulary, aids reading comprehension, and has a positive impact on students' attitude toward reading. It is the easiest component to incorporate into any language program at any grade level. Reading aloud is cost-effective, requires little preparation, and results in few discipline problems. (p. 32)

Readalouds should be seen as a key aspect of instruction and should be included in literacy and learning goals. It allows struggling readers to give full attention to enjoying language and visual images while someone else is decoding (Allen, 2000).

Academic Resiliency is also a critical factor that influences literacy development. Academic resiliency refers to a student's ability to persist, even in the face of multiple academic difficulties (McTigue, Washburn, & Liew, 2009). Resilient students are those driven by their own goal of mastery. Fostering a student's academic resiliency is supported with decades of research. Bernard (1995) conducted longitudinal studies indicating that between half and two-thirds of children living in homes with risks (e.g., poverty, alcoholism, and even the travesties of war) do succeed despite their adversities. This ability to be resilient is innate and allows humans to develop qualities such as problem-solving skills, social competence, and a sense of purpose for

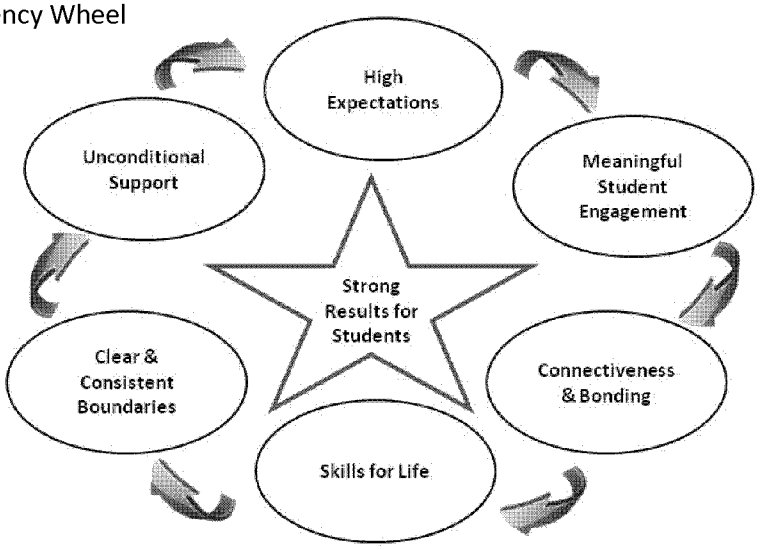
the future. While families and their surrounding community have the ability to enhance a child's ability to overcome some of the possible negative risk factors of life, so do schools. Bernard (1995) believes that to foster resilient students, all schools must strive to assist students through supportive relationships, help students set high expectations, and provide students with meaningful involvement and responsibility within the school.

The "Resiliency Wheel" (Henderson, Bernard, & Sharp, 2000, p. 8) diagrams a way schools and all youth-serving organizations can show young people how to successfully meet the stresses and challenges in life (see Figure 3). Henderson, Bernard, and Sharp (2000) suggest that schools and youth organizations should

- Provide care and support,
- Set and communicate high and realistic expectations,
- Provide opportunities for meaningful participation,
- Increase bonding or connectedness,
- Set clear and consistent boundaries, and
- Teach life skills.

Just as Henderson at al.'s (2000) six factors work for enhancing a student's personal resiliency, the same factors support academic resiliency. Effective literacy instruction has teachers working with students to set high, yet realistic, reading goals and engaging in meaningful literary experiences. Such lessons, in well-managed classrooms with clear and consistent boundaries and with a teacher providing unconditional support to all learners, offer students literary skills that can be utilized throughout a lifetime. Henderson et al.'s (2000) work was used as the basis for the Wellness and Resiliency Framework presented on the Pennsylvania Department of Education website (PDE, 2010).

Figure 3. The Resiliency Wheel



(Adapted from N. Henderson and M. Milstein, Resiliency in Schools, 2003. p. 12)

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The concepts of academic resiliency and engagement interrelate, as both involve persistence. Students show resiliency and are engaged when they persevere through a difficult task, believing in their ability to achieve. Students with high levels of resiliency and engagement show higher levels of academic success. Adults must recognize the importance of planning appropriately leveled literacy activities to ensure student engagement while at the same time fostering each student's academic resiliency.

Below, we address specific topics that have an impact on students' motivation, engagement, and development of academic resiliency.

Culture. Pennsylvania's students represent over 200 home languages and a wide range of cultural beliefs and life experiences. Native Pennsylvanians throughout the state bring multiple variations of the English language and multiple cultural perspectives to classrooms. For instance, the way students approach reading and thinking and the way they engage in classroom tasks (e.g., collaboration vs. competition, social aspects of learning, thinking orientation (people first), etc.) is often influenced by cultural backgrounds and previous experiences. Culture may also influence various perspectives on nurturing and independence, oral vs. written communication, as well as differences in communication styles. Barriers to engagement may also include differing expectations of teachers, parents, and students. Lack of understanding of the school system and its expectations can affect the level of access and participation of students and their families. Student engagement may also be limited by socio-economic factors. Many factors influence family participation in schools: availability of transportation, work schedules, level of language proficiency and literacy in the home, and family members' interpretation of their role in the education of their children. Additionally, family participation may be limited by the ways in which schools communicate with them.

Moreover, textbooks and perspectives portrayed in the mainstream curriculum can, at times, be alienating and unmotivating to students who feel that their stories, voices, histories, and experiences are not reflected in the curricula. In consideration of the diversity of experiences, cultures, and languages of Pennsylvania students, recognizing and incorporating the rich "*funds of knowledge*" that students have into everyday classroom practice allows students to feel validated and have ownership in their learning experiences. The phrase "funds of knowledge" was coined by González, Moll, and Amanti (2005) and refers to the "historically developed and accumulated strategies (skills, abilities, ideas, practices) or bodies of knowledge that are essential to a household's functioning and well-being" (p. 92). Accessing and incorporating the knowledge and expertise students bring from their home environments into the classroom not only validates students, it also fosters motivation and engagement, enabling them to be more confident classroom participants. In summary, the understanding that student engagement with reading, and within the classroom in general, is tied to cultural practices and values is essential to helping students of diverse backgrounds remain engaged.

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Libraries play a very important role in fostering engagement and academic resiliency. Libraries, classrooms, schools, and the community can all provide access to a wide variety of print materials and digital media. They offer both high interest fiction and up-to-date nonfiction in a range of reading levels and languages, seeking to be responsive to student abilities and interests. Further, school library programming serves to motivate students and foster habits of lifelong reading through special events such as author visits, literature circles, book clubs, and book talks. The Guidelines for Pennsylvania School Library Programs (PDE, 2011) state that school libraries can provide not only books or journals to read, but also access to computers to assess and monitor student reading.

According to Celano and Neuman (2001),

> libraries continue to play a major role in fostering literacy in our nation, particularly among those segments of the populations that need special assistance in developing literacy skills, such as preschool and elementary school children. Public libraries are in a remarkable position to expose children to great quantities of print and meaningful language opportunities that researchers say are crucial to reading achievement. (p. 3)

Technology. With the explosion of technology and accessibility to the internet, technology plays a key role in fostering academic resiliency and engagement for students at all levels, but especially the secondary level. New literacies are required for participation in a digital world and for student success in the 21st century. The term "new literacies" is defined as follows in the *Standards for Reading Professionals* (Revised 2010):

> Information and communication technologies, such as cellular telephones, personal computers, MP3 players, and the internet, that shape new forms of reading and writing, including the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continually emerge in our world. (International Reading Association [IRA], 2010, p. 87-88)

In regards to assimilating the internet and information and communication technology (ICTs), the tenants of new literacies, into the existing literacy framework, the International Reading Association (IRA) stated that

> there are at least four common elements that apply to nearly all of the current perspectives being used to inform the broader dimensions of this new research (Coiro, Knobel, Lankshear, & Leu, 2008): (1) The Internet and other ICTs require new social practices, skills, strategies, and dispositions for their effective use; (2) new literacies are central to full civic, economic, and personal participation in a global community; (3) new literacies rapidly change as defining technologies change; and (4) new literacies are

> multiple, multimodal, and multifaceted; thus, they benefit from multiple lenses seeking to understand how to better support our students in a digital age. (2009, p. 2)

IMPLICATIONS

General

Now, we highlight the importance of building relationships with students that demonstrate respect and appreciation for their individual difference and interests, the key use of readalouds at all levels, and some notions about technology in the classroom.

Build relationships with students that demonstrate an appreciation for and understanding of individual differences and interests.

- Provide a caring relationship with students by supporting, respecting, validating, showing compassion, and modeling resiliency.
- Stress high expectations and achievement by believing in students' innate capacities.
- Provide student-centered instruction, structure for growth and risk, focus on strengths.
- Give students power and responsibility in interactive groups, e.g., making choices, solving problems, expressing opinion and reflecting (Goodwin, 2007).
- Use technology as a tool for building engagement.

Use Readalouds as a means of engaging and motivating students to read.

- Readalouds are risk free: Language and literacy can be enjoyed without risk.
- Readalouds build mental models that help students develop as self-motivated readers. These models can provide perspectives in addition to or in place of textbooks.
- Readalouds set the stage for learning to read and reading to learn. They help students with several critical reading components: reading motivation, word knowledge, syntax, story grammar, genre knowledge, authors' intentions, readers' choices, and understanding.
  (Allen, 2000, p. 45-47).

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Using the Internet in the Classroom

- **Become familiar with technology use.** Use the Internet and become aware of its potential for learning as well as its limitations. http://www.iste.org/standards/nets-for-teachers.aspx
- **Model connections.** Share your own online interactions with students. When relevant and appropriate, talk about how you are learning from others. Introduce students to learners who are passionate about the subjects they are studying.
- **Share student work.** Create a classroom portal online where you can regularly share student work. As much as possible, make sharing a natural part of the learning process, publishing interesting student blog posts, videos, or other quality artifacts that students create. Find ways to encourage discussion and interactions from readers online. With younger students, moderate those interactions. With older students, share strategies for moderating and vetting to help them become responsible for monitoring and responding to comments on their own. Have discussions on what appropriate interactions look like and how to make sure that participants are who they say they are. Help students learn how to respond to comments appropriately.
- **Practice and teach "reputation management."** Help students hone strategies for the continual monitoring of their lives online - not just in what they produce, but also in what others publish and share about them. This might include setting up alerts or Rich Site Summary (RSS) feeds that deliver links when they are mentioned online or tagged in photos or learning simple strategies for searching for themselves online (Richardson, 2011).

Embed writing in literacy instruction by including written responses for engagement. Some sample activities include:

- Metacognitive logs
- Double entry journal
- Reflective writing
- Quick writes
- Graphic organizers
- Structured note taking
- Marking text
- Readers' strategies list
- Resource Area for Teaching (RAFT)
- Writers' response journals
- Summarizing
- Written retelling
- Digital storytelling
- Online writing such as blogs and class websites.

