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Background on New Hampshire

New Hampshire is a state of intriguing paradoxes. We rank 40th in state population and 44th in area (by square miles), yet we have the fourth largest legislative body in the world, totaling 424 members. We excel in innovation, yet cable connection for communities in the North Country is a new service, and high-speed internet is not yet available to in large sections of the state. Our schools range from a science and technology charter school in Manchester to a one-room schoolhouse in Landoff. Most of our population resides in the southeast corner of the state, yet scores of tourists travel to our most remote areas to visit our grand hotels, magnificent mountains, and pristine lakes, often situated in areas of relative rural poverty.

We are a local control state with the emphasis on “local.” Our citizens and communities have an expectation of autonomy and are independent in their thinking and in educational decision making that has been informed by tradition, research, and best practice. Our total K-12 enrollment is 192,811, 19.7% of whom are students in poverty. We have 163 districts with 476 schools. Two locations in the state have a critical rate of poverty (over twice the state average), the city of Manchester, with a student poverty rate of 39.7% and our northern and most rural county, Coos, with a student poverty rate of 37.87%. Manchester, our largest city, has schools with over 75% of students qualifying for free and reduced meals and over 50% non-white student populations. These same schools are also among the 5% persistently lowest-achieving for the state, (David Boston, 2008).

For the New Hampshire Department of Education (NHDOE), relationship building has been our way of doing business. We have a long history of collaborating with districts, state associations, institutions of higher education, and non-profit organizations to build political will, to bring new practices into the State, and to extend the Department’s capacity to lead successful reform initiatives. Our collaborative nature, our focus on support rather than compliance, and our frequent interactions with the field through regular meetings, networks, and systems of support provide us with the advantage of more quickly identifying promising practices and using the existing infrastructure to expand local efforts statewide.

Despite our size and rural nature, NH has been a national leader in efforts to improve the quality of education through an emphasis on standards and assessment, efforts leading to increased high school graduation, and dropout prevention. Along with Rhode Island and

Vermont, we are a founding member of the now four-state New England Common Assessment Program (NECAP), which developed a multiple state assessment based on identical curriculum and performance standards. NECAP is one of the precursors to today's national movement for state-led common standards and comprehensive assessment systems. Currently, we are developing a growth model, which will be added to our accountability system to ascertain growth of students and to set educational goals.

Governor John Lynch has made excellent education leading to high school graduation a hallmark of his term in office, setting a goal of zero dropouts by 2012. The Governor and the NH legislature passed SB 18, which raised the compulsory age of education in NH from 16 to 18, starting with school year 2009-2010. To attain this goal, direct support is provided to districts for dropout prevention and rigorous multiple pathways to graduation.

In December 2008, NH was a founding member of the New England Secondary School Consortium, which is dedicated to broadening assessment at the high school level to ensure preparation of each student for college and career. The state's innovative approach to extended learning opportunities for high school credit, which are based on web-based, student-centered performance assessments with large scale moderation practices, has enabled hundreds of students to complete high school while being mentored and challenged by experts in the field.

As a state, we have a long history of educational reform, from BEST Schools to Follow the Child, from high school redesign to comprehensive dropout prevention strategies. Under former Governor and now U.S. Senator Jeanne Shaheen, the BEST Schools initiative provided facilitated support to over half of NH's school districts in educational improvement efforts. A whole-school initiative, Follow The Child focused on longitudinally tracking individual student performance in four broad academic, personal, social, and physical domains to provide baseline data for student supports and system improvement. The outcomes from these efforts are impressive. New Hampshire consistently scores in the top five states on the National Assessment of Educational Progress (National Center for Education Statistics). In 2008, NH, Massachusetts, Rhode Island, and Vermont were the only states to show significant gains in math achievement on NAEP in both the fourth and eighth grades. Since 2002, high school graduation rates have risen for all students, with a 10% increase for Hispanic students. The State's dropout rate has been declining steadily from 14.4% in 2002-03 to 6.6% in 2008-09, with a decline of 30% from 2007-08 to 2008-09, alone.

Appendix i: Background on New Hampshire

Despite these accomplishments, there is a need to drill down below the surface. When we look more closely at test scores and graduation rates across various groups of students, it is clear that not every child has received the same quality of educational opportunity. NH has not provided the necessary preparation, development, and supports so that every educator is fully prepared and able to address the diverse needs of the broad spectrum of NH learners. Although Senate Bill 18 has provided the moral imperative to reach the goal of every student graduating from high school, it is clear that there are areas that need substantial improvement and concentrated attention. NH's proposed comprehensive, cohesive plan to reform education across multiple fronts simultaneously follows. The State is committed to accomplishing this plan, whether we are awarded Race to the Top funds, or not. The plan has been created to meet New Hampshire's goals over the next four years.

NAEP and NECAP Goals for Percentage for All NH Students and by Subgroups at or Above Proficiency in 2014

As part of its Race to the Top initiative, New Hampshire is setting the following ambitious yet achievable goals for percent proficient, overall and by subgroup, for increasing student achievement in reading and language arts, as reported by NAEP, by reducing the gaps by 25% by 2014.

NAEP, Mathematics

Student Groups	Mathematics			
	Grade 4		Grade 8	
	Percentage At or Above Proficiency, 2009	Goal for Percentage At or Above Proficiency, 2014	Percentage At or Above Proficiency, 2009	Goal for Percentage At or Above Proficiency, 2014
All NH Students	56	60	43	50
Asian	67	70	62	65
Hispanic	31	41	22	34
Black	-	-	-	-
White	57	60	44	50
English Language Learners	28	39	-	-
Socio-Economically Disadvantaged	35	44	24	36
Students with Disabilities	27	38	14	28

NAEP, Reading/Language Arts

Student Groups	Reading/Language Arts			
	Grade 4		Grade 8	
	Percentage At or Above Proficiency, 2009	Goal for Percentage At or Above Proficiency, 2014	Percentage At or Above Proficiency, 2009	Goal for Percentage At or Above Proficiency, 2014
All NH Students	41	50	43	55
Asian	45	55	62	75
Hispanic	30	42	22	39
Black	28	40	-	-
White	42	50	44	55
English Language Learners	15	30	-	-
Socio-Economically Disadvantaged	23	38	24	41
Students with Disabilities	14	30	14	33

Appendix A-1-1: NAEP and NECAP Goals for Percentage for All NH Students and By Subgroups at or Above Proficiency in 2014

As part of its Race to the Top initiative, New Hampshire is setting the following ambitious yet achievable goals for percent proficient, overall and by subgroup, for increasing student achievement in reading and language arts, as reported by the New England Common Assessment Program.

New England Common Assessment Program, Reading

Student Groups	Grades 3-8		Grade 11	
	Average % at or above proficiency 2009-10	Average % at or above proficiency 2013-14	Average % at or above proficiency 2009-10	Average % at or above proficiency 2013-14
All NH Students	77	85	73	85
Asian	84	90	76	87
Hispanic	58	71	60	75
Black	58	71	50	68
White	78	86	83	90
English Language Learners	40	57	26	50
Socio-Economically Disadvantaged	60	72	55	64
Students with Disabilities	37	55	30	53

New England Common Assessment Program, Mathematics

Student Groups	Grades 3-8		Grade 11	
	Average % at or above proficiency, 2009-10	Average % at or above proficiency, 2013-14	Average % at or above proficiency, 2009-10	Average % at or above proficiency, 2013-14
All NH Students	72	82	33	60
Asian	80	90	47	74
Hispanic	49	65	17	48
Black	46	62	9	42
White	73	83	34	60
English Language Learners	34	53	5	39
Socio-Economically Disadvantaged	54	68	17	48
Students with Disabilities	34	53	5	39

State's Commitments With or Without Race to the Top Funding

Commitment	Responsibility	Resource	Timeline With Funds	Timeline Without Funds
Adopt Common Core State Standards (CCSS) in ELA and Math	State Board of Education	Nellie Mae Education Foundation funds	August 2, 2010	August 2, 2010
Increase graduation standards in consort with college and career expectations	State Board of Education, NH P-16 Council	NH General Funds	2011	2013
Implement aligned and balanced assessment system including state-level summative and local formative assessments	NHDOE, Smarter Balanced Consortium, PARCC Consortium	Federal funds (ESEA), assessment funds, and NH General Funds	2013	2014
Test and implement board examinations as next generation system of curriculum, instruction, and assessment	NHDOE, National Center for Education and the Economy	Foundation support, assessment funds, and NH General Funds	2013 (test and implement, based on efficacy of trial)	2013 (test only)
Redesign state accountability system for districts, schools, and educators based on multiple measures of student growth	NHDOE, P-16 Council	Nellie Mae Education Foundation grant, Federal funds (ESEA), NH General Funds	2012	2015
Redesign system for teacher and leader preparation, development, support, evaluation, and compensation based on multiple measures of student growth	NH State Board of Education, Task Forces, NHDOE	Federal (ESEA) funds, NH General Funds, foundation funds (TBD)	2012	2015
Implement intensive model of school turnaround for 5% persistently lowest-achieving schools	NH State Board of Education, NHDOE	Federal funds (Title I, School Improvement Grant), NH General Funds	2010	2010
Improve data systems to support more rigorous accountability system at every level and scale	NHDOE, P-16 Council	Federal funds, NH General Funds	2010	2014

New Hampshire School Reform
Race to the Top Application
Memorandum of Understanding for Participating School Districts

This Memorandum of Understanding (MOU) is entered into by and between the State of New Hampshire Department of Education (“State”) and the _____ (“Participating School District”). The purpose of this agreement is to identify the specific roles and responsibilities of each party to ensure effective implementation of an approved Race to the Top grant.

I. SCOPE OF WORK

Exhibit I, the Preliminary Scope of Work, indicates which portions of the State’s proposed reform plan the Participating School District is agreeing to implement. Ninety (90) days after approval of the State’s application, each participating district, working with the New Hampshire Department of Education to ensure its plan is in alignment with the State Plan, will submit a final scope of work to the State for approval.

II. PROJECT ADMINISTRATION

A. PARTICIPATING SCHOOL DISTRICT RESPONSIBILITIES

In assisting the State in implementing the tasks and activities described in its Race to the Top application, the _____ (Participating School District) will:

- 1) Complete a final, detailed scope of work within ninety (90) days of the State receiving notification of the award from the U.S. Education Department (USED);
- 2) Implement the school district plan, which is aligned to the State’s reform plan (see Scope of Work in Exhibit I);
- 3) Actively participate in relevant convenings, communities of practice, or other practice-sharing events that are organized or sponsored by the State or the USED;
- 4) Post to any website specified by the State or USED, in a timely manner, all products and best practices developed using funds associated with the Race to the Top grant;
- 5) Participate, as requested, in any evaluations of this grant conducted by the State or USED;
- 6) Respond to State and USED requests for information, e.g., status of project, project implementation, data, outcomes, and any challenges anticipated or encountered;
- 7) Submit data and interim reports as required; and
- 8) Participate in meetings, webinars, and telephone conferences with the State to discuss (a) progress of project; (b) potential dissemination of resulting non-proprietary products and lessons learned; (c) sustainability plans for subsequent years of the Race to the Top grant period; and (d) other matters related to the Race to the Top grant and associated plans.

B. STATE RESPONSIBILITIES

In assisting Participating School Districts in implementing their scope of work, the State will:

- 1) Work collaboratively with and support the Participating School District in developing and carrying out its scope of work as approved by the State and aligned with the State’s reform plan;
- 2) Distribute the school district’s portion of Race to the Top funds during the course of the project period in a timely manner and in accordance with progress on the school district’s approved scope of work;

- 3) Provide feedback on the District's status updates, annual reports, interim reports, and project plans and products;
- 4) Identify sources of and provide technical assistance to achieve school district's approved scope of work, e.g., consultants for leadership, content, data, and/or school improvement coaches, e-learning and OPEN-NH, assistance from regional and national support centers (NECC), and consistent oversight including webinars, face to face meetings and monitoring visits;
- 5) Monitor Race to the Top allocations through online management systems; and
- 6) Develop, implement, and audit the statewide plan for school reform addressing the four assurance areas (standards and assessment, data systems to support instruction, great teachers and leaders, and turning around the lowest-achieving schools).

C. JOINT RESPONSIBILITIES

- 1) The State and the Participating School District will each appoint a key contact person for the Race to the Top grant.
- 2) The key contacts from the State and the Participating School District will maintain ongoing communication to facilitate cooperation and progress under this MOU.
- 3) State and Participating School District grant personnel will work together to develop the final scope of work and determine appropriate timelines for project updates and status reports throughout the grant period.
- 4) State and Participating School District grant personnel will negotiate to continue to achieve the overall goals of the State's Race to the Top grant including any necessary modifications.
- 5) Nothing in this MOU shall be construed to alter or otherwise affect the rights, remedies, and procedures afforded under federal, state, or local laws (including applicable regulations or court orders) or under the terms of collective bargaining agreements. By way of the signatures below, the LEA and local collective bargaining representative agree to confer in good faith over matters within the scope of the MOU.

D. STATE RECOURSE FOR SCHOOL DISTRICT NON-PERFORMANCE

If the State – through its periodic reviews – determines that the Participating School District is not meeting its goals, timelines, budget, or annual targets, or is not fulfilling other applicable requirements, the State will take appropriate enforcement action, which could include a collaborative process between the State and the school district, or any of the enforcement measures that are detailed in 34 CFR section 80.43 including putting the school district on reimbursement payment status, temporarily withholding funds, or disallowing costs.

III. ASSURANCES

The Participating School District hereby certifies and represents that it:

- 1) Has all requisite power and authority to execute this MOU;
- 2) Will not use Race to the Top funds to supplant other federal, state, or local funds;
- 3) Is familiar with the State's Race to the Top grant application and is supportive of and committed to working on all or significant portions of the State Plan;
- 4) Agrees to be a Participating School District and will use Race to the Top funds to implement all or significant portions of the State Plan indicated in Exhibit I, if the State application is funded;
- 5) Will select and implement one of four reform models described in the final notice for Race to the Top, if at least one of its schools has been identified as a Tier 1 or Tier 2 persistently lowest-achieving school;
- 6) Will provide a Final Scope of Work to be attached to this MOU as Exhibit II only if the State's application is funded; will do so no later than ninety (90) days after a grant is awarded; and will describe in Exhibit II the school district's specific goals, activities, timelines, budgets, key

personnel, and annual targets for key performance measures (“District Plan”) in a manner that is consistent with the Preliminary Scope of Work (Exhibit I) and with the State Plan; and

- 7) Will comply with all of the terms of the Grant, the State’s subgrant, and all applicable Federal and State laws and regulations, including laws and regulations applicable to the Program, and the applicable provisions of EDGAR (34 CFR Parts 75, 77, 79, 80, 82, 84, 85, 86, 97, 98 and 99).

IV. MODIFICATIONS

This Memorandum of Understanding may be amended only by written agreement signed by each of the parties, in consultation with the USED.

V. DURATION/TERMINATION

This Memorandum of Understanding shall be effective, beginning with the date of the last signature hereon and, if a grant is received, ending upon the expiration of the grant project period, or upon mutual agreement of the parties, which ever occurs first.

VI. SIGNATURES

School District Superintendent (required):

Signature/Date

Print Name/Title

President of Local School Board: (required):

Signature/Date

Print Name/Title

Local Teachers’ Union Leader (if in agreement):

Signature/Date

Print Name/Title

Authorized State Official (required):

By its signature below, the State hereby accepts the district as a Participating District:

Signature/Date

Print Name/Title

Appendix A-1-3: Memorandum of Understanding

Exhibit 1: Preliminary Scope of Work

Standards and Assessments

Vision: Improve student performance and teacher effectiveness in all content areas through the development and implementation of a comprehensive preK-16 system of rigorous college and career-ready standards and assessments that provide differentiated access for ALL students.

For all school districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> • Adopt the Common Core State Standards (CCSS) by August 2, 2010. • Create a crosswalk between the newly adopted CCSS and the NH Curriculum Frameworks (including the NECAP standards and the NH-Alt Learning Progressions). • Disseminate standards to educators, institutes of higher education, policymakers, and the public • Provide workshops and online training regarding the implementation of the CCSS. 	<ul style="list-style-type: none"> • Provide school improvement coaches to continue support around transitioning from NECAP to the new CCSS assessments, alternative assessments, and competency- and performance-based assessments in all content areas. 	<ul style="list-style-type: none"> • Incorporate standards in curriculum, instruction, and assessments. • Ensure that teachers and leaders participate in State’s professional development related to the Common Core State Standards. • Work with the department to incorporate and align local curriculum, instruction and assessment to the CCSS.
<ul style="list-style-type: none"> • Design and implement a summative assessment aligned to CCSS with an online computer adaptive component. 		<ul style="list-style-type: none"> • Ensure that teachers and leaders participate in State’s professional development related to the new state assessment.
<ul style="list-style-type: none"> • Collaborate with other states to create a powerful, comprehensive system, preK-16, of next generation assessments that informs the teaching and learning process and allows all students to demonstrate their understanding of rigorous standards through formative or benchmark assessments, summative assessments, competency- and performance-based assessments in content areas, revision of NH’s alternate assessment, and adoption of 		<ul style="list-style-type: none"> • Implement and administer the next generation assessment system that provides students with opportunities to demonstrate achievement of standards in multiple settings and that is comprised of a variety of assessments – formative, summative, competency- and performance-based. • Build a culture of reflection and inquiry based on review of student data from a variety of sources, including student’s

Appendix A-1-3: Memorandum of Understanding

For all school districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<p>growth model.</p> <ul style="list-style-type: none"> • Provide regional, online, and school-based training and other instructional opportunities in the development, delivery, and use of formative, benchmark, and the new summative assessments including common assessments for content areas not currently in place (e.g., STEM, arts, social studies, world languages, health). 		<p>progress based on the growth model.</p> <ul style="list-style-type: none"> • Incorporate formative assessments into the curriculum, organized around the standards, curriculum, and learning progressions to inform teaching and student learning. • Provide time for educators to participate in professional development and to receive field support related to improving teaching and learning through assessment literacy.
<ul style="list-style-type: none"> • Build the capacity of preK-16 educators to articulate the new CCSS and implement them at the classroom level in their curriculum, instruction, and assessments. 	<ul style="list-style-type: none"> • Provide school improvement coaches to assist with the implementation of the CCSS at the classroom level in curriculum, instruction, and assessment. 	<ul style="list-style-type: none"> • Work with school improvement coaches to align local curriculum, instruction, and assessment to Common Core Standards. • Build a culture of reflection and inquiry based on review of student data from a variety of sources.
<ul style="list-style-type: none"> • Provide regional professional development sessions in state priority initiatives: <ul style="list-style-type: none"> ○ Response to Intervention ○ Instructional coaching ○ Instructional leadership ○ Assessment literacy and data analysis ○ Differentiated instruction ○ Content specific professional development (i.e., Math Science Partnership projects, OPEN-NH online professional development, NE Arts Assessment Institute) ○ Competency- and performance-based assessments <p>in partnership with state’s professional associations, institutes of higher education, and Professional Development centers.</p>	<ul style="list-style-type: none"> • Provide data and school improvement coaches to assist schools in addressing curriculum, instruction, assessments, and local and state assessment results in order to improve student performance. 	<ul style="list-style-type: none"> • Enable teams of educators to participate in ongoing professional learning focused on state priority initiatives and how to develop and use formative assessments, examine student work, develop e-portfolios, and engage in review and moderation processes to examine assessments and student work, within and beyond the school.

Appendix A-1-3: Memorandum of Understanding

For all school districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> • Provide training on effective implementation of Universal Design for Learning and Assessing by using research-based, innovative procedures, item and test designs, and technology for learning, assessing, and processing student work in ways that allow all students to demonstrate their understanding of rigorous standards. 	<ul style="list-style-type: none"> • Provide targeted assistance in appropriate selection and use of instructional and assessment accommodations that provide meaningful access while supporting rigorous performance expectations and maximum academic independence. 	<ul style="list-style-type: none"> • Provide time for educators to participate in professional development and to receive field support related to alternative and adaptive assessments (i.e., Nimble Tools, computer-adaptive testing, augmented and assisted communication devices).
<ul style="list-style-type: none"> • Expand our well-designed data system that allows schools and districts to powerfully mine multiple measures of student performance in order to improve instruction and student achievement through assessment literacy. • Develop a reporting system that allows parents and teachers to monitor student academic achievement and growth toward college and career readiness. 		<ul style="list-style-type: none"> • Enable teams of educators to participate in ongoing learning focused on mining assessment data to monitor student growth and achievement and school effectiveness over time.
<ul style="list-style-type: none"> • With support from the National Governors Association, develop an early warning system to catch students before they fail and provide reports from early warning system to districts and schools. 		<ul style="list-style-type: none"> • Use data to identify and target additional supports for identified students.
<ul style="list-style-type: none"> • Pilot the Board Examination system in at least eight high schools statewide. 	<ul style="list-style-type: none"> • Provide professional development on the adoption of a Board Examination System such as the Cambridge International Examination’s International Certificate of Secondary Education (IGCSE) and their AICE program, the College Board’s Advanced Placement (AP) Program, the International Baccalaureate (IB) Diploma Program, ACT’s Quality Core or Pearson Edexcel’s IGCSE and A-level programs. 	<ul style="list-style-type: none"> • Optional: Pilot a Board Examination system.

Appendix A-1-3: Memorandum of Understanding

Data Systems to Support Instruction

Vision: Continue to improve student-level data system that is a central resource for improved education at all levels for all stakeholders.

For all school districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> Provide means of tracking student progress across P-20 by expanding use of unique K-12 student identifier to preschool, postsecondary, and workforce in the State Longitudinal Data System. 	<p>No additional services.</p>	<ul style="list-style-type: none"> Submit data that meets quality standards (including preschool and higher education institutions).
<ul style="list-style-type: none"> Expand scope of data in SLDS to include results from formative and interim assessments, e.g., student portfolios, high school competencies. 		<ul style="list-style-type: none"> Regularly submit data from formative, interim, and other assessments for real-time access.
<ul style="list-style-type: none"> Enable parents and students to track academic performance and make informed decisions by giving them access to data via Performance Plus and user-friendly training materials on website. 		<ul style="list-style-type: none"> Notify parents and students of access to Performance Plus; offer training to interested parents.
<ul style="list-style-type: none"> Build systems to track preservice teachers in alternative or IHE preparation programs from their preparation into and through placement and teaching. 		<ul style="list-style-type: none"> Submit data on preservice and inservice teachers to SLDS that meets quality standards (applies to districts, alternative and higher education preparatory programs).

Appendix A-1-3: Memorandum of Understanding

Data Systems to Support Instruction

Vision: Build the capacity of all stakeholders to make data-informed decisions in their role of educator – as a student, parent, teacher, or policymaker.

For all school districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> • Create a Research Group in the NHDOE to identify which instructional practices, programs, and policies are working for whom and which should be scaled up. 		<ul style="list-style-type: none"> • Use research findings to foster conversation about practice, programs, and policies among P-20 educators, parents, and community and use data to inform programmatic or policy changes.
<ul style="list-style-type: none"> • Continue to expand use of SLDS data by teachers, leaders, schools, districts, parents, researchers, policymakers, and community members by providing professional development, co-creating training materials, and working with vendor to enhance query tool to include custom reports for ease of novice users that is consistent with FERPA. • Expand the NHDOE’s website to include an online repository of training guides and videos; identify and train one individual in each school or district. 		<ul style="list-style-type: none"> • Use SLDS data to track student progress, measure teacher, leader, and program effectiveness, and assess effectiveness of teacher preparation programs (includes use by researchers, policymakers, and community members). • Co-develop or provide feedback on training materials and case studies to build the capacity of teachers, leaders, and districts to describe how schools have effectively leveraged data to inform instruction.
<ul style="list-style-type: none"> • Build capacity in each school or district through a train-the-trainers model, and provide support to trainers and educators in field through quarterly communities of support meetings (in-person or virtually). 		<ul style="list-style-type: none"> • Identify a person, who will become the school’s or district’s champion of data-informed decision making; allow their participation in a series of train-the-trainers sessions; and provide them with time to interact with other staff.

Appendix A-1-3: Memorandum of Understanding

Great Teachers and Leaders

Vision: Each and every New Hampshire student is educated by effective teachers and principals.

For all districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> • Compile research on existing definitions of teacher effectiveness. • Convene a task force, with broad stakeholder involvement, to develop a clear definition of effective teachers for use in teacher preparation, development, evaluation, placement, and compensation based on the four domains of Danielson’s Framework—planning and preparation, classroom environment, professional responsibilities, instruction (Danielson, 2007), and student growth as a fifth domain (as defined by the NH Teacher Effectiveness task force). • Compile descriptive information and research on existing teacher evaluation models, including those that reward individuals, teams, and schools. • Design an evaluation system for teachers based on the State’s definition of effective teaching. The evaluation system will consist of multiple measures of student achievement and teacher effectiveness, and be fair, reliable, and valid. The task force will examine the weighting of selected multiple measures. 	<ul style="list-style-type: none"> • Invite representative participation in the task force. • Provide data from a state model of student growth as one measure of a teacher’s effectiveness. • Provide access to multiple measures of effectiveness stored in state’s longitudinal database system. 	<ul style="list-style-type: none"> • Adopt the State’s definition of effective teaching. • Conduct annual evaluations of teachers during first three years in profession. Implement annual evaluations of more experienced educators that focus on one or more of the relevant domains. • Use the results to inform decisions regarding developing, compensating, promoting, and retaining teachers.
<ul style="list-style-type: none"> • Compile research and examples of existing definitions of leader effectiveness. • Convene a task force with broad representation to develop a clear definition of effective leaders based on the ISLLC standards and current research. • Compile descriptive information and research on existing leader evaluation models. 	<ul style="list-style-type: none"> • Invite representative participation in the task force. • Offer training in implementation of evaluation system for school leaders. • Provide data from a state model of student growth as one measure of a leader’s effectiveness. • Provide access to multiple measures 	<ul style="list-style-type: none"> • Conduct annual evaluations of principals. • Use the results to inform decisions regarding developing, compensating, promoting, and retaining leaders.

Appendix A-1-3: Memorandum of Understanding

For all districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> Design a leader evaluation system based on the State's definition of effective leaders. The evaluation system will consist of multiple measures of student achievement and leader effectiveness, and be fair, reliable, and valid. The task force will examine the weighting of selected multiple measures. 	<ul style="list-style-type: none"> of effectiveness stored in state's longitudinal database system. 	<ul style="list-style-type: none"> Conduct annual evaluations of principals. Use the results to inform decisions regarding developing, compensating, promoting, and retaining leaders.
	<ul style="list-style-type: none"> Select sites from among participating districts to pilot evaluation systems. Offer training in implementation of an evaluation system for teachers and leaders. 	<ul style="list-style-type: none"> Optional: Pilot the educator evaluation system for teachers and leaders, or an equivalent that assures fair and reliable methods of assessing good teaching and leadership based on the State's definition.
<ul style="list-style-type: none"> Collect course information and student performance tied to individual educators. 	<ul style="list-style-type: none"> Provide Performance Plus and job-embedded training to educators on how to use data from Performance Plus' reports to assist them in making instructional and programmatic decisions. 	<ul style="list-style-type: none"> Provide frequent opportunities for data teams and individual teachers to review reports and use data to make individual and school-wide instructional decisions. Use data to make placement and programmatic decisions.
<ul style="list-style-type: none"> Create and encourage career ladders for teachers by reframing and expanding master teacher certification and expanding opportunities for teacher leaders, mentors, and coaches. 	<ul style="list-style-type: none"> Provide resources and capacity to districts who agree to pilot a teacher compensation system based on the State definition of an effective teacher. Evaluate the effectiveness of the teacher compensation system and provide reports to participating districts. 	<ul style="list-style-type: none"> Pilot a teacher compensation system based on the State definition of an effective teacher and provide data to the State as to its effectiveness.

Appendix A-1-3: Memorandum of Understanding

For all districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> Develop the new Educator Information System (EIS) and definition of effective teaching to measure equitable distribution of effective teachers in high-need schools and districts. 	<ul style="list-style-type: none"> Collect multiple years of data within the new EIS and conduct analyses of the distribution of educators across the state. Provide accurate and timely data regarding teacher performance to districts, schools, and educators. Provide targeted assistance in implementation of Performance Tracker. 	<ul style="list-style-type: none"> Place effective teachers and leaders in schools and classrooms where students are experiencing challenges in meeting growth targets over time.
<ul style="list-style-type: none"> Facilitate the development of alternative certification programs in critical shortage areas with year-long residencies in high-need schools. 	<ul style="list-style-type: none"> Facilitate partnerships with higher education preparation programs or alternative certification programs, such as Teach for America, and assist in development and assessment of programs. Provide incentives and financial supports to recruit and train teachers in critical shortage areas. 	<ul style="list-style-type: none"> Pair teacher residents with most effective teachers and offer positions to graduates, if available.
<ul style="list-style-type: none"> Strengthen and expand Future Educators Academies in high schools. 		<ul style="list-style-type: none"> Optional: Establish or strengthen existing Future Educators Academy.
<ul style="list-style-type: none"> Develop and implement an evidenced based system of credentialing and maintain teacher preparation and development programs that assure a pool of effective teachers and leaders in shortage areas. 	<ul style="list-style-type: none"> Make information on pre-service evaluation available to districts and the public. 	<ul style="list-style-type: none"> Provide class rosters and student outcome data to the state's data warehouse.
<ul style="list-style-type: none"> Link student outcomes back to in-state teacher preparation programs in public colleges and universities and interested private colleges through Performance Pathways technology and provide current, accurate information on department's website regarding the status and performance of teacher and leader preparation and development programs. 	<ul style="list-style-type: none"> Provide technical assistance and data regarding the longitudinal success of specific teacher preparation programs available both in-state and nationally in order to assure a sufficient pool of promising educators. 	<ul style="list-style-type: none"> Use data to recruit teachers and school leaders to the district from the most effective programs.