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Birth to Age 5

Research in early literacy emphasizes that the natural mastery of skills for children birth to age five is through the enjoyment of books, the importance of positive interactions between young children and adults, and the critical role of literacy-rich experiences. These positive interactions play a critical role in developing literacy and language-rich experiences. When children have positive interactions with books, they are developing good feelings about reading, which motivates them to continue seeking out books and other literacy materials as they grow. The emotional bonds between young children and their families, other adults, and peers influence children's motivation and potential to learn (Snow, Burns, & Griffin, 1998). Children can:

- choose a favorite book,
- ask adults to read to them, or
- pretend to read.

If children are engaged and enjoying themselves, they are learning. Children benefit by experiences such as:

- purposeful and playful exposure to a variety of printed materials,
- hearing quality literature read daily, and
- participating in discussion about the pictures in books.

It is through positive, meaningful relationships and experiences that children gain confidence in their ability to explore and learn from the world around them. When families and other adults share stories, songs, and books with children, they not only model literacy skills but also give children the message early on that learning to read and write is important. Exposure to books and stories that have interesting content, rich vocabulary, and detailed illustrations are imperative for helping young children build oral language and vocabulary. Children benefit by experiences in which adults will:

- model rich spoken language,
- provide opportunities for children to experiment and play with the sounds that words make through rhymes, nonsense words, poems, music and chants;
- read books that contain rich language (rhyme, repetition and rhythm), and
- encourage children to use new vocabulary words when discussing pictures or real objects.

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In the classroom, teachers should provide:

- access to high quality and large quantity of literature in a variety of formats,
- learning centers for children to engage with words and pictures, and
- classroom libraries where learners can independently interact with quality books, such as in Book Lists for Young Children

In a world of interactive media, children are comfortable with using digital devices, and this media has a powerful influence on student engagement with literacy. In their position statement regarding technology in education (NAEYC, 2011), NAEYC recommends that early childhood educators recognize that technology and digital media are valuable tools to be used intentionally with children to extend and support active, hands-on, creative, and authentic engagement with those around them and with their world. Recommendations are to:

- allow children to explore digital materials in the context of human interactions, with an adult as mediator and co-player; and
- use shared technology time as an opportunity to talk with children, use new vocabulary, and model appropriate use, as with shared book reading.

Kindergarten-Fifth Grade

According to the Pennsylvania Literacy Framework,

> a relationship exists between young children's motivation to learn and their perception that adults care about them as individuals and their learning. Caring is one element that appears to most strongly influence whether children enjoy school (Lumsden, 1999). This suggests that caring environments with clear, high expectations are the underpinnings of motivation. The nature of students' relationships with teachers is central to what makes school appealing or distasteful, inviting or uninviting. (Pennsylvania Department of Education [PDE], 2010, p. 2.15-2.16)

Teachers can help readers understand that with appropriately leveled texts and much reading they can improve their reading proficiencies; students will then successfully engage in the work and practice needed to become better readers. Students become engaged when they know teachers care about them, what they are learning matters and they possess the skills necessary to meet a given challenge. Several key teacher behaviors that promote motivation and several that undermine it are described below.

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Factors that *motivate* reading and learning include:

- the teacher relates materials to students' lives,
- the teacher listens to all opinions and voices his or her opinions as well,
- the teacher encourages students to choose what they read (learn) at least most of the time,
- the teacher allows students to finish if they are reading (or writing) something of interest to them, and
- the teacher helps students find their own ways of learning to read.

Factors that *reduce* motivation to read:

- the teacher stops students when they are reading something interesting,
- the teacher tells students exactly what to do all the time,
- the teacher listens only to people who share his or her opinion, and
- the teacher gives homework that does not help or promote the students' understanding of the lesson or topic

(Fillman and Guthrie as cited in Allington, 2009, pp.155-156)

The most powerful way to engage students in reading and foster voluntary reading is to provide easy access to an assortment of interesting and appropriately difficult text in a variety of formats, including audio and digital. In addition, teachers and school librarians must provide opportunities to choose some of the books that will yield "high-success reading experiences are characterized by accurate, fluent reading with good understanding of the text that was read" (Allington, 2006, p. 98).

Effective teachers:

- model literacy and self-efficacy in the classroom (McTigue et al., 2009).
- observe all students carefully to know which struggle with engaging in academic activities (Kelley & Clausen-Grace, 2009).
- employ a predictable classroom structure that includes built-in written and oral responses to help students remain engaged in learning (Kelly & Clausen-Grace, 2009).
- provide students with desirable reading materials for independent reading, and encourage students to set goals with specificity, proximity, and difficulty in mind (McTigue et al., 2009).
- provide specific and accurate feedback that emphasizes student effort (McTigue, et al., 2009).

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Sixth-Twelfth Grade

Research on adolescent literacy suggests that readers must be actively involved in reading (Hayes-Jacobs, 2006; Schoenbach, Greenleaf, Cziko, & Hurwitz, 1999). Without engagement and active participation, students will learn and retain little. According to Schoenbach, Greenleaf, Cziko, and Hurwitz (1999),

> Students' engagement with and comprehension of texts is increased by activities that help them understand that reading is an active, problem solving-process to make meaning and that they must draw on all their knowledge and experiences because a good reader's whole self is involved in reading. (p.32)

Therefore, one would expect that reading in secondary classrooms would be interactive, engaging students on both a social and personal dimension, whether discussions occur in the classroom or in online web-based discussions. Motivated readers set reading purposes and goals, take stances as readers and acknowledge their personal connections, and responses to texts and situations (Schoenbach et al., 1999). Understanding that reading occurs on a continuum and that some readers may be good at one type of reading, and not as good at another type of reading, enables students to see themselves as "readers" and to tolerate their frustration by recognizing and building upon their reading strengths (Shoenbach et. al., 1999). In classrooms that support academic literacy and student engagement:

- Teachers model reading and thinking strategies with text (think-alouds, talking to the text, good reader strategies list).
- Teachers provide students with opportunities to work through difficult text using a variety of strategies.
- Classroom routines revolve around collaborative problem solving and dialogue about texts in a socially safe and supported environment.
- Students of all levels have opportunities for success.

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Professional Resources about Readalouds:

- Books Kids Will Sit Still for: The Complete Read-Aloud Guide by Judy Freeman, Bowker, 1990.
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- The Read-Aloud Handbook by Jim Trelease (4th ed.) Penguin, 1995.
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- Making Facts Come Alive: Choosing Quality Nonfiction Literature K-8 by Rosemary A. Banford and Janice V. Kristo, Christopher-Gordon, 1998.

Web-based Resources

- Adolescent Literacy
- *Family Literacy: A Strategy for Educational Improvement*
- Guidelines for Pennsylvania School Library Programs
- International Society for Technology in Education
- *Learning to Talk and Listen: An Oral Language Resource for Early Childhood Caregivers*
- The Literacy Web
- National Governors Association (NGA) Center for Best Practices
- National Institute for Literacy
- Pennsylvania Department of Education's Standard Aligned System (SAS)
- Read, Write, Think
- Resiliency in Action
- Zero to Three: National Center for Infants, Toddlers and Families

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Web-based Informational Reading Systems

Awesome Stories - Collection off multimedia primary source materials such as photos, videos, audio, and historical documents

Discover - Collection of news articles about science, technology and the future

Web-based Interactive Learning Systems

Fact Monster - Students access reference material categorized by topics

Fun Brain - Games listed by title, subject and grade level

Science News for Kids - Science news for children ages 9-14

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ESSENTIAL ELEMENT 5: Differentiation of Instruction

Differentiation of instruction is key to enhancing students' ability to learn. Teachers must be able to plan instruction that accounts for the differences that exist in students' skills, interests, cultures, and experiential backgrounds.

RATIONALE

Contemporary literacy classrooms are replete with students who have increasingly diverse language, learning styles, culture, and experiences. These differences exist along a continuum and within the context of an increased demand for higher, absolute levels of literacy. Faced with the challenge of meeting the needs of all students, educators are not only forced to recognize and understand the varying differences among students in their classrooms, they also need to employ a variety of "differentiated" instructional practices that maximize the literacy potential of each student. This differentiated instruction may include, for example, providing different levels of challenge, illuminating multiple pathways to acquiring information, or varying means of demonstration of understanding. According to Hall, Strangman, and Meyer (2003),

> to differentiate instruction is to recognize students' varying background knowledge, readiness, language, preferences in learning and interests; and to react responsively. Differentiated instruction is a process to teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is and assisting in the learning process. (p. 3)

Proponents of differentiation purport that its principles and guidelines are grounded in years of educational research and have roots in theories of learning, such as Vygotsky's (1978) the Zone of Proximal Development. In addition to its alignment as an applied practice with learning theory, multiple intelligences, and current neuroscience research, the rationale for differentiation rests upon its ability to address learner variance (Lawrence-Brown, 2004; Tomlinson, 2003; Tomlinson & Kalbfleisch, 1998; Tuttle, 2000). Furthermore, other practices central to differentiation have been validated, including effective management procedures, instructional grouping, and student engagement (Ellis & Worthington, 1994).

In the implications section, there is a discussion of general principles about differentiation followed by a description of the Universal Design for Learning (UDL) and Response to Instruction and Intervention (RtII) in Pennsylvania. Each of these discussions provide information about how differentiation can be implemented in schools. In this section, implications are general in nature rather than divided into various age group segments. There is also a box that highlights important principles for instructing students who are English Language Learners (ELLs).

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IMPLICATIONS

General

A historical and significant drawback of traditional instruction is that many teachers "teach to the middle" (Haager & Klinger, 2005, p.19). Differentiation means matching instruction and assessment to the needs of individual students and not simply to the needs of the average, or even majority, of learners in the classroom. In order to differentiate effectively, two foundational elements must be present. The first is quality instruction that is aligned to a coherent set of learning outcomes, indicating what students should know and be able to do. The second is a series of quality assessments that accurately describe student needs and learning differences. It is upon this foundation that instruction can be varied and adapted. The following variables, adapted from Rock, Gregg, Ellis, and Gable (2008), suggest ways that differentiation can be operationalized in the classroom:

Teacher Variables

- Teachers are aware of misconceptions about differentiating instruction.
- Teachers have adequate knowledge, resources and support toward change.
- There are reasonable plans for implementing, monitoring, and evaluating change.
- Teachers are aware of their own preferences and biases.
- School and classroom cultures value diversity and are positive and respectful.

Content Variables

- Standards for each content area are clear, available, and organized.
- An adjusted pacing guide is created.
- Student surveys are used to inform decisions about differing levels of task completion within a lesson or unit.

Learner Variables

- Readiness, interests, preferences, strengths, and learning needs are considered.
- Group dynamics are evaluated (e.g., competitive vs. cooperative).
- Needs for enrichment, supplementation and/or remediation are identified.
- Individualized Education Plans (IEP's) are considered.

Instructional Variables

- Varied models of instruction are used (e.g., direct, strategic, constructivist, etc.).
- Multiple learning experiences, activities, and assignments are used to support lessons and units.

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- A safe, positive, and inviting learning climate is established.
- Instructional formats are varied (e.g., whole class, small group, one-to-one tutoring).
- Flexible grouping is used (e.g., heterogeneous, homogeneous, cross-age, between-class, within-class).
- Sound lesson structure is evident (beginning, middle, end).
- Visual supports (e.g., graphic organizers, multimedia presentations, video, models, real objects, photographs, diagrams, handouts, posters, whiteboards, outlines, pictures. etc.) are used in instruction.
- Instructional pace is varied (brisk vs. slow).
- High rate of opportunities for correct student responding (opportunities to respond) is evident.
- Frequent, immediate, and instructive feedback is provided.
- Accommodations and modifications are offered based on individual student need.
- Assistive technology is used and encouraged.
- Text materials of varying difficulty are offered.
- Manipulative materials are readily available.

Assessment Variables

- A continuum of assessment measures is utilized.
- Multi-method assessments are administered to the group or class to determine students' mastery of subject-specific content and individual strengths and needs.
- Teacher assessments (self, peer) are used to guide reflection and improve classroom practice.
- Student assessments (peer, self) are used to offer support and feedback to all learners.

Because reading instruction may be thought of as multi-dimensional, educators must be aware of the different dimensions of instruction (e.g., content, instructional delivery, time, grouping and materials), as well as how to differentiate within and across these dimensions, in order to meet a broad continuum of student needs, including behavioral factors such as motivation and effort.

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Implications for Differentiation based upon Dimensions of Reading Instruction

Dimensions	
Content	With respect to differentiating *content* (the knowledge and skills taught relative to phonological awareness, phonics, fluency, vocabulary and comprehension), some students may be working on the basic comprehension skills of retelling, while other students may be summarizing important information from a text. Teachers can differentiate content and instructional focus using teacher led groups.
Instructional Delivery	*Instructional delivery* may be differentiated relative to explicitness through modeling, systematic instruction with appropriate scaffolding and pacing, and provision of immediate corrective feedback to students with sufficient opportunities to respond.
Time	*Time* may also be differentiated relative to how much is spent on the other dimensions. For example, how much time is spent on vocabulary? How much time is spent in small group instruction versus whole group instruction across a week? Do students have opportunities to interact and working independently?
Grouping	*Grouping* may be differentiated relative to number of grouping formats utilized in the classroom including whole group, homogeneous small group, partners, heterogeneous, mixed ability small group, independent and one to one.
Materials	*Selecting materials* for specific students and purposes is often a challenge. Materials should be evidence-based and adjusted to meet the needs of students.
Learning Environment	The dimensions of reading instruction are differentiated within a positive and safe *learning environment* that has clearly defined and consistently enforced rules and expectations.

(Adapted from: http://www.centeroninstruction.org/differentiated-instruction-part-1)

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Literacy Instruction for English Language Learners (ELLs)

Fostering the literacy development of ELLs requires the consideration of four principles of instruction that consider language proficiency and background knowledge. While these principles are effective when in place for all students, they consider key aspects of second language acquisition that directly impact the needs of ELLs. The four principles are as follows:

1. Increase Comprehension
2. Increase Student to Student Interaction
3. Increase Higher Order Thinking Skills and the Use of Learning Strategies
4. Make Connections to Students' Background Knowledge

For more information regarding any of these principles, please see the following resources:

Kauffman, D. (2007). W*hat's different about teaching reading to students learning English?* McHenry, IL: Center for Applied Linguistics.

Two comprehensive frameworks for differentiating instruction are Universal Design for Learning (UDL) and Response to Instruction and Intervention (RtII).

Universal Design for Learning (UDL): Implications for Differentiated Instruction

UDL is an approach for designing curriculum and instruction that ensures all students can be successful. Adapted from the concept of *Universal Design* found in architecture, universally designed environments have features that minimize or remove barriers and allow access for all possible users (National Center on Universal Design for Learning [NCUDL], 2011). Similarly, UDL "builds flexible features into curriculum thereby removing barriers and inviting engagement for the widest range of students, while maintaining high standards" (NCUDL, 2011, p.1).

According to the National Reading Panel report (National Institute of Child Health and Human Development, 2000), a small number of studies identified the addition of speech to print via computers as a promising practice. Instructional technologies may encourage students to interact instructionally with text for greater amounts of time than they would with only conventional instruction. The report called for additional research relative to the use of internet applications, the use of computer technology to perform speech recognition, and the use of multimedia presentations in the context of reading instruction.

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The term *"universal design for learning"* means a scientifically valid framework for guiding educational practice that

> (A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and
>
> (B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient (Center for Applied Special Technology [CAST], 2011).

In addition, there are three primary principles that organize the guidelines for UDL implementation:

1. Provision of multiple means of representation or the "what" of learning, since there is not one means of representation that is optimal for all learners;
2. Provision of multiple means of action and expression or the "how" of learning, since there is not one means of action and expression that will be optimal for all learners; and
3. Provision of multiple means of engagement or the "why" of learning, since there is not one means of engagement that will be optimal for all learners in all contexts (CAST, 2011).

In order to facilitate the development of expert learners, who are distinguished by their resourcefulness, knowledge, goal-directed behavior and motivation, primary UDL curricular components that include goals, methods, materials and assessments are utilized. For more information on UDL, see:

- Center for Applied Special Technology (CAST)
- Focus on Effectiveness (resources to improve classroom results by combining instructional practices and technologies)
- National Center on Universal Design for Learning
- PA Standards Aligned System: Universal Design for Learning
- Reading and Math Matrices (Evidence and products for the use of technology that supports students with special needs)
- Technology and Teaching Children to Read

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Response to Instruction and Intervention (RtII)

Effective reading instruction and the implementation of evidence-based practices lie at the very heart of Response to Intervention (RtI). RtI is the practice of providing high quality instruction and intervention matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying student response data to important educational decisions. When this process is adopted, systematic and systemic decision-making is applied to decisions in general, remedial, and special education, creating a well-integrated system of instruction/intervention that is guided by student outcome data (Batsche et al., 2005). For the past several years, Pennsylvania has provided coordinated training and technical assistance in an effort to support the adoption and sound implementation of the Response to Instruction and Intervention (RtII) framework and has recognized that standards-aligned core instruction lies at the heart of RtII and fundamental to technically adequate implementation and sustainable practices and leadership.

It is important for educators to establish connections between common frameworks. Both UDL and RtII share a common framework – both are premised on the use of a comprehensive, multi-tiered system that focus on a solid core of practices, with supplemental interventions and strategies that build upon this core. Furthermore, when the components of quality reading instruction are efficiently and effectively organized and delivered within a comprehensive service delivery framework, progression toward systems alignment and better outcomes is possible.

The intent of multi-tiered systems of support is to use student performance data to allocate instructional resources to improve learning for all students using the most effective, efficient, and equitable means possible. The sound integration and scaling of RtII framework components over time holds significant promise for transforming current systems and ultimately sustaining the following outcomes:

- Shared leadership for student learning facilitated by strong principal leadership and ongoing, job-embedded professional learning
- Rapid cycles of improvement relative to teaching and learning
- Data-driven cultures that make informed curricular, assessment, and instructional decisions
- Implementation of research-based instruction using a continuum of reliable and valid data sources
- Improved and sustainable student learning outcomes

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The following checklist may be helpful to framework implementers and was adapted from Gersten et al.'s (2008) guide entitled *Assisting Students Struggling with Reading: Response to Intervention (RTI) and Multi-Tier Intervention in the Primary Grades*. For a review of the complete checklist, please visit http://www.readingrockets.org/article/30663.)

1. All students are screened for potential reading problems at the beginning of the year and again in the middle of the year, and the progress of students who are at elevated risk for developing reading disabilities is regularly monitored.
2. Differentiated reading instruction is provided for all students based on assessments of students' current reading levels (Tier 1).
3. Intensive, systematic instruction is provided on up to three foundational reading skills in small groups to students who score below the benchmark score on universal screening. Typically, these groups meet between three and five times a week for 20 to 40 minutes (Tier 2).
4. The progress of students receiving Tier 2 support is monitored at least once a month. These data are used to determine whether students still require intervention. For those students still making insufficient progress, school wide teams should design a Tier 3 intervention plan.
5. Provide intensive instruction (Tier 3) on a daily basis that promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in Tier 2 small group instruction.

RtII is both a systematic and systemic roadmap for organizing differentiated practices so that student needs are met as efficiently and effectively as possible through:

- Alignment of instructional foci to Pennsylvania standards within and across tiered supports
- Analysis and synthesis of data across multiple sources
- Creation of flexible instructional groups
- Evaluation of effectiveness of classroom instruction
- Refinement of instructional practices matched to student need
- Identification and monitoring of individual students in need of intensive differentiated instruction/intervention
- Establishment of structures that support ongoing, differentiated professional learning relative to student needs and systems level outcomes

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For more information on RtI/RtII, see:

- Center on Instruction
- National Center on Response to Intervention
- Pennsylvania Standards Aligned System: Response to Instruction and Intervention
- Pennsylvania Training and Technical Assistance Network
- RtI Action Network

Additional Resources for K-12 Educators

Books

1. *Differentiated Instruction for Students with Learning Disabilities: Best Teaching Practices for General and Special Educators*, by William Bender.
   This book provides ideas, examples, and strategies for implementing up-to-date differentiated instruction when working with students with learning disabilities.

2. *Curriculum Mapping for Differentiated Instruction K–8*, by Michelle Langa and Janice Yost.
   This guide provides hands-on materials to guide instruction though the use of curriculum mapping and instructional planning in the classroom.

3. *Differentiated Instructional Strategies in Practice: Training, Implementation, and Supervision*, by Gayle Gregory.
   This book has a variety of strategies for teachers to use when differentiating instruction in the classroom.

4. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades K–5*, by Carol Ann Tomlinson and Caroline Cunningham Eidson.
   This guide provides teachers with lesson plans, units, and materials they can use to carry out differentiated instruction in the K–5 classroom.

5. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 5–9*, by Carol Ann Tomlinson and Caroline Cunningham Eidson.
   This guide provides teachers with lesson plans, units, and materials they can use to carry out differentiated instruction in the 5th–9th grade classroom.

6. *Differentiation in Practice: A Resource Guide for Differentiating Curriculum, Grades 9–12*, by Carol Ann Tomlinson and Cindy A. Strickland.
   This guide provides teachers with lesson plans, units, and materials they can use to carry out differentiated instruction in the 9th–12th grade classroom.

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7. *Differentiated Instruction Guide for Inclusive Teaching*, by David P. Riley and Anne M. Moll.
   This book offers a simple approach that helps teachers to carry out a variety of differentiated instructional approaches in the classroom. Practitioners will find the assessment plans and the overview of the general education curriculum especially helpful.

8. *Instructional Strategies for Differentiated Learning*, by Wendy Conklin.
   This book is an easy reference for a teacher that provides current research-based approaches to differentiating instruction that could easily be put into classroom practice.

9. *Drumming to the Beat of Different Marchers: Finding the Rhythm for Differentiated Learning*, by Debbie Silver and Peter H. Reynolds.
   This book offers teachers a quick reference to research-based approaches for differentiating instruction. The authors also include original poetry throughout the book.

10. *Differentiating the High School Classroom*, by Kathie Nunley.
    This book offers practical advice to help teachers overcome the obstacles they face when attempting to carry out differentiated instruction in the classroom.