Appendix A-1-3: Memorandum of Understanding

For all districts, the State will...	For participating school districts, the State will...	Participating school districts will...
<ul style="list-style-type: none"> Support the implementation of Danielson’s teaching framework with faculty in teacher preparation programs. 	<ul style="list-style-type: none"> Study benefits and challenges of using Danielson’s framework; share findings with other preparation programs. 	
<ul style="list-style-type: none"> Invest in residency models of educator preparation that are site-based in K-12 schools. 	<ul style="list-style-type: none"> Provide incentives to enter into partnerships with colleges and universities to develop, implement, evaluate, and refine preparation programs. 	<ul style="list-style-type: none"> Optional: With NHDOE and higher education partner, develop, implement,
<ul style="list-style-type: none"> Revise alternative 4 and 5 certification programs through rulemaking. 	<ul style="list-style-type: none"> Tie alternative 4 and 5 programs to competency-based assessment criteria. 	<ul style="list-style-type: none"> Strengthen supports to alternative 4 and 5 programs for teacher recruitment.
<ul style="list-style-type: none"> Follow-up on an invitational summit on “Redefining Educator Development for 21st Century Learning” for P-20 partnership teams to commit to new approaches to pre-service and in-service educator development. 	<ul style="list-style-type: none"> Support the work of P-20 educators and the state’s teacher unions and administrator associations to replicate 21st Century Learning approaches in the State. 	<ul style="list-style-type: none"> Identify ways to advance 21st Century Learning through the district’s Master Plan for professional development.
<ul style="list-style-type: none"> Develop and provide a coherent teacher development system based on beginning, experienced, and reframed master teacher, including induction, mentoring, residency, and online professional development through NHEON. 	<ul style="list-style-type: none"> Provide resources and capacity to support coherent teacher development, with priority given to Tier 1 and Tier 2 persistently lowest-achieving schools. Offer targeted assistance in providing time for job-embedded professional development through common planning and collegial learning communities. 	<ul style="list-style-type: none"> Participate in statewide professional development opportunities that are aligned to the district’s plan, e.g., formative assessment, mentor training, or Response to Intervention. Adopt collegial learning communities based on review of student data in own classrooms and discussion of current research’s impact on teaching practice.
<ul style="list-style-type: none"> As part of the National Institute of School Leadership (NISL) Consortium, develop and implement an effective leader preparation and development system with external partner, to include a multiple-year mentorship in conjunction with the NH Association of School Principals, NH School Administrators Association, and NH 	<ul style="list-style-type: none"> Provide resources and capacity to districts so that a team of leaders may participate in leader preparation and development offerings and additional coaching, if needed. 	<ul style="list-style-type: none"> Participate in training and program evaluation of the effective leader preparation and development system.

Appendix A-1-3: Memorandum of Understanding

For all districts, the State will...	For participating school districts, the State will...	Participating school districts will...
Society for Technology in Education.		
<ul style="list-style-type: none"> • Revise State rules to require linkage between teachers’ individual professional development plans, which are tied to recertification, and the results of their evaluations, which include an assessment of student growth among other measures. 	<ul style="list-style-type: none"> • Offer assistance in linking evaluation results and student growth data to educators’ professional development. • Identify strategies for tracking the effectiveness of professional development in subsequent years. 	<ul style="list-style-type: none"> • Use data from annual teachers’ evaluations, which includes data on student growth, and needs of the district to craft individual, school, and district professional development plans. • Track effectiveness of professional development provided in subsequent years.
<ul style="list-style-type: none"> • Facilitate the development and implementation of a statewide curriculum to train educator evaluators and mentors based on the four domains of Danielson’s Framework—planning and preparation, classroom environment, professional responsibilities, instruction (Danielson, 2007), and student growth as a fifth domain (as defined by the NH Teacher Effectiveness task force); develop a cadre of trained evaluators who can make consistent judgments based on evidence; convene a mentoring network; and increase number of mentors who assist new teachers to look at student data to make instructional decisions. 	<ul style="list-style-type: none"> • Provide ongoing training to leaders and teachers in professional evaluation and mentorship. • Make trained evaluators/mentors available to the lowest-achieving schools and districts. 	<ul style="list-style-type: none"> • Participate in leader and teacher evaluation, mentorship training, and mentoring networks for teachers and leaders. • Identify effective teachers and leaders to be trained as mentors and coaches.

Appendix A-1-3: Memorandum of Understanding

Turning Around Lowest-Achieving Schools

Vision: Annually identify New Hampshire’s persistently lowest-achieving schools and support reform efforts in these schools and districts that result in the elimination of achievement gaps by restructuring schools, enhancing teacher and leader skills, effectively using data, and implementing a strong, comprehensive curriculum and assessment system.

This section describes the roles and responsibilities of the State and those districts with Tier 1 and Tier 2 schools (see Exhibit III) identified as persistently lowest-achieving. The responsibilities described are in addition to those outlined in the other three assurance areas.

Goal of State assistance	For participating school districts that have State-identified persistently lowest-achieving schools, the State will...	Participating school districts that have State-identified persistently lowest-achieving schools will...
<ul style="list-style-type: none"> • Support organizational, structural, and management changes to ensure reform. 	<ul style="list-style-type: none"> • Identify persistently lowest-achieving schools and participation requirements. • Recruit and hire external partners. • Identify a consistent support team for each district co-led by external partner and NHDOE. • Assist districts in decision making regarding reform model selection. 	<ul style="list-style-type: none"> • With assistance from NHDOE staff and external partners, conduct needs assessment, identify appropriate reform model, and develop action plan for all persistently lowest-achieving schools. • Complete progress reports and grant evaluations. • If annual targets are not met, revise plan. • If targets are not met within two years of model implementation, district’s plan will be revised by the Commissioner.

Appendix A-1-3: Memorandum of Understanding

Goal of State assistance	For participating school districts that have State-identified persistently lowest-achieving schools, the State will...	Participating school districts that have State-identified persistently lowest-achieving schools will...
<ul style="list-style-type: none"> Increase data-informed decision making and student achievement. 	<ul style="list-style-type: none"> By the end of 90-day planning period, coordinate signing of reciprocal accountability clause by school, district, and external partner that all are responsible for student achievement gains. Target resources to needs of schools and districts – using resources that have been effective in similar situations, e.g., Center for Innovation and Improvement’s Rapid Improvement Tool, Focused Monitoring, and Response to Intervention. Strengthen monitoring and data collection systems to include specific improvement and reform initiative results. Assist schools and districts to identify and access wrap-around services from community organizations to meet students’ and families’ needs. 	<ul style="list-style-type: none"> Work with external partner and designated NHDOE coach/master to focus on student achievement, e.g., set annual targets for student achievement, use Performance Plus, establish and support ongoing work of data teams. Use the Center for Innovation and Improvement’s Rapid Improvement Tool that is currently used by all NH restructuring schools. Utilize targeted resources and assess their effectiveness over time with students.
<ul style="list-style-type: none"> Increase effectiveness of teachers and leaders to improve student learning. 	<ul style="list-style-type: none"> Identify effective schools and structure visitations/discussions for persistently lowest-achieving schools. Provide/organize statewide and targeted professional development and training sessions tied to school’s and district’s needs. 	<ul style="list-style-type: none"> Evaluate teachers and leaders, using state model of evaluation based on State’s standards for effective teachers and leaders. Participate in ongoing, job-embedded training and mentoring through the NHDOE that is focused on increasing district and school leadership capacity Enable teachers to have common planning time for study groups on instructional practices, analysis of data by subgroup on a regular basis, lesson planning, structured classroom visitation to observe effective teachers with follow-up discussions on observations.

Appendix A-1-3: Memorandum of Understanding

Goal of State assistance	For participating school districts that have State-identified persistently lowest-achieving schools, the State will...	Participating school districts that have State-identified persistently lowest-achieving schools will...
<ul style="list-style-type: none"> • Coordinate efforts of all involved to improve student learning. 	<ul style="list-style-type: none"> • Establish a network of districts with low performing schools and implement communication vehicles to share effective practices, review data on student performance, problem solve, and ensure that targeted services are provided to schools and districts across external partners and NHDOE liaisons. 	<ul style="list-style-type: none"> • Meet with network districts and schools to problem solve issues related to scaffolding support to improve school performance. • Meet regularly with external partner support team, which includes NHDOE. • Communicate regularly with parents and community through a means that proves to be effective.

Proposed Aligned Consortia, LEA, and Postsecondary Projects

District/Organization	Focus	Grade Levels	Geographic Area
<i>Standards and Assessments</i>			
Board Exam/Move On When Ready Network <i>(Kearsarge, Franklin, Sunapee, Claremont, Governor Wentworth, Hudson, Portsmouth, Raymond, Hollis, and Newport)</i>	Adopt Board Exam System, establish a regional CTE charter school that uses a teacher evaluation system based on student performance and data to assess effectiveness of work	9-12	Southwest, South Central, Seacoast, and Lakes Region
<i>Data Systems to Improve Instruction</i>			
New Hampshire Department of Corrections	Use technology to provide high school courses throughout three facilities	9-12 + young adult	Statewide
Sakai K-12 Collaborative <i>(Pembroke, Manchester, ConVal, Derry, Winnecunnet, Hollis, Barrington, Lebanon, Franklin, Winnisquam, Newfound, and Kearsarge)</i>	Build a collaborative learning environment that would serve teaching, learning, research and administration using teaching and learning tools and e-portfolios	K-12	Statewide
Virtual Learning Academy Charter School	Expand the capacity of the Virtual High School, and produce reports, data, and instructional videos	9-12	Statewide
<i>Teacher and Leader Effectiveness</i>			
Barrington, Rochester, and Milton	Build teacher content knowledge in mathematics and highly effective instructional strategies for teaching mathematics in partnership with the NH Impact Center (three campuses)	K-8	Statewide
Granite State College	Develop residency program to prepare K-12 special education teachers; web-based professional development school (PDS) structure, provision of site-based coursework, intensive, supervised field experience, and professional learning community for college faculty based on using student achievement data to evaluate teacher candidates	K-12	Statewide
District/Organization	Focus	Grade	Geographic Area

Appendix A-1-4: Proposed Aligned LEA and Consortia Projects

		Levels	
Marlborough and Keene State College	Create innovative, residency program in an elementary school (K-6) learning environment to prepare preservice teachers with academic focus on STEM; provision of some site-based course work, intensive, and supervised field experience	K-6	Marlborough, NH
NEA-NH/Future Educator Academy	Expand Future Educator Academies from 9-29 high schools in the state	9-12	Statewide
PIMA, Upper Valley Educators Institute	Prepare, induct, mentor, and assess (PIMA) NH educators in rigorous and innovative ways working with teacher preparation programs, NHDOE, teacher unions, and new teachers and principals	K-12	Statewide
Southern New Hampshire University/Manchester	Develop a residency model for elementary school teachers based in Manchester, NH; academic focus across all subject areas, all coursework provided on school site, intensive, supervised field experience, and development of PDS	K-6	Manchester, NH
<i>Turning Around the Lowest-Achieving Schools</i>			
Parent Information Resource Center	Implement the use of the School Community Index (SCI) tool created by Academic Development Institute in the lowest-achieving schools	K-12	Statewide

**New Hampshire Department of Education
Research Group
2009**

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Sudha Sharma

Anticipated LEA Participants

Several LEAs not listed in Table (A)(1) are expected to participate in Race to the Top. These LEAs have expressed interest, but could not provide an MOU because the school board meets only once a month. Superintendents of the following LEAs will recommend signing an MOU at the June school board meeting.

LEA	# of Schools	# of K-12 Students	# of K-12 Students in Poverty
Chichester	1	254	20
Deerfield	1	495	64
Epsom	1	432	60
Grantham	1	228	12

ARRA Competitive Grant Working Committee 2009-2010

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Emma Rous
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Graduate Program Director
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Bob Suprenant
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SAU #40, Milford

Tom Horgan
President and CEO
NH College and University Council

Lori Temple
Public Information Officer
NHDOE

Education Reform Area Work Teams and Resources

Education Reform Area	NH Department of Education Staff	Resources
Standards and Assessment	Paul Leather Deb Wiswell Tim Kurtz Marcia McCaffrey Gaye Fedorchak Education Consultant TBD	NECAP states Smarter Balanced Assessment Consortium PARCC Consortium Exam Board System/Move On When Ready Network High School Transformation Network National Center for the Improvement of Educational Assessment (growth model)
Data Systems to Support Instruction	Judy Fillion Irene Koffink Michael Schwartz	Research Group CELТ Corporation SAKAI
Effective Teachers and Leaders	Judy Fillion Kathleen Murphy Ginny Clifford Cathy Higgins Administrator TBD	NH Mentoring and Induction of New Teachers Network NISL Leadership Academy New Hampshire Association of School Principals Charlotte Danielson
Turning Around Persistently Lowest-Performing Schools	Kathleen Murphy Stephanie Lafreniere Mary Ellen Arrigo Deb Connell Merry Fortier Ed Murdough Rob Tenney Santina Thibodeau	Persistently Lowest-Achieving Schools and Districts Center for Innovation and Improvement Contracted external partners and providers NISL Leadership Academy New Hampshire Mentoring and Induction of New Teachers Network New Hampshire Association of School Principals
Commissioner's Office	Race to the Top Director Race to the Top Auditor Longitudinal Data Coordinator Administrative Assistant	

Process to Rally Support Around a Common Goal

In 2004-05, the New Hampshire State Board of Education (State Board) went through an extensive stakeholder building process to establish 21st Century Learning, resulting in a revision of the NH State School Approval Standards and Rules. Through a series of multiple stakeholder meetings, regional public hearings, surveys, written testimony, and state summits for both high school redesign and lowering the dropout rate, the State Board started the process of raising standards for high school graduation, centering high school credit attainment on mastery of course-level competencies rather than seat time, and offering multiple pathways to graduation, including distance learning, dual credit and enrollment with higher education, and extended learning opportunities for credit.

An Office of School Approval was established in the New Hampshire Department of Education (the Department). The State Board started a process with the Department by which schools and districts not meeting school approval standards were held accountable to the State Board, including sanctions and penalties. The State has demonstrated political will by enforcing the school approval standards, and the fundamental state process to assure school safety and curriculum and instruction expectations necessary to provide a 21st century education is in place. Cities and towns now expect that the State Board will hold them accountable for an adequate education through this process.

Over the last five years, Governor John Lynch, the State Board, and both Commissioners Lyonel Tracy and Virginia Barry have created tremendous momentum to educate each and every NH student so that they are college- and career-ready:

“Today a high school diploma is the minimum price of admission for most jobs. Yet 20 percent of our young people are dropping out of high school. These young people will not have the opportunities they deserve. Half a high school education is no longer enough. That is why we must increase our compulsory attendance age from 16 to 18.”

~ New Hampshire Governor John Lynch, 2007 Inaugural Address

NH also saw an increase in college going behavior. The high school graduation/dropout prevention plan has several major components:

- Raising major stakeholder knowledge of and investment in solving the dropout problem through a series of state-level and regional summits on high school graduation, dropout prevention, and high school redesign;
- Increasing knowledge of and investment in high school redesign efforts, including:
 - Increased student personalization and heightened adult student supportive relationships;
 - Greater emphasis on rigor and high standards;
 - Greater relevance of curriculum and instruction and student engagement;
 - Hard targets around student graduation and completion;
 - Educators trained and supported in student personalization and engagement in learning; and
 - Follow The Child ~ a whole child emphasis, where data points for students are collected longitudinally for academics, personal, social, and physical development.
- Building resources and creating methods for students to follow personalized multiple pathways to graduation and connection to higher education and careers;
- Requesting local plan and accomplishment presentations to the State Board of Education on a monthly basis by schools that have demonstrated high dropout rates.

Once again, the process of State Board attention and approval of local plans regarding high school graduation and dropout prevention has led to overall statewide success in reducing the dropout rate, and also specific success in cities and towns that have struggled for many years to tackle the problem. This process, of the State Board holding school districts, local school boards, and school administrators accountable to school approval standards and graduation and completion expectations is consistent with New Hampshire's tradition of local control leavened by statewide transparency and accountability.

Virginia M. Barry

Virginia M. Barry Ph.D. was sworn in as Commissioner of Education on June 1, 2009. The New Hampshire Executive Council unanimously confirmed Governor John Lynch's nomination to the position. The commissioner is responsible for the organizational goals of the department and represents the public interest in the administration of improving the effectiveness and efficiency of administrative and instructional services to all public schools in New Hampshire. The commissioner has direct responsibility for school administrative units for promoting excellence in education and the provision of resources through state and federal programs for all students.

Dr. Barry has over 27 years of experience in education as a teacher, leader, tenured university professor, and provost and vice president for academic affairs. Her teaching interests are embedded in the principles of human development and educational leadership. Dr. Barry is deeply committed to collaborative leadership and works closely with the school and business communities to create open communication among stakeholders and create a culture of innovation and excellence.

Dr. Barry currently is a member of a number of boards including the University System of New Hampshire, the Community College System of New Hampshire, Healthy Kids of New Hampshire and a number of private foundations. She has received distinguished awards for outstanding teaching at the undergraduate and graduate levels and most notably the Harold Hyde Award for outstanding leadership.

She received her B.S., from Florida State University and M.S., from Queens College City University of New York and State University of New York at Stony Brook., Ph.D. Florida State University with post-doctoral studies at New York University, Harvard and William and Mary..

Paul K. Leather

Mr. Leather is the Director of the Division of Career Technology and Adult Learning for the NHDOE. In this capacity, he oversees the administration of Vocational Rehabilitation, Adult Education, Career and Technical Education, Tech-Prep, School Guidance and Counseling, Apprenticeship Programs, and Career Development efforts, including Workforce Investment Act coordination for the DOE. Mr. Leather is responsible for the implementation and performance of all federal and state programs in the Division. He also serves as lead for the Department for High School Redesign and Dropout Prevention Projects, including a million dollar per annum Nellie Mae Education Foundation Grant demonstrating the use of Extended Learning Opportunities for High School Credit. Mr. Leather serves as Department Liaison to the New England Secondary School Consortium, the New Hampshire Workforce Opportunity Council and the NH Community College System Board of Trustees. He also serves on the Commissioner's Cabinet, advising on policy, budgetary, and programmatic issues

Mr. Leather's background and experience in education, counseling, and administration in New Hampshire spans three decades and includes: social studies teaching; vocational rehabilitation counseling, training and management at two of the DOE's Regional offices; and training and administration at the Bureau of Rehabilitation Services.

Mr. Leather is past president of the Council of State Administrators of Vocational Rehabilitation (CSAVR) and oversees statewide initiatives such as High School Redesign, Extended Learning Opportunities, and Drop Out Prevention.

Dr. Judith D. Fillion

Dr. Judith D. Fillion is the Director of the Division of Program Support which is comprised of four bureaus: the Bureau of Credentialing, the Bureau of Data Management, the Bureau of School Approval and Facility Management, and the Bureau of Nutrition Programs & Services. She also serves on the Commissioner's cabinet. Dr. Fillion has been employed by the Department of Education for 35 years, 24 of which have been as division director. The Division is directly impacted by two of the four Race to the Top assurances; Statewide Longitudinal Data System and Great Teachers and Leaders. Dr. Fillion has extensive experience in teacher education and credentialing as well as data collection and analysis at both the state and national level.

Dr. Fillion is responsible for the drafting of administrative rules on Teacher Education Certification, Professional Development, and School Approval and testifies on both proposed administrative rules and legislation. Most recently she has been working with key legislators on legislation authorizing a P-20 longitudinal data system.

Dr. Fillion serves as the Commissioner's designee on the Council for Teacher Education (CTE). CTE members review teacher education programs and make recommendations for State Board of Education approval. By law, she serves as the Executive Secretary to the Professional Standards Board which advises the State Board on all matters relating to teacher certification and professional development. This year she was instrumental in convening two subcommittees addressing issues crucial to ensuring quality education preparation, certification, professional development, and evaluation. For many years Dr. Fillion served on the NCATE Board of Examiners reviewing numerous teacher education programs in other states.

For over twenty years Dr. Fillion has been the New Hampshire representative to the National Forum on Education Statistics and served as chair of the Programs, Policies, and Information Committee. She has served on national data committees, most recently the team that developed the Forum Guide to the Privacy of Student Information (FERPA Tool Kit).

Dr. Fillion holds a doctorate degree from Vanderbilt University in School Administration and a Certificate of Advanced Graduate Studies in School Administration and Supervision from the University of New Hampshire. She has both a Masters degree in Education and a Bachelors degree in Science and holds certification as both Administrator (superintendent and principal) and Science Teacher (Biology, General Science).

Kathleen A. Murphy

Kathleen Murphy holds the position of Director of the Division of Instruction, one of three major organizational strands at the NH DOE. As Director, she provides leadership to a number of Bureaus and Offices in the Division: Bureau of Special Education, Bureau of Integrated Programs (entitlements) Bureau of Accountability, Assessment and Curriculum and the Office of School Health and Office of Technology. Providing this oversight has created opportunities for a collaborative and strategic approach to supporting schools and creating environments for change.

Under Kathleen's leadership, the division is engaged in a number of statewide initiatives that focus on teaching and learning in New Hampshire. Those initiatives include: developing an RtI framework for instruction, creating and sharing models for differentiated instruction, and working to close the achievement gap through focused monitoring and data analysis strategies. Kathleen will also provide leadership for New Hampshire in the Smarter Balanced Assessment Consortium, which includes 46 states in total.

Over the past 40 years, Kathleen has been afforded a broad view of public education through a variety of experiences including classroom teaching, public school principalships and central office positions including the superintendency. Kathleen's ability to bring stakeholders to the table to meet the needs of the Twenty First Century learners and become learners themselves has made her effective and efficient in her role as Director of Instruction.

Kathleen has an undergraduate degree from Plymouth State College, a Masters Degree from Rivier College and an Advanced Graduate Degree from the University of New Hampshire.

Virginia A. Clifford

Virginia Clifford is currently working in both the Bureau of Credentialing and the Bureau of Data Management for the Division of Program Support at the NH Department of Education. Ginny's current responsibilities include oversight of the approval process for the districts' Professional Development Plans, serving as the program manager for the Sungard PerformancePlus Data Tool training project, and working as a member of the state longitudinal data system (SLDS) management group. Ginny is coordinating New Hampshire's reform initiatives for the Great Teachers and Leaders assurance area of the ARRA funding requirements and New Hampshire's strategic plan.

Ginny also works with the New England Comprehensive Center and participates regularly in the National Comprehensive Center on Teacher Quality meetings. Ginny also is a member of CCSSO's Interstate New Teacher Assessment and Support Consortium.

Ginny has worked for the NH DOE for nine years and was the Bureau Administrator for the federal title programs for two years. She administered the Youth Risk Behavior Survey under a Center for Disease Control state grant in 2003.

Ginny has an M.A.T. from the University of New Hampshire.

Lisa Danley

Lisa Danley oversees the Career Development Bureau which administers career and technical education and technology preparation programs state-wide. This work promotes collaboration between secondary and postsecondary education through career pathways plans of study, articulation and concurrent credit options. Over the past two years Ms. Danley has been involved in initiatives that transformed data systems and reporting in career and technical education, promoted the rigor and relevance of career and technical education programs as well as worked to identify and strengthen STEM programs around the state.

Ms. Danley has worked in the field of education for the past twenty years.

Additionally, she serves as adjunct faculty for Granite State College in the early childhood education department.

Gaye V. Fedorchak

Gaye Fedorchak is currently the Director of Alternate Assessments and Access Services for the New Hampshire Department of Education where she directs the administration of the NH Alternate Assessment and the English Language Proficiency State Assessment & Accountability System. In this capacity, she provides leadership in guiding access design and the provision of accommodations for the New England Common Assessment Program (NECAP), which serves the states of New Hampshire, Vermont, Rhode Island, and Maine. She has also served as an advisory consultant on a number of federally-funded research and development projects, including the National Alternate Assessment Center (NAAC). She is currently overseeing the development of a universally designed *NH Alternate Learning Progressions Assessment*, which will establish a single instructionally embedded and formative assessment continuum across all learner populations in NH.

Ms. Fedorchak has over 30 years of experience in the areas of school psychology research, universal design, and cognition in both general and special education administration and policy where she has worked with a diverse range of student populations. A frequent presenter at national assessment conferences, Ms. Fedorchak is deeply committed to the creation of universal and meaningful access for *all* students to truly rigorous academic standards – even for those with the most severe disabilities.

In 2004, Ms. Fedorchak began a partnership with an educational research group at Boston College whose work evolved into the newly launched and highly innovative Nimble Tools Online Accommodated Assessment Delivery System. This technology platform has drawn national attention and offers great promise for improving the accessibility of large-scale summative and local formative assessments. Through her efforts, the State of New Hampshire has become the lead in a 12-state Nimble Tools® research and development consortium studying the feasibility of very large-scale implementation of new accessibility tools.

Currently, Ms. Fedorchak serves as a member of the Smarter-Balanced Assessment Consortium Design Team, with primary consultation in the areas of Access by Design and Technology Approach. She received her B.S., M.S., and CAGS from the State University of New York at Oswego.

Merry Fortier

Merry Fortier is an education consultant in the Office of Accountability at the New Hampshire Department of Education (NH DOE) with deep expertise in the areas of school improvement and school guidance. In her current role, Merry serves as a member of the state school improvement team, which is a collaborative partnership between the NH DOE, Education Development Center and the New England Comprehensive Center. This team has designed a statewide support system for schools and districts identified in need of improvement and developed, adopted and disseminated processes and tools to assist districts in identifying the conditions and factors hindering student achievement.

Prior to assuming her current role, Merry was the NH DOE Safe and Drug-Free Schools State coordinator. In this capacity, she served as the Commissioner's designee on the Governor's KIDS Cabinet, a collaborative, inter-agency group formed for the singular purpose of improving efforts of the NH state government in addressing the most pressing problems affecting New Hampshire children and adolescents. Central to this cross-agency work was engagement in the process of root-cause analysis in order to identify and negotiate resolutions to the systemic issues hindering desired outcomes. Merry was recognized for her contributions to this work by the NH Charitable Foundation as its first recipient of the "Leader in Prevention" award.

Before coming to the NH DOE, Merry worked for over a decade as a high school guidance counselor. She earned a B.A. in Business from Plymouth State University and a M.Ed. in Counseling from the University of New Hampshire.

Cathy Higgins

Dr. Cathy G. Higgins serves as the State Educational Technology Director in the Office of Educational Technology at the New Hampshire Department of Education. Since 1997, she has provided assistance to schools in learning powered with technology. She directs federal grants to schools (NCLB Title II-D and OPEN NH) to provide professional development and digital tools in support of instruction.

From 1999-2004, she directed Project New Teachers, funded by the USDOE Preparing Tomorrow's Teachers to Use Technology Program. She has helped revise educator certification standards for Computer Technology Education (Education Technology Integrator), Library Media Specialist, and Professional Education. Having managed the 2005 update of the Information and Communication Technology Literacy (ICT Literacy) standards (former Computer Literacy Program) within the Minimum Standards for School Approval, she continues to provide assistance to schools as they update their programs to more fully embed ICT competencies within all core content areas and establish the use of student digital portfolios as an essential element for instruction and assessment.

Dr. Higgins has managed the development of web-based education resources, such as NH Educators Online, Verizon Thinkfinity (formerly MarcoPolo), and the NH Learning Interchange (provided by Apple). She has provided assistance to state legislative committees regarding educational technology issues, such as 1:1 laptop initiatives, E-Rate, Internet safety, and technology standards. She has represented NHDOE on statewide and national committees and organizations, including the State Educational Technology Council, Distance Learning Commission, NH Society for Technology in Education (NHSTE), NH School Library Media Association (NHSLMA), Christa McAuliffe Technology Conference Committee, and State Educational Technology Directors Association (SETDA).

Dr. Higgins has a Bachelor's Degree (music education) from North Park University, Masters Degree (Instructional Leadership) from the University of Massachusetts Amherst, and C.A.G.S. from Plymouth State University. She earned her Doctorate at Argosy University Sarasota in Educational Leadership.

Irene Koffink

Irene Koffink joined the New Hampshire Department of Education in 2007 and is currently an Administrator and the Project Manager for the Statewide Longitudinal Data System. In this capacity Ms. Koffink facilitates communication between the Department, other state agencies and stakeholders; evaluates the program operations for effectiveness and proper allocation of agency staff, state and federal funds; manages internal staff working on the SLDS project; and engages and manages NHDOE vendors. Ms. Koffink is the NH DOE Data Governance Director and a member of Multi Agency and Multi State Data Governance.

Ms. Koffink has over 25 years experience in Information Technology and previously served as the IT Director for the NH Department of Revenue and IT Manager for the NH Department of Information Technology. She was responsible for major technological improvements at the Department of Revenue and the implementation of a statewide Customer Support Call Center with the Department of Information Technology. Irene also lived and worked in both Providence RI and Washington DC holding various software development and management positions.

Irene received her Bachelor's degree in Information Management Systems from Southern New Hampshire University.