11. *The Teacher's Toolbox for Differentiating Instruction*, by Linda Tilton.
    The information presented in this book provides teachers with multiple approaches to differentiating instruction in all academic content areas.

Recommended Websites

- The Access Center: Improving Outcomes for All Students K-8
- Alliance for Excellent Education
- Best Evidence Encyclopedia
- Florida Center for Reading Research
- The IRIS Center
- National High School Center
- Pennsylvania Standards Aligned System (SAS)
- Reading Rockets
- Vaughn Gross Center for Reading and Language Arts
- What Works Clearinghouse

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ESSENTIAL ELEMENT 6: Disciplinary Literacy

The development of a literate individual requires that educators in all of the academic disciplines incorporate literacy instruction as a means of enhancing students' ability to learn the content of the discipline.

RATIONALE

According to the National Assessment of Educational Progress (NAEP) scores, secondary students' literacy has not changed much since the early 1990's (Grigg, Donahue, P. & Dion, G., 2007). Yet at the same time, demands for higher literacy levels for jobs, for civic engagement, for health, and for academic success have increased (Shanahan & Shanahan, 2008). The NAEP data suggest that students may have developed general literacy skills "but not the specialized strategies, vocabulary and knowledge base required for understanding complex discipline specific texts" (Lee & Spratley, 2010, p. 2).

Although some general comprehension strategies (such as summarization) and heuristics (such as study guides), for understanding texts are useful across disciplines (Heller & Greenleaf, 2007), every academic discipline tends to use literacy differently to construct knowledge and to communicate that knowledge. What counts as evidence for reasoning and what is important to specify differs from discipline to discipline. The student who can read a physics text with understanding may not be able to comprehend and interpret the themes in Macbeth. "The differences among the texts of different disciplines result in unique challenges for readers" (Shanahan & Shanahan, 2008, p. 53).

Developers of the Common Core Standards recognized the importance of *disciplinary literacy*, the use of literacy in understanding and communicating within different content areas by developing literacy standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects. Content area teachers can most effectively help students develop disciplinary literacy because they best know and understand the importance and use of literacy within their disciplines.

Disciplinary literacy goes far beyond using a "set of strategies or tools brought in to the disciplines to improve reading and writing of subject-matter texts" (Moje, 2008, p. 99); it is using literacy in the service of understanding the discipline itself. "To develop complex knowledge in any discipline, students need opportunities to read, reason, investigate, speak, and write about the overarching concepts within that discipline" (McConachie, et al., 2006, p. 1). Disciplinary literacy, using literacy as it is used in the discipline, is necessary if students are going to be proficient in both the content and the means of communicating it.

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Disciplinary literacy is most often thought of as appropriate for secondary students and teachers; however, the foundation for disciplinary literacy is developed from the very beginning. Children develop concepts and vocabulary that are crucial to understanding disciplines in the early years before they begin formal education. Elementary students have rich opportunities to develop disciplinary language and conceptual foundations for more intensive study in the secondary years.

IMPLICATIONS

Disciplinary literacy is appropriate in ALL content areas, such as the fine arts, physical education, foreign languages, and health; however, we are initially focusing on four major areas: English/language arts, science, mathematics, and social studies. Because of the emphasis on learning in the academic disciplines in the middle and high school, the implications begin at the secondary level. Specific implications are provided for each of the four major academic disciplines.

Secondary 6 – 12

Disciplinary Literacy in English Language Arts (ELA)

While the authors of the Common Core State Standards (CCSS) define students' literacy development as a responsibility that cuts across all content areas and technical subjects, they also cite "the unique, time-honored place of ELA teachers in developing students' literacy skills" (Common Core State Standards [CCSS], 2010, p. 4). Similarly, within the discipline of ELA, literature (stories, drama, and poetry), has held a time-honored place. With their increasing emphasis on career and college readiness as students move up in the grades, the CCSS follow NAEP in requesting that all teachers, including ELA teachers, incorporate more informational texts into their instruction. For ELA teachers in particular, this request means giving more attention to *literary nonfiction* (e.g., essays, speeches, biographies, and autobiographies, among others) than has generally been the case to help students meet the changing literacy demands of an information-rich world. In addition to becoming more skilled at handling this subgenre of informational text (i.e., literary nonfiction), students are expected to work with texts of increasing complexity and with multiple texts simultaneously.

Similarly, students are expected to write across a variety of text types including argument, informative/explanatory, and narrative. In addition, they are expected to use technology to produce and distribute their writing, "taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically" and to "research to

build and present knowledge" using "multiple authoritative print and digital sources…" (CCSS, 2010, p. 46).

As teachers who traditionally distinguish themselves, for one, by the amount of explicit attention they give to reading and writing, ELA teachers are in a unique position to take up the disciplinary literacy charge outlined for them by the CCSS. Specifically, ELA teachers will need to give increasing attention to supporting students in learning how to:

- grapple with complex texts including essays, speeches, and biographies, among others, and tasks related to those texts in ways authentic to the discipline: http://www.readwritethink.org/classroom-resources/lesson-plans/having-multigenre-autobiography-project-1103.html
- understand, analyze, and use literary nonfiction and other informational texts (including non-print) that reflect the ways knowledge is mediated in contemporary culture
  http://www.readwritethink.org/classroom-resources/lesson-plans/argument-persuasion-propaganda-analyzing-829.html

  http://www.readwritethink.org/classroom-resources/lesson-plans/twenty-first-century-informational-30581.html
- make significant links between the disciplinary ways of reading, writing, and thinking in the classroom and their literacy practices in their out-of-school time
  http://www.readwritethink.org/classroom-resources/lesson-plans/using-microblogging-social-networking-1171.html
- move from literal comprehension to higher-order thinking skills such as analysis and interpretation of single texts of multiple genres and to synthesize meaning across several texts to complete reading and writing tasks as part of their normal instruction
  http://www.readwritethink.org/classroom-resources/lesson-plans/harlem-renaissance-retrospective-connecting-252.html

Again, ELA teachers are in a unique position here, arguably, because their main professional organization, National Council for Teachers of English (NCTE) has outlined standards related to these skills as well as ways to address them in a variety of other documents:

- http://www.ncte.org/positions/21stcenturyliteracy
- http://www.ncte.org/positions/literacy
- http://www.ncte.org/positions/standards

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Disciplinary Literacy in Math

Many students, and even teachers, would claim they do little reading and writing in mathematics; mathematicians would claim the opposite. Mathematicians read and write to participate in problem solving. The difference is that the type of text read and the form writing takes are unique. Reading and writing in mathematics often occur simultaneously and requires one to move fluidly between different representations of the work, such as:

- diagrams,
- language,
- symbols,
- real world context, and
- concrete models

Mathematical text is very complex. It contains more concepts per sentence and paragraph than other types of text. It uses symbols and numbers and may not travel in typical left-to-right fashion. It often has accompanying graphics (graphs or diagrams) which much be understood to make meaning complete. Vocabulary words used often have unique meanings in mathematics. Mathematics readers have to pay attention to small words such as *the, and, is,* or *any*, which can often be skipped over while making meaning reading other types of text (Kenney, Hancewicz, & Heuer, 2005).

Writing in mathematics is complex.

- It involves producing the same forms of text: mathematical language, symbols and numbers, and graphics.
- It's not just about what was done to solve the problem, but why it was done using sound mathematical reasoning.
- It must communicate with precision

All of these unique qualities of reading and writing in mathematics are reflected in the CCSS Standards for Mathematical Practice.

Disciplinary Literacy in Science

Reading and writing are central to the discipline of science. Consider this: scientists do not simply start designing or running experiments. Rather, they begin by understanding past research and findings. Science texts are used to develop the background knowledge necessary to formulate new research questions and design new investigations.

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Science literacy instruction should engage students in making sense of scientific texts as a form of scientific inquiry. "When science literacy is conceptualized as a form of inquiry, reading and writing activities can be used to advance scientific inquiry, rather than substitute for it" (Pearson, Moje, & Greenleaf, 2010, p. 459). In fact, the skills that help make sense of scientific phenomena are in fact, consistent, if not identical, to those needed to formulate meaning during reading. A shared skill set includes:

- making sense of data
- drawing conclusions
- constructing arguments based on evidence
- questioning
- visualizing
- determining meaning of vocabulary
- communicating ideas

When this instruction is done well, it creates a reciprocal relationship between scientific understanding and literacy. One informs the other, resulting in positive impacts in both science and reading and writing. Conversely, minimizing or ignoring the need to address literacy within the discipline of science is to create a dependency on the teacher for all background knowledge, which places the learner in a passive role and undermines the ways in which the discipline of science actually occurs.

Scientific reading:

- Is densely packed with a high proportion of discipline-specific, technical words
- Often includes elaborate charts and diagrams which illustrate text concepts

Readers of science read:

- To clarify their understanding of a scientific principle or phenomenon
- To verify or augment their understanding of a scientific phenomenon
- To understand how a scientific phenomenon is important in a theoretical or practical sense
- In search of truth the reader must be convinced that descriptions of experiments and interpretation of results is valid.

Readers of science attend to:

- Precise definitions of technical terms which denote both concepts and processes
- Images, charts and graphs to illustrate the text
- Descriptions of experiments and results

- Explanations of scientific phenomenon
- Surprising results that which reveal misconceptions

Science teachers are well-versed in literacy practices of their disciplines and are the appropriate guides to teach their students these skills.

Disciplinary Literacy in Social Studies

While all academic disciplines depend heavily on the development of strong literacy skills, the social studies (comprising the disciplines of civics and government, economics, geography and history) require continuous skill development in reading and writing connected text and visual images (such as political cartoons and maps). The rapid and accelerating changes wrought by the digital age have added further gravity and sophistication to how each student gains, analyzes, manages, and communicates content and skills.

Beyond essential reading and writing skills, literacy in social studies includes the ability to:

- Learn to use technology to access information effectively and efficiently
- Interpret primary and secondary historical documents
- Evaluate the reliability of sources
- Establish a context in time, culture, place, etc.
- Focus on cause and effect
- Understand advanced geographic information systems
- Access and understand U.S. Supreme Court decisions
- Critique different market economies.

Of course, there are mixed blessings to the revolution that has changed the way students learn and relate to the world. Although vast oceans of data and information are an instantaneous click away, the literacy skills required to search, manage, and discern the validity of the sources of knowledge are time-consuming and dependent upon careful practice and experience.

Historical thinking is at its core a search for truth. Readers of history approach text with the stance of a skeptic, questioning the authenticity of the author, the sources and validity of the author's conclusions. Primary and secondary sources are read with application of background knowledge related to time, place and culture. Sources are evaluated and interpreted, not accepted at face value.

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The following table compares literacy across four disciplines, providing recommendations and challenges to literacy instruction.