Tim Kurtz

Mr. Kurtz currently spends most of his time as Director of Assessment for the NH DOE. In this capacity, he oversees all assessment work, including all three state assessments, NECAP, NH-Alt, and ACCESS for ELLs. This work includes item development, test administration, reporting, scoring, analysis, and generally working to ensure that the New England Common Assessment Program (NECAP) remains an assessment of the highest quality and rigor. Because he helped design and develop, and now helps to manage, the NECAP he manages the communication with the other members of the NECAP Management Team from Rhode Island, Vermont, and Maine. Mr. Kurtz also deals directly with the field, answering questions, sorting out data, and consulting around testing students. He also helped build New Hampshire's accountability system and is helping guide the work on the Student Growth Percentile model.

Mr. Kurtz's NECAP work has made him an integral member of the Design Team for the new assessment consortia that are applying for RTTT Assessment funds. Both of these consortia realize the importance of hearing from the states that have firsthand experience with decision making in consortia. Mr. Kurtz is the voice at the table for test security, item rigor, and flexibility of use so that teachers can benefit from the results and use them to improve classroom instruction and student achievement. In addition to the assessment and accountability work, Mr. Kurtz oversees the Math Science Partnership Program.

Mr. Kurtz earned a Bachelor of Science in Mathematics Education, a Master of Science in Mathematics, and completed graduate work in mathematics education at the University of New Hampshire. He taught mathematics and mathematics education at the middle school, high school, college, and graduate school levels in Arizona, Colorado, New York, New Hampshire, Maine, and Connecticut. Among his accomplishments: he ran an early internet program called "Ask Prof. Maths" with his students at St. Bonaventure University; organized IHE's to improve their own teacher preparation programs in mathematics and science; and helped to develop the first state level Grade 12 NAEP assessment in mathematics.

Stephanie Lafreniere

Stephanie Lafreniere is currently the Title I Administrator/State Director for the New Hampshire Department of Education (NHDOE). In this capacity, she provides oversight of the Title I program, school and district improvement plans and serves in a leadership role within the Statewide System of Support structure. She is also the lead for the Struggling Schools Committee at the department, overseeing the support structure for and implementation of reform plans for New Hampshire's persistently lowest-performing schools. Another role that she fulfills is that of the department liaison to the Parent Information Resource Center (PIRC), serving on the PIRC advisory committee, linking resources and parental involvement initiatives between the NHDOE, district, schools and PIRC.

Before joining the NHDOE, Stephanie worked as the Director of Strategic Initiatives at the NYC Leadership Academy, a non-profit organization contracted through the New York City Department of Education to provide administrative coaching support programs, an Aspiring Principals Program and new school development support. Stephanie is a graduate of the NYC Leadership Academy Aspiring Principal Program and spent two years in an administrative role within New York City schools prior to accepting her director position.

Stephanie began her professional career as a school social worker, working in schools K-12 in New York City and Connecticut for five years. During this time she served on many committees focused on student social and emotional needs, student achievement, data analysis, special education inclusion, parent involvement, truancy, drop-out prevention and school reform. In addition to her background in the field of education, Stephanie has worked for the Bookspan publishing company in New York City and has had managerial positions in retail.

Stephanie is a New Hampshire native, earning her Bachelor of Arts degree in Social Work at the University of New Hampshire. She has also earned a Masters of Science degree in Social Work with a Law minor at Columbia University and a Masters of Education Administration and Supervision degree at Baruch College, City University of New York. She is currently certified as a superintendent, principal and school social worker.

Marcia A. McCaffrey

Marcia McCaffrey is the Arts Consultant in the Bureau of Accountability for School Improvement at the New Hampshire Department of Education. In this role, she provides consultation and leadership regarding state policy recommendations, best practices, and teacher training in arts education. Most recently, Marcia has focused her work on the process of using assessments to improve teaching and learning. She has been active in the State Collaborative on Assessment and Student Standards (SCASS) Arts Education Consortium since 1997 and has served on its steering committee for the last five years. In that time, SCASS Arts developed an online item review and approval process that includes online submission, review, approval, storage and retrieval for standards-based selected and constructed response items in the arts as well as a companion item writing training series.

Marcia is a co-founder and co-director of the New England Arts Assessment Institute (NEAAI) with the Vermont Department of Education. NEAAI is an award winning summer institute, which provides training to teachers and administrators in best practices in arts assessment. The institute draws teachers and administrators from Vermont, New Hampshire, Connecticut, Rhode Island, and Massachusetts. She presents nationally at conferences including the National Conference on Student Assessment, the National Dance Educators Conference, the Educational Theatre Association National Conference (keynote speaker), and assisted the Los Angeles Unified School District with their district-wide arts assessment trainings.

Marcia currently co-chairs the National Expectations for Learning in Arts Education State Education Agency Directors of Arts Education (SEADAE) initiative. This project takes a systemic view of education reform and includes curriculum, standards, assessment, professional development, data systems, policy development, leadership, and community partnerships. In a meeting of arts education stakeholders at CCSSO on May 13, 2010 Common Core State Standards for the Arts was determined to be the next activity for this project.

Marcia is an adjunct faculty member at Plymouth State University. Her career as an educator began by teaching at a gifted and talented performing arts magnet school in Montclair, New Jersey. Receiving the New Jersey Governor's Award in Arts Education recognized her work in Montclair. She has engaged students of all ages in dance as an expressive art form, from pre-school children at community centers to directing a senior's dance company in Ithaca, New York.

Marcia earned her Bachelor of Science degrees in Elementary Education and Physical Education/dance from Iowa State University. She has a Master of Arts in Dance Education from Teachers College, Columbia University.

Michael F. Schwartz:

Mr. Schwartz has more than 20 years experience in data informed decision-making, data systems and data education. His background includes both corporate and public sector experience. At the DOE, Mr. Schwartz has led the development of a comprehensive student level data collection and a system for educators across the state to use data to inform instruction. He works with a wide variety of stakeholders including policy makers, educators, researchers, parents and students and others to leverage data.

His work spans many educational domains – elementary, secondary, career and technical education, early childhood and postsecondary.

Mr. Schwartz brings background includes a B.S. in Computer Science and a Master in Public Administration from Harvard University.

Roberta Tenney

Roberta Tenney is currently an administrator for the New Hampshire Department of Education in areas of educational innovation, Charter Schools and school improvement. She taught history, served as History Department Chair, senior college admissions advisor, Dean of Faculty, and Vice Rector, with responsibility for faculty and curriculum at St. Paul's School, Concord, N.H. She serves on the Board of New Hampshire Association of Curriculum and Design where she chairs the Influence Committee. Her work includes advocacy efforts at the federal, state, and local levels. She joins the ASCD team in bringing discussions of educational policy to the nation's capitol and initiated public policy meetings with educators in the NH House and Senate.

Her work in school improvement includes working with a district in corrective action, and schools that have not made adequate progress. She has headed the state's innovative work with Charter schools and worked with the interested individuals to open 11 schools. She developed a well received accountability system for Charter Schools. She is a member of the working group of New England Consortium of Secondary Schools, a group with funding from Nellie Mae Foundation and the Bill and Melinda Gates Foundation.

She served the State of New Hampshire as a Trustee for its University System where she was elected secretary and vice chair of the Board. She also served on the Board of Rivier College. Her work with adolescence, higher education, public policy and school finance gives her a unique perspective on innovation and improvement in N.H. schools.

She graduated from the University of New Hampshire, in history and secondary education, received a masters degree from Dartmouth College and a certificate of Advanced Graduate Studies from Harvard Graduate School of Education where her concentration was adolescent development. She has qualified for a doctorate at Teachers College, Columbia University with a concentration on educational leadership and school finance.

Deborah B. Wiswell

Deb Wiswell is currently the Administrator for the Bureau of Accountability. In this capacity, she oversees curriculum, instruction, assessment, school improvement and accountability for the NH Department of Education. After 35 years in NH schools teaching grades 1-8 and serving in multiple administrative capacities, she came to the DOE to see it from the other side. In her first year at the Department, she led the development of the *NH PreK-16 Literacy Action Plan for the 21st Century* and this past year brought to completion the *NH PreK-16 Numeracy Action Plan for the 21st Century*, the only statewide plan focused on Quantitative Literacy. Under her lead, the DOE has developed a Statewide System of Support for schools and districts that includes an agency wide Roundtable for sharing information and a cadre of school improvement coaches who work with schools to improve content knowledge, leadership, instructional strategies and all aspects of infrastructure that need to improve in order to raise student achievement.

Deb was instrumental in bringing the National Institute for School Leadership (NISL) to NH in order to improve the quality of professional development available for school leaders. Her major accomplishments at the DOE include overseeing the final approval and distribution of new state standards in all content areas in 2006; steering the state assessment through the process of USED Peer Review; facilitating the development and implementation of the Follow The Child Growth Model; developing the Learning Progressions in reading as part of the revision of the NH Alternate Assessment; and for the past year, guiding the development of the new NH Accountability System which will include a new Student Growth Percentile Model.

Although NECAP (New England Common Assessment Program) and AYP take a lot of her time, Deb's heart lies in getting down to the teacher and classroom level, working to get the best, most current information and tools to principals, teachers, and students. She is currently spearheading the Common Core State Standards effort and is involved in multiple assessment consortia and other grant proposals. She has presented nationally on literacy related topics, growth models and other assessment topics related to the value of multiple item types and assessment literacy.

Deb received her undergraduate degree from Springfield College in Elementary Education, her Masters from Antioch New England in Curriculum, and her CAGS from Plymouth State University in Educational Leadership.

LETTERS OF SUPPORT – 5/27/10

Governor of New Hampshire, John H. Lynch
NH State Board of Education Chairman, John E. Lyons, Jr.
NH State Senate President, Sylvia B. Larsen
NH State Senator, Molly M. Kelly
State Rep. Emma Rous, Chair, House Committee on Education
State Rep. Kim Casey, Chair, Charter School Legislative Oversight Committee
U.S. Senator Jeanne Shaheen
University System of New Hampshire
Keene State College
Community College System of NH
NH Postsecondary Education Commission
NH College & University Council
NH School Administrators Association
NH School Boards Association
National Education Association NH
NH Public Charter School Association
NH Health Science & Technologies Teachers
NH Technology Education Association
NH Science & Engineering Exposition Association
NH Partners in Education
Southern New Hampshire University

New England Association of Schools & Colleges, Inc.
The Center for Secondary School Redesign
NH Parent Information Center
NH Department of Corrections
NH Department of Health & Human Services
NH Division of Juvenile Justice
NH Department of Resources & Economic Development
Charlotte Danielson, Danielson Group
Great Schools Partnership
Measured Progress
Nellie Mae Education Foundation
Center on Innovation & Improvement
Southeastern Regional Education Service Center, Inc.
Nimble Assessment Systems, Inc.
New England Comprehensive Center
The Council of Chief State School Officers
City Year New Hampshire
Jobs for America's Graduates – NH
ESPCoR
BAE Systems
Real World Design Challenge



JOHN H. LYNCH
Governor

State of New Hampshire
OFFICE OF THE GOVERNOR
107 North Main Street, State House - Rm 208
Concord, New Hampshire 03301
Telephone (603) 271-2121
www.nh.gov/governor
governorlynch@nh.gov

May 27, 2010

The Honorable Arne Duncan
Secretary of Education
US Department of Education
400 Maryland Ave, SW
Washington D.C. 20202

Dear Secretary Duncan:

I am writing in support of New Hampshire's Race to the Top proposal. New Hampshire is a small state with a strong tradition of broad collaboration to improve educational opportunities and results for our youth. This grant will provide resources and a framework to strengthen those partnerships and continue the progress New Hampshire has made in so many educational areas.

Over the last five years, this collaboration has allowed us to define what it means to offer a constitutionally adequate education; examine what meaningful educational accountability looks like, both in terms of inputs provided into the system and outcomes demonstrated by students; and, for the first time, to require all districts to offer kindergarten.

New Hampshire has a clear vision of our educational objectives. For example, in 2005 I set as my top education priority reducing the dropout rate to zero by 2012. I truly believe this goal can be achieved. The State Department of Education, the Legislature, and education leaders across the State have not only developed strategies to achieve this goal, but have made them operational realities: the age of compulsory attendance has been raised from 16 to 18; high schools are required to publish course competencies and grant credit to students who can demonstrate those competencies; and to engage the students who may otherwise tune out, we now offer extended learning opportunities, which are designed around a student's personal goals and talents. As a result, in just one year, we have decreased the dropout rate by almost 30 percent.

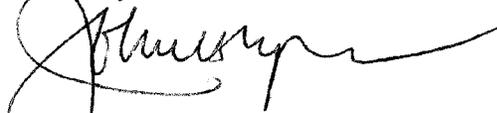
Appendix A-2-11: Letters of Support

New Hampshire is embarked on a systemic approach to improving education. In 2006, I created the P-16 Working Group, bringing together leaders from the New Hampshire Department of Education, the University and Community College Systems and the private colleges, as well as workforce and business representatives. We now have clearly delineated articulation agreements and online tools to help students plan for college. A high school senior can begin his or her college education at a community college knowing that they will be able to transfer those credits to a 4-year college to complete a bachelor's degree. Our Running Start program allows students to earn community college credits while still in high school. Race to the Top funding will also allow us to move forward with data sharing aimed at producing high school students better prepared for college and new teachers better prepared for the classroom.

I look forward to the opportunity to work with the greater education community of New Hampshire in furthering the Race to the Top goals of raising the bar for students, teachers, and school leaders as well as New Hampshire's goals of 100 percent high school completion, increased college enrollment, and increased college completion. New Hampshire's future, and the nation's future, depends on well-educated citizens.

Thank you very much for providing New Hampshire this opportunity. I hope that you will consider our application favorably.

Sincerely,

A handwritten signature in black ink, appearing to read "John H. Lynch", with a long, sweeping horizontal line extending to the right.

John H. Lynch
Governor



John E. Lyons, Jr.
Chairman
Portsmouth

Fredrick J. Bramante, Jr.
Durham

Helen G. Honorow
Nashua

Daphne A. Kenyon
Windham

Stephen R. L'Heureux
Hooksett

Tom Raffio
Bow

William D. Walker
Campton

STATE BOARD OF EDUCATION
STATE OFFICE PARK SOUTH
101 PLEASANT STREET
CONCORD, N.H. 03301
TEL. (603) 271-3144
FAX (603) 271-1953
Citizens Services Line
1-800-339-9900

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JAN 04 2010

STATE DEPARTMENT
OF EDUCATION

December 31, 2009

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm, as Chairman of the New Hampshire State Board of Education, I endorse and support the New Hampshire Department of Education's Race to the Top grant application.

New Hampshire is unique in that our Governor, Senate, House, State Board of Education, Department of Education, Administrators Association, Principals Association, State School Boards Association, Parent/Teacher Organizations, and most importantly, our Teachers Associations have agreed to set aside personal and political preferences for the benefit of all children. As a result, New Hampshire has been in the forefront of education reform which has led to the creation of programs and standards that have fostered a true 21st century education. New Hampshire is well on its way to implementing high school redesign, extended learning opportunities outside of the traditional classroom, eliminating the dropout rate, integrating models of assessment and accountability for students and teachers that align with the common core of K-12 standards as well as improving and supporting the preparation of teachers as true leaders who can meet the needs of our students.

The Department of Education's Race to the Top grant application would ensure that New Hampshire continues to be a vibrant incubator for education reform. I am confident that a

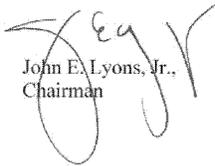
TDD ACCESS: RELAY NH 1-800-735-2964
EQUAL OPPORTUNITY EMPLOYER - EQUAL EDUCATIONAL OPPORTUNITIES

Appendix A-2-11: Letters of Support

Virginia M. Barry, Ph.D.
December 31, 2009
Page 2

review of New Hampshire's track record will lead the United States Department of Education to conclude that New Hampshire is more than a worthy candidate to be a recipient of Race to the Top funds. With the assistance of Race to the Top funds, New Hampshire will not only improve the success of all students, but particularly those students having the most significant achievement gap. Finally, Race to the Top grant funds will position New Hampshire to be a model other states can look to for guidance.

Sincerely,



John E. Lyons, Jr.,
Chairman



The Senate of the State of New Hampshire

107 North Main Street, Room 302, Concord, N.H. 03301-4951

SYLVIA B. LARSEN
President of the Senate
District 15

Office 271-2111

TTY/TDD
1-800-735-2964

January 6, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that I support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and student achievement in order to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state.

I am supportive of the focus on the four areas of reform that the grant has identified, particularly the intention to concentrate on teacher and leader effectiveness. The plan to continue and enhance New Hampshire's standards for school approval and our assessment system by using first rate data collection is exactly what the state has been incrementally trying to accomplish even pre-No Child Left Behind. A successful grant application will propel us in that direction. It is very exciting to imagine an accelerated pace in helping to close the achievement gap in our state.

We are hopeful that we, as legislative leaders, will be able to collaborate with the NH DOE to:

- Increase the number and percentage of students who annually meet grade-level expectations, state standards, and growth expectations;
- Decrease the achievement gap
- Increase the graduation rate, while decreasing the dropout rate to zero by 2012;
- Increase the number of students enrolling in and completing postsecondary degrees or credentials;
- Increase the number and equitable distribution of effective teachers and leaders; and,
- Expand use of proven practices throughout the state.

We, as legislators, look forward to collaborating with the Department, schools, districts and organizations to support the education of youngsters. It is a critical time in education and this grant represents our best hopes for our children's future.

Sincerely,

Sylvia B. Larsen
President of the Senate



The Senate of the State of New Hampshire

107 North Main Street, Room 302, Concord, N.H. 03301-4951

MOLLY M. KELLY
District 10

Office 271-2111

TTY/TDD
1-800-735-2964

January 11, 2010

Virginia M. Barry, PH.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

As Chair of the New Hampshire Senate Education Committee, I highly support and enthusiastically endorse the New Hampshire Department of Education's Race to the Top application. It is imperative that our students are prepared for the 21st Century and that every child is provided an equal opportunity for a quality education. The goal of the State's innovative education initiatives is to make sure that those students who have not traditionally achieved will succeed and ensure that all students perform at their highest level.

Each and every child is unique and equally important, it is our responsibility as educators and legislators to provide diverse and creative academic resources that reach each one of these children. Because of the Department of Education's current statewide data system, New Hampshire is leading the way in evaluating those innovative programs that have proven to be successful. Developing, refining, supporting and sharing these effective programs are necessary to achieve our educational goals. The use of data will not only improve academic instruction but will also provide important information for necessary legislative policy.

Education is the hope for our future and I am honored to participate with you and the entire Department of Education in their outstanding efforts to increase student academic growth expectations, high school graduation rates, postsecondary degrees, effective teachers and use of innovative programs throughout the State.

I strongly promote the Department's Race to the Top application and look forward to continuing to work with you in reaching New Hampshire's educational goals.

Sincerely,


Molly M. Kelly



Emma L. Rous
Chairman
J. Timothy Dunn
Vice Chairman

State of New Hampshire

HOUSE OF REPRESENTATIVES

Legislative Office Building, 33 North State Street
Concord, NH 03301-6328

TEL: (603) 271-3334
TDD Access: Relay NH 1-800-735-2964

COMMITTEE ON EDUCATION

5/23/10

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

I enthusiastically endorse the New Hampshire Department of Education's Race to the Top application. The program's focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs and goals of New Hampshire.

The NH Legislature continues to work collaboratively with the Department of Education on a number of initiatives that align with Race to the Top goals:

The state's adequacy funding formula recognizes the need for increased educational resources for low-income students by increasing aid for every student in the school based on the school's concentration of students on free and reduced lunch. The legislature will do everything possible to fully fund the formula in difficult economic times.

As chair of the NH House Education Committee, I worked to pass legislation to redesign our state accountability system. That work will result in more rigorous measures of school achievement, including an improved growth model and a performance system that includes multiple measures of assessment.

I was proud to sponsor legislation to raise the compulsory attendance age to 18 while providing support for at risk students, resulting in a 30% decrease in the state drop-out rate, with a goal of 100% by 2012.

In a few days, the governor will sign legislation strengthening our ability to gather and analyze accurate longitudinal data by extending our unique student identifier number to publicly funded preschool children and to the public postsecondary system, with voluntary private school participation.

Ongoing dialogue with school administrators, the Department of Education, the House and Senate education committees, teacher educators, and teacher groups (NEANH, AFTNH, the NH Staff Development Council, the Professional Standards Board) will create strengthened teacher preparation and evaluation systems that include student performance measures and career ladder opportunities for teachers.

As a board member of NH Scholars, I support increased enrollment in rigorous, college preparatory courses and increased access to postsecondary study for all students, with a goal of 80% postsecondary enrollment by 2012. The governor's P-16 Council is setting rigorous new targets for educational achievement. As a partner in the New England Secondary School Consortium, we support the regional collaborative effort to promote and extend best practices in high schools, including the use of performance assessments aligned with rigorous standards.

The Department of Education is successfully engaging local districts in moving forward with these initiatives. While New Hampshire scores very well on national tests such as NAEP, we need to close the performance gap for subgroups. Turning around low performing schools is a high priority for NH and the success of some of our at risk schools in making AYP demonstrates that we can succeed.

The legislature will continue to support the Department's efforts to promote the best possible education for all New Hampshire students. Race to the Top participation offers a vital opportunity to strengthen and promote the state's educational goals.

Sincerely,

A handwritten signature in cursive script that reads "Emma L. Rous". The signature is written in black ink and is positioned above the typed name.

Rep. Emma L. Rous, Chair
NH House Education Committee



State of New Hampshire

HOUSE OF REPRESENTATIVES

CONCORD

May 25, 2010

Virginia M. Barry
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

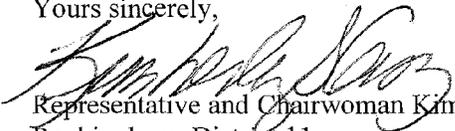
As a member of the New Hampshire House Education Committee, Chair of the Charter School Legislative Oversight Committee, a ten year former school board member in one of the largest districts in the state and a present member of two Board of Trustees of two highly successful Charter Schools, one being the first Virtual Charter school in the state, I can't think of anything in which I could wax more enthusiastic, or look to with greater anticipation and excitement, than the Department's Race to the Top (R3T) application. Its focus on narrowing the achievement gap for subgroups of students matches the needs of our state.

Because of the unique geographical realities in a state like New Hampshire, where we find student achievement challenges in both isolated small rural communities, as well as extraordinarily diverse metropolitan areas, as a state legislator, I think the opportunities R3T would allow us to develop, research, refine and apply effective and innovative education reform practices, and in particular, investing in collaborative activities, very exciting.

Our work in New Hampshire to date, lowering the number of dropouts significantly, creating better opportunities for rural (and all) students through the Virtual Learning Academy, and using data to assess our progress can be viewed as a very good step. I can only imagine how R3T could enhance these, and other, opportunities.

I look forward, along with my colleagues, to continue to support through legislative action and budget support to allow New Hampshire's children to thrive by offering the best educational opportunities we can.

Yours sincerely,


Representative and Chairwoman Kim Casey
Rockingham, District 11
East Kingston and Newton.

JEANNE SHAHEEN
NEW HAMPSHIRE

SUITE 5H-520
HART BUILDING
WASHINGTON, DC 20510
(202) 224-2643

United States Senate

WASHINGTON, DC 20510

May 25, 2010

Ms. Thelma Meléndez de Santa Ana
Assistant Secretary for Elementary and Secondary Education
Office of Elementary and Secondary Education
400 Maryland Avenue, SW
Washington, DC 20202

Dear Mr. Shelton,

I am writing to express my strong support for the Race to the Top application submitted by the New Hampshire Department of Education (NHDOE) to improve schools, raise student performance and narrow the achievement gap for traditionally underserved students.

New Hampshire's plan for educational transformation focuses on initiatives in four education reform areas highlighted by the U.S. Department of Education: rigorous standards and high quality assessment, data systems that support instruction, ensuring teacher and administrator effectiveness and turning around the lowest-achieving schools.

To promote reform, NHDOE will provide services for districts and schools that enrich assessment promote best practices, encourage innovation and turnaround low performing schools. NHDOE will design multiple assessment measures for all students and disseminate effective education reform practices that can be shared and scaled in communities across the state. These may include extended learning opportunities, investing in collaborative activities and other initiatives.

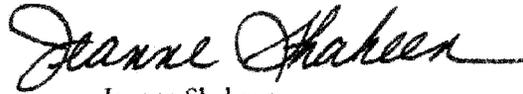
The state will also support innovative reforms undertaken by specific districts, professional organizations and consortia of districts that align with the State Plan and can be replicated in other communities. At the most intense level, the Department of Education will match the state's 12 lowest-achieving schools and district with vetted external partners to guide, coordinate and manage school transformation. The goals of these interventions are to provide resources to improve all schools, support the best local efforts to improve results and quickly transform failing schools.

As a result of the proposed work, the state expects to increase the number of high school students graduating with a standard diploma from 89 percent to 95 percent by 2012 and reduce the achievement gap in student performance by 40 percent over the next six years. The proposal also outlines specific goals to increase enrollment and completion of postsecondary programs and to more equitably distribute highly effective teachers and administrators in high-need schools and districts across the state.

Appendix A-2-11: Letters of Support

I fully support the New Hampshire Department of Education's proposal to strengthen our schools and raise student performance. This is a bold and carefully crafted application and I urge the U.S. Department of Education to give it full consideration. If you have any questions, please contact my Legislative Aide, Alison MacDonald, at 202-224-7093.

Sincerely,

A handwritten signature in black ink, reading "Jeanne Shaheen". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Jeanne Shaheen
United States Senator



CHANCELLOR'S OFFICE

Dunlap Center
25 Concord Road
Durham, NH 03824-3546
Phone: (603) 862-0918
Fax: (603) 862-0908
www.usnh.edu

May 21, 2010

Dr. Virginia Barry
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

New Hampshire's economy rests on the quality of its schools, colleges, and universities to provide a well-educated and well-rounded workforce. The state needs a trained workforce which can address 21st-century employment needs. Postsecondary education institutions, in partnership with business and industry, are the incubators of new products, services, and applications, as well as the catalysts for new companies and new jobs. P-12 education is the foundation of the whole enterprise and "Race to the Top" initiatives are part of New Hampshire's educational growth model to strengthen that foundation by ensuring that P-12 students are better prepared for admission to and graduation from colleges and universities.

P-16 thinking focuses on the changes needed at both the P-12 and higher education levels. This includes establishing individual student proficiency standards, outcome assessments, and graduation requirements to close the gaps between the stages at which students leave high school, enter college, and obtain high-performance jobs. It also challenges colleges and universities to strengthen their own programs, including a review of admission requirements, entrance testing and placement, grading standards, academic advising, use of technology, and re-designing teacher education programs to be in greater alignment with NH K-12 outcome standards.

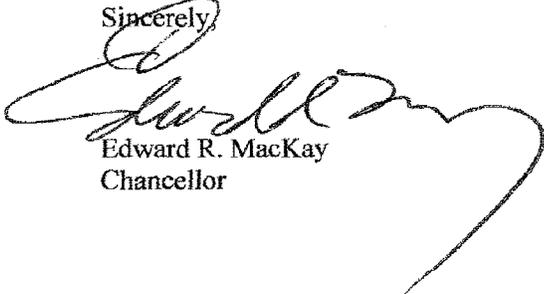
The University System of New Hampshire is the largest provider of post secondary education in the Granite State. With almost 30,000 enrolled students and 70,000 alumni living in state, the sister institutions of the University System - the University of New Hampshire, Plymouth State University, Keene State College, and Granite State College - have a direct impact on hundreds of thousands of New Hampshire citizens every year. In fact, the University System institutions produce the most graduates in New Hampshire in Teacher Education and in the STEM disciplines.

The case for high standards in P-12 education is needed to give New Hampshire's citizens the skills—habits of mind and habits of heart—they need to compete effectively in a rapidly changing global economy. The local challenges are many. All three levels of educational sectors must work more closely together to ensure that the pathway is clear, that help is available along the way, and that progress may be measured. Specific outcomes include:

- Increased proficiency score in P-12 for each individual student
- Decreased high school drop-out rate
- Increased college attendance and completion at both two-year and four-year institutions
- Better prepared graduates to enter the workforce
- Better prepared teachers to enter the classroom
- Better collection of data and increased transparency in reporting of outcomes

The goals of this grant, and the collaborative efforts it represents, are not only in perfect alignment with national priorities regarding education reform and the preparation of teachers for the 21st century, but represent an extension along a natural trajectory of current efforts in New Hampshire. I pledge the full support of the University System to implement this grant, and will be engaged with its development and operation along the way.

Sincerely,



Edward R. MacKay
Chancellor



Office of the President
Keene State College
229 Main Street
Keene, New Hampshire 03435-1504
603-358-2000 keene.edu

May 21, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

On behalf of Keene State College, it is with great enthusiasm that I support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state and is consistent with the priorities of Keene State College.

The State of New Hampshire envisions three levels of intervention at which it will provide or broker services for districts and schools. The first level involves the Department of Education coordinating networks of schools, districts, institutions of higher education and professional organizations that will provide vehicles for sharing findings and promising practices, problem solving, and identifying ways to scale up effective practices in the state and across the region.

At this first level, Keene State College anticipates partnering with the New Hampshire Department of Education to mobilize the resources and expertise of its graduate program in education to link directly with the needs of the local school district. Through an innovative immersion apprenticeship model, Keene State teacher candidates will be embedded with collegiate mentors and classroom teachers at a local elementary school where they will support literacy and the creation and delivery of a developmentally-appropriate, and progressive, curriculum. Keene State will partner with colleagues in the school and within the larger school district to lead the development of authentic assessment instruments for students and teacher candidates alike. It is our intention that these instruments will leverage existing statewide data systems and result in complementary tools that support peer comparison and evaluation of effectiveness in outcomes achievement for students, teacher candidates and teaching professionals alike.