Disciplinary Literacy Table

	Science	Social Studies	English	Math
Overview	Science literacy instruction is a form of scientific inquiry that models the manner in which the larger scientific community builds background knowledge prior to developing new research questions and investigations.	Social studies literacy (history, economics, geography, and civics) includes the ability to analyze oral and written communication in understanding the past through close scrutiny of primary and secondary sources. It requires knowledge and analysis of economic laws, human behavior, individual rights, and the common good of society.	Disciplinary literacy in ELA engages students in oral and written exchanges of ideas around challenging texts. It is characterized by the type of inquiry, analysis, and interpretation used by experts in fields, including language and literature studies, among others.	Literacy in math is embedded in the solving of problems from the concrete to the abstract.
Specific Literacy Skills	Students need to be able to gain knowledge from challenging texts that often make extensive use of elaborate diagrams and data to convey information and illustrate concepts (CCSS, 2010). Describe experiments & results. Define and use discipline specific words.	**History:** Analyze, evaluate, and differentiate primary and secondary sources. Question authenticity of author or source. Look for evidence of bias within text and within self. Based on historical evidence, create historical explanations or	Students read, write, and talk about texts including both literary and informational works to understand their meaning and their craft and structure. They draw inferences and cite textual evidence to support analysis and interpretation. They integrate knowledge and ideas within single texts as well as across texts of increasing complexity. They produce original written works of	Define and use discipline specific words. Make sense of charts, diagrams, and symbols to solve problems. Contextualize and define mathematical symbols.

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	Ask questions as they read about what is new. They question the facts, design of experiments and interpretations of results. Truth is being convinced that the experiments and explanations given, in fact, demonstrate what is claimed.	interpretation. Use names, dates, and other facts as anchors to assist in making historical interpretations. **Economics:** Use economic laws and data to analyze economic behavior and make predictions of economic activity. Data can also be used to explain vital concepts and trends. **Civics:** Students read, research, write, and discuss documents, events, and cases that shape citizenship, government policy, and societal norms. **Geography:** Employ data, research, and readings in analysis of human-environmental interactions.	various text types including argument, informative/ explanatory, and narrative. They research to build and present knowledge. They draw evidence to support analysis, reflection, and research when writing.	

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Recommen-dations	Incorporate regular opportunities for reading and writing as an aspect of scientific inquiry. Use high leverage practices for teaching vocabulary. Apprentice students in the skills to make sense of complex diagrams and charts.	Incorporate experiences and "real world" sources that enhance the development of literacy skills and relevancy to the lives of students. Use primary and secondary source documents with emphasis on recognizing biases in sources, comparing evidence, situating evidence in context, and taking into account different perspectives and multiple causes and results.	Include more informational texts as students move up in the grades; apprentice students in interpretive tasks that span ideas from across entire texts and multiple texts by single or multiple authors; and engage students with challenging texts.	Read to make sense of the solutions of others. Write solutions in multiple representations. Diminish focus on the "one right answer;" increase focus on communicating solutions precisely, including why the solution is valid.
Challenges	The primary challenge is the density of scientific text. Each sentence is packed with a high proportion of technical, specialized vocabulary. Science reading is like learning a foreign language for some students.	Traditional textbooks tend to present information as authoritative whereas historical reasoning requires interpretation and analysis. Incorporate materials for all disciplines from outside the realm of traditional textbook publishing companies. Emphasize development of 21st century learning skills and redesign educational experiences to emphasize literacy as well as strict content.	Traditional discourse patterns in classrooms are characterized by closed-ended questions focusing on recall of information; an atomistic approach to analysis and interpretation of texts; a predominant focus on canonical literary fiction; and a focus on writing primarily as product.	Unlike common language, words in mathematics must be used with precision. For example, "the" is very different from "a."

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Elementary K - 5

In primary and intermediate grades, children can begin to develop the vocabulary and the conceptual thinking necessary for success in disciplinary literacy. Interactive informational book readalouds in the elementary grades can lead to understanding vocabulary and comprehension of concepts associated with science and social studies. Readalouds with narratives can lay the foundation for understanding literature. Informational texts should have a prominent place in elementary classrooms. For some children, these texts provide an entry to literacy that narratives do not. For all children, these texts provide background knowledge for later focus on disciplinary literacy. Students should have opportunities to:

- become familiar with text structures found in both narratives and in informational books.
- recognize that narratives have a beginning, middle, and end.
- recognize that most informational books do not have to be read cover-to-cover.
- learn about setting, characters, problems, events, and resolutions. http://www.readwritethink.org/classroom-resources/lesson-plans/teaching-about-story-structure-874.html

  http://www.readwritethink.org/classroom-resources/lesson-plans/plot-structure-literary-elements-904.html?tab=1#tabs
- understand character motivation, a very important element in more complex narratives. http://www.pdesas.org/module/content/resources/4597/view.ashx
- experience description, cause and effect, problem and solution, compare and contrast, and generalization and examples in nonfiction texts, expository text structures that will be important in social studies, science, and math. http://www.readwritethink.org/classroom-resources/lesson-plans/exploring-cause-effect-using-925.html
- develop academic vocabulary. (This task is particularly important for English language learners and for students who find learning to read and write more difficult.) http://www.readwritethink.org/professional-development/strategy-guides/supporting-vocabulary-acquisition-english-30104.html
- be introduced to morphology because much of the discipline-specific vocabulary in science is built on Latin and Greek roots: seismograph, magnitude, dermatitis.

  http://www.readwritethink.org/classroom-resources/lesson-plans/rooting-meaning-morpheme-match-880.html

- practice using graphs, tables, charts, and illustrations to extend understanding of informational books.
- learn to use book supports (such as tables of contents, indexes, and glossaries) and Internet searching strategies to prepare for the more complex tasks they will face in the disciplines. http://www.pdesas.org/module/content/resources/4582/view.ashx

  http://www.readwritethink.org/classroom-resources/lesson-plans/using-science-texts-teach-413.html

  http://www.readwritethink.org/classroom-resources/lesson-plans/adventures-nonfiction-guided-inquiry-183.html

- learn to make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.
- practice writing different kinds of informational texts: persuasive texts, reports, recounts, and procedural texts
  http://www.readwritethink.org/classroom-resources/lesson-plans/cooking-with-words-creating-1018.html?tab=1#tabs

  http://www.readwritethink.org/professional-development/strategy-guides/persuasive-writing-30142.html?main-tab=1#main-tabs

0 – 5 years

Although disciplinary literacy is emphasized at the secondary level, the foundation for understanding the disciplines can be laid in the early preschool years.

- Parents, caregivers, child care centers, and libraries can introduce young children to the concepts and the vocabulary of disciplines through direct experience with items (such as living and non-living) and through reading "concept" books with children. These books can introduce children to vocabulary and ideas that can later inform disciplinary understanding.
- Concrete experiences with real items (such as examining vegetables or experimenting with things that float) help children to develop vocabulary and beginning disciplinary concepts.

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- Interactive readalouds are an effective way to engage young children with disciplinary ideas and vocabulary. Encouraging children to point out illustrations of various items, such as animals, vehicles, colors, articles of clothing, and parts of the body helps them internalize the vocabulary necessary for these areas and form conceptual categories. Readalouds also introduce children to informational and narrative "book language."

  http://pa.webjunction.org/c/document_library/get_file?folderId=108973551&name=DLFE-29860033.pdf. (listing of suggested informational books for read alouds)

  http://www.readwritethink.org/parent-afterschool-resources/tips-howtos/make-most-reading-aloud-30565.html

- Asking children to group items according to function, color, sound, etc. can prepare children to organize their knowledge and develop categories, a very important thinking skill for later learning.
- Having children talk about their observations of the world around them helps them to be better observers and encourages them to use vocabulary.
- Readalouds and discussion of academic vocabulary prepare children to meet the demands of disciplinary literacy as they continue through elementary and secondary school.

References for Essential Element 6

Common Core State Standards Initiative [CCSS]. (2010). *Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects*. Retrieved from http://www.corestandards.org/assets/CCSSI_ELA%20Standards.pdf

Grigg, W., Donahue, P. & Dion,G. (2007). *The nation's report card: 12th-grade reading and mathematics 2005* (NCES 2007-468). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Analysis of the 2005 NAEP data for 12th grade.

Heller, R., & Greenleaf, C. L. (2007a). *Literacy instruction in the content areas: Getting to the core of middle and high school improvement*. Washington, D.C.: Alliance for Excellent Education. Retrieved from http://www.all4ed.org/publication_material/reports/literacy_content

Report that argues for advanced literacy instruction for students in all academic areas so that they may be successful in meeting 21st century literacy demands. Presents several straightforward recommendations for policymakers at the district, state, and federal levels.

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Kenney, J. M., Hancewicz, E., & Heuer, L. (2005). *Literacy strategies for improving mathematics instruction*. Alexandria, VA: Association of Supervision and Curriculum Development.

Good resource for teachers to integrate literacy and mathematics instruction for the improvement of both. Includes ideas about helping children decode mathematical texts and interpret graphic representations.

Lee, C. D., Spratley, A. (2009). *Reading in the disciplines: The challenges of adolescent literacy*. New York, NY: Carnegie Corporation of New York. Retrieved from http://carnegie.org/fileadmin/Media/Publications/PDF/tta_Lee.pdf

Long report describing general literacy strategies that might be used across many disciplines, and specific literacy skills needed for science, history, literature, and mathematics. Also suggests ways to teach both content knowledge and reading strategies together.

Moje, E. B. (2008), Foregrounding the disciplines in secondary literacy teaching and learning: A call for change. *Journal of Adolescent and Adult Literacy, 52*, 96-107. Retrieved from http://www.clemson.edu/aophub/documents/call%20for%20change.pdf

Good introduction to the concept of Disciplinary Literacy. Moje explains current research and challenges to developing disciplinary literacy practices.

McConachie, S., Hall, M., Resnick, L., Ravi, A. K., Bill, V. L., Bintz, J., & Taylor, J. A. (2006). Task, text, and talk: Literacy for all subjects. *Educational Leadership, 64*(2), 8-14. Retrieved from http://www.innovationlabs.com/newhighschool/2006/reading%20materials/literacy.pdf

Short article presenting five principles of Disciplinary Literacy in the classroom. Gives classroom examples from the major disciplines to show how these principles work in practice.

Pearson, P. D., Moje, E. B., & Greenleaf, C. (2010). Science and literacy: Each in the service of the other. *Science, 328*(5977), 459-463.

Addresses synergies between inquiry science and literacy teaching and learning of K-12 curriculum. Answers two questions: (i) how can reading and writing be used as tools to support inquiry-based science, and (ii) how do reading and writing benefit when embedded in an inquiry-based science setting?

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Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review 78*, 40-59. Retrieved from http://www.uww.edu/conteduc/camps/otherevents/Docs/Papers/Shanahan%20and%20Shanahan%202008.pdf

Article describes the Shanahans' research into literacy practices in math, history, and chemistry. The authors describe the rationale for focusing on Disciplinary Literacy especially for adolescents.

Additional Resources for Disciplinary Literacy

Books

Borasi, R., & Siegel, M. (2001). *Reading counts: Expanding the role of reading in mathematics classroom*. New York, NY: Teachers College Press.

Three perspectives on reading are presented, highlighting different ways that reading can enhance mathematics learning. Classroom application showing the range of texts, strategies, and reading practices teachers can use.

Ferriter, W., & Gary, A. (2010). *Teaching the iGeneration: Five ways to introduce essential skills using web 2.0 tools.* Bloomington, IN: Solution Tree Press.

Serves as a fine primer for "digital literacy."

Kletzien, S. B., & Dreher, M. J. (2004). *Informational text in K-3 classrooms*. Newark, DE: International Reading Association.

Gives teachers suggestions for using informational books with children to introduce them to book features, academic vocabulary, and expository text structures. Contains ideas for comprehension and informational writing.

Litman, C., & Greenleaf, C. (2008). Traveling together over difficult ground: Negotiating success with a profoundly inexperienced reader in an Introduction to Chemistry class. In K. Hinchman & H. Thomas (Eds.), *Best practices in adolescent literacy*. New York: Guilford.

Chapter in a useful book that also includes information about reading complex texts in social studies and science. Gives specific ways that students can be helped to become more capable with disciplinary texts.

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Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future for teaching the past*. Philadelphia: Temple University Press.

Excellent text that explains why we study history and what challenges it presents for students and teachers.

Journal Articles and Reports

Baer, J. D. (2006). *The literacy of America's college students*. Washington, D.C.: American Institutes for Research. Retrieved from http://www.air.org/focus-area/education/index.cfm?fa=viewContent&content_id=636

Report of research study examining graduating students (from 2-year and 4-year institutions) in prose literacy, document literacy, and quantitative literacy. Using the National Assessment of Adult Literacy, results indicate no difference in quantitative literacy from previous generations, but current graduates are superior to earlier generations in prose and document literacy.

Carnegie Council on Advancing Adolescent Literacy. (2010). *Time to act: An agenda for advancing adolescent literacy for college and career success*. New York, NY: Carnegie Corporation of New York. Retrieved from http://carnegie.org/fileadmin/Media/Publications/PDF/time_to_act_2010_v_3.pdf

Capstone report of Carnegie Council for Advancing Adolescent Literacy. Provides steps for leaders at all levels to improve adolescent literacy.

Fisher, D., & Ivey, G. (2005). Literacy and language as learning in content-area classes: A departure from "every teacher a teacher of reading." *Action in Teacher Education, 27*, 3-11.

Description of how Disciplinary Literacy is different from "reading in the content areas" with examples from physics and physical education. Gives five principles to encourage disciplinary literacy in every class.

Greenleaf, C. L., & Hinchman, K. (2009). Reimagining our inexperienced adolescent readers: From struggling, striving, marginalized, and reluctant to thriving. *Journal of Adolescent and Adult Literacy*, *53*(1), 4-13. Retrieved from http://onlinelibrary.wiley.com/doi/10.1598/JAAL.53.1.1/abstract

Description of a secondary school student who recreates his image as a reader through working through texts out of school that are important to him and how his teachers used this to help him access academic texts.

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Greenleaf, C. L., Litman, C., Hanson, T., Rosen, R., Boscardin, C. K., Herman, J., . . . Jones, B. (2011). Integrating literacy and science in biology: Teaching and learning impacts of reading apprenticeship professional development. *American Educational Research Journal, 48*(3), 647-717.

Presents the results of a study examining the effects of professional development integrating academic literacy and biology instruction on science teachers' instructional practices and students' achievement in science and literacy.

Hall, K. M., & Sabey, B. L., (2007). Focus on the facts: Using informational texts effectively in early elementary classrooms. *Early Childhood Education Journal, 35*(3), 261-268.

Authors suggest several research-based strategies to help children understand and learn from informational texts.

Hapgood, S. & Palincsar, A. S., (2007). Where literacy and science intersect. *Educational Leadership, 64*(4), 56-60. Retrieved from http://district.auburn.cnyric.org/departments/science/Where%20Literacy%20and%20Science%20Intersect.pdf

Provides ideas for integrating science and literacy in elementary classrooms.

Haynes, M. (2011). *Engineering solutions to the national crisis in literacy: How to make good on the promise of the Common Core standards.* Washington, D.C.: Alliance for Excellent Education. Retrieved from http://www.all4ed.org/files/EngineeringSolutionsLiteracy.pdf

Presents data from NAEP and PISA testing showing that American adolescents are not performing well in literacy and suggesting that adherence to the Common Core standards can help address this problem. Gives possible reasons for the lack of achievement and describes policy decisions that can make a difference.

Kamil, M. L., Borman, G. D., Dole, J., Kral, C. C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide* (NCEE #2008-4027). Washington, DC: U. S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/practiceguides/adlit_pg_082608.pdf

Guide presenting several evidence-based recommendations that teachers can use to increase the literacy levels of their adolescent students. Includes references to the research supporting these recommendations.

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Moje, E. B. (2007), Developing socially just subject-matter instruction: A review of the literature on disciplinary literacy teaching. *Review of Research in Education, 31*, 1-44. Retrieved from http://blog.lib.umn.edu/cehd/teri/Moje2007.pdf

Long article describing the research that had been done on Disciplinary Literacy up until 2006. Focus is on combining socially just instruction with Disciplinary Literacy.

Moss, B. (2005). Making a case and a place for effective content area literacy instruction in the elementary grades. *The Reading Teacher, 59*(1), 46-55.

Gives ways that elementary teachers can integrate literacy instruction within content areas.

Neuman, S. B., & Dwyer, J. (2009). Missing in action: Vocabulary instruction in Pre-K. *The Reading Teacher, 62*(5) 384-392.

Review of the importance of vocabulary instruction and development in pre-school. Analysis of strengths and weaknesses of ten common curriculum programs and suggestions for vocabulary instruction in Pre-K.

Websites

American Association of School Librarians Standards for the 21st Century Learner

Standards and suggestions for teachers in helping students with information literacy.

International Reading Association

Information, resources, publications for all teachers concerned with literacy.

National Council for the Social Studies

Information, resources, lesson plans, publications and professional development for social studies teachers.

National Council of Teachers of English

Information, resources, ideas for lessons, publications, and professional development for English teachers.

National Council of Teachers of Mathematics

Resources, lesson plans, ideas for instruction, information and publications for mathematics teachers.

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National Science Teachers Association

Lesson plans, videos, professional development and information for science teachers.

Pennsylvania Standards Aligned System

At this site, teachers can find the Common Core standards, assessments, ideas for instruction, and lesson plans aligned with the standards.

Reading Apprenticeship

Reading Apprenticeship is one of the leading programs for fostering Disciplinary Literacy. This site explains the program and provides many resources for teachers who want to understand more about how to teach content through disciplinary literacy.

ReadWriteThink

This website, jointly sponsored by International Reading Association and the National Council of Teachers of English, provides many ideas for teachers and for parents in promoting literacy. It includes lesson plans as well as student interactives.

Thinkfinity

This website provides information, activities, videos, audio files, and lesson plans from ten different content partners – including ReadWriteThink (International Reading Association and National Council of Teachers of English), Science NetLinks (American Association for the Advancement of Science), History Explorer (Smithsonian Museum of American History), Xpeditions (National Geographic Society), Illuminations (The National Council of the Teachers of Mathematics) and others.

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Part IV: Implementing the Plan

In summer, 2011, The Striving Readers Steering Committee met to discuss implementation of the Comprehensive Literacy Plan (CLP). They began by identifying the resources, materials, and policies currently available in PA that would assist schools in implementation efforts and then made recommendations that they believed are essential if the CLP is to be understood and also fully implemented. The results of their discussion are displayed in the following table.

> "Vision without action is merely a dream; action without vision just passes the time; Vision with action can change the world…
> ~Joel Arthur Barker
>
> http://www.quotes.net/quote110490

What PA/PDE Has in Place	Recommendations
Standards and Goals	
PA Learning Standards from Birth to 12. Adoption of Common Core State Standards and development of transition tools Standards Aligned System (SAS) that integrates standards with instruction and assessment available on website	Clearer alignment and articulation of Standards Professional development to deepen understanding of standards and curricular connections for all stakeholders (schools, community agencies, universities, parents) Professional development and technical assistance to increase knowledge and use of available resources, including curriculum mapping tool, curriculum frameworks, assessment tools, instructional resources and transition documents Increase rigor in meeting standards (PA) with commitment to high expectations for all students
Assessment	
PA State system of assessments including PA System of School Assessment, Keystone End of Course Exams in Literature and Composition, Classroom Diagnostic Tool	Professional development to assist schools in making better use of formative assessment for instructional decision making

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What PA/PDE Has in Place	Recommendations
Assessment tools including PA Value Added Assessment System and eMetric sites Ongoing work to develop appropriate assessments for pre-school children Resources – materials and ideas on PDE website available for schools	Provide support to support teachers in accessing longitudinal data about students Professional development for teachers and administrators that focuses on: • Deeper understanding of assessments, interpreting and using assessment data, and greater understanding of what specific assessments do or do not indicate. • Increasing awareness of and understanding of student achievement data Assist school districts in developing a relevant, coherent, and systematic plan of assessment.
Partnerships: Establishing Connections Between schools, parents, community agencies, etc.	
Resources for parents and other community agencies available on SAS/OCDEL websites Many different partnerships exist between PDE, schools, and agencies that support educational work	Continue to develop new partnerships and strengthen ones currently in existence. Encourage partnerships with businesses, for example. Strengthen partnership between higher education institutions, PDE, and schools by developing better communication system to inform higher education personnel of current policies and procedures Increase awareness and usage of available resources to engage families in literacy activities Increase outreach to parents and communities, especially to develop a better understanding of the Comprehensive Literacy Plan Leverage resources available in schools, with more coherence between and among initiatives

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What PA/PDE Has in Place	Recommendations
Instruction and Intervention	
Resources and ideas available electronically on SAS/PDE websites Well-developed approach for differentiating instruction (Response to Instruction and Intervention in PA) with available electronic and print resources Staff development about literacy (Birth-grade 12) available from most IUs and PaTTAN Provision of coaching support with many of the literacy initiatives in the state State sponsored initiatives for increasing effectiveness of literacy instruction, e.g., LETRS, Literacy Design Collaborative, Reading Apprenticeship, Reading Recovery	Increase awareness of and ability to access electronic resources of all stakeholders Improve quantity of quality resources available for schools, especially in the areas of writing, speaking, listening, and disciplinary literacy Professional development that builds teacher and administrator knowledge of evidence-based, rigorous instruction, especially as conceptualized in the Comprehensive Literacy Plan. Such professional development should assist schools in building a systematic instructional program – that includes effective core instruction and a well-coordinated set of interventions Increase efforts to provide support to schools attempting to improve teaching of disciplinary literacy through professional development that is systemic and school-based (not focused on individual teachers). Such professional development should provide for multiple levels of staff development for content teachers, teacher leaders and administrators with processes built in for reflective practice. Build knowledge and understanding of college and university faculty about components of the Comprehensive Literacy Plan

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Leadership	
Striving Readers State Literacy Leadership and Steering Team that developed the Comprehensive Literacy Plan Professional development that targets school/district administrators (PA Inspired Leadership) Instructional Coach Credential available Certification credential for Directors of Early Childhood Programs available School Improvement Plan in place for schools in PA	Continue leadership team to serve as an advisory committee for the ongoing implementation of the Comprehensive Literacy Plan Develop a general email address or central communication plan for all school districts to keep contacts up to date. Provide support for and professional development that assists schools in building programs that provide for alignment among standards, instruction, and assessment (reduce numbers of initiatives in schools) Expand professional development for administrators related to quality literacy curriculum, instruction and assessment; professional development that helps them recognize and support quality literacy practices Professional development for teachers and other informal leaders in schools that builds an understanding of the importance of schools as a place of learning for teachers and students (schools as communities of learning)
Professional Learning	
New certification requirements for teachers that include a PreK-4 certificate. Continuing education requirements for all educators that provide for options (electronic learning, etc.) Teacher induction program for new educators	Professional Development needs for teachers and other school personnel especially as related to the CLP: • Emergent literacy and how it can be enhanced in early childhood programs and in homes • Teachers as informal literacy leaders (shared leadership in schools) • Disciplinary literacy

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	• Highlight Guiding Principles and Essential Elements of the CLP Work with institutions of higher education and with the Higher Education Division at PDE to build deeper understanding of the CLP for inclusion in teacher /administrator preparation programs

Later in the summer, the Striving Readers Leadership Team met to develop an Action Plan for implementing the Pennsylvania Comprehensive Literacy Plan. This action plan specifies action steps, those responsible for the action, deliverables, and a time frame for accomplishing each of the action steps. The action plan is presented in the following table.