As New Hampshire's public liberal arts college with an NCATE accredited teacher education program, Keene State has not only the capacity to advance the goals of the Department of Education, but also a commitment to driving economic growth in our state and a tradition of educating the best New Hampshire teachers for service to their communities. As a member of your advisory council, I also pledge my personal support for education in our state. I look forward to collaborating with the Department of Education on this statewide project that will enhance student learning, improve teacher candidate preparation, and support career success and professional development activities for educators across New Hampshire.

Sincerely,

A handwritten signature in cursive script that reads "Helen F. Giles-Gee".

Helen F. Giles-Gee
President



March 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that we endorse/support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state.

This program would support New Hampshire's education leaders and stakeholders in working collaboratively toward measurable outcomes. The focus on improving postsecondary enrollment and timely completion is of special significance to the Community College System. The lifetime benefits to an individual that result from education beyond the secondary school level are well-documented. Identifying and implementing strategies that support student achievement and successful transition into postsecondary education is vital. Recently the Community College System has worked with a group of NH high schools to diminish the percentage of incoming college students with remedial math needs. In turn, we expect to see improvement in college retention and completion, as students arrive prepared for college-level work and require less time to degree attainment. This type of collaborative, outcome-based, measurable work is illustrative of what could be done on a larger scale with support from the Race to the Top program.

We look forward to collaborating with the Department, schools, districts, and organizations to achieve the goals of the Race to the Top initiative.

Sincerely,

A handwritten signature in black ink that reads "Richard A. Gustafson".

Dr. Richard A. Gustafson
Chancellor

RG/mm



RECEIVED

MAY 25 2010

STATE DEPARTMENT
OF EDUCATION

STATE OF NEW HAMPSHIRE POSTSECONDARY EDUCATION COMMISSION

Financial Aid | College & University Approvals | Career School Licensing | Veterans State Approvals | Closed School Transcripts | Research/Studies

May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that we support the New Hampshire Department of Education's "Race to the Top" Phase II grant application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state.

The NH Postsecondary Education Commission (Commission) is a coordinating state agency that regulates the activity of colleges, universities and career schools in all sectors (profit and non profit; independent and public) and administers state funds through financial aid programs.

NH's "Race to the Top" Phase II grant provides incentives for collaboration between K-12 and the higher education sector and focuses on student achievement. The NH model for educational transformation focuses on reform in standards, instruction support systems, teacher and leader effectiveness, and the lowest achieving schools. Success in these areas will significantly increase the capacity of higher education to support student learning.

Additionally, the grant aligns with the Governor's P-16 Working Group, established in 2006, with the purpose to communicate and collaborate across the elementary, secondary, and postsecondary education sectors to encourage students to stay in school, improve their academic performance, and to raise aspirations leading to enrollment in colleges and universities.

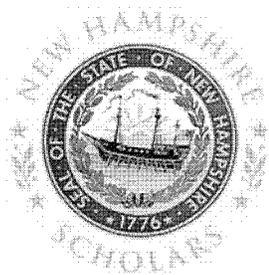
Developments would be shared with the Commission, as well as the Governor's P-16 Working Group members.

We look forward to continued collaboration with the NH Department of Education, schools, districts, and organizations to accomplish great things for our students.

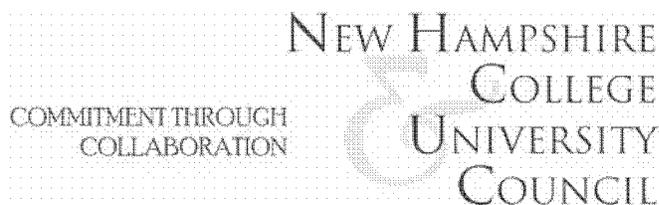
Sincerely,


Kathryn G. Dodge
Executive Director

KGD:pme



3 Barrell Court, Suite 100, Concord, NH 03301
(603) 225-4199 x300 • www.NHscholars.org



3 Barrell Court, Suite 100, Concord, NH 03301
(603) 225-4199 • www.nhcuc.org

May 25, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, New Hampshire 03301

Dear Commissioner Barry:

The New Hampshire College & University Council is pleased to provide this letter of support to the New Hampshire Department of Education's Race to the Top application. On behalf of our public and private member institutions, we particularly support the application's focus to increase student learning and achievement to meet the demands of the 21st century. We commend the Department's work on the application in an effort to create an educational system that will build human and social capital to grow and sustain a vibrant New Hampshire economy.

To better prepare students for college and career, our State Scholars Initiative builds the capacity of school districts to enhance personalized learning, individualized progress and encourages students to take more rigorous course work. We appreciate that New Hampshire's Race to the Top application includes funds to expand New Hampshire Scholars throughout the state.

We strongly support collaboration with the Department of Education to ensure that all school districts in New Hampshire systemically support student learning and achievement. In many of our struggling schools there are lacking resources and support structures necessary to promote higher learning. The New Hampshire College & University Council, through its State Scholars Initiative, provides additional resources and support enabling schools to better serve their students.

We are also excited that this application will enable us to target our lowest-achieving schools. In many instances, our struggling schools exhibit these characteristics:

- Low expectations
- Minimal aspirations for higher education
- Students lack access to college readiness material
- Lack of urgency to graduate high school with necessary high level skills

(continued)

We are confident the NHDOE application can make a real difference in changing the culture and expectations of these school districts. When students are asked to perform at a high level, enroll in more rigorous courses, explore college and career options they will accept the challenge. In a recent survey, more than 70% of recent high school graduates said they would have worked harder in high school if someone would have asked them to do so. We know our students will accept the challenge. We also know that the innovative work being done in thirty of our districts through the State Scholars Initiative will be successful in increasing expectations and building an effective strategy in our lowest-performing schools as well.

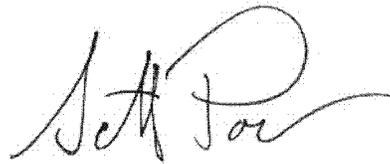
The New Hampshire College & University Council has been a long-time partner of New Hampshire's Department of Education. Together we have successfully implemented our college readiness program in one-third of the state's school districts. We plan to continue collaboration in an effort to narrow the achievement gap for New Hampshire's students. Our colleges and universities clearly understand the importance of supporting and recognizing well prepared students. With the K-12 pipeline decreasing in New Hampshire it is critically important to foster student learning and student achievement in all of the state's school districts.

We look forward to collaborating with the Department, schools, districts and other partners to successfully meet the goals and objectives of this application.

Sincerely,



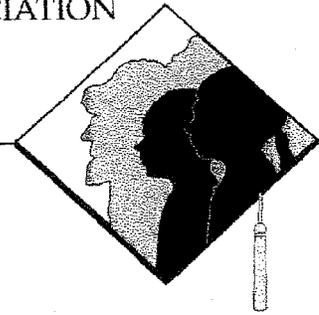
Thomas Horgan
President & CEO
NH College & University Council
(603) 225-4199 x318



Scott Power
Director
New Hampshire Scholars Initiative
(603) 225-4199 x300

NEW HAMPSHIRE SCHOOL ADMINISTRATORS ASSOCIATION

CHAMPIONS FOR CHILDREN



May 21, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry,

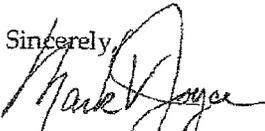
On behalf of the New Hampshire School Administrators Association (NHSAA), please accept this letter of support for the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

The New Hampshire School Administrators Association is private, non-profit association founded in 1941 to support public education, the interests of children and the development of educational leaders and its members. NHSAA represents school system leaders including school superintendents, assistants, school finance leaders, curriculum coordinators and special education directors.

We believe this innovative grant opportunity will empower our local school districts in their significant efforts to reform and transform learning opportunities for ALL our children. While all aspects of the application are innovative and valuable, we are especially excited to be part of the continuing effort to include multiple measures of student success in the development of our assessment system, further refine the New England Common Assessment Program, and improve the preparation of teachers and leaders in their very challenging careers. These strategies will be used to narrow achievement gaps and ensure that all New Hampshire students perform at their highest levels.

We look forward to collaborating with the New Hampshire Department of Education, schools, districts, and organizations to help reshape New Hampshire's public education system to better prepare all our children for the challenges of the future. On behalf of education system leaders, we support this very important effort.

Sincerely,


Dr. Mark V. Joyce
Executive Director

BOW BROOK PLACE, 46 DONOVAN STREET, SUITE 3 • CONCORD, NH 03301
TEL: (603) 225-3230 • FAX: (603) 225-3225



Phone: (603) 228-2061
or (800) 272-0653
Fax: (603) 228-2351

<http://www.nhsba.org>

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January 13, 2010

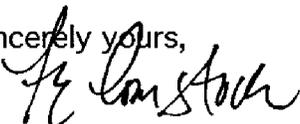
Virginia M. Barry, PhD.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry,

Please accept this as the New Hampshire School Boards Association's support of the New Hampshire Department of Education's application to secure federal Race To The Top funds.

This appears to be a significant new federal program that may bring much needed additional resources to the public schools of New Hampshire.

Please contact me if I can be of further assistance.

Sincerely yours,


Dr. Theodore E. Comstock
Executive Director and General Counsel
New Hampshire School Boards Association
(603)228-2061; email: sklesq@aol.com

Executive Director
Dr. Theodore E. Comstock
sklesq@aol.com
NH School Boards Association
25 Triangle Park Drive, Suite 101
Concord, NH 03301



May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

NEA-New Hampshire supports the New Hampshire Department of Education's Race to the Top application. The grant's focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state and the mission of NEA-NH. NEA-NH values the close working relationship our organization has with the Department of Education; we look forward to collaborating with the department on this effort.

We believe that New Hampshire is already making excellent progress on educational innovation and reform through programs like *Running Start*, the state's work with *Extended Learning Opportunities* and the *Moving on when Ready* initiative. We are excited about the possibility of expanding the Future Educators Academy, the program for high school students aspiring to teach that we currently co-sponsor with the department.

As an organization, NEA-NH shares the grant's focus on increasing student learning and believes that if the strategies outlined in the grant proposal are fully supported with funding from Race to the Top funds, the strategies have the potential to make a significant and positive impact on student achievement in New Hampshire.

Sincerely,

A handwritten signature in black ink that reads "Rhonda Wesolowski".

Rhonda Wesolowski
President, NEA-New Hampshire



**The New Hampshire
Public Charter School
Association
NHPCSA**

To: The Federal Department of Education
From: The New Hampshire Public Charter School Association
RE: The New Hampshire DOE Race to the Top Application
Date: May 25th 2010

The New Hampshire Public Charter School Association (NHPCSA) would like to express its support of the New Hampshire Department of Education application for Race to the Top funding. Of particular interest to the Association is the department's proposal to use the NH public charter schools as a test pool demographic for a new performance based assesment to supplement the existing NECAP standardized testing. Many of the charter schools are performance based and feel that standardized testing does not fully capture the picutre of student progress and achievement that could be captured with performance based testing.

The Association has worked with a local testing institution to frame what this performance based assesment would entail in both administration, data collection, labor and expenses and estimates this cost to be less than or equal to \$500,000/year for a three year period.

The NHPCSA has a close relationship with the NH DOE and looks forward to the opportunity to work even more closely together and fulfill our mission of becoming the learning laboratories of the state to offer this supplemental testing and more fully portray the progress of each individual student.

Sincerely,

Eileen

Eileen Groll Liponis
Executive Director
New Hampshire Public Charter School Association
603-498-2386
eileen@liponis.com

May 21, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry:

It is with great enthusiasm that I endorse and support the New Hampshire Department of Education's Race to the Top application, particularly as it relates to Science, Technology, Engineering and Math. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

The Health Science and Technologies teachers in New Hampshire are preparing students for postsecondary study and careers that require a strong foundation in science, technology and mathematics. We are excited that this STEM initiative will give students from all backgrounds the necessary skills to succeed in our programs and beyond.

We are currently working with industry and postsecondary faculty to develop statewide rigorous plans of study that outline the science, math and technology required to for postsecondary success in the allied health career paths. It is clear to us that a strong STEM curriculum in New Hampshire is critical to the success of our students.

Through the state and national Health Occupations Student Organization, our students gain experience in science and technology through competition, camaraderic and leadership activities. We continually strive to encourage all students to participate in these activities to increase their knowledge and skills.

We would welcome the opportunity to collaborate with the Department of Education, schools and industry to strengthen STEM education and improve access for as many New Hampshire students as possible.

Sincerely,

(b)(6)

✓ Linda Cutler, President
NH Health Science & Technologies Teachers

New Hampshire Technology Education Association

January 15, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry:

It is with great enthusiasm that the New Hampshire Technology Education Association supports the New Hampshire Department of Education's Race to the Top application, particularly as it relates to Science, Technology, Engineering and Math. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state. As Technology Education teaches, our members teach the "T" and "E" in STEM everyday. We are pleased to see engineering and technology teachers included in the second "Race to the Top" goal: Recruit, develop, and retain effective teachers and principals thus guaranteeing an equitable distribution of highly qualified math, science, engineering and technology teachers throughout the state, particularly in areas of high poverty and rural areas.

Race to the Top has identified the following goals for STEM:

- Increased access to high-quality STEM-related courses and experiences for all students in all schools, P-12, particularly underrepresented groups and of women and girls; identify clear career paths in the STEM industries;
- Recruit, develop, and retain effective teachers and principals thus guaranteeing an equitable distribution of highly qualified math, science, engineering and technology teachers throughout the state, particularly in areas of high poverty and rural areas;
- Support all priority schools and districts to adopt and implement innovative research and standards-based models for STEM teaching; and
- Actively increase student preparedness for college level math and reduce the need for remedial mathematics for high school graduates enrolling in college

The state of New Hampshire has placed an emphasis in engineering education for over six years by endorsing PLTW and now Engineering byDesign and including funding for engineering curriculum. New Hampshire is ahead of most states in this regard. The New Hampshire Technology Education Association has been very active in promoting the Standards for Technological Literacy, Engineering byDesign and other engineering curricula and hope that this program will strengthen our efforts to develop a technologically literate society here in New Hampshire.

NHTEA, continued
January 15, 2010
Page Two

The New Hampshire Technology Education Association looks forward to collaborating with the Department of Education, schools, districts, and other organizations to increase student awareness and knowledge in STEM subjects.

Sincerely,

(b)(6)

Dawn Korade,
President, NHTEA

Dan Caron
EbD Curriculum Specialist



New Hampshire Science & Engineering Exposition Association

SPONSORS OF THE
NH SCIENCE AND ENGINEERING EXPOSITION
WWW.NHSEE.ORG

May 21, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry:

It is with great enthusiasm that I endorse and support the New Hampshire Department of Education's Race to the Top application, particularly as it relates to Science, Technology, Engineering and Math. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

For the past eight years, a small group of science teachers have been providing students statewide an opportunity to showcase their scientific research projects and participate in science and engineering challenge competitions at the annual New Hampshire Science and Engineering Exposition. Increased access to high quality STEM-related courses and experiences and highly effective teachers will increase the number of students who participate in our event as well as improve the quality of their research.

We are very excited about the STEM initiative in New Hampshire's Race to the Top application because it aligns with our goals of increasing student interest in science and engineering and providing them with the skills necessary to engage in scientific inquiry. We hope to reach students from the northern rural parts of the state to provide students from those communities the opportunities to participate in a statewide science and engineering competition and this effort will assist us in this effort.

We look forward to collaborating with the Department of Education, schools and industry partners to improve and expand science, technology, engineering and mathematics education in New Hampshire.

Sincerely,

(b)(6)

Norma Bursaw
President



889 Elm Street, Suite 304 Manchester, NH 03101-2000 Tel: 603-540-0620 www.nhpie.org

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Grantham School District

Daniel N. Hebert
Executive Director
New Hampshire
Partners in Education

January 14, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that NH Partners in Education provide our endorsement to the New Hampshire Department of Education in its Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

From our perspective, the most exciting aspect of this initiative is the "out-of-the-box" approach to school reform by developing creative solutions to help our children succeed in a rapidly-changing environment. As a statewide organization who recognizes the thousands of NH school volunteers who donate over one million hours of their time to local schools each year, we know first-hand the power of community and creative collaboration.

We look forward to partnering with the Department, schools, districts, and other organizations to work on creative reforms that will positively transform our schools for decades to come.

Sincerely,

(b)(6)

Daniel N. Hebert
Executive Director



School of Education

2500 North River Road | Manchester, NH 03106-1045 | 603.629.4675 | fax: 603.629.4673 | www.snhu.edu

May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

As dean of the Southern New Hampshire University School of Education, I fully support the New Hampshire Department of Education's Race to the Top application. Our faculty and staff are committed to developing in our students a depth of academic knowledge that weaves theory into practice and embraces the concept of educating the whole child while gauging progress toward high achievement based on a common core of content. Our programs are grounded in the practice of content matter that enables inquiry, collaboration, critical thinking, and problem solving.

We are enthusiastic about participating in the development of a 21st century residency preparation program for teachers and leaders. Located in southern NH, we are in an ideal location to impact failing schools in the Manchester School District. We know that recruiting, preparing, and retaining good teachers is the central strategy for improving our schools and that true school reform cannot succeed unless it focuses on creating the conditions under which teachers can teach, and teach well so that students learn to high levels. What teachers know and do is the most important influence on what students learn. The bottom line is that there is simply no way to create good schools without good teachers. Knowing this, SNHU seeks to construct optimal conditions that prompt the integration of theoretical and practical learning, providing a compelling context for developing skilled and thoughtful teachers. We focus intently on building intensive clinical training opportunities, including supporting our cooperating teachers so that they become excellent teachers of teachers and true partners in the teacher education process.

On behalf of the SNHU School of Education, we look forward to collaborating with the Department, schools, districts, and organizations to boldly move New Hampshire forward into a 21st century learning environment.

Sincerely,

A handwritten signature in cursive script that reads "Mary Sullivan Heath".

Mary Sullivan Heath



Founded in 1885

NEW ENGLAND ASSOCIATION OF SCHOOLS & COLLEGES, INC.
OFFICERS

President

REGINALD R. MAYO
Superintendent
New Haven Public Schools
New Haven, CT 06519

President-Elect

JAY S. STROUD
Headmaster
Labor Academy
Marion, MA 02738

Secretary-Treasurer

KENNETH K. QUIGLEY, JR.
President
Curry College
Milton, MA 02186

Immediate Past President

DANIEL FOGEL
President
University of Vermont
Burlington, VT 05405

**Executive Director and
Chief Executive Officer**

JACOB LUDS III
jluds@neasc.org

May 25, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that the New England Association of Schools and Colleges (NEASC) endorses the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our six-state region.

New Hampshire's commitment to narrow the achievement gap for subgroups of students compliments the regional effort we have been promoting. NEASC, America's first and oldest regional accrediting organization, stands ready to support your work in the areas of standards and assessment, and the development of data systems to support instruction. We will make our research office available to the New Hampshire Department of Education to assist you in data gathering and analysis in support of school improvement. We are excited about the potential your Race to the Top application offers.

We will share our enthusiasm for your application with our friends and colleagues at the United States Department of Education and the Domestic Policy Council (WHO) and look forward to collaborating with the New Hampshire Department of Education, schools, and districts to improve education in the state and serve as a model for the region.

Sincerely,

(b)(6)

Jacob Luds, III
Executive Director/CEO

Celebrating 125 years 1885-2010
Demanding Excellence, Honoring Difference

209 BURLINGTON ROAD, SUITE 201, BEDFORD, MA 01730-1433 | 781-271-0022 | FAX 781-271-0950
www.neasc.org



Breaking Ranks for Student Success

May 21, 2010

Virginia M. Barry, Ph. D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

The Center for Secondary School Redesign, Inc. (CSSR) is pleased to endorse the New Hampshire Department of Education's Race to the Top application. It reflects the needs and opportunities that exist in New Hampshire schools and districts at this time as they focus on meeting the demands of the 21st Century as a guide for increasing student achievement. Also, the grant application addresses the need to narrow the achievement gaps for subgroups of students across the State.

We are particularly excited about how this grant will allow for focusing on turning around the lowest performing schools in the state. CSSR is proud to have had the opportunity to provide technical assistance to schools and districts that have been implementing extended learning opportunities (ELO's) to students as a means to gain the student engagement in learning needed to close achievement gaps.

We plan to build on what we've learned through the ELO project to create a network of high schools, including those identified as the lowest performing high schools in the State, that will focus on creating valid and reliable performance assessments as part of a multiple measure assessment system. This aspect of the Race to the Top application will simultaneously provide the development of standards and assessments that prepare students to succeed in college, the workplace and the global economy while assisting in turning around the persistently lowest-achieving schools.

Respectfully Submitted,

(b)(6)

Joseph A. DiMartino,
President



January 7, 2009

Virginia Barry, Ph.D.
Commissioner of Education
NH Department of Education
101 Pleasant St
Concord, NH 03301

Dear Commissioner Barry,

The Parent Information Center of NH is both pleased and excited to support the NH Department of Education's Race to the Top application and its focus on increasing student achievement to meet the challenges of the 21st century and especially narrowing the achievement gap for all student subgroups.

We have been very encouraged by the Department's clear statements and visible expressions of support for a strong family and community engagement effort being built into the Race to the Top application. As you know, through various programs at the Parent Information Center, we are working to help increase the effectiveness of NH's lowest-achieving schools, in both regular and special education domains, and in particular through our implementation of the Solid Foundation program that we currently have embedded or started in 20 schools.

The Parent Information Center of NH plans to continue to support the Department's effort through expanding the Solid Foundation program into more schools, offering technical assistance and professional development opportunities for school leaders and staff, providing parent workshops, and making resources available to both schools and parents to meet goals around raising student achievement, improving outreach to underserved populations (including ethnic and refugee communities), strengthening school-family communication and building strong family-school-community partnerships.

The Parent Information Center of NH is committed to working in a collaborative statewide fashion with the Department to ensure that all NH students rise to their highest level of achievement.

Sincerely,

(b)(6)

Kevin Lew-Hanson
Executive Director



**STATE OF NEW HAMPSHIRE
DEPARTMENT OF CORRECTIONS
OFFICE OF THE COMMISSIONER**

P.O. BOX 1806
CONCORD, NH 03302-1806
603-271-5603 FAX: 603-271-5643
TDD Access: 1-800-735-2964
www.nh.gov/nhdoc

William L. Wrenn
Commissioner

William G. McGonagle
Assistant Commissioner

May 26, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

The New Hampshire Department of Corrections (NHDOC) is happy to support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students, matches the needs of our state.

NHDOC appreciates that the State's proposed innovations will be continually monitored and assessed by the collection, analysis, and use of data to inform classroom practice, district-wide and state initiatives and policy. Schools and districts across the State, including our own Corrections Special School District, will benefit from these initiatives. We applaud the Department of Education's very specific goals and the State's three-level intervention strategy for achieving these results.

I highly recommend the Department of Education's Race to the Top application.

Sincerely,

A handwritten signature in black ink, appearing to read "William L. Wrenn".

William L. Wrenn
Commissioner

WLW: nw



State of New Hampshire

DEPARTMENT OF HEALTH AND HUMAN SERVICES

129 PLEASANT STREET, CONCORD, NH 03301-3857

603-271-4688 FAX: 603-271-4912 TDD ACCESS: 1-800-735-2964

NICHOLAS A. TOUMPAS
COMMISSIONER

May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

RECEIVED

MAY 25 2010

STATE DEPARTMENT
OF EDUCATION

Dear Commissioner Barry:

It is with great enthusiasm that I support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matching the needs of our State.

The New Hampshire Department of Health and Human Services' (DHHS) mission includes joining communities in providing opportunities for citizens to achieve independence. The New Hampshire Department of Education's application, goals and ultimate results of increasing the percentage of students who will complete high school and a post secondary career will allow these citizens to obtain higher levels of employment, thus, achieving independence.

The Department of Health and Human Services would be happy to collaborate with the Department of Education to reach their projected goals and outcomes of increasing student achievement and the equitable distribution of highly effective teachers and leaders in high-need schools and districts.

Sincerely,

Nicholas A. Toumpas
Commissioner

The Department of Health and Human Services' Mission is to join communities and families in providing opportunities for citizens to achieve health and independence.



Nicholas A. Toumpas
Commissioner

William W. Fenniman, Jr.
Director

STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION FOR JUVENILE JUSTICE SERVICES

1056 NORTH RIVER ROAD, MANCHESTER, NH 03104
603-625-5471 FAX: 603-624-0512 TDD Access: 1-800-735-2964

May 25, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that we endorse the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

It is most exciting to consider the expected results of the work proposed. To increase the number of students who will annually meet State standards and growth expectations alone would be a substantial gain. Adding this accomplishment to reducing achievement gaps, to increasing the percentage of High School completers through GED and Diploma and to increase the number of students who enroll in postsecondary programs would be truly ambitious and thrilling outcomes to look forward to.

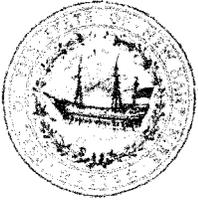
The concept of three levels of intervention to meet the individual needs of each district and to clearly address where they stand in the overall improvement process and what will be expected of them is a most efficient approach to successfully affect change.

We look forward to collaborating with the Department, schools, districts, and organizations in achieving these goals.

Sincerely,

A handwritten signature in black ink, appearing to read "W Fenniman".

William W. Fenniman, Jr.
Director



STATE OF NEW HAMPSHIRE
DEPARTMENT of RESOURCES and ECONOMIC DEVELOPMENT
OFFICE of the COMMISSIONER
172 Pembroke Road P.O. Box 1856 Concord, New Hampshire 03302-1856

GEORGE M. BALD
Commissioner

603-271-2411
FAX: 603-271-2629
george.bald@dred.state.nh.us

May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that I support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

Possible topics for the second paragraph:

- Identify what you are most excited about regarding the application.
- Discuss current statewide, regional, or local work in particular education reform area(s): standards and assessment, data systems to support instruction, teacher and leader effectiveness, and turning around persistently lowest-achieving schools.
- Describe ways you plan to be involved in the work.
- Discuss your capacity and political will to see the project happen.

I look forward to collaborating with the Department, schools, districts, and organizations to support the Race to the Top. Best wishes in this effort, and please feel free to call me if I can help in any way.

Sincerely,

A handwritten signature in black ink that reads "George M. Bald".

George M. Bald
Commissioner

GMB:lc

TDD ACCESS: RELAY NH 1-800-735-2964 recycled paper

OFFICE OF THE COMMISSIONER 603-271-2411

CHARLOTTE DANIELSON
448 EWING STREET
PRINCETON, NJ 08540

May 26, 2010

Commissioner, Virginia M. Barry
NH Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Ginny:

It was a pleasure meeting with you and your staff in New Hampshire on May 9th and to have the opportunity to talk with you further on May 10th at the NH ASCD session where I was presenting. The teacher effectiveness issues that we discussed – *the need for multiple measures of teacher effectiveness; implementation of a differentiated teacher evaluation system; and the training of evaluators to ensure valid and reliable assessment* – are challenges that face our nation and issues that I am very interested in addressing.

I am delighted to accept your invitation to consult with the NH Commissioner's Task Force on Teacher Evaluation and look forward to scheduling our work scope over the next several months. I can imagine your excitement at the possibility of resources that would be afforded New Hampshire through a successful Race to the Top application. Even more important, though, it is even more exciting to know that New Hampshire will pursue its teacher effectiveness agenda regardless of the success of the application.

I wish you the best of luck with the application, and I look forward to working with the state in this important endeavor.

Sincerely,

(b)(6)

Charlotte Danielson
CEO, Danielson Group



May 5, 2010

Virginia M. Barry
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

On behalf of the New England Secondary School Consortium (www.newenglandssc.org) and the Great Schools Partnership, I want to express our enthusiastic endorsement and support of New Hampshire's second round Race to the Top application. The New Hampshire Department of Education, as the representative of its state and public schools, has been a true asset to the New England Secondary School Consortium since its inception. As you know, the five member states of Connecticut, Maine, New Hampshire, Rhode Island, and Vermont believe that our bold vision, shared goals, and innovative strategies will empower us to close persistent achievement gaps, promote greater educational equity and opportunity for all students, dramatically improve teacher quality, enhance the reliability and regional comparability of our data systems, and lead our educators into a new era of secondary schooling. The Consortium's collective commitment is truly unprecedented in its ambition and scope, while our multistate strategy is grounded in a set of agreed-upon beliefs and proven transformative strategies that are all highly aligned with the objectives and assurances of the American Recovery and Reinvestment Act's Race to the Top competition.

Above all, it is an honor to be able to say, without hesitation or equivocation, that our five states are not only committed to realizing systemic educational improvements at scale across our states and the region, but to producing a measurable beneficial impact on the aspirations, achievement, and life outcomes of every one of our adolescents, regardless of race, socioeconomic status, geographic location, the educational attainment of their parents, or any other factor.

For more than two years, the Consortium, in collaboration with its funders and partners, has been designing, planning, and implementing a variety of systemic school-improvement strategies intended to bring greater coherence, alignment, and common purpose to the promotion of best practices, school innovation, and forward-thinking educational policies. A leadership team of dedicated policy makers and state education agency staff has established high-functioning, collegial relationships within and among the Consortium's five member states and its partnering organizations, which include the New England Association of Schools and Colleges, the New England Board of Higher Education, and the Council of Chief State School Officers. Our partnership is guided by the New England Secondary School Consortium Council, a regional leadership team encompassing the five commissioners of education for the Consortium states, state board of education members, governor representatives, influential lawmakers from both legislative houses, and prominent business leaders from within each state. In a word, we

are marshalling the expertise, leadership, and political will needed to successfully support the effective execution of Connecticut's Race to the Top proposal, as well as its aligned school-improvement initiatives, including the state's bold and forward-thinking Connecticut Plan, Connecticut Accountability for Learning Initiative, Teacher Education and Mentoring program, statewide implementation of research-based interventions, longitudinal educational data system, new teacher certification regulations.

If our goal is to ensure that the educational performance and attainment of our public high school students will not only be competitive with their peers worldwide, but that every student graduates prepared for success in the colleges, careers, and communities of the 21st century, the Consortium must work to improve school-based educational practices and their governing policies; develop 21st century learning standards and new skilled-based assessments and data systems that can more accurately measure the attainment of those standards; strengthen statewide educational systems design and the quality of classroom instruction students experience every day; and create a new generation of high-performing, internationally competitive learning models while turning around our chronically underperforming schools—priorities that clearly support Connecticut's Race to the Top application.

During the coming year, the Consortium will be working closely with Connecticut and our other state and organizational partners to establish networks of schools for the purposes of best-practice exchange, resource sharing, and educator development. Schools identified as low performing will be invited to participate in these networks, which will provide coordinated regional support structures for systemic and continuous improvement, including ongoing professional development and school coaching. And not only will these schools be connected within states, but they will have opportunities to work with secondary-school colleagues across state lines.

Connecticut, like the other four Consortium states, has signed on to the Common Core State Standards Initiative. To enhance and complement this groundbreaking initiative and build upon the strong success of the New England Common Assessment Program, the member states will be developing—with the goal of co-adopting and assessing—forward-thinking, skill-based, 21st-century standards that reflect the ways in which students will learn, work, live, and lead in the colleges, careers, and communities of tomorrow. To ensure that these standards are not simply adopted, but meaningfully implemented and assessed in our public schools, the Consortium is also working to develop a multistate performance-assessment system that has the potential to provide regional comparability of student learning beyond the traditional standardized test.

Connecticut has also taken the lead, in collaboration with the member states and the Donahue Institute at the University of Massachusetts, on the development of common, high-impact metrics for determining the efficacy of public secondary education across New England. One of the Consortium's explicit goals is to "more accurately measure student learning" through innovative performance-based assessments, more robust longitudinal data systems, and regional—even national—comparability of student data. As part of our regional data team, the Connecticut Department of Education has been instrumental in the effort to establish baseline performance data for the five states using a common, comprehensive methodology for calculation, reporting, and analysis. In addition to several metrics for measuring student achievement during the critical secondary school years, our regional data team is also developing a plan to gauge postsecondary aspirations and success, including remedial course-taking data and

college enrollment and completion rates using the National Student Clearinghouse's StudentTracker for High Schools system.

This collaborative regional work on standards, assessment, data, and school-improvement are critical components of a much larger and more systemic rethinking of secondary education in New England. In keeping with national efforts to improve the quality of state educational systems—including the Common Core State Standards Initiative, the Data Quality Campaign, and Race to the Top Assessment Program, among several others—Connecticut is on the forefront of promoting educational policies and practices that will make the measurement of educational efficacy and student outcomes more transparent, reliable, and actionable for policy makers, school leaders, teachers, parents, and citizens.

It is our sincere hope and expectation that the US Department of Education will look favorably on Connecticut's Race to the Top application and the work of the New England Secondary School Consortium—both of which have come to fruition only after years of investment, collaboration, commitment, and hard work—while also seeing in their design and execution the hallmarks of the kind of innovative leadership that will bring good ideas, effective policies, and proven educational models to scale in New England and across the country.

Sincerely, 

(b)(6)

David J. Ratt
Executive Director
Great Schools Partnership

This letter has been prepared by the Great Schools Partnership, Inc. on behalf of the New England Secondary School Consortium, its five member states, and its funders and partners. The Great Schools Partnership is the lead coordinator of the Consortium.



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www.measuredprogress.org

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50 Education Way, Dover, NH 03820

May 24, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

We wholeheartedly endorse the New Hampshire Department of Education's Race to the Top application. Since we are a current contractor who hopes to continue its relationship with the Department and who is also well aware of the strictures governing procurement, we offer our support of the state's application without any expectations or conditions.

We have worked with the Department as the general and/or alternate assessment contractor since the 1980's and have collaborated with schools and districts across the state on professional development and local assessment programs (including participating in a Math-Science Partnership Grant with the University of New Hampshire). Since we are headquartered in New Hampshire, 77 % of our employees live here and have a vested interest in the quality of the education their children receive. And because New Hampshire is a small state we have both a professional and personal relationship with Department staff and have witnessed first hand their dedication and passion to meet the needs of *all* the state's students.

As a result of these factors, we have monitored—and in some cases actively supported—initiatives of the Department and the State Board to break new ground in their ongoing efforts to improve public education and increase learning and achievement for all students. In many respects, these initiatives reflect New Hampshire's underlying educational philosophy and form the backbone of its Race to the Top application. In one way or another they address the four education reform areas that are at the heart of that program. A few examples demonstrate this point.

- Several examples pre-date but clearly address the standards and assessment reform—as well as the data systems—mandate. These include the state's
 - being one of the founding members of the New England Common Assessment Program (a unique multi-state collaboration with which we have worked from the beginning and whose rigor has been cited by many, including Achieve's Michael Cohen),

Virginia M. Barry, Ph.D.

Page 2.

May 24, 2010

- participating in USED Enhanced Assessment Grants,
- securing and subsidizing online systems for effective interim and performance tracking,
- working with Nimble Assessment Systems in the early stages of its development of groundbreaking tools to make content more accessible to a wide range of students, and
- exploring performance assessment,
- Other examples address multiple reform areas keyed to improving outcomes for *all* students. These include
 - the State Board's pioneering policies of freeing up school calendars and shifting to a focus on student competency rather than seat time,
 - the Department's growth- and individual-student-oriented "Follow the Child" initiative (we are an awardee), and
 - the state's participation in the pioneering New England Secondary School Consortium (NESSC)—a national model designed to address persistent challenges in high school outcomes.
- The Department has long supported the implementation of high-quality professional development, which is critical to achieving success in all reform areas, but particularly teacher/leader effectiveness. From our personal collaboration with state staff members, we have witnessed the support the Department provides to local educators around the state. For example, through the Bureau of Accountability's School Improvement Group, it established a coaching program with a solid mandate to provide support to districts and/or schools. A Race to the Top award would enable the Department to fully implement this program.

Even if we are not contracted by the Department to help it implement its proposed Race to the Top program, because of the nature of our relationship and the fact that this is our home, we will share what expertise and advice we can to help it take advantage of the unique opportunity an award offers to accelerate its reform initiatives.

Sincerely,

(b)(6)

Stuart R. Kahl, Ph.D.
CEO

January 11, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301



Dear Commissioner Barry:

I am writing today on behalf of the Nellie Mae Education Foundation to endorse the New Hampshire Department of Education's Race to the Top application. We enthusiastically support its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students.

The Foundation is New England's largest public charity dedicated to improving academic achievement for the region's underserved communities. Our mission is to stimulate transformative change of public education systems across New England. We believe that developing a greater variety of higher quality education opportunities will enable all learners—especially and essentially those underserved—to obtain the skills, knowledge and supports necessary to become civically engaged, economically self-sufficient life-long learners.

New Hampshire's focus on meeting the demands is aligned with both our mission and our evolving work. We are currently transitioning to a new strategic focus. Moving forward, we will focus primarily on the promotion and integration of developmentally appropriate, rigorous, student-centered approaches to learning. These approaches takes into account the many ways students learn and are focused on a broad set of essential and relevant skills. It is the Foundation's goal to help grow these approaches into core facets of the education system.

We have previously partnered with the New Hampshire Department of Education to support policy change in the state that is aligned with our mission and strategic focus. We are providing \$70,000 in direct grant support to the state to help develop this Race to the Top proposal and have offered input to key administration officials. We have been a key supporter of the state's efforts to assist local districts in offering Extended Learning Opportunities for students to personalize their experience and earn credit towards high school graduation. We are also supporting the high school redesign efforts of the New England Secondary School Consortium, of which New Hampshire is a valued member along with Maine, Vermont, Rhode Island and Connecticut.

We look forward to continued collaboration with the Department and with schools, districts and other organizations to improve education for all New Hampshire's learners.

Regards,

(b)(6)

Nicholas C. Donohue
President and CEO, Nellie Mae Education Foundation

CENTER ON INNOVATION & IMPROVEMENT

Twin paths to better schools

January 15, 2010

Virginia M. Barry
Commissioner
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry,

Pride in professional workmanship and devotion to the children in your midst have always been chief motivators for school improvement, and New Hampshire has these attributes in spades. As a result, New Hampshire's students have traditionally fared well. But there are limits to what strong motivation and hard work can accomplish, especially in schools at the margins and for students who struggle. Motivation must be matched with effective practice and efficient systems. This realization came to the New Hampshire Department of Education over the very recent years, and the Department has met the challenge head-on.

The New Hampshire Department of Education has candidly assessed its system of support for district and school improvement, adopted technological systems to facilitate its assistance to districts and schools, elevated its expectations of locally controlled districts, and sharply focused on the effective practices that produce results for students. Now NHDE has risen to the challenge of Race to the Top, addressing the assurances and laying plans for a system of excellence in a state that expects the best of itself.

In my meetings with NHDE and district personnel in New Hampshire, I have always come away with a respect for their candor and professionalism. Under your leadership I see these characteristics channeled toward creation of a state system that fosters excellence by supplying state supports without crushing local responsibility. I have no doubt that this is a formula for excellence that will propel New Hampshire to *The Top*. I wish you all the best in the competition, and pledge our full support for your good work.

Sincerely,

(b)(6)

Sam Bedding, Ed.D.
Director



SERESC

**Southeastern
Regional
Education
Service Center, Inc.**

29 Commerce Drive
Bedford, NH 03110
Phone: 603-206-6800
Fax: 603-434-3891
www.seresc.net

ANTONIO G. PARADIS, Ph.D.
Executive Director

Our mission is to engage, support and inspire learning.

January 6, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

RECEIVED

JAN 07 2010

**STATE DEPARTMENT
OF EDUCATION**

Dear Commissioner Barry:

The Southeastern Regional Education Service Center (SERESC) appreciates the work of the NH Department of Education in their continuous efforts on behalf of New Hampshire Students, including their efforts transform education through NH by applying for Race to the Top Funds.

The Focus of Race to the Top, which is increasing student learning and achievement to meet the demands of the 21st Century by narrowing the achievement gap for subgroups of students, matches the needs of our state, can create new initiatives for educational support, and can expand some of the ongoing projects that have been successful in helping all NH educational agencies meet their student achievement goals.

SERESC, incorporated in 1974 to provide regional special education services, has developed into an education service center that focuses on three major areas: technology, education for children of all abilities, and professional development. We have developed major statewide educational support projects in partnership with the NHDOE, with foundations, and with the USDOE. Current major SERESC Projects include a Statewide Early Care and Education Technical Assistance Network, Positive Behavior Interventions and Supports, Focused Monitoring and Program Approval, and an interagency project to support student transition from Department of Health and Human Services to Education Placements. Other projects managed by SERESC over the past decade include a Teaching American History Project, Teacher Enhancement Project and an Adolescent Literacy Project. Our highly regarded consultants bring years of experience as educational administrators and service providers. Our conference center supports technology innovation in its professional development, with capabilities to reach statewide audiences.

SERESC has a strong interest in promoting the incorporation of technologies that enhance teaching and learning and to that end has been the promoter of a new non-profit entity called NHkids1st. The New Hampshire KIDS 1st program will:

- Bring broadband connectivity to each school in New Hampshire
- Ensure adequate networking within each 21st Century Classroom
- Deliver access with the use of computers in each 21st Century Classroom

MEMBER SCHOOL DISTRICTS

Auburn • Bedford • Candia • Hampstead • Hooksett • Hudson • Litchfield
Londonderry • Merrimack • Pelham • Timberlane • Windham

Appendix A-2-11: Letters of Support

- Provide rich instruction in each 21st Century Classroom by:
- Delivering adequate and appropriate professional development related to technology use
- Provide software that provides for self-paced instruction
- Software that allows for collaboration to support project-based instruction

The NHKids1st partnership will be a support to NH initiatives including those that are generated through Race to the Top funding.

SERESC stands enthusiastically ready, and willing, to help the NHODE any way we can in their efforts to implement Race To the Top funded projects. We are interested in helping the NHDOE with Race to the Top generated improvement projects in all of the core areas to support local education agency transformation: data systems to inform instruction, standards and assessment, teacher and leader effectiveness, and turning around the lowest-achieving schools.

Sincerely,

(b)(6)

Antonio G. Paradis, Ph.D.
Executive Director
Southeastern Regional Education Service Center (SERESC)

nimble assessment systems, inc.

3 Bridge Street, Suite B101, Newton, MA 02458

617-431-4441

January 14, 2009

Virginia M. Barry, Ph. D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

I am writing to express my strong support for the New Hampshire Department of Education's Race to the Top application. I have worked closely with the NH Department of Education for the past 10 years. During that time, they have continually demonstrated an unwavering commitment to supporting the highest quality of education, meeting the needs of all students, and doing so by embracing innovative and efficient methods.

NH's commitment in these areas is demonstrated through its leadership in forming the New England Common Assessment Program (NECAP), developing a cutting-edge alternate assessment, and adopting innovative solutions for meeting the access needs of all students during testing. NECAP represents the first and only multi-state consortium that has built common standards, developed common assessments to measure those standards, and administered those tests to monitor and improve educational quality. For this, they have become a model for building effective and efficient state consortium that produce products of the highest quality. While several states have adopted all multiple-choice tests in an effort to save costs, NH's commitment to high-quality has led it to not only resist this strategy, but to insist on developing cost-saving methods to support the ongoing use of items that measure the full range of content standards and skills it holds schools and students accountable for developing.

NH has also been the first state to adopt computer-based methods to increase accessibility of test content for all students and, in turn, improve the validity of its test scores. Its partnership with leading innovators in the field of universal design and computer-based testing has defined NH as pioneer in accessible assessments. NH's efforts to develop a rigorous alternate assessment, that provides valid information about the achievement of students with severe cognitive disabilities, also demonstrates its commitment to educating all students and embracing cutting-edge methods to support teaching, learning, and assessment.

This commitment to embracing and continuing to develop innovative solutions to meet important educational challenges is clearly reflected throughout its current proposal. While I have not discussed a potential role our organization might play in supporting NH's efforts to implement its proposed strategies and solutions, I would welcome the opportunity to work with NH as it continues to be a leader in making educational opportunities accessible, valid, meaningful, and effective for all students.

Sincerely,

(b)(6)

Michael Russell
President

Appendix A-2-11: Letters of Support



RMC Research Corporation

1000 Market Street
Portsmouth, NH 03801

Phone: 603.422.8888
Fax: 603.436.9166
www.necomprehensivecenter.org

January 4, 2009

Dr. Virginia Barry
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry,

I am writing to convey my full support of the New Hampshire Department of Education's (NHDOE) Race to the Top (RttT) application. As Director of RMC Research Corporation's New England Comprehensive Center (NECC) for the past five years, I have had the opportunity to work with you and your state education agency leaders on several priority education initiatives. This experience, coupled with my knowledge of your RttT plans, gives me confidence that the NHDOE is well positioned to fully utilize this unprecedented opportunity for the educational, civic, and economic benefit of New Hampshire's children and families.

New Hampshire has accomplished important milestones over the past several years that lay a critical foundation for the award and use of RttT funds. New Hampshire is one of four states that has created and adopted common assessments through the New England Common Assessment Program. As you know, recent NAEP data point to the success of this work as shown in student achievement outcomes. The Department has also been underway with high school reform work that is aimed at both drop out prevention and college readiness and success. The state's i4see and Performance Pathways systems are exemplary state initiatives supporting P-20 data access and use to inform instruction and to ensure accountability for outcomes.

New Hampshire is one of six states involved in the NECC's New England Collaborative for Educator Quality and Effectiveness.

Dr. Carol Keirstead, *Director*
Dr. Karen Laba, *Deputy Director*

**New England
Comprehensive
Center Partners**

The Education Alliance
at Brown University
Education Development Center
Learning Innovations at WestEd

Appendix A-2-11: Letters of Support



RMC Research Corporation

1000 Market Street
Portsmouth, NH 03801

Phone: 603.422.8888
Fax: 603.436.9166
www.necomprehensivecenter.org

This collaborative effort is supporting the creation of common educator standards and approaches for educator evaluation and compensation. Finally, we have worked alongside the Department in the development and implementation of a system of support for struggling districts and schools. NHDOE has implemented key statewide policy and professional development initiatives to assist all districts and schools in improving outcomes for all students. In each of the four USED reform priority areas, NH has a proven track record to build from.

In addition to these accomplishments, New Hampshire has the opportunity to lead the nation in solving some important educational challenges. Among these is the urgency to address the educational needs of rural America. Conditions of poverty and the inability to attract and retain a highly trained educator workforce are among the vexing problems faced in rural America. New Hampshire's size and statewide resource capabilities provide opportunities to both innovate and adapt to meet these needs.

The New England Comprehensive Center is poised to assist the Department in these important initiatives as you move forward. As do you, we see the RttT as a once in a lifetime opportunity to bring all of our best collective knowledge, skill, and will to realize the vision of a world class education for every student regardless of race, socio-economic status, or place of residence.

Best of luck with your application. We look forward to our continued partnership in the years to come.

Sincerely,
Carol J. Keirstead, Ed.D.
Senior Research Associate
RMC Research Corporation

Dr. Carol Keirstead, *Director*
Dr. Karen Laba, *Deputy Director*

**New England
Comprehensive
Center Partners**

The Education Alliance
at Brown University

Education Development Center

Learning Innovations at WestEd



THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS

ONE MASSACHUSETTS AVENUE, NW, SUITE 700
WASHINGTON, DC 20001-1431
202-336-7000
WWW.CCSSO.ORG

Deb Wiswell, Administrator
Curriculum, Assessment, Accountability, School Improvement
NH Department of Education
101 Pleasant Street
Londergan Hall
Concord, NH 03301

Dear Deb and New Hampshire Colleagues,

This letter is in support of the New Hampshire Department of Education's proposal for first round funding of the U.S. Department of Education Race to the Top Program. My endorsement is based on my personal experiences working with the programs and personnel of the New Hampshire Department of Education and other educators who teach in New Hampshire's schools.

New Hampshire has a brilliant record of forward-thinking reform efforts with impressive results. The state's emphasis on competency-based education and their recognition of the need for a comprehensive assessment system that features performance assessment techniques prominently has made them one of the leaders in the nation.

In one example, Litchfield's Campbell High School music program features an online, formative assessment program that engages the students in practice and rehearsal techniques that produces significant data on their performance activity while raising their desire to achieve at higher levels. The origins of this program can be directly traced to the state's competency-based approach to learning and to a long standing support of finding new and better ways to measure performance skills in the arts.

Due to the leadership from the State Department of Education, New Hampshire, with the collaboration of Vermont, has established a Summer Institute for Arts Education Assessment that has established itself as a national model training teachers to use a balanced and coherent system of assessment to inform the instructional program and to provide important accountability data for teachers and learners alike.

And last, but most significantly, New Hampshire Department of Education has collaborated with Vermont, Rhode Island, and Maine, to create the **New England Common Assessment Program (NECAP)**. This unprecedented effort to work across state boundaries on a set of common standards and assessment is a true milestone in American education.

I can recommend New Hampshire's application without reservation. Support of this program and set of educational leaders is a solid investment.

Sincerely,

(b)(6)

Frank S. Philip, Program Director
Council of Chief State School Officers

Appendix A-2-11: Letters of Support

May 25, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that City Year New Hampshire supports the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

We are most excited to work with Superintendent Tom Brennan, Mayor Ted Gatsas and the Manchester School District to help support the lowest performing schools in the city to best help at-risk students succeed in school and in life. City Year strives to put national service to work addressing the dropout crisis by tutoring and mentoring students in high-poverty schools and by providing meaningful after school, weekend, and vacation time programming to keep kids engaged in their communities, excited about school, and on track to graduate from high school.

Through the funding provided a Race to the Top application, City Year has the potential to grow our AmeriCorps member presence in the Manchester School district and place teams of 10 full time volunteers in classrooms in 3-5 of the lowest performing schools to help students who are off track in the areas of attendance, behavior and course completion in English and Math get the extra focus and help they need to get back on track.

We look forward to collaborating with the Department, schools, districts, and organizations to support our schools to best keep kids in school and on track towards graduation.

Sincerely,



Alexandra Allen
Co-Executive Director
City Year New Hampshire



Pawn Nitichan
Co-Executive Director
City Year New Hampshire



Supporting youth in school, work & life.



January 5, 2010

BOARD OF DIRECTORS

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Senator Bob Odell

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

It is with great enthusiasm that I support the New Hampshire Department of Education's Race to the Top application. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

This is an opportunity for us as a state to collaborate and create innovative practices that will allow us to improve student readiness, learning and achievement. The New Hampshire-JAG organization has partnered with schools participating in this application process and we are witness as to how student learning can improve when given the ability and resources to provide innovative and non-traditional ways for students to engage in their school and community.

NH-JAG is affiliated with the National Jobs for America's Graduates organization and is a proven leader in areas of dropout prevention and school to work transition.

I look forward to collaborating with the Department, schools, districts and organizations to provide opportunities that will improve student achievement, support teacher effectiveness and refine data systems to support instruction. The NH-JAG organization is fully prepared to support the Department's efforts.

Sincerely,

Priscilla Parisien, President
NH-JAG



THE POWER OF PARTNERSHIPS

NEW HAMPSHIRE EPSCoR

January 8, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

On behalf of New Hampshire EPSCoR, I am writing to endorse with enthusiasm your Department's Race to the Top application. NH EPSCoR has similar goals of enhancing student achievement, in particular, in Science, Technology, Engineering and Mathematics (STEM) subject areas. Toward this end, we are working to expand broadband Internet access to schools in remote areas, and have proposed to the National Science Foundation a program that would leverage research in the state's universities and colleges by developing teaching modules appropriate for pre-college and college-age classroom instruction.

Our plans for the next five years call for workshops for teachers, a "VisMobile" that will deliver learning modules and related computer technologies to remote sites, and engagement of the public through the NHPTV, museums, and other public venues. NH EPSCoR also is a partner with the Department's STEM Equity Project, an NSF-sponsored program to increase participation by girls and women in STEM education and career pathways.

We look forward to collaborating with the Department, schools, districts and other partners in pursuit of our common goal of preparing students for responsible and effective citizenship in the 21st century.

(b)(6)

Janet W. Campbell, Ph.D.
Interim Director
New Hampshire EPSCoR

University of New Hampshire, Gregg Hall, Durham, NH 03824
Tel. 603-862-1804 www.epscor.unh.edu



BAE Systems
Electronic Solutions
P.O. Box 868, Mail Stop NHQ1-765
Nashua, NH 03061-0868
Telephone 603-885-6911
Fax 603-885-2813

January 15, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Dr. Barry:

It is with great enthusiasm that I endorse/support the New Hampshire Department of Education's Race to the Top application, particularly as it relates to Science, Technology, Engineering and Math. Its focus on increasing student learning and achievement to meet the demands of the 21st century, while narrowing the achievement gap for subgroups of students matches the needs of our state.

Race to the Top has identified the following goals for STEM:

- Increased access to high-quality STEM-related courses and experiences for all students in all schools, P-12, particularly underrepresented groups and of women and girls; identify clear career paths in the STEM industries;
- Recruit, develop and retain effective teachers and principals thus guaranteeing an equitable distribution of highly qualified math, science, engineering and technology teachers throughout the state, particularly in areas of high poverty and rural areas;
- Support all priority schools and districts to adopt and implement innovative research and standards-based models for STEM teaching; and
- Actively increase student preparedness for college level math and reduce the need for remedial mathematics for high school graduates enrolling in college

BAE Systems has been an active supporter of educational initiatives throughout the state of New Hampshire for many years. Our continued outreach is focused on the areas of math, science and technology through support of programs such as FIRST (For Inspiration and Recognition of Science and Technology) of which BAE Systems is a major strategic sponsor. BAE Systems has collaborated with the Department of Education on programs such as Schools to Careers and internship programs which foster an interest in technology and engineering in school age children. BAE Systems opens its doors to a number of students throughout the state to engage in real world experiences in the fields of engineering, science and technology. We plan to continue supporting STEM activities through philanthropy, outreach, and community support.

BAE Systems looks forward to collaborating with the Department, schools, districts, and organizations to encourage students to pursue careers related to science, technology, engineering and mathematics.

Sincerely,

(b)(6)

 Lu Goncalves-Getty
Manager, Community and Business Relations
Electronic Solutions



11710 Plaza America Drive
Suite 2000
Reston, VA 20190
703-298-6630
rcoppola@ptc.com

January 14, 2010

Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education
101 Pleasant Street
Concord, NH 03301

Dear Commissioner Barry:

New Hampshire is one of the state partners in the Real World Design Challenge. We applaud you for your vision and plan for STEM Education. The Real World Design Challenge has been incorporated in the New Hampshire STEM education plan.

We are pleased to help support your Race to the Top grant application! Since New Hampshire is a partner in the Real World Design Challenge two of the corporate partners PTC and Mentor Graphics will donate engineering software for high school team participating in the Challenge. The following is what is provided:

1. PTC will donate 300 licenses of Pro/ENGINEER 3D Computer Aided Design (CAD) software to each trained teacher. Each license is worth \$3,000 that is a donation of \$900,000 per teacher. These licenses are perpetual and all upgrades are free.
2. PTC will donate a license of Mathcad for each teacher and student involved in the Real World Design Challenge. Each license is worth \$1095. For a team of 8 people that is donation of \$8,760 per team. Mathcad plugs into Pro/ENGINEER and enables the user to track and manage and understand and use all of the mathematical formulas associated with their CAD designs.
3. Each student/teacher team will get access to Windchill, global engineering collaboration and data management software. Each seat is worth \$2,800. Real World design Challenge teams may have up to 7 students and a teacher or 8 people. Windchill for a team of 8 people is worth \$22,400. These seats are server-based and are renewed for each new set of teams each year.

4. Mentor Graphics will donate 1 license of FloEFD.Pro, fluid dynamics testing software package per team. The software package is worth \$24,500 per license for each team for the year of the project.

You may have as many teams in the state as you like. Each Real World Design Challenge Team will receive all of the above mentioned software. The US Department of Energy is covering the cost of travel to Washington, DC for the Real World Design Challenge State Winner to compete in the National Challenge Event. Each team also gets access to up to four professional mentors from government, industry and higher education at no cost to them. The teams collaborate with the mentors using Windchill.

All 24 Real World Design Challenge Partners from government, industry and education stand in support of the New Hampshire Race to the Top proposal.

We are very pleased to have New Hampshire involved in the Real World Design Challenge. We anticipate that the number of teams from the state will grow each year. We hope your proposal will be funded! Please let me know if there is anything else that I can do to help!

Sincerely,

(b)(6)

Ralph K. Coppola, Ed.D
Director, Real World Design Challenge &
Director of Global Government & Strategic Education Programs at PTC

New Hampshire Department of Education
BUDGET PART I: BUDGET SUMMARY TABLE

Evidence for selection criterion (A)(2)(i)(d)

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	\$634,414	\$719,914	\$753,211	\$788,823	\$2,896,361
2. Fringe Benefits (DOE rate 48%)	\$304,519	\$345,559	\$361,541	\$378,635	\$1,390,254
3. Travel	\$112,510	\$103,560	\$103,560	\$103,560	\$423,190
4. Equipment	\$42,750	\$30,000	\$20,000	\$30,000	\$122,750
5. Supplies	\$17,500	\$17,500	\$16,500	\$16,500	\$68,000
6. Contractual	\$6,127,395	\$6,712,600	\$6,121,040	\$4,850,290	\$23,811,325
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other (Training Stipends)	\$6,552	\$8,736	\$8,736	\$8,736	\$32,760
9. Total Direct Costs (lines 1-8)	\$7,245,640	\$7,937,868	\$7,384,588	\$6,176,544	\$28,744,640
10. Indirect Costs*	\$58,077	\$64,544	\$67,152	\$69,998	\$259,771
11. Funding for Involved LEAs	\$0	\$0	\$200,000	\$200,000	\$400,000
12. Supplemental Funding for Participating LEAs	\$2,097,610	\$2,097,610	\$1,949,436	\$1,949,436	\$8,094,092
13. Total Costs (lines 9-12)	\$9,401,327	\$10,100,023	\$9,601,175	\$8,395,977	\$37,498,502
14. Funding Subgranted to Participating LEA's (50% of Total Grant	\$9,375,000	\$9,375,000	\$9,375,000	\$9,375,000	\$37,500,000
15. Total Budget (lines 13-14)	\$18,776,327	\$19,475,023	\$18,976,175	\$17,770,977	\$74,998,502

*(Direct Cost – Contractual –
Equipment) X 5.4%

New Hampshire Department of Education
BUDGET PART I: BUDGET SUMMARY NARRATIVE

NH's RttT Grant Budget has been divided into six grant projects aligned to the four education reform areas, with grant staff, both state agency full time equivalents and contracted consultants managing the overall grant to achieve the outcome of a transformed public education system in NH by the end of the 4 year grant.