Action	Deliverable	Responsible	Time Frame
Approval from PDE and posting on PDE Website	Comprehensive Literacy Plan is posted on PDE Website	LT/PDE	September, 2011
Conduct a Focus Group to get feedback on Plan	Recommendations for implementation and professional development focus	LT	Fall, 2011 September 19, 2011
Develop a Communi-cation Plan for introducing the plan to various entities	Communication Plan is developed (Penn-Link, podcast, webinar, etc.)	LT	Fall, 2011
Develop professional development modules (assign to key personnel)	Modules developed for each entity. (PowerPoint, Trainer Notes, Brochures)	LT, PAIUCC, PaTTAN, SR Steering Committee, OCDEL, PDE	Winter, 2012
Develop needs Assessments for school district actions and supports	Needs Assessment Instrument	LT	Fall, 2011/Winter 2012

January 2012 Edition

Conduct Train the Trainers sessions for the modules	Region professional development sessions conducted across the state for all stakeholder groups; trainers identified	PaTTAN/ IUs Higher Education	Spring, 2012
Develop a timeline for roll outs			

Code: LT = Leadership Team
PDE – Pennsylvania Department of Education
PAIUCC – Pennsylvania Intermediate Unit Curriculum Coordinators
PaTTAN – Pennsylvania Training & Technical Network
OCDEL – Office of Child Development & Early Learning
SR – Striving Readers

January 2012 Edition

Appendix: Analysis and Assessment Plan

Districts, schools, and classrooms generate large amounts of data on a daily basis. Students are often asked to demonstrate what they have learned through classroom based assessments, district assessments, or on state assessments, but how often are the results of those assessments used to guide instruction for students? Generating data does not guarantee that the information is used or even reviewed. In an effort to make informed decisions about the educational opportunities available to students, educators should purposefully select assessments and deliberately use the data. Facilitating the concerted generation and analysis of data can be accomplished by implementing an assessment plan which describes assessments and their application, uses a data cycle for conceptualizing the data analysis process, and provides a structured forum for data analysis.

Developing an Assessment Plan

It is easy to identify the assessments given in any school, but it is more difficult to determine why those assessments are given and how the results are used. Therefore, it is beneficial to think about creating an assessment plan that takes into account the purpose for assessments, as well as a description of how those results are to be used.

Determining What Needs to be Assessed

In order to turn data into actionable information deliberate and purposeful planning needs to occur prior to test administration. First, determine what needs to be assessed. As it is often said, what is assessed is often what is taught. Identifying the instructional goals can clarify the content that needs to be assessed. When prioritizing content for assessments, consider district and state standards as well as grade-level and content specific big ideas.

Selecting Appropriate Assessments

After the content has been selected, tests and other assessment measures should be identified. It may be helpful to create a chart of the assessments given at each grade-level with their purpose for administration and a brief synopsis of how the data will be used. The charts can provide a visual representation of all of the assessments students will take in any given grade. It is imperative that the charts are analyzed to ensure that the data is used in the intended manner and to avoid duplication of assessments.

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Grade	Assessment	Purpose	Use of Data	Date of Administration	Taken By
7	PSSA/ PASA/ PSSA-M	State assessment	Alignment of programs and curriculum	March - April	All students
	4Sight	Benchmark assessment	Monitor progress of groups within curriculum and programs	Quarterly	All students
	CDT	Diagnostic assessment	Identify individual strengths and needs; flexible groups	September, December; May	All students

Excerpt of a grade-level assessment plan

Aligning Assessments and Instructional Priorities

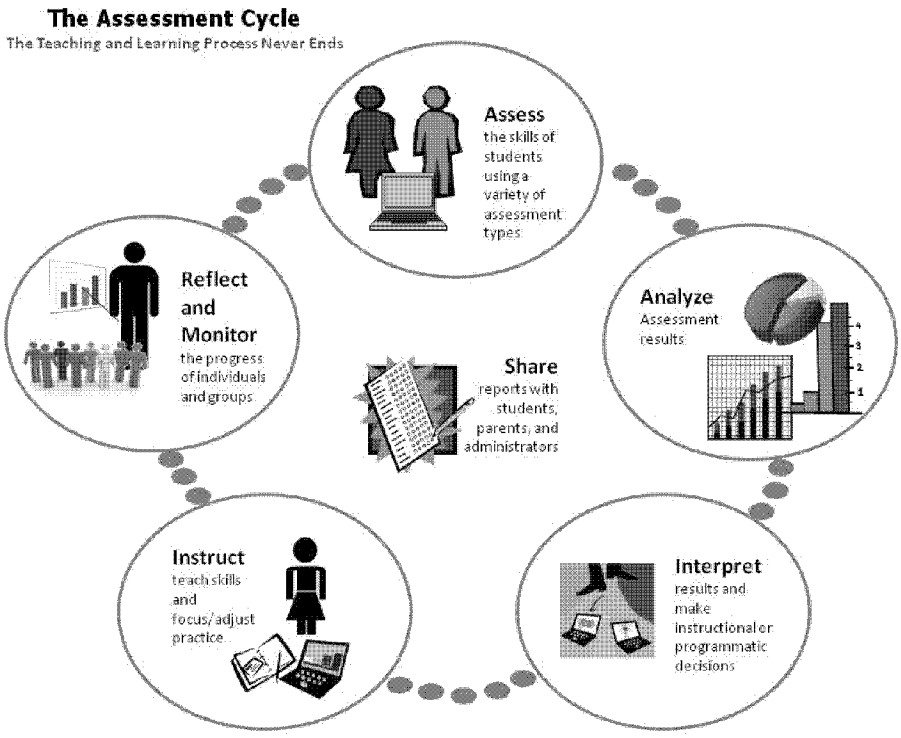
If an assessment is given and the results are not used, that assessment should be further examined. Is it because the results are not communicated in a timely manner; is it because there is not a clear understanding of how to interpret the results; or is it because there are other assessments that generate the same information? Each of those answers leads to a different solution to address the unused data.

The development of an assessment plan provides a mechanism to check that instructional priorities are assessed and that the assessments are used for making decisions. If something is important enough to assess, the results should be used.

The Assessment Cycle

Once assessments have been selected and administered, it is important to analyze and interpret the data. The assessment cycle emphasizes what should occur after an assessment has been administered. During the analysis phase, assessment results are examined to look for patterns and trends within the data. After patterns and trends have been identified, results are interpreted and used to make instructional decisions. During the interpretation phase, results from other assessments should be used to validate current results and conclusions. The information gained from analysis and interpretation is used to provide focused instruction aligned to areas of academic need and the development of academic strengths. Prior to additional assessments, the progress of students should be monitored and explored. This task can be accomplished through the use of formative assessments or observations. Throughout the cycle, the results of the assessments, as well as the rationale for additional instruction, should be shared with students, parents, and administrators as appropriate.

Figure 4: The Assessment Cycle

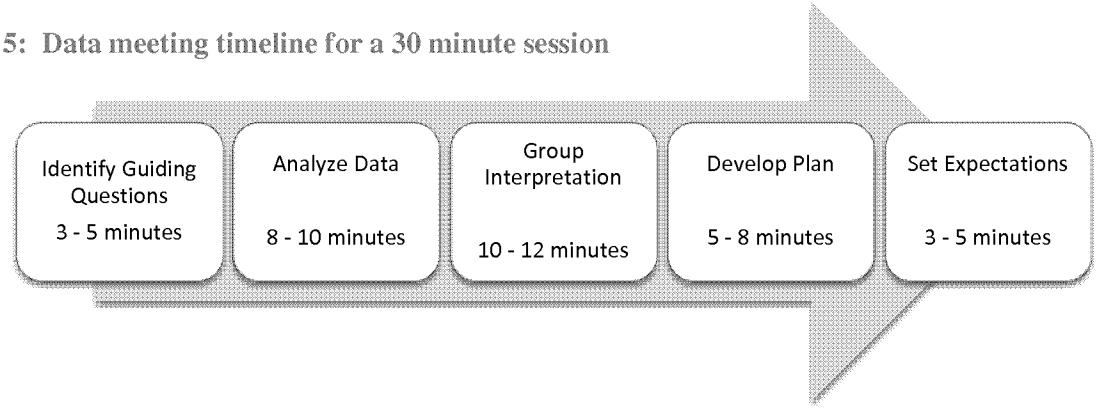


(Adapted from the CDT Core Team Assessment Cycle)

Data Team Meetings

The data analysis process has a specific purpose for reviewing and analyzing data. Groups of educators collaborate to develop a plan to address identified needs and to support or replicate identified strengths. During the meeting, the bulk of the time should be devoted to group analysis and plan development. Groups should be careful to not spend so much time reviewing the data that they never get to developing plans. At the end of each meeting, expectations are set for the following meeting. Some data teams find it helpful to assign roles during each meeting such as data compiler/ guide, timekeeper, recorder, and meeting leader.