The six projects are:

1. Race to the Top Project Oversight
2. Standards and Assessment
 - A. Adopt the Common Core Standards
 - B. Build on current assessments to create a Comprehensive Assessment System for NH
 - C. Build Assessment Literacy through Data and Media Literacy Coaches on NHDOE's School Improvement Teams
 - D. Implement Board Examination/Move on When Ready
 - E. Improve Data Systems and Data Use for Standards and Assessment
3. Data Systems
 - A. Complete the requirements of the America COMPETES Act
 - B. Incorporate IHE and Early Education Data
 - C. State Sponsored Student Information System
 - D. Conduct and Disseminate Research to Improve Student Performance
 - E. Train Educators to Use Data to Inform Instruction.
4. Great Teachers and Leaders
 - A. Teacher Evaluation System
 - B. Teacher Mentoring and Induction
 - C. Alternative Certification Pathways
 - D. Principal Evaluation
 - E. Research and Evaluation
 - F. Residency Model
5. Turning Around the Persistently Lowest-Achieving Schools and Districts
6. Science, technology, engineering and mathematics (STEM).

Two Department full time equivalents are requested to oversee the administrative functions of the grant:

- *Race to the Top Director*: The role for this position is to coordinate all RttT efforts, convene and coordinate with all vendors, external partners and in-state collaborators, oversee the fiscal management of the RttT initiative, and supervise SEA RttT personnel. The RttT Director will report to the Commissioner and will be a member of the commissioner's extended cabinet.
- *Administrative Assistant to the Race to the Top Director*: The primary function of this position is to provide project support to the RttT Director, including fiscal management of grants and contracts to providers and districts.

Additional Department full time equivalents requested in this application include:

- *Education Consultants (5) and Program Specialist:* These positions will be dedicated to overseeing the implementation of the NH reform model specific to the Standards and Assessment, Struggling School and Great Teachers and Leaders projects. These

consultants will work directly with LEAs and schools to support them in the implementation of the NH reform plan. They will also collaborate with our existing NHDOE staff to ensure that the consultants are able to provide targeted reform intervention support that is above and beyond current NHDOE support and align reform efforts across initiatives at the NHDOE. Consultants will be hired based on expertise in the following areas: Leadership, High School Redesign, Curriculum and Assessment, Early Education.

- *Longitudinal Data System Staff*
 - *Project Manager:* The charge of this position will be to oversee the expansion of the NH Data Warehouse to include longitudinal student data Pre-K to K-12 to Higher Education, as well as to capture Systems of Care information regarding individual students from such systems as Juvenile Justice, Child and Family Services, Mental Health, and Substance Abuse Prevention. Additionally, this administrative position will oversee the linking of student growth data contained in Performance Plus to the proposed NH Educator Evaluation model, a new component of the NH Educator Information System.
 - *Business Analyst and Data Base Administrator* – To provide further enhancements and maintain the Longitudinal Data System.
 - *Program Specialist* – The function of this position will be to develop additional data reports and queries and to provide training and assistance to the department power users of the longitudinal data system

Fiscal management of the grant will be coordinated with the department's Office of Business Management. *Race to the Top Auditor:* NH will provide current staff to work in conjunction with the Office of Business Management to manage all fiscal matters with regard to the RttT.

Several functions to ensure effectiveness and implementation of New Hampshire's RttT strategies will be contracted with outside partners/vendors. Contracted resources will connect directly with districts and Department specialists addressing the content areas of each project. Particular attention will be focused on the lowest achieving school districts, which will be overseen by the Director of the Division of Instruction and the Title I Office. This will assure integrated programming, resource management, and project deliverables between RttT, SIG and Title I programs. Research and technical assistance contracts are anticipated, one for contracting with a highly respected national organization specializing in designing turnaround school models to review and evaluate New Hampshire conditions for turnaround at both the local and state level, including review of statutes, regulations, district, school, and community conditions that effect overall success in turnaround activities. This report will be presented to key decision makers at the state and local level to further NH's ability to apply Turnaround principles in NH's strongly local control environment. The second contractor will be responsible for facilitating the completion of the NH educator evaluation project, convening major

stakeholders, e.g. school boards, educator unions, NHDOE staff, representatives from higher education.

In addition to the support of the Content Specialists at the DOE, School Improvement Teams, made up of NH educators with expertise in leadership, literacy, mathematics, and data use/assessment literacy will be contracted with in order to work directly with schools and district in NH, beginning with the lowest achieving schools.

Additionally, contractors have been vetted for provision of direct service, technical assistance, and research in the various projects. Districts will engage with these contractors as they plan and implement their overall projects.

There are a number of additional revenue sources that the State will leverage in their biennial budget to enhance the transformation of NH Education. The State budgets \$985,000.00 for local education improvement. In addition, \$600,000 support special education programs, \$226,500 for career and technical education and 6 million to support the assessment work. All of these local funds allow the NHDOE to work with local districts to support the efforts to achieve the goals for student achievement.

With local monies the NH DOE has leveraged federal entitlements to address the multiple needs of school districts, personnel and students. Using the Title I School Improvement Grant, 20 schools were identified for funding to address leadership training in their district. This project is currently ongoing with preliminary reports of success. This grant enhanced the capability of districts with high poverty to exceed the expectation for leadership.

Using State awarded funds from the Title II grants, including the II D Educational Technology grant, the NH DOE has worked with districts across the state to provide training in RtI, Coaching, Assessment and 21st Century classrooms. Currently the Nellie Mae Foundation supports competency based assessment at the secondary level. This work is ongoing at the secondary level.

In anticipation of awards for the Investing in Innovation Fund (I3), TQE, and TIF, the State has focused these funding sources with the four assurances as outlined in the Race to the Top Application. Teacher Certification funds will also support this initiative. The source of this funding is fees paid by educators for certification and recertification.

New Hampshire Department of Education
BUDGET PART II: PROJECT-LEVEL BUDGET NARRATIVE

Project Name: Race to the Top Project Oversight
Associated with Criteria: As an oversight project this relates to all criteria of the grant application.

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$112,476	\$118,100	\$124,005	\$130,205	\$484,786
2. Fringe Benefits (DOE rate 48%)	\$53,988	\$56,688	\$59,522	\$62,498	\$232,697
3. Travel	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
4. Equipment	\$4,000	\$0	\$0	\$0	\$4,000
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
6. Contractual	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$216,964	\$221,288	\$230,027	\$239,203	\$907,483
10. Indirect Costs**	\$10,150	\$10,600	\$11,071	\$11,567	\$43,388
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$444,525	\$444,525	\$296,350	\$296,350	\$1,481,749
13. Total Costs (lines 9-12)	\$671,639	\$676,412	\$537,448	\$547,120	\$2,432,620
** Indirect costs = (Direct Cost – Contractual – Equipment) X 5.4%					

1. Personnel

NH proposes several new positions and will provide one internal position for Project Oversight. The Race to the Top Director will oversee all grant functions and report to the Commissioner's Office. The Administrative Assistant will provide administrative services to the Director and to the Race to the Top project staff. NH DOE will provide an Auditor position that will be responsible for examining and verifying the use of RttT funds and ensuring transparency. Other positions required for RttT Project Oversight are identified in the appropriate project narratives.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$112,476	\$118,100	\$124,005	\$130,205	\$484,786
Race to the Top Director	\$76,187	\$79,996	\$83,996	\$88,195	\$328,373
Administrative Assistant	\$36,290	\$38,104	\$40,009	\$42,010	\$156,412

2. Fringe Benefits

Fringe benefits for the NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state's portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$53,988	\$56,688	\$59,522	\$62,498	\$232,697
Race to the Top Director	\$36,570	\$38,398	\$40,318	\$42,334	\$157,619
Administrative Assistant	\$17,419	\$18,290	\$19,204	\$20,165	\$75,078

3. Travel

We anticipate that department staff working on this project will travel to conferences, out-of-state meetings and general travel within the state.

It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + 60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + 60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + 60)) = \$1,790$ per person

Year 1 through Year 4 Travel:

- In-state travel to visit the school districts - \$4,000 per year
- The extended cost for 4 department staff to attend 2-day national meetings is $4 \times \$1,270/\text{person} = \$5,080$ per meeting or \$10,160 for 2 meetings per year
- The extended cost for 2 department staff to attend 3-day national meetings is $2 \times \$1,530/\text{person} = \$3,060$ per year

- Misc conferences and/or travel for training for 2 department staff = \$2,780 (could be a two or 3 day trip) per year

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
In-State Travel	\$4,000	\$4,000	\$4,000	\$4,000	\$16,000
Out-of-State Travel	\$16,000	\$16,000	\$16,000	\$16,000	\$64,000

4. Equipment

Standard equipment set up for new employees is \$2,000. Set up includes desktop, software, shared printer costs.
\$4,000 for 2 staff members

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$4,000	\$0	\$0	\$0	\$4,000
Laptop and standard software	\$4,000	\$0	\$0	\$0	\$4,000

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
Clerical supplies/phone	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will procure IT services for the development of systems to collect and maintain data required in the administration of the RttT project including web development to ensure transparency.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000
Information Services	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) X 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$10,150	\$10,600	\$11,071	\$11,567	\$43,388

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$671,639	\$676,412	\$537,448	\$547,120	\$2,432,620

Project Name: Standards and Assessment
Associated with Criteria: B(1), B(2), B(3), C(1), C(2), C(3)

A. Adopt the Common Core State Standards
Associated with Criteria: B(1), B(2), B(3)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$55,497	\$57,935	\$60,567	\$63,180	\$237,179
2. Fringe Benefits (DOE rate 48%)	\$26,639	\$27,809	\$29,072	\$30,326	\$113,846
3. Travel	\$8,000	\$8,000	\$8,000	\$8,000	\$32,000
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$9,000	\$9,000	\$9,000	\$9,000	\$36,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$103,136	\$104,744	\$108,639	\$112,506	\$429,025
10. Indirect Costs**	\$4,975	\$5,170	\$5,381	\$5,589	\$21,115
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$108,111	\$109,914	\$114,020	\$118,096	\$450,140
* **The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

This project will encompass the integration and dissemination of the Common Core State Standards (B1). NH will collaborate with other states to create a powerful, comprehensive system, preK-16, of next generation assessments, that informs the teaching and learning process and allows students to demonstrate their understanding of rigorous standards (B2 and B3).

1. Personnel

One Education Consultant will be required to assist all educators, preK-16, to articulate the new CCSS and implement them at the classroom level in their curriculum, instruction, and assessments (B3).

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$55,497	\$57,935	\$60,567	\$63,180	\$237,179
Education Consultant III	\$55,497	\$57,935	\$60,567	\$63,180	\$237,179

2. Fringe Benefits

Fringe benefits for NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state’s portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$26,639	\$27,809	\$29,072	\$30,326	\$113,846
Education Consultant III	\$26,639	\$27,809	\$29,072	\$30,326	\$113,846

3. Travel

Department staff working on the Common Core Project will travel to schools throughout the state to build educator capacity in the implementation of the CCSS.

In-State:

- 100 miles x 80 trips throughout the state x .50 per mile = \$4000 x 2 staff members per year.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$8,000	\$8,000	\$8,000	\$8,000	\$32,000
In-State Travel	\$8,000	\$8,000	\$8,000	\$8,000	\$32,000
Out-of-State Travel	\$0	\$0	\$0	\$0	\$0

4. Equipment

Standard equipment set up for new employees is \$2,000. Set-up includes desktop, software, and shared printer costs.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
Laptop and Standard Software	\$2,000	\$0	\$0	\$0	\$2,000

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, copies of frameworks, CD’s, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Office supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000

9. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

Meetings will be required for building educator capacity in the implementation of the CCSS. Meetings will be held in NH’s six professional development (PD) centers. Anticipated cost is \$500 per meeting, 3 meetings per year at each of the 6 Professional Development Centers = \$9,000 per year.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$9,000	\$9,000	\$9,000	\$9,000	\$36,000
Meetings	\$9,000	\$9,000	\$9,000	\$9,000	\$36,000

10. Construction

11. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) X 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$4,975	\$5,170	\$5,381	\$5,589	\$21,115

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$108,111	\$109,914	\$114,020	\$118,096	\$450,140

**B. Build on Current assessments to create a Comprehensive Assessment System for NH
Associated with Criteria: B(2), B(3)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$53,138	\$55,497	\$57,935	\$60,567	\$227,136
2. Fringe Benefits (DOE rate 48%)	\$25,506	\$26,639	\$27,809	\$29,072	\$109,025
3. Travel	\$32,000	\$32,000	\$32,000	\$32,000	\$128,000
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
6. Contractual	\$156,000	\$156,000	\$156,000	\$156,000	\$624,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$270,144	\$271,636	\$275,243	\$279,139	\$1,096,161
10. Indirect Costs**	\$6,056	\$6,244	\$6,439	\$6,650	\$25,389
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$276,199	\$277,880	\$281,682	\$285,789	\$1,121,550
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

This project encompasses the collaboration with other states to create a powerful, comprehensive system, preK-16, of next generation assessments, that informs the teaching and learning process and allows students to demonstrate their understanding of rigorous standards.

NH will design and implement a valid and reliable assessment system that allows for evaluation of student progress linked to the standards, that includes a statewide summative assessment and;

- Curriculum-embedded assessments that evaluate the full range of standards through local formative and benchmark assessments;
- Competency-based course level assessment for determining high school credit;
- A gateway/readiness exam at high school

1. Personnel

One Education Consultant will be required to manage the HS Redesign and also assist with the development and implementation of high school assessments.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$53,138	\$55,497	\$57,935	\$60,567	\$227,136
Education Consultant III	\$53,138	\$55,497	\$57,935	\$60,567	\$227,136

2. Fringe Benefits

Fringe benefits for the NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state’s portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$25,506	\$26,639	\$27,809	\$29,072	\$109,025
Education Consultant III	\$25,506	\$26,639	\$27,809	\$29,072	\$109,025

3. Travel

In-State:

- In-state travel to visit the school districts - \$2,000 per year

Out-of-State:

- It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + \$60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + \$60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + \$60)) = \$1,790$ per person

The extended cost for 4 department staff to attend 3-day national meetings is $4 \times \$1,530/\text{person} = \$6,120$ per meeting $\times 4$ meetings = \$24,480.

The extended cost for 4 department staff to attend 2-day national meetings is 4 x \$1,270/person = \$5,080

Out-of-State day travel for collaboration with New England states (mileage and meals only) = \$440.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$32,000	\$32,000	\$32,000	\$32,000	\$128,000
In-State	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Out-of-State	\$30,000	\$30,000	\$30,000	\$30,000	\$120,000

4. Equipment

Standard equipment set up for new employees is \$2,000. Set-up includes desktop, software, shared printer costs.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
Standard Equipment	\$2,000	\$0	\$0	\$0	\$2,000

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
Office Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

Contracted services will be vetted to map and define differentiated paths so that all students can access the curriculum and assessments in ways that allow them to demonstrate their understanding of rigorous standards (B2 and B3).

Services will provide for the following:

- Research, evaluate, and develop innovative item designs and test formats that support multiple forms of student engagement, item presentation, and response formats,

permitting students to demonstrate academic constructs in alternate yet highly rigorous ways (differentiated assessment);

- Expand statewide training in appropriate selection and use of instructional and assessment accommodations that provide meaningful access while supporting the rigorous performance expectations and maximum academic independence;
- Provide intensive statewide educator training to administer curriculum-embedded NH Alternate Assessments of Learning Progressions (aligned to the CCSS) that demonstrate appropriate match to student sensory & communication needs (GSEG grant);
- Expand use of Nimble Tools® Online System for delivery of NH computer-based assessments designed to support multiple access formats (EAG grant);
- Develop statewide Computer-Adaptive Testing;
- Provide intensive field support in use of augmented and assistive communication resources for learning & assessment;
- Continue NH’s active program of collaborative research in assessment and item design technology & development of accessible portable item protocol standards (APIP-EAG grant)
- Provide professional development on the adoption of a Board Examination System such as the Cambridge International Examination’s International Certificate of Secondary Education (IGCSE) and their AICE program, the College board’s Advanced Placement (AP) Program, the International Baccalaureate (IB) Diploma Program, ACT’s Quality Core or Pearson Edexcel’s IGCSE and A-level programs.

Contractor costs include travel.

Statewide meetings will be required to inform districts on how to administer the new assessments. We anticipate four large statewide meetings to introduce new assessments and then regional meetings at the six professional development centers in NH.

Large meetings will be held in south central, western, seacoast, and north country venues.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$156,000	\$156,000	\$156,000	\$156,000	\$624,000
Alternate Assessment/Access Specialist K-12	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Literacy Specialist K-12	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000
Meetings	\$6,000	\$6,000	\$6,000	\$6,000	\$24,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) X 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
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Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

10. Indirect Costs	\$6,056	\$6,244	\$6,439	\$6,650	\$25,389
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11. Funding for Involved LEAs

12. Supplemental funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$276,199	\$277,880	\$281,682	\$285,789	\$1,121,550

C. Build Assessment Literacy through Data and Media Literacy Coaches on NH DOE's School Improvement Teams
Associated with Criteria: B(2), B(3)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$206,000	\$406,000	\$409,000	\$412,000	\$1,433,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$208,000	\$408,000	\$411,000	\$414,000	\$1,441,000
10. Indirect Costs**	\$108	\$108	\$108	\$108	\$432
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$208,108	\$408,108	\$411,108	\$414,108	\$1,441,432
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

This project will deploy school improvement coaches to LEAs and schools to assist with alignment of local curriculum to Common Core Standards and adapt and/or augment curriculum materials as needed.

- Priority initiatives include:
 - Response to Intervention
 - Differentiated Instruction
 - Instructional Coaching
 - Instructional Leadership
 - Assessment Literacy and Data Analysis

Content specific professional development, (i.e. Math Science Partnership projects, OPEN NH on-line professional development, NE Arts Assessment Institute) will also be provided.

1. Personnel

Personnel from the common core will also be working in this area.

2. Fringe Benefits

3. Travel

4. Equipment

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	2,000	2,000	2,000	2,000	8,000
Office Supplies	2,000	2,000	2,000	2,000	8,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will contract for services for school improvement coaches. NH will implement a team approach for school improvement. Each team will be comprised of four members with expertise in the following areas: Leadership, Reading and Writing, Mathematics, Data/Assessment Literacy and High School redesign.

We anticipate the cost for each team member to be \$50,000. In the first year, one team will work with the persistently low achieving schools and hold regional sessions (to include other schools with similar identified needs). In subsequent years, we will increase the number of teams to two in order to reach more schools in an effort to expand statewide.

Meetings will be held in NH’s six professional development (PD) centers. As the number of teams increases the number of required meetings will also increase. We anticipate the cost of each meeting to be \$500. The first and second year we plan 2 meetings at each of the 6 PD centers, 3 meetings at each PD center in year 3 and 4 meetings at each PD center in year 4. NH will also implement a dropout prevention program in one of its CTE schools.

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$206,000	\$406,000	\$409,000	\$412,000	\$1,433,000
School Improvement Coaches	\$200,000	\$400,000	\$400,000	\$400,000	\$1,400,000
Meetings	\$6,000	\$6,000	\$9,000	\$12,000	\$33,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) X 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs Total	\$108	\$108	\$108	\$108	\$432

11. Funding for Involved LEAs

12. Supplemental funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$208,108	\$408,108	\$411,108	\$414,108	\$1,441,432

**D: Implement Board Examination/Move on When Ready
Associated with Criteria: B(2), B(3)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$7,000	\$7,000	\$7,000	\$7,000	\$28,000
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$906,300	\$906,300	\$604,240	\$604,240	\$3,021,080
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$915,300	\$915,300	\$613,240	\$613,240	\$3,057,080
10. Indirect Costs**	\$486	\$486	\$486	\$486	\$1,944
11. Funding for Involved LEAs	\$0	\$0	\$200,000	\$200,000	\$400,000
12. Supplemental Funding for Participating LEAs	\$381,490	\$381,490	\$381,490	\$381,490	\$1,525,960
13. Total Costs (lines 9-12)	\$1,297,276	\$1,297,276	\$1,195,216	\$1,195,216	\$4,984,984
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

5. Personnel
2. Fringe Benefits
3. Travel

We anticipate department staff working on the Board Examination Project will travel to conferences, out-of-state meetings and general travel within the state.

It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + 60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + 60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + 60)) = \$1,790$ per person

Year 1 through Year 4 Travel:

- In-state travel to visit the school districts - \$1,000 per year
- The extended cost for 2 department staff to attend 2-day national meetings is $2 \times \$1,270/\text{person} = \$2,540$ per meeting
- The extended cost for 2 department staff to attend 3-day national meetings is $2 \times \$1,530/\text{person} = \$3,060$ per year
- Out-of-state travel for meetings (no overnight) = \$400 per year

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$7,000	\$7,000	\$7,000	\$7,000	\$28,000
In-State	\$1,000	\$1,000	\$1,000	\$1,000	\$4,000
Out-of-State	\$6,000	\$6,000	\$6,000	\$6,000	\$24,000

4. Equipment
5. Supplies

The costs of supplies for state staff working on this project includes (wipe boards, markers, pens, paper, printer cartridges, etc.) meeting supplies.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	2,000	2,000	2,000	2,000	8,000
Office Supplies	2,000	2,000	2,000	2,000	8,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will hire consulting services to provide project management and leadership in the implementation of a statewide Board Examination System. Consulting services will be responsible for, among other items:

- Conducting planning and research
- Developing a strategy for increasing the proportion of high school students ready for college without remediation
- Organizing and leading an outreach effort
- Installing a system based on international best practice

Year 1:

Project Manager: 1,500 hrs X \$100 per hour = \$150,000

Consultants: 10,084 hrs X \$75 per hour = \$756,300

Total for Year 1: \$906,300

Year 2:

Project Manager: 1,500 hrs X \$100 per hour = \$150,000

Consultants: 10,084 hrs X \$75 per hour = \$756,300

Total for Year 2: \$906,300

Year 3:

Project Manager: 1,500 hrs X \$100 per hour = \$150,000

Consultants: 5,678 hrs X \$80 per hour = \$454,240

Total for Year 3: \$604,240

Year 4:

Project Manager: 1,500 hrs X \$100 per hour = \$150,000

Consultants: 5,678 hrs X \$80 per hour = \$454,240

Total for Year 4: \$604,240

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$906,300	\$906,300	\$604,240	\$604,240	\$3,021,080
Consulting Services	\$906,300	\$906,300	\$604,240	\$604,240	\$3,021,080

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) X 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$486	\$486	\$486	\$486	\$1,944

11. Funding for Involved LEAs

Piloting of Board Examinations and training will be implemented in years 3 and 4.

Activities:

1. Provide professional development on the multiple curricula options for the Board Exam for teaching staff, administration, guidance, and community members.
2. Provisions for dialogue and collaboration with post secondary institutions on student transitions.
3. Student exposure to understanding the overall goals of board examination.

Costs will include imbedded professional development, as statewide professional development events and community outreach.

Year 3: \$200,000

Year 4: \$200,000

Total for years 1 through 4: \$400,000

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
11. Funding for Involved LEAs	\$0	\$0	\$200,000	\$200,000	\$400,000

12. Supplemental funding for Participating LEAs

a)

Activities	Purpose	Total Project Cost	# of LEA's
<ul style="list-style-type: none"> • Conduct planning and research • Develop a strategy for increasing the proportion of high school students ready for college without remediation • Organize and lead an outreach effort 	High school transformation. Students ready for college. Alternative ways to graduation.	\$4,984,984	6

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

<ul style="list-style-type: none"> • Install a system based on international best practice • Pilot Board Examination • Take Board Examination statewide 			
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b)

LEA	Rationale	Supplemental Subgrant cost	Total
Windham	Based on its Title I share, this LEA would receive \$23,138 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully participate in all state plans and to improve and enhance the quality of it's International Baccalaureate and Technology Integration programs.	\$44, 216 per year X 4 years	\$176,864
Kearsage Regional	Based on its Title I share, this LEA would receive \$250,904 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully participate in all state plans. Kearsage Regional will establish a regional charter school and will pilot Board Examination/Move on when Ready System as well as offer multiple, personalized pathways to	\$337,274 per year X 4 years	\$1,349,096

	graduation. This project can be taken statewide.		
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13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$1,297,276	\$1,297,276	\$1,195,216	\$1,195,216	\$4,984,984

**E. Improve Data Systems and Data Use for Standards and Assessment
Associated with Criteria: B(2), B(3), C(1), C(2), C(3)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$180,000	\$180,000	\$80,000	\$80,000	\$520,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$180,000	\$180,000	\$80,000	\$80,000	\$520,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$180,000	\$180,000	\$80,000	\$80,000	\$520,000
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel**
- 6. Fringe Benefits**
- 7. Travel**
- 8. Equipment**
- 9. Supplies**

10. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will hire consulting services to:

Expand our well-designed data system that allows schools and districts to powerfully mine multiple measures of student performance in order to improve instruction and student achievement through assessment literacy (B3).

Create additional longitudinal data views enabling schools, districts, and NH DOE to monitor student achievement and school effectiveness over time.

Create a confidential portal for parents and students to access student achievement data and monitor growth and progress toward college and career readiness

Provide training and support to teachers and leaders in the use of the state’s currently licensed PerformancePlus (P+) software, Tech Paths and Assessment Builder, and general data use to improve instruction.

Purchase software license for Assessment Builder.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$180,000	\$180,000	\$80,000	\$80,000	\$520,000
P+ Enhancements	\$100,000	\$100,000	\$0	\$0	\$200,000
P+ Assessment Builder	\$80,000	\$80,000	\$80,000	\$80,000	\$320,000

11. Construction

12. Other

10. Indirect Costs

11. Funding for Involved LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$180,000	\$180,000	\$80,000	\$80,000	\$520,000

Project: Data Systems
Associated with Criteria: C(1), C(2), C(3)

A. Complete the requirements of the America Competes Act
Associated with Criteria: C(1)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$218,889	\$285,524	\$298,857	\$313,800	\$1,117,070
2. Fringe	\$105,067	\$137,052	\$143,451	\$150,624	\$536,194
3. Travel	\$12,010	\$3,060	\$3,060	\$3,060	\$21,190
4. Equipment	\$22,000	\$30,000	\$20,000	\$30,000	\$102,000
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
6. Contractual	\$928,000	\$805,500	\$740,500	\$180,500	\$2,654,500
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other (space rental)	\$6,552	\$8,736	\$8,736	\$8,736	\$32,760
9. Total Direct Costs (lines 1-8)	\$1,294,018	\$1,271,372	\$1,216,104	\$688,220	\$4,469,713
10. Indirect Costs**	\$18,577	\$23,537	\$24,603	\$25,797	\$92,514
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$1,312,595	\$1,294,909	\$1,240,707	\$714,017	\$4,562,227
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

13. Personnel

This project has budgeted for 3 full time NH DOE employees for all four years of the project: Project Manager/Data Quality Director (labor grade 31), Database Administrator (labor grade 30), and Business Analyst II (labor grade 30) for the term of this project. A third staff member will be required in year two through four to develop additional data reports and queries and to provide training and assistance to the department power-users of the longitudinal data system.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$218,889	\$285,524	\$298,857	\$313,800	\$1,117,070
Project Manager	\$79,775	\$83,764	\$87,952	\$92,350	\$343,841
Database Administrator	\$69,557	\$76,495	\$79,995	\$83,995	\$310,042
Business Analyst	\$69,557	\$76,495	\$79,995	\$83,995	\$310,042
Program Specialist	\$0	\$48,770	\$50,915	\$53,461	\$153,146

14. Fringe Benefits

Fringe benefits for the NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state's portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$105,067	\$137,052	\$143,451	\$150,624	\$536,194
Project Manager	\$38,292	\$40,207	\$42,217	\$44,328	\$165,043
Database Administrator	\$33,387	\$36,718	\$38,398	\$40,317	\$148,820
Business Analyst	\$33,387	\$36,718	\$38,398	\$40,317	\$148,820
Program Specialist	\$0	\$23,410	\$24,439	\$25,661	\$73,510

15. Travel

It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + 60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + 60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + 60)) = \$1,790$ per person

Travel in year one will include 4-day data query software training for 5 NH staff members. The extended cost for 5 people is $5 \times \$1,790/\text{person} = \$8,950$.

Year one through year 4 travel will also include travel to MIS national meetings. The extended cost for 2 people to attend 3-day MIS national meetings is $2 \times \$1,530/\text{person} = \$3,060$ per year.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$12,010	\$3,060	\$3,060	\$3,060	\$21,190
In-State	\$0	\$0	\$0	\$0	\$0
Out-of-State	\$12,010	\$3,060	\$3,060	\$3,060	\$21,190

16. Equipment

As expansion and use of the data warehouse continues additional and replacement hardware will be required. Certify/C4DQ data validation software license is needed for each year of the grant. One replacement laptop will also be required during the grant period.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$22,000	\$30,000	\$20,000	\$30,000	\$102,000
Laptop and Standard Software	\$2,000	\$0	\$0	\$0	\$2,000
C4DQ Software	\$20,000	\$20,000	\$20,000	\$20,000	\$80,000
Reporting and Database Servers	\$0	\$10,000	\$0	\$10,000	\$20,000

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
Office Supplies	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000

12. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

NH will procure vendor services for the following:

- Contractors with systems development/programming experience will be required to enhance current data systems, including the longitudinal data system, to meet the requirements of the America Competes Act. Consultants will be expected to have educational data systems implementation experience. It is expected that the consulting team will consist of 3-4 members who will have expertise in project leadership, data analysis, data modeling, and database programming.
- Build a collaborative learning environment that serve teaching, learning, research and administration through teaching and learning tools and e-portfolios.

- Build the capacity of NH’s virtual high school and produce reports and promotional videos. The statewide virtual high school provides yet another pathway to student success.
- Assist the NH Department of Corrections Granite School District to provide all Corrections locations with the technical capabilities to access the entire Granite School District’s curriculum available to this population of students.

The NH DOE will send five staff, considered power-users for the longitudinal data system to data query software training.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$935,295	\$765,500	\$700,500	\$150,500	\$2,551,795
Consult/Partner	\$447,295	\$300,000	\$300,000	\$0	\$1,047,295
Corrections	\$50,000	\$50,000	\$25,000	\$0	\$125,000
Project Management	\$150,000	\$150,000	\$150,000	\$150,000	\$600,000
Meetings and supplies	\$500	\$500	\$500	\$500	\$2,000
Software Consultants	\$225,000	\$225,000	\$225,000	\$0	\$675,000
Competency Development	\$40,000	\$40,000	\$0	\$0	\$80,000
4 day query training for 5 staff	\$22,500	\$0	\$0	\$0	\$22,500

7. Construction

8. Other

Space rental for the NH employees and contractors is estimated to be \$2,184 per person per year.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
8. Other (space rental)	\$6,552	\$8,736	\$8,736	\$8,736	\$32,760

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$18,577	\$23,537	\$24,603	\$25,797	\$92,514

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$1,312,595	\$1,294,909	\$1,240,707	\$714,017	\$4,562,227

**B. Incorporate IHE and Early Education Data
Associated with Criteria: C(1)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$628,050	\$568,050	\$515,550	\$61,800	\$1,773,450
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$628,050	\$568,050	\$515,550	\$61,800	\$1,773,450
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$628,050	\$568,050	\$515,550	\$61,800	\$1,773,450
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

1. Personnel
2. Fringe Benefits
3. Travel
4. Equipment
5. Supplies

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

NH DOE will procure vendor services to assist with the implementation of a K-12 to higher Education transcript process. The consultant will be expected to have experience in software development and project management. Licensing for e-Transcript solution is also requested.

Year 1: Consultant staff 1700 hours @ \$75 hr = \$127,500
Licensing = \$61,800

Year 2: Consultant staff 1700 hours @ \$75 hr = \$127,500
Licensing = \$61,800

Year 3: Consultant staff 1700 hours @ \$75 hr = \$127,500
Licensing = \$61,800

Year 4: Licensing = \$61,800

In order to facilitate data sharing between the NH DOE and higher education and early education NH plans on working closely with the University System of NH (USNH), the Community College System of NH (CCSNH) and the Department of Health and Human Services (DHHS).

USNH will procure vendor services to implement the sharing of data between the NH DOE and the USNH. The USNH does not have a centralized data warehouse to provide this information to the NH DOE. Each University and College within the USNH will work independently, at least initially. Total for 4 years = \$630,000.

CCSNH will procure vendor services to implement the sharing of data between the NH DOE and the CCSNH. The CCSNH does have a centralized data warehouse that will provide for easier sharing of data with the NH DOE. Total for 4 years = \$330,000.

DHHS is expected to hire a consultant to complete a data inventory of education data in the various state agencies, address the early education data requirements as well as the court ordered placed students, and also to research data sharing opportunities.

Year 1: Consultant staff 1050 hours @ \$75/hr = \$78,750

Year 2: Consultant staff 1050 hours @ \$75/hr = \$78,750

Year 3: Consultant staff 350 hours @ \$75/hr = \$26,250

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$628,050	\$568,050	\$515,550	\$61,800	\$1,773,450
USNH	\$230,000	\$200,000	\$200,000	\$0	\$630,000
CCSNH	\$130,000	\$100,000	\$100,000	\$0	\$330,000
DHHS/DCYF/DJJS Consultant	\$78,750	\$78,750	\$26,250	\$0	\$183,750
Transcript Licensing	\$61,800	\$61,800	\$61,800	\$61,800	\$247,200
NH DOE Consultant	\$127,500	\$127,500	\$127,500	\$0	\$382,500

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$628,050	\$568,050	\$515,550	\$61,800	\$1,773,450

**C. State Sponsored Student Information System
Associated with Criteria: C(1)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$300,000	\$380,000	\$280,000	\$200,000	\$1,160,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$300,000	\$380,000	\$280,000	\$200,000	\$1,160,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$300,000	\$380,000	\$280,000	\$200,000	\$1,160,000
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel
- 2. Fringe Benefits
- 3. Travel
- 4. Equipment
- 5. Supplies

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

NH DOE will work with a consulting partner on a collaborative effort with the school districts to pilot a state sponsored Student Information System (SIS). The state sponsored SIS will provide a lower cost option for the LEAs. The budget amount allocated represents seed money to work with districts. Training consultants will also be required to provide training and technical assistance to school districts implementing the new software. The budget for this contract is calculated as follows:

Year 1:

Project Manager: 1000 hours @ \$100 = \$100,000

Software Consultants: 2 consultants for a total of 2500 hours @ \$ 80/hr = \$200,000

Year 2:

Project Manager: 1000 hours @ \$100 = \$100,000

Software Consultants: 2 consultants for a total of 2500 hours @ \$ 80/hr = \$200,000

Training Consultants: 2 trainers for a total of 1600 hours @ \$50/hr = \$80,000

Year 3:

Project Manager: 500 hours @ \$100 = \$50,000

Software Consultants 2 consultants for a total of 1875 hours @ \$80/hr = \$150,000

Training Consultants: 2 trainers for a total of 1600 hours @ \$50/hr = \$80,000

Year 4:

Project Manager: 500 hours @ \$100 = \$50,000

Software Consultants 2 consultants for a total of 1875 hours @ \$80/hr = \$150,000

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$300,000	\$380,000	\$280,000	\$200,000	\$1,160,000
Consultants	\$300,000	\$300,000	\$200,000	\$200,000	\$1,000,000
Training Consultants	\$0	\$80,000	\$80,000	\$0	\$160,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$300,000	\$380,000	\$280,000	\$200,000	\$1,160,000

**D. Conduct and Disseminate Research to Improve Student Performance
Associated with Criteria: C(2), C(3)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$125,500	\$175,500	\$125,500	\$125,500	\$552,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$125,500	\$175,500	\$125,500	\$125,500	\$552,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$125,500	\$175,500	\$125,500	\$125,500	\$552,000
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

1. Personnel
2. Fringe Benefits
3. Travel
4. Equipment
5. Supplies

6. Contractual

NH will fund several research grant opportunities that will evaluate the effectiveness of instructional materials, strategies, and approaches for educating different types of students. In order to facilitate communication and transparency of research efforts NH will procure vendor consulting services in year 2 to expand the statewide researchers' website.

Web Developer: 625 hours x \$80/hr = \$50,000

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$125,500	\$175,500	\$125,500	\$125,500	\$552,000
Research Grants	\$125,000	\$125,000	\$125,000	\$125,000	\$500,000
Web Development	\$0	\$50,000	\$0	\$0	\$50,000
Meetings and Supplies	\$500	\$500	\$500	\$500	\$2,000

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$125,500	\$175,500	\$125,500	\$125,500	\$552,000

**E. Training Educators to Use Data to Inform Instruction
Associated with Criteria: C(3)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$2,750	\$0	\$0	\$0	\$2,750
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$200,500	\$225,500	\$225,500	\$225,500	\$877,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$203,250	\$225,500	\$225,500	\$225,500	\$879,750
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$203,250	\$225,500	\$225,500	\$225,500	\$879,750
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel**
- 2. Fringe Benefits**
- 3. Travel**
- 4. Equipment**

A projector for training, one laptop and standard software will also be required during the grant period.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$2,750	\$0	\$0	\$0	\$2,750
Laptop and Standard Software	\$2,000	\$0	\$0	\$0	\$2,000
Projector	\$750	\$0	\$0	\$0	\$750

5. Supplies

6. Contractual

NH DOE will hire Training Coordinators to work with schools on effective use of data and also to develop training materials and share best practices. Training coordinators will work on-site in schools and districts. Training Coordinators will be required to have prior training experience, preferably with PerformancePlus software and student information systems. Web consulting services will be required to create a thorough, on-line repository of training guides, training videos and other training documents on the NH DOE website.

Year 1 through year 4:

4 Training Coordinators at \$50,000 each = \$200,000

Meetings and Supplies: \$500

Web Developer: 312 hours x \$80/hr = \$25,000

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$200,500	\$225,500	\$225,500	\$225,500	\$877,000
Training Coordinators	\$200,000	\$200,000	\$200,000	\$200,000	\$800,000
Meeting Supplies	\$500	\$500	\$500	\$500	\$2,000
Web Development	\$0	\$25,000	\$25,000	\$25,000	\$75,000

13. Construction

9. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project	Project	Project	Project	Total
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Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

	Year 1	Year 2	Year 3	Year 4	
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$203,250	\$225,500	\$225,500	\$225,500	\$879,750

Project Name: Great Teachers and Leaders
Associated with Criteria: D(1), D(2), D(3),D(4), D(5), C(1), C(2)

A: Teacher Evaluation System
Associated with Criteria: D(2), C(1), C(2)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$90,363	\$94,224	\$98,416	\$102,570	\$385,573
2. Fringe Benefits (DOE rate 48%)	\$43,374	\$45,228	\$47,240	\$49,234	\$185,075
3. Travel	\$8,120	\$8,120	\$8,120	\$8,120	\$32,480
4. Equipment	\$4,000	\$0	\$0	\$0	\$4,000
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$105,000	\$370,000	\$370,000	\$370,000	\$1,215,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$252,857	\$519,572	\$525,776	\$531,924	\$1,830,128
10. Indirect Costs**	\$7,768	\$8,077	\$8,412	\$8,744	\$33,001
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$260,626	\$527,648	\$534,188	\$540,667	\$1,863,129
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

The major component to this project is to define the 5th domain of student achievement, what the achievement measures will look like, and how fair measurements will be implemented. NH will adopt a model based on Charlotte Danielson's Framework and develop protocols for student achievement. Training of evaluation specialists will also be required.

17. Personnel

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$90,363	\$94,224	\$98,416	\$102,570	\$385,573
Program Manager/Education Consultant III	\$55,497	\$57,935	\$60,567	\$63,180	\$237,179
Program Specialist	\$34,866	\$36,289	\$37,849	\$39,390	\$148,394

18. Fringe Benefits

Fringe benefits for the NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state's portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$43,374	\$45,228	\$47,240	\$49,234	\$185,075
Program Manager/Education Consultant III	\$26,639	\$27,809	\$29,072	\$30,326	\$113,846
Program Specialist	\$16,736	\$17,419	\$18,168	\$18,907	\$71,229

3. Travel

In-State:

- In-state travel will be required to visit the local school districts and also to attend Professional Development (PD) meetings and trainings at the PD centers throughout NH.

Out-of-state:

- It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + 60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + 60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + 60)) = \$1,790$ per person

- The extended cost for 2 department staff to attend two 3-day national meetings is $2 \times \$1,530/\text{person} = \$3,060$ per meeting $\times 2$ meetings = \$6,120

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$8,120	\$8,120	\$8,120	\$8,120	\$32,480
In-State	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Out-of-State	\$6,120	\$6,120	\$6,120	\$6,120	\$24,480

4. Equipment

Standard equipment set-up for new employees is \$2,000. Set-up includes desktop, software and shared printer costs.

Training materials include books, manuals and conference materials.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment Total	\$4,000	\$0	\$0	\$0	\$4,000
Laptop and Standard Software	\$4,000	\$0	\$0	\$0	\$4,000

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Standard Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000

14. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will contract with an external partner that will provide services for the development of a teacher evaluation system. Services will include facilitation, expert training and evaluation specialists, coaches, and technical support.

This partner will manage training for administrators and teachers that will explain the evaluation system determine the evidence to be provided, and develop skills for the evaluators to implement consistent and fair criteria. Training will also include three summer institutes and regional training at the six professional development centers throughout the state. The summer institutes will provide the foundational knowledge of the evaluation system and will be followed up with on-going training and coaching. Development coaches will support assessors for fidelity and consistency. Coaches will work one-on-one with principals for one half day each month for two years.

Technical support includes the development or purchase of a commercial, off-the-shelf (COTS), web tool with rubrics for evaluation, the ability to store portfolio evidence, implementation and training.

Contractual expenses for travel are included.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$105,000	\$370,000	\$370,000	\$370,000	\$1,215,000
Training Coordinator - External partner	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
Evaluation Specialists - high level training	\$0	\$100,000	\$100,000	\$100,000	\$300,000
Coaches - follow up training in schools, coaching	\$0	\$70,000	\$70,000	\$70,000	\$210,000
On-line tools for collecting evaluation/evidence	\$0	\$25,000	\$25,000	\$25,000	\$75,000
Summer Institutes	\$0	\$70,000	\$70,000	\$70,000	\$210,000
Meetings and meeting supplies	\$5,000	\$5,000	\$5,000	\$5,000	\$20,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$7,768	\$8,077	\$8,412	\$8,744	\$33,001

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$260,626	\$527,648	\$534,188	\$540,667	\$1,863,129

B. Teacher Mentoring and Induction
Associated with Criteria: D(2), D(5)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$740,750	\$740,750	\$690,750	\$690,750	\$2,863,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$743,250	\$743,250	\$693,250	\$693,250	\$2,873,000
10. Indirect Costs**	\$135	\$135	\$135	\$135	\$540
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	109,580	109,580	109,580	109,580	\$438,320
13. Total Costs (lines 9-12)	\$852,965	\$852,965	\$802,965	\$802,965	\$3,311,860
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

3. Personnel**4. Fringe Benefits****3. Travel**

In-State:

- In-state travel to visit the school districts - \$2,000 per year

Out-of-state:

- This out-of-state travel will be for day meetings with other New England states. No overnight travel is required.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000
In-State	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Out-of-State	\$500	\$500	\$500	\$500	\$2,000

4. Equipment**5. Supplies****6. Contractual**

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will contract with external partners to train mentors to support new teachers and principals throughout the state. Services will include conducting a needs assessment for statewide mentor services, developing cohorts of trained mentors and using a train-the-trainer model to develop mentor trainers, thus building state capacity to sustain the work beyond the grant period.

Summer institutes will be conducted all four years of the grant to develop successive cohorts of mentors. Training will be delivered in multiple forms including traditional face-to-face formats in addition to on-line courses and virtual professional learning communities. Both site-based and video-based coaching will be available to mentors.

The NH DOE will contract with a second external partner to create and administer a school leadership system for existing leaders. This project will focus on leadership in the struggling schools as a first priority. Our largest school district currently partners with NISL and which has proven to be very successful. NISL will continue to work with NHDOE staff to contextualize and provide leadership training to teams from persistently lowest-achieving schools and districts over 18 months (up to 50 participants); train six NH educators to be certified trainers.

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$740,750	\$740,750	\$690,750	\$690,750	\$2,863,000
Teacher Mentor Training	\$225,000	\$225,000	\$225,000	\$225,000	\$900,000
Principals Mentoring project	\$140,750	\$140,750	\$140,750	\$140,750	\$563,000
NISL Project Support	\$300,000	\$300,000	\$250,000	\$250,000	\$1,100,000
Meetings and meeting supplies	\$75,000	\$75,000	\$75,000	\$75,000	\$300,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$135	\$135	\$135	\$135	\$540

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

a)

Activities	Purpose	Total Project Cost	# of LEAs
<ul style="list-style-type: none"> Co-design and implement Teacher Improvement Centers for struggling teachers in the Departments regional professional development centers statewide; focus on Job-embedded professional learning. Can be State-wide implementation 	Improve Teacher Effectiveness	\$550,000	2

b)

LEA	Rationale	Supplemental	Total
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Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

		Subgrant cost	
Lincoln-Woodstock	Based on its Title I share, this LEA would receive \$ 111,681 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully participate in all state plans and Co-design and implement Teacher Improvement Centers for struggling teachers.	\$ 109,580 per year X 4 years	\$438,320

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$852,965	\$852,965	\$802,965	\$802,965	\$3,311,860

C: Alternative Certification Pathways
Associated with Criteria: D(1), D(3), D(5)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$170,000	\$160,000	\$160,000	\$150,000	\$640,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$170,000	\$160,000	\$160,000	\$150,000	\$640,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$170,000	\$160,000	\$160,000	\$150,000	\$640,000
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

1. Personnel
2. Fringe Benefits
3. Travel
4. Equipment
5. Supplies

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH will contract with a vendor to develop an on-line class for new alternative teacher and principal candidates. This course will orient the candidates to the alternative certification process. One goal of the course is to facilitate the creation of robust alternative plans to meet the standards required for a particular endorsement. Incentive programs will be evaluated to determine the success of these supports in increasing the number of educators prepared in alternative programs, particularly with regard to the critical shortage areas.

Contractual services will also provide for the expansion of the successful Future Educators Academies currently in nine high schools across the State leading to higher numbers of high school students entering the teaching profession.

NH will contract with a vendor/ partner to implement a new and innovative approach to the training and assessment of teachers and school leaders in NH. Participants will include:

- IHE’s to examine current practices in preparing future educators
- NH DOE to review regulations pertaining to professional standards
- Teacher Unions, Principal Associations, Superintendents and School Boards to rethink their approach to accountability for new teachers and school leaders
- New Teachers and Principals to embrace collegiality and engage and inspire students to be self-motivated learners.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$170,000	\$160,000	\$160,000	\$150,000	\$640,000
On-line course development Alt 4	\$30,000	\$20,000	\$20,000	\$10,000	\$80,000
Future Educator Academy project	\$15,000	\$15,000	\$15,000	\$15,000	\$60,000
Teacher Training and Assessment	\$125,000	\$125,000	\$125,000	\$125,000	\$500,000

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$170,000	\$160,000	\$160,000	\$150,000	\$640,000

D: Principal Evaluation
Associated with Criteria: D(2)

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$50,000	\$150,000	\$250,000	\$250,000	\$700,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$52,000	\$152,000	\$252,000	\$252,000	\$708,000
10. Indirect Costs**	\$108	\$108	\$108	\$108	\$432
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$52,108	\$152,108	\$252,108	\$252,108	\$708,432
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel
- 2. Fringe Benefits
- 3. Travel
- 4. Equipment

5. Supplies

The costs of office supplies for the project team (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Standard Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will contract with an external partner that will provide services for the development of a principal evaluation system. Services will include facilitation and expert training.

This partner will manage training for central office staff that will explain the evaluation system, determine the evidence to be provided and develop skills for the evaluators to implement consistent and fair criteria. Training will also include three summer institutes. The summer institutes will provide the foundational knowledge of the evaluation system and will be followed up with on-going training and coaching. Development coaches will support assessors for fidelity and consistency.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$50,000	\$150,000	\$250,000	\$250,000	\$700,000
Principal evaluation, System Development and Training	\$50,000	\$150,000	\$250,000	\$250,000	\$700,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
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10. Indirect Costs*	\$108	\$108	\$108	\$108	\$432
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11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$52,108	\$152,108	\$252,108	\$252,108	\$708,432

E. Research and Evaluation

Associated with Criteria: D(1), D(2), D(3), D(5)

Budget Categories	Project Year 1 (a)	Project Year 2 (b)	Project Year 3 (c)	Project Year 4 (d)	Total (e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$200,000	\$80,000	\$80,000	\$80,000	\$440,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$200,000	\$80,000	\$80,000	\$80,000	\$440,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$0	\$0	\$0	\$0	\$0
13. Total Costs (lines 9-12)	\$200,000	\$80,000	\$80,000	\$80,000	\$440,000
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel
- 2. Fringe Benefits
- 3. Travel
- 4. Equipment
- 5. Supplies

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will contract with a research organization to examine the current NH data on educator turnover rates and the distribution of inexperienced and alternative candidates in NH. The researcher will provide both quantitative and qualitative analysis to determine root causes of turnover rates and educator distribution across the state.

The NH DOE will contract with a research organization to create a white paper on the feasibility of new educator compensation models for NH.

The NH DOE will contract for evaluation services to create the metrics to measure the effectiveness of the teacher and principal evaluation systems, the incentives for filling critical shortage areas, alternative preparation programs and the mentoring programs established through this grant. The evaluator will assist with project designs to create measurable outcomes that will be tracked during and beyond the end of the grant period.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$200,000	\$80,000	\$80,000	\$80,000	\$440,000
Research for equitable distribution	\$70,000	\$0	\$0	\$0	\$70,000
Research for compensation models	\$50,000	\$0	\$0	\$0	\$50,000
Evaluation Services	\$80,000	\$80,000	\$80,000	\$80,000	\$320,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

13. Total Costs

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$200,000	\$80,000	\$80,000	\$80,000	\$440,000

F. Residency Model
Associated with Criteria: D(4)

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$0	\$0	\$0	\$0	\$0
5. Supplies	\$0	\$0	\$0	\$0	\$0
6. Contractual	\$360,000	\$440,000	\$440,000	\$260,000	\$1,500,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$360,000	\$440,000	\$440,000	\$260,000	\$1,500,000
10. Indirect Costs**	\$0	\$0	\$0	\$0	\$0
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$175,336	\$175,336	\$175,336	\$175,336	\$701,344
13. Total Costs (lines 9-12)	\$535,336	\$615,336	\$615,336	\$435,336	\$2,201,344
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel
- 2. Fringe Benefits
- 3. Travel
- 4. Equipment
- 5. Supplies

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

The NH DOE will support the development of residency models for teacher preparation programs. The focus of these programs will be to increase the amount of time that the teacher preparation candidates spend in schools instead of on college campuses and to offer some of their college content and pedagogy onsite within a cohort format. The pre-service candidates will engage in a professional learning community of their own as well as joining the PLC's in their schools.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$360,000	\$440,000	\$440,000	\$260,000	\$1,500,000
Residency model for teacher prep	\$360,000	\$440,000	\$440,000	\$260,000	\$1,500,000

- 7. Construction
- 8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.
 The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$0	\$0	\$0	\$0	\$0

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEAs

a)

Activities	Purpose	Total Project Cost	# of LEA's
The NH DOE will support the development of residency models for teacher preparation programs. The focus of these programs will be to increase the amount of time that the teacher preparation candidates spend	To create a sustainable, transferable model for the 21 st century classroom	\$750,000	6

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

<p>in schools instead of on college campuses and to offer some of their college content and pedagogy onsite within a cohort format. The pre-service candidates will engage in a professional learning community of their own as well as joining the PLC's in their schools.</p>			
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b)

LEA	Rationale	Supplemental Subgrant cost	Total
Marlboro	Based on its Title I share, this LEA would receive \$48,656 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully participate in all state plans. This project can be taken statewide.	\$ 175,336 per year X 4 years	\$701,344

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$535,336	\$615,336	\$615,336	\$435,336	\$2,201,344

**Project Name: Turning Around the Persistently Lowest-Achieving Schools and Districts
Associated with Criteria: Section E (all sub-sections)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$104,052	\$108,634	\$113,432	\$118,501	\$444,618
2. Fringe Benefits (DOE rate 48%)	\$49,945	\$52,144	\$54,447	\$56,880	\$213,417
3. Travel	\$22,880	\$22,880	\$22,880	\$22,880	\$91,520
4. Equipment	\$4,000	\$0	\$0	\$0	\$4,000
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
6. Contractual	\$300,000	\$300,000	\$300,000	\$300,000	\$1,200,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$482,876	\$485,658	\$492,759	\$500,261	\$1,961,555
10. Indirect Costs**	\$9,659	\$10,026	\$10,409	\$10,814	\$40,908
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs	\$986,680	\$986,680	\$986,680	\$986,680	\$3,946,719
13. Total Costs (lines 9-12)	\$1,479,215	\$1,482,364	\$1,489,847	\$1,497,755	\$5,949,181
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

19. Personnel

This project has budgeted for one full-time staff member to oversee all reform efforts within the persistently lowest-achieving schools and report to the Commissioner’s Office. The Education Consultant I will coordinate the work of consultants that are linked specifically to the struggling schools, facilitate NH DOE wide system of support meetings, ensure alignment of state and federal district or school plans (i.e. professional development, technology, teacher effectiveness) and use of federal grant funds.

Also budgeted is a full-time Education Consultant/Early Childhood Specialist to work with school districts in developing early education programs.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
1. Personnel	\$104,052	\$108,634	\$113,432	\$118,501	\$444,618
Education Consultant I	\$50,914	\$53,137	\$55,497	\$57,934	\$217,482
Education Consultant II/Early Childhood Specialist	\$53,138	\$55,497	\$57,935	\$60,567	\$227,136

20. Fringe Benefits

Fringe benefits for the NH DOE employees are calculated at 48% to include the costs of FICA, Medicare, the state’s portion of retirement, and health and dental insurance.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
2. Fringe Benefits (DOE rate 48%)	\$49,945	\$52,144	\$54,447	\$56,880	\$213,417
Education Consultant I	\$24,439	\$25,506	\$26,639	\$27,808	\$104,391
Education Consultant II/Early Childhood Specialist	\$25,506	\$26,639	\$27,809	\$29,072	\$109,025

Travel

We anticipate department staff working on this project will travel to RttT required conferences, out-of -state meetings and general travel within the state.

In-State

Travel to the twelve persistently lowest achieving schools at least once per month:

- Average 100 miles x 144 trips throughout the state x .50 per mile = \$7,200 per year.

It has been assumed that the cost of airfare will be \$750 roundtrip, per diem cost for the average hotel room \$200, and per diem cost for meals \$60. The per person cost for a 2 day or 4 day conference or course is as follows:

Trip Costs

Airfare: \$750

Hotel: \$200/night

Meals: \$60/day

2-day trip: $\$750 + (2 \times (\$200 + \$60)) = \$1,270$ per person

3-day trip: $\$750 + (3 \times (\$200 + \$60)) = \$1,530$ per person

4-day trip: $\$750 + (4 \times (\$200 + \$60)) = \$1,790$ per person

Year 1 through Year 4 Travel:

- The extended cost for up to 3 department staff to attend 2-day national meetings is 3 x \$1,270/person = \$3,810 per meeting or \$7,620 for 2 meetings per year
- The extended cost for 2 department staff to attend 3-day national meetings is 2 x \$1,530/person = \$3,060 per year
- Misc conferences and/or travel for NH DOE staff = \$5,000 per year

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
3. Travel	\$22,880	\$22,880	\$22,880	\$22,880	\$91,520
In-State	\$7,200	\$7,200	\$7,200	\$7,200	\$28,800
Out-of-State	\$15,680	\$15,680	\$15,680	\$15,680	\$62,720

4. Equipment

Standard equipment set-up for new employees is \$2,000. Set-up includes desktop, software, shared printer costs.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$4,000	\$0	\$0	\$0	\$4,000
Standard Equipment	\$4,000	\$0	\$0	\$0	\$4,000

5. Supplies

The costs of office supplies for the staff and consultants (wipe boards, markers, pens, paper, printer cartridges, etc.) and phones have been budgeted as follows:

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000
Office Supplies	\$2,000	\$2,000	\$2,000	\$2,000	\$8,000

15. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

Consultants will be vetted to create partnerships with NH LEAs to provide assistance in the following areas:

- Form Focused Monitoring Teams (comprised of external partners) assigned to specific persistently lowest-achieving schools
- Facilitate the process of data analysis and needs assessment of the persistently lowest-achieving schools

- Provide professional development and systemic support to the persistently lowest-achieving schools and assist in school improvement planning and implementation process.
- Provide differentiated support to schools and LEAs through the Office of Innovation and Improvement for the purpose of improving student performance. Services provided will include consultation and coaching in the areas of assessment literacy, data use, leadership, early childhood education/intervention, curriculum alignment, high school redesign and professional learning teams. Coaches will have content and school reform expertise.
- Provide assistance to struggling and marginal teachers and follow-up by non-district observer/evaluators. Provide effective lesson planning, instructional strategies specific to grade level and classroom environment.

Years 1 - 4: Two focus monitoring teams to work with the 12 persistently lowest achieving schools. \$100,000 per team = \$200,000

The NH DOE will also contract with a vendor to facilitate the Solid Foundations Program at each of the 12 persistently lowest-achieving schools. This program focuses on strengthening school and LEA relationships with parents/guardians and community members.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$300,000	\$300,000	\$300,000	\$300,000	\$1,200,000
Focus monitoring consultant team	\$200,000	\$200,000	\$200,000	\$200,000	\$800,000
Parent Information Resource Center	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000

16. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$9,659	\$10,026	\$10,409	\$10,814	\$40,908

11. Funding for Involved LEAs

12. Supplemental funding for Participating LEAs

Each LEA with an identified persistently lowest-achieving school will contribute 80% of their RttT funds (determined by their Title I allocation percentage) to implement the selected reform model.

To equalize the amount of funds available for implementation of the reform model in the persistently lowest-achieving schools, the NH DOE will provide supplemental funds through a formula to ensure that \$200,000 is available to each school per year.