Figure 5: Data meeting timeline for a 30 minute session

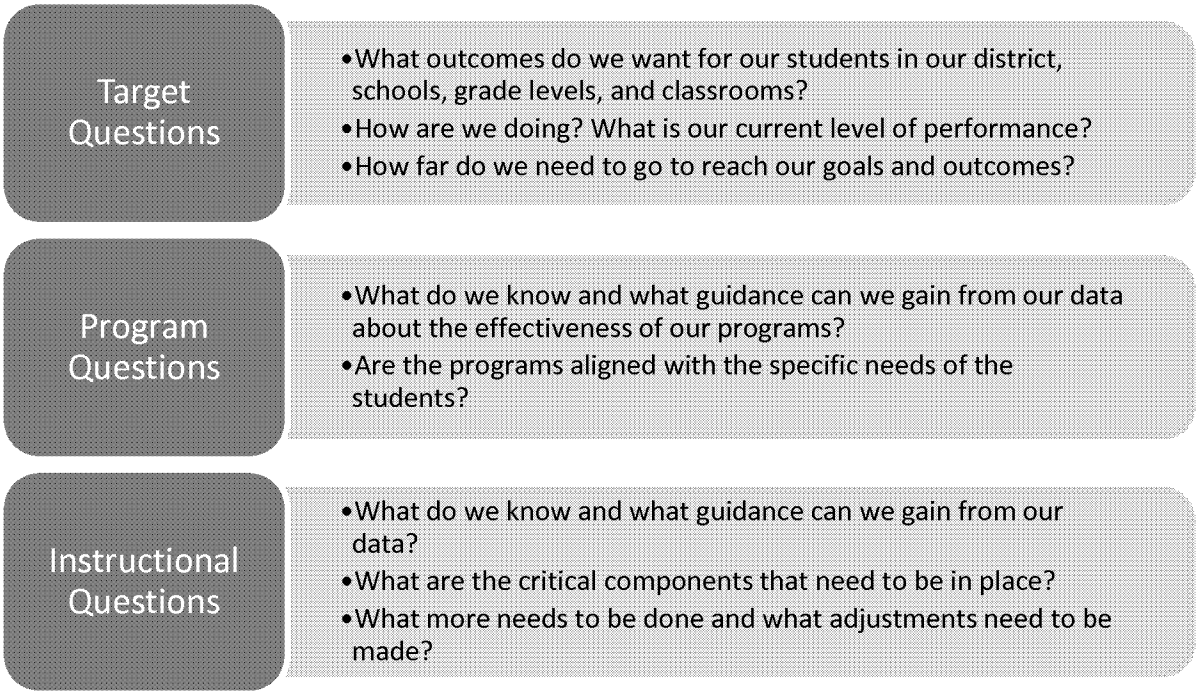


Identify Guiding Questions

Guiding questions are used to set a goal for the meeting; they provide the purpose for looking at data. As such, they also establish the context from which to view the data and provide a focus for the meeting. Using guiding questions enables participants to look for specific data trends, identify areas of strength and need, or to establish a parameter for discussing programmatic or curricular feedback.

When developing guiding questions, there are several areas that can be used to focus the data analysis. For example, questions can address achievement targets, outcome goals, or instructional implications. Each data analysis session should have a clear guiding question in order to keep the meeting on target. The guiding question should be selected prior to the meeting and then explained to the participants once the meeting begins. It may be helpful to post the guiding question so that it remains the focus for the entire session.

Figure 6: Sample guiding questions



Analyze Data

Prior to the meeting, data should be selected and packaged for the review. Participants should each be provided with a copy of the data to review in the context of the guiding question. Every participant should be comfortable with the data and able to interpret the report prior to the meeting so that the focus of the meeting remains on the analysis.

During the review phase, the discussion focuses on the data. Because conjecture and hypothesizing occurs during the interpretation phase, every effort should be made to keep the discussion focused on what is seen within the data. When making statements, participants should be encouraged to reference the data. If the discussion veers off-topic, the moderator can refocus the group by bringing the discussion back to the guiding question or by probing statements further by asking participants to "point to the data" they are discussing.

Group Interpretation

In the interpretation phase, members discuss the trends that they are seeing in the data relative to the guiding question. Additional sources of data may be consulted to confirm or refute proposed hypotheses that have been generated based on the data.

Root cause analysis may be part of this step if the guiding question warrants a root cause analysis. Root causes are the underlying cause of a data strength or concern that if addressed would explicitly affect the strength or concern. See Preuss (2003) for the root cause processes, e.g., force field analyses, the 5 why's, a fish bone activity.

Develop a Plan

Once the interpretation step is complete, teams should develop a plan based on the conclusions drawn from the data to address the guiding question or impact instruction. It may be helpful for data team members to collaborate and share resources to improve instruction relative to the data and guiding question.

Set expectations

Based on the plan that was developed, team members determine what will be done before the next meeting. Teams may need to consider the following: Do we need to collect additional data?; What short-term tasks should we accomplish before the next meeting?; and, What supporting artifacts will be shared at the next meeting?

The implementation of an articulated assessment and analysis plan can help educators move from data to information. The information can then be used to support program and curricular choices, as well as impact and affect instruction. By selecting specific assessments, articulating their purpose, and using the data to drive instruction schools can capitalize on resources they already have while at the same time provide customized educational experiences for their students.

Reference

Preuss, P. (2003). *School leader's guide to root cause analysis: Using data to dissolve problems*. New York: Eye on Education.

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- **Steven T. Wray -** Executive Director, Economy League of Greater Philadelphia

Description of Initiative	Amount of Investment
Quality Pre-K Supports (Forerunner of PA Pre-K Counts)* • Direct support to programs to build ECE partnerships & offer quality Pre-K programming • Development of business strategy • ECE policy development – engaging local leaders to advocate for increased public investments	**$8,803,334**
Early Learning Outcomes (Accountability Grants)* • Development of Early Learning Network (ELN) design • Implementation of Work Sampling and Ounce training, purchase of materials, implementation of train the trainer model • Development and implementation of PELICAN and ELN through extensive professional development, creation of manuals and materials, purchase of Pearson licenses	**$4,665,442**
BUILD* • Support of Diversity Conference (Higher Education) • Program to Program Articulation Projects (Higher Education) • Development , printing, and distribution of Early Learning Standards (Infant/Toddler – 2nd grade) • Early Learning Standards alignment study and resulting revisions • Development, printing, and distribution of parent calendars – *Kindergarten, Here I Am; Kindergarten, Here I Come; Learning Is Everywhere* • Development of English Language Learners Toolkit • Translation of Early Learning Standards • Development of 12 hours of training on "Supporting Conversations on Race & Culture in Early Childhood Settings"	**$1,734,680**
Leadership At All Levels* • Early Learning Investment Commission (ELIC) – engaging over 75 high level CEO's and presidents in support of ECE (Also supported by BUILD funds) • Communications to field and funders, production of accountability reports, support of PA's Promise for Children (Also supported by BUILD funds)	**$944,883**
Higher Education Engagement* • Gate Opener Project – Increasing access to higher education • BUILD-funded projects (See above)	**$620,660**
ECE Green and Healthy Initiative	**$550,000**
Early Childhood Mental Health Support* • Infant/toddler mental health pilot (Forerunner of current statewide ECMH initiative) • Parent Child Interaction Therapy	**$500,000**
Professional Development* • Color Me Healthy • BUILD-funded projects (See Above)	**$400,000**
STARS Coaching and Mentoring	**$361,459**
Children's Trust Fund	**$245,000**
Public Engagement Grant	**$100,000**
Digital Media Literacy	**$100,000**
GRAND TOTAL	**$19,025,458**

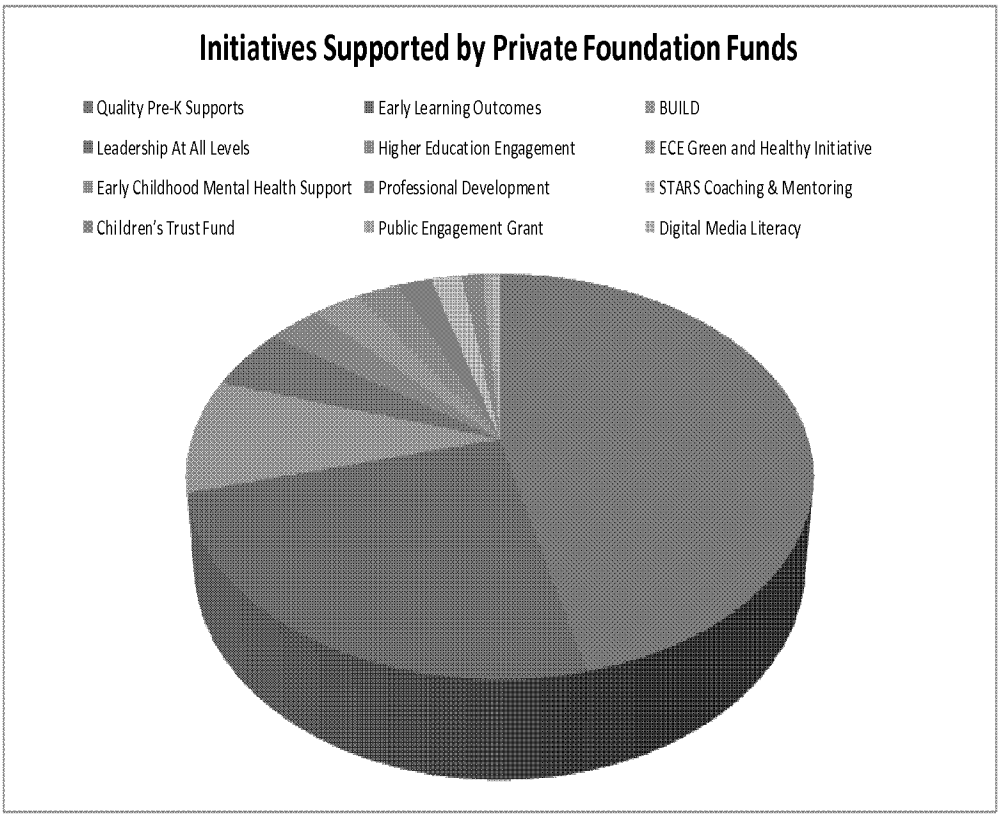
**Indicates that although private funding of some or all of this initiative has ended, work continues through public funding, in many cases on a statewide scale.*

Foundation Support for Early Learning in Pennsylvania, 2004 – 2013

Total support provided by Private Foundations: $19,025,458

Participating Foundations

- The Grable Foundation
- The Heinz Endowments
- William Penn Foundation
- The Benedum Foundation
- Friends of the Children's Trust Fund
- The John S. and James L. Knight Foundation
- R.K. Mellon Foundation



Pennsylvania's three major foundations whose missions include work in support of early childhood education (noted in blue above) are by far the largest private contributors to Pennsylvania's early childhood efforts, accounting for 84.5% of the total dollars received.

Pennsylvania is a BUILD State

The Heinz Endowments and William Penn Foundation support Pennsylvania's participation in the BUILD Initiative, which has the goal of establishing effective statewide early childhood systems.

There are currently ten BUILD states; Pennsylvania has been a BUILD state since 2004. Approximately $1,735,000 of the Foundation support over the past ten years has been channeled through the BUILD Initiative.

Breakdown of Funding by Initiative

Description of Initiative	Amount of Investment
Quality Pre-K Supports (Forerunner of PA Pre-K Counts)* • Direct support to programs to build ECE partnerships & offer quality Pre-K programming • Development of business strategy • ECE policy development – engaging local leaders to advocate for increased public investments	**$8,803,334**
Early Learning Outcomes (Accountability Grants)* • Development of Early Learning Network (ELN) design • Implementation of Work Sampling and Ounce training, purchase of materials, implementation of train the trainer model • Development and implementation of PELICAN and ELN through extensive professional development, creation of manuals and materials, purchase of Pearson licenses	**$4,665,442**
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GRAND TOTAL	**$19,025,458**

**Indicates that although private funding of this initiative has ended, work continues, professional development continues to be delivered, or products continue to be utilized through public funding and/or user fees.*