These funds will be used according to the individual school plans that will be developed by the NH DOE and LEA staff during the 90-day period following the awarding of the grant. All uses of funds will require approval from the NH DOE and support items such as:

- External partner support
- Professional development
- Data system enhancements
- Integration of technology
- Development of specific reform projects
- Teacher incentive programs
- Compensation for staff involved in reform work outside of contracted hours\
- Travel to NH DOE led professional development

a)

Activities	Purpose	Cost	# LEA's
<ul style="list-style-type: none"> • Work with an external partner to implement all requirements of the selected reform model • Engage in targeted professional development supports: <ul style="list-style-type: none"> • 18 month leadership institute • Four-year mentoring and induction program • Using data workshop/institute series • Collaborate in the development of the state teacher and leader • Evaluation system and participate in the pilot model • Pilot the expansion of the statewide longitudinal data system • Participate in the Reform Consortium • Participate in one or more of the NH Innovation networks 	To provide intensive, comprehensive assistance to the lowest performing schools (cuts across all four reform areas)	\$5,949,181	6

Appendix A-2-14: Budget Part II: Project-Level Budget Table and Narrative

b)

LEA	Rationale	Supplemental Subgrant cost	Total
Farmington	Based on its Title I share, this LEA would receive \$ 750,726 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully implement the chosen reform model and participate in all state reform plan component.	\$249,855 per year X 4	\$999,419
Franklin	Based on its Title I share, this LEA would receive \$1,210,941 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully implement the chosen reform model and participate in all state plans.	\$157,812 per year X 4	\$631,247
Hillsboro-Deering	Based on its Title I share, this LEA would receive \$ 498,845 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully implement the chosen reform model and participate in all state plans.	\$100,231 per year X 4	\$400,924
Milton-Nute	Based on its Title I share, this LEA would receive \$313,528 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully implement the chosen reform model and participate in all state plans.	\$337,294 per year X 4	\$1,349,178
Pittsfield	Based on its Title I share, this LEA would receive \$292,562 of the State's RttT grant; this subgrant from the State's 50% increases the LEA's funding to allow it to fully implement the chosen reform model and participate in all state plans.	\$141,488 per year X 4	\$565,950

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$1,479,215	\$1,482,364	\$1,489,847	\$1,497,755	\$5,949,181

Project Name: Science, Technology, Engineering and Mathematics (STEM)**Associated with Criteria: Competitive Preference Priority -- Emphasis on Science, Technology, Engineering and Mathematics (STEM)**

Budget Categories	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
	(a)	(b)	(c)	(d)	(e)
1. Personnel	\$0	\$0	\$0	\$0	\$0
2. Fringe Benefits (DOE rate 48%)	\$0	\$0	\$0	\$0	\$0
3. Travel	\$0	\$0	\$0	\$0	\$0
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
5. Supplies	\$1,000	\$1,000	\$0	\$0	\$2,000
6. Contractual	\$530,000	\$675,000	\$700,000	\$700,000	\$2,605,000
7. Construction	\$0	\$0	\$0	\$0	\$0
8. Other (Training Stipends)	\$0	\$0	\$0	\$0	\$0
9. Total Direct Costs (lines 1-8)	\$533,000	\$676,000	\$700,000	\$700,000	\$2,609,000
10. Indirect Costs**	\$54	\$54	\$0	\$0	\$108
11. Funding for Involved LEAs	\$0	\$0	\$0	\$0	\$0
12. Supplemental Funding for Participating LEAs					
13. Total Costs (lines 9-12)	\$533,054	\$676,054	\$700,000	\$700,000	\$2,609,108
**The formula used is (Direct Cost – Contractual – Equipment) X 5.4%					

- 1. Personnel**
- 2. Fringe Benefits**
- 3. Travel**
- 4. Equipment**

One laptop will be needed for current staff to expand scope of work and align needs to contracted staff.

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
4. Equipment	\$2,000	\$0	\$0	\$0	\$2,000
Laptop and Software	\$2,000	\$0	\$0	\$0	\$2,000

5. Supplies

Materials needed for supplementing office supplies as well as instructional materials for kick-off and professional development

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
5. Supplies	\$1,000	\$1,000	\$0	\$0	\$2,000
Instructional materials for Statewide meetings	\$1,000	\$1,000	\$0	\$0	\$2,000

6. Contractual

The State will follow procedures for procurement under 34 CFR Parts 74.40 – 74.48 and Part 80.36.

One part-time position will provide technical assistance to the field in the implementation of professional development, training, meeting attendance and contact with stakeholders.

Costs related to a statewide “kick-off” conference that outlines goals, model programs local and nationally and opportunities for partnerships aligned with goals in Competitive Preference Priority-STEM narrative.

STEM Initiative Projects:

- Contract with an external partner to implement model STEM programs in middle and high schools to include professional development, teacher training, curriculum delivery and assessment of outcomes in a minimum of two LEA’s. This will serve as a model to take statewide.
- Collaborative partnership to transform an industrial arts/tech education into a cutting edge pre-engineering program in grades 6, 7 and 8. This project will connect to the high school with shared resources, shared networks, peer mentoring and classroom collaboration. Model will be developed and promoted state-wide.
- Collaborative partnership with NH public college to implement college level math courses to better prepare students for technical and math oriented careers. (25 LEAs)
- Collaborative partnership with NH public college to implement focused teacher training in science for regional LEAs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
6. Contractual	\$530,000	\$675,000	\$700,000	\$700,000	\$2,605,000
Statewide Meetings	\$30,000	\$0	\$0	\$0	\$30,000
Technical Assistance	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
STEM Initiative Projects	\$425,000	\$650,000	\$650,000	\$650,000	\$2,375,000

7. Construction

8. Other

10. Indirect Costs

The indirect cost rate used for this project is 5.4% per year.

The formula used is (Direct Cost – Contractual – Equipment) x 5.4%

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
10. Indirect Costs	\$54	\$54	\$0	\$0	\$108

11. Funding for Involved LEAs

12. Supplemental Funding for Participating LEA

13. Total Costs

Budget Category	Project Year 1	Project Year 2	Project Year 3	Project Year 4	Total
13. Total Costs	\$533,054	\$676,054	\$700,000	\$700,000	\$2,609,108

Budget: Indirect Cost Information

To request reimbursement for indirect costs, please answer the following questions:

Does the State have an Indirect Cost Rate Agreement approved by the Federal government?

YES
NO

If yes to question 1, please provide the following information:

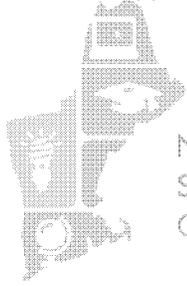
Period Covered by the Indirect Cost Rate Agreement (mm/dd/yyyy):
From: 07/01/2009_ _____ To: 06/30/2011 _____

Approving Federal agency: ED Other
(Please specify agency): _____

Directions for this form:

1. Indicate whether or not the State has an Indirect Cost Rate Agreement that was approved by the Federal government.
2. If “No” is checked, ED generally will authorize grantees to use a temporary rate of 10 percent of budgeted salaries and wages subject to the following limitations:
 - (a) The grantee must submit an indirect cost proposal to its cognizant agency within 90 days after ED issues a grant award notification; and
 - (b) If after the 90-day period, the grantee has not submitted an indirect cost proposal to its cognizant agency, the grantee may not charge its grant for indirect costs until it has negotiated an indirect cost rate agreement with its cognizant agency.

If “Yes” is checked, indicate the beginning and ending dates covered by the Indirect Cost Rate Agreement. In addition, indicate whether ED, another Federal agency (Other) issued the approved agreement. If “Other” was checked, specify the name of the agency that issued the approved agreement.



NEW ENGLAND
SECONDARY SCHOOL
CONSORTIUM

Declaration of Commitment

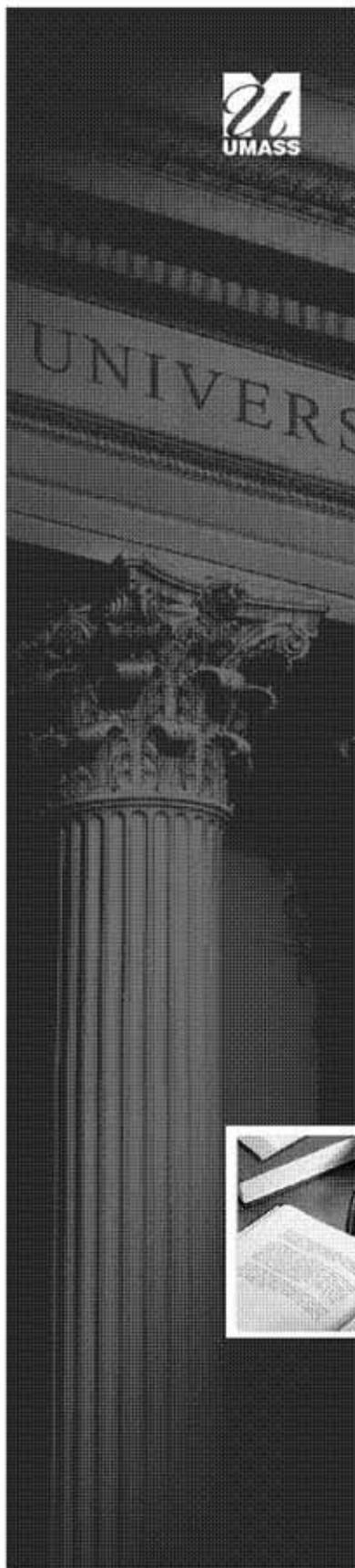
The New England Secondary School Consortium is a pioneering educational partnership committed to fostering forward-thinking innovations in the design and delivery of secondary education across the New England region. The five partner states of Connecticut, Maine, New Hampshire, Rhode Island, and Vermont believe our bold vision, common mission, and innovative approach will empower us to close persistent achievement gaps, promote greater educational equity and opportunity for all students, and lead our educators and schools into a new era.

While maintaining fidelity to our vision, mission, and objectives, the Consortium's Declaration of Commitment is an aspirational "living document" that will be periodically revisited and refined to reflect emerging needs and contexts.

To realize our vision, we affirm our collective commitment to the following objectives and strategies:

- 1 **TRANSFORM SECONDARY SCHOOLING:** The Consortium will transform—from the statehouse to the schoolhouse—educational policies, assessment practices, teaching strategies, professional development, and state and local leadership to ensure that the educational performance and attainment of our public high school students will not only be competitive with their peers worldwide, but that every student graduates prepared for success in the colleges, careers, and communities of the 21st century.
- 2 **ACHIEVE FIVE AMBITIOUS OBJECTIVES:** By 2016, the Consortium will (1) increase four-year, on-time graduation rates across the five states to ninety percent or higher; (2) decrease annual drop-out rates to less than one percent; (3) increase the percentage of students enrolling in two- and four-year college-degree programs or pursuing accredited postsecondary credentials to eighty percent or higher; (4) reduce the number of students required to take remedial courses during their first year of college to five percent or less; and (5) engage postsecondary institutions, organizations, and colleagues in a collaborative effort to ensure that more students enroll in and complete postsecondary education.
- 3 **BUILD PUBLIC WILL FOR CHANGE:** The Consortium will foster a coordinated regional effort to build broad-based support for its major initiatives among educators, policy makers, and business leaders, while also engaging parents and community members in the educational process through positive messaging, cross-state networking, and community outreach.

- 4 **CO-ADOPT 21ST-CENTURY LEARNING STANDARDS:** The Consortium will develop and co-adopt a set of integrated, forward-thinking learning standards that reflect the ways in which our youth will live, work, learn, and lead in the 21st century. These standards will define the academic, cognitive, interpersonal, self-directional, and real-world knowledge, skills, and habits of mind that can be applied throughout a student's life and across all educational, career, and civic contexts.
- 5 **RESHAPE EDUCATIONAL POLICY:** The Consortium will conduct an extensive review of the legislation, regulations, and rules governing secondary education across the five partner states. The resulting policy map and high-leverage policy framework will help to guide the development of new state and local policies designed to stimulate educational innovation and creativity, coordinate the implementation of new models of teaching and learning, ensure the personalized support every student needs to succeed, and clarify performance expectations for educators and students.
- 6 **ACCURATELY MEASURE STUDENT LEARNING:** The Consortium will explore, promote, and implement the use of performance assessments and standards-based grading practices that more accurately measure student learning. By moving beyond course credits, grade averaging, and other conventional measures used to determine educational achievement, these proven practices will encourage teachers to personalize, diversify, and strengthen their repertoire of instructional strategies to more effectively engage students and close persistent achievement gaps.
- 7 **ENSURE INTERNATIONAL COMPETITIVENESS:** The Consortium will undertake a wide-ranging evaluation of learning standards, course content, organizational structures, school leadership, teaching strategies, professional development, and student outcomes in relation to the world's highest-performing countries, educational systems, and schools. Recognizing that national borders no longer define the knowledge, skills, and habits of mind that students need for success, this work will apply the characteristics of effective 21st-century education to the creation of new models of teaching, learning, and leading.
- 8 **CREATE VERSATILE LEARNING MODELS:** The Consortium will work with educators in the field to develop innovative, internationally competitive learning models and programs at the secondary level, beginning with the transformation of a core group of high schools in each of the five partner states. No longer limited by building design, geography, or educational convention, these high-performing schools will be versatile community learning centers that prioritize individual learning needs, blend secondary and postsecondary experiences, provide engaging educational opportunities both inside and outside the classroom, and offer a variety of student-designed pathways to graduation—all while emphasizing critical thinking, global understanding, multicultural awareness, technological literacy, real-world applications, and other challenging 21st-century skills and proficiencies.
- 9 **BUILD COLLABORATIVE NETWORKS:** The Consortium will create new in-state and cross-state networks comprising state agencies, support organizations, postsecondary institutions, districts, and schools that will share resources and expertise in pursuit of our common mission. The five partner states will also collaborate with the Council of Chief State School Officers, the New England Association of Schools and Colleges, the New England Board of Higher Education, and other organizations to bring greater coordination, consensus, and alignment to the promotion of best practices and common learning expectations across the New England region.



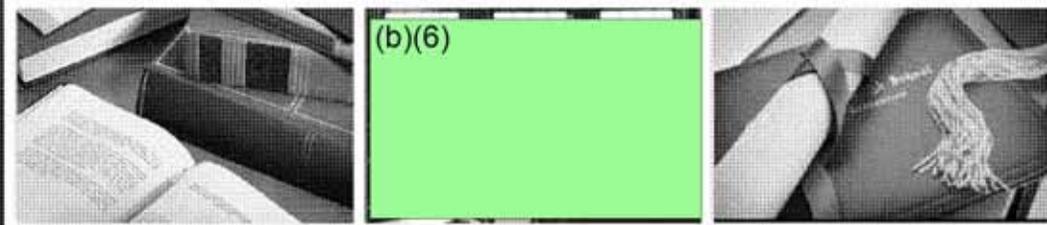
UMASS DONAHUE INSTITUTE • RESEARCH & EVALUATION GROUP



New England Secondary Schools Consortium

Technical Report with Baseline Data

April 27, 2010



New England Secondary Schools Consortium

Technical Report with Baseline Data

April 2010

(b)(6)

Project Staff

Lonnie Kaufman, *Project Manager*
John Tapper, *Research Manager*

Report Information

This report is conducted under contract with the Nellie Mae Education Foundation (NMEF) in Quincy, Massachusetts. This work would not be possible without considerable cooperation and assistance from the data coordinators and their staffs in the five participating states comprising the New England Secondary School Consortium.

The University of Massachusetts Donahue Institute is the public service, outreach, and economic development unit of the University of Massachusetts President's Office. Established in 1971, UMDI strives to connect the Commonwealth with the resources of the University through services that combine theory and innovation with public and private sector applications.

UMDI's Research and Evaluation group specializes in applied social science research, including program evaluation, survey research, policy research, and needs assessment. The Research and Evaluation group has designed and implemented numerous innovative research and evaluation projects for a variety of programs and clients in the areas of education, human services, economic development, and organizational development.

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Executive Summary

Encompassing Connecticut, Maine, New Hampshire, Rhode Island, and Vermont, the New England Secondary School Consortium (NESSC, or the Consortium) is a pioneering educational partnership committed to fostering forward-thinking innovations in the design and delivery of secondary education across the New England region. The Consortium's bold goal is to ensure that by 2016 every public high school student in the five partner states will receive an education that will prepare them for college, career, and civic responsibility in the interconnected global community of the 21st century.

The NESSC grant identifies five long-term measures of success:

1. Increase graduation rates across the five states to 90 percent.
2. Decrease annual dropout rates to less than 1 percent.
3. Increase the percentage of students enrolling in two- or four-year college degree programs to 80 percent.
4. Reduce the number of students required to take remedial courses during their first year of college to 5 percent or less.
5. Engage post-secondary institutions, organizations, and colleagues in a collaborative effort to ensure that more students earn a college degree.

As part of their contract to serve as evaluators of NESSC, the UMass Donahue Institute (UMDI) has actively participated in a collaborative process of identifying common indicators and documenting cross-state agreements related to these data. The role of UMDI has been to document, organize, help to clarify, and to report on both the common and dissimilar data sources and methodologies utilized by each state.

The process for establishing baseline data engaged data representatives from the NESSC states (Data Group) in five day-long meetings that took place over nine months beginning in June 2009 (Connecticut participated in the January and March 2010 meetings). The Data Group made recommendations to UMDI and the Consortium on data reporting and availability. The measures to be reported include:

- Graduation Rates
- Dropout Rates
- Post-Secondary Matriculation
- College Readiness
- Post-Secondary Success

Graduation Rate

Graduation rates have been computed using the formula recommended by the National Governors Association (NGA). This is a rate that relies on the identification and tracking of a four-year graduation cohort. All states in the Consortium currently report graduation rates based on this recommendation. The Data Group recommendations provide greater uniformity in calculation of this measure by, for example, developing a common approach for students on Individual Education Plans (IEPs) and for students with limited English proficiency (LEP).

Dropout Rate

The Consortium dropout rate is closely linked to the graduation rate. Data Group members recognized the confusion that sometimes results when the graduation rate and dropout rate are reported using different methods. The group felt that a clear relationship between these measures would be helpful. The NGA has offered guidance

on dropout rates and recommend that dropouts be counted as those students who have not completed high school and are no longer enrolled. This rate is calculated as a cohort rate, using the same freshman cohort as was used for the graduation rate. Using this approach will be helpful, since as the graduation rate increases the dropout rate should decrease.

Post-Secondary Matriculation

Getting accurate data on post-secondary matriculation requires states to become members of the National Student Clearinghouse (NSC). At this time, NSC is the only agency that provides detailed information on post-secondary attendance and completion. All of the Consortium states are members or in the process of joining NSC.

Consortium Council members expressed their desire for post-secondary matriculation data to capture student attendance at one-year certificate programs that may not be part of matriculation for a college degree. These data are not currently available but will be added to the technical report tables as they become available in the future.

College Readiness

The original measure of college readiness in the NESSC grant relied on the number of students participating in remedial classes in their first year of college. In the opinion of the Data Group, inconsistencies in the definition of remedial classes across states, and between colleges within states, made participation in remedial education an impractical and unreliable measure of college readiness.

To allow for better reporting of “college readiness,” future data will make use of multiple measures, including:

- Remedial class participation rates
- Placement tests (Accuplacer or other)
- SAT scores
- Advanced Placement course participation and scores
- Participation in the State Scholar program
- Early enrollment in college

Except for Connecticut, data on these measures was not made available by NESSC states during this baseline year.

Post-Secondary Success

In the original NESSC grant, post-secondary success was referred to as “college success” and identified high school graduates who attended two- or four-year higher education institutions. At the request of the Consortium Council, this measure was renamed “post-secondary success.” This measure will eventually include matriculation and completion data for students who attend one-year post-secondary professional certificate programs (like LPN or HVAC programs).

The measures reported here also acknowledge that not all students start and/or finish their post-secondary education “on time.” For that reason, the post-secondary success rate will be computed over a six-year period.

At this time, only New Hampshire has provided post-secondary matriculation data on their high school graduates. Other Consortium states report they are working on acquiring these data in the future.

Appendix A-2-17: Excerpt from New England Secondary Schools Consortium, Technical Report with Baseline Data

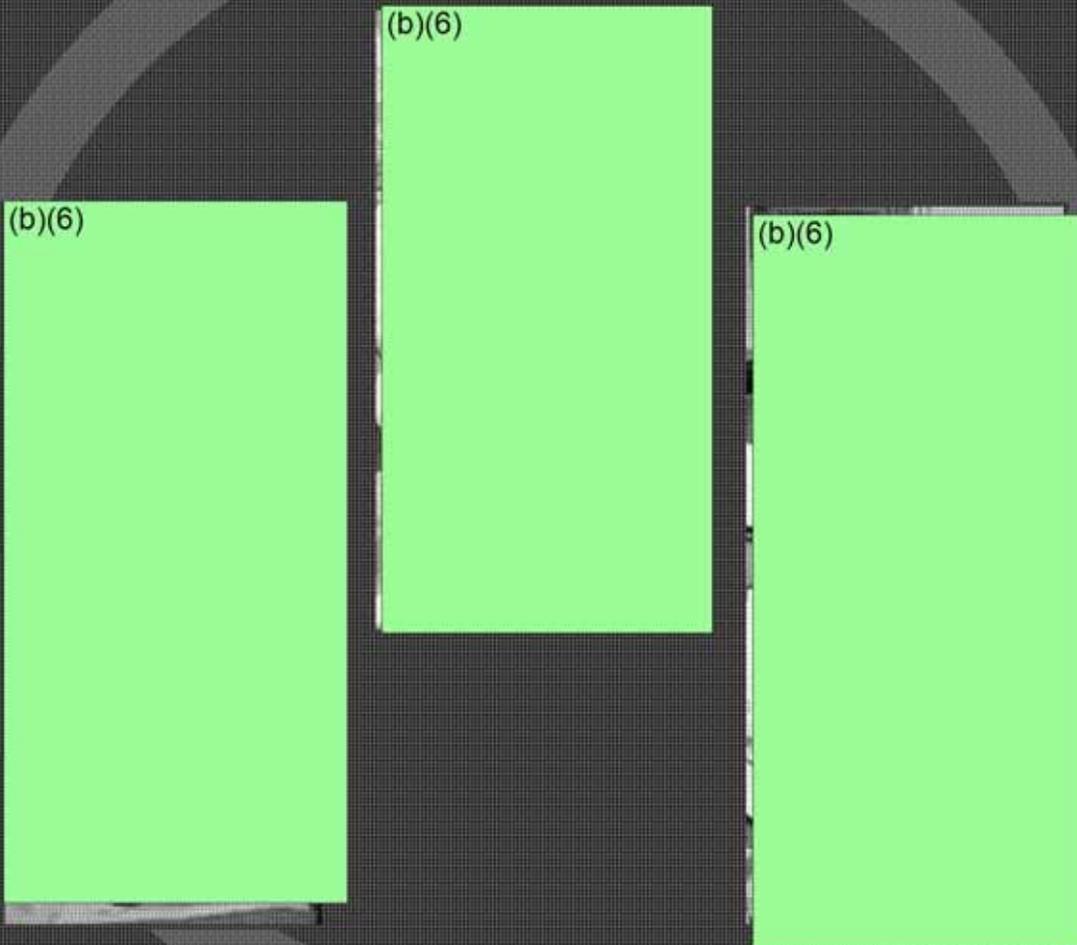
NESSC Key Indicators Data Table			
Goal to be Reported	Key Decision Points	Method for Reporting	Comments
High School Graduation Rate	The calculation is done with a variation on the National Governors Association (NGA) formula. States will report four-, five-, and six-year rates, freezing the adjusted cohort in Year 4. No exemptions will be included for SpEd or LEP.	$(\# \text{ of graduating seniors}) \div (\# \text{ of first-time freshman} \pm \text{ transfers in or out})$	<ul style="list-style-type: none"> Data is disaggregated by NCLB categories, including a category for “multi-racial.” Students are referenced in the IEP or LEP statistics if they have been in these groups at any point in their high school career.
High School Dropout Rate	The rate recommended by the Data Group is conceptually similar to the Graduation Rate (see above) supported by the NGA. The rate reflects a count of students who have not graduated from a program aligned with state standards, or are not enrolled.	$(\# \text{ of students in adjusted freshman cohort}) - (\text{Graduates} + \text{students still enrolled} + \text{other completers of standards-aligned programs}) = \text{Dropouts}$ $\text{Dropout rate} = \text{dropouts} \div \text{adjusted freshman cohort}$	<ul style="list-style-type: none"> In this formula GED completers are listed as dropouts. Dropout rates will be computed and reported with and without including GED completers. GED completers and those students who enroll in college without finishing high school will be reported in this section with a separate table.
Post-Secondary Matriculation Rate	This will include matriculation rates at two- and four-year colleges and one-year certificate programs. ¹ The rates will be calculated for the first two years after high school completion.	$(\# \text{ of students matriculating}) \div (\# \text{ of high school graduates})$	<ul style="list-style-type: none"> Data is disaggregated by matriculation in college or certificate program¹, and by background as a high school graduate, GED completer, or early enrollment student. The National Student Clearinghouse (NSC) will provide data to the Consortium on post-secondary matriculation and completion.
College Readiness	The Data Group recommended using a variety of measures to provide a composite representation of college readiness.	Composite Measures on College Readiness: <ol style="list-style-type: none"> Attendance in remedial classes during the freshman year Scores on placement tests (Accuplacer) SAT scores in high school AP course participation and scores Participation in State Scholars program Early enrollment in college 	<ul style="list-style-type: none"> This is a difficult construct to capture as no one measure is consistent across the Consortium. All the measures listed have some bias and must be interpreted as a group. The measure is an adaptation of the original grant measure that called for reporting only attendance in remedial classes.
Post-Secondary Success	Students are counted as beginning college when they first matriculate. They have six years in which to be counted as completers.	$(\# \text{ of students completing their program within six years}) \div (\# \text{ of students beginning post-secondary education in target year})$	<ul style="list-style-type: none"> Completion is disaggregated by college degree and certificate programs. No data source for one-year programs exists at present.

¹ These data are not currently available. The National Student Clearinghouse is engaged in efforts to capture these data and make them available in the future.

Data Group Members

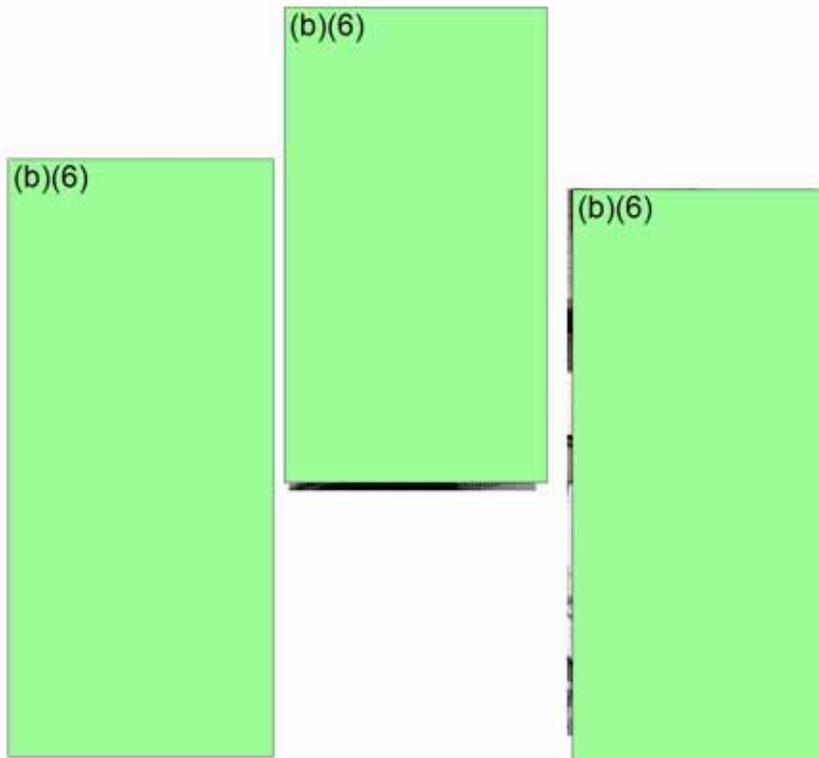
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New Hampshire's Vision for Redesign: MOVING FROM HIGH SCHOOLS TO LEARNING COMMUNITIES



State of New Hampshire Department of Education • 2007

New Hampshire's Vision for Redesign: MOVING FROM HIGH SCHOOLS TO LEARNING COMMUNITIES



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Dear Friends and Colleagues:

The release of this report, "*New Hampshire's Vision for Redesign: Moving from High Schools to Learning Communities*," could not be more timely for New Hampshire. From the leadership of Governor John Lynch in his initiative to seek ways to improve the graduation rate of New Hampshire high school students, to the Department's *Follow The Child* initiative, we are seeing school after school in the Granite State focusing on what matters most – the documented progress of each student, personally, socially, physically, and academically.

This document is meant to support the work being done every day in our schools as educators, along with students, parents, and community leaders, seek to improve the quality of secondary education through meaningful redesign. The document has brought together several important bodies of work, including the NH *Minimum Standards for School Approval*, national high school redesign theory and practice as exemplified through the National Association of School Principals' *Breaking Ranks II*, and the revised secondary accreditation standards of the New England Association of Schools and Colleges. By aligning the rich practices and policies found in these leadership documents within a context supportive of the work of New Hampshire educators, *New Hampshire's Vision for Redesign* will support the improvement of our secondary schools.

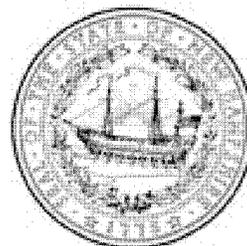
I would like to thank Paul Leather, chairman, and other distinguished educators who worked tirelessly for over two years on the effort. Members of the State Board of Education who contributed, particularly Chairman David Ruedig and Fredrick Bramante, were particularly supportive toward the successful completion of this project. It has been an exciting time for the committee, as they sifted through the state and national developments of high school design, to create and articulate a shared vision for the future of secondary education here in New Hampshire. Thanks also go to the many hundreds of students, educators, community leaders, business leaders, parents, and citizens who, through a series of focus groups, provided the perspectives on which this vision document is based.

New Hampshire's Vision for Redesign will be of great value to the New Hampshire schools and communities that seek to improve educational offerings. Most importantly, it will positively impact our students' preparation for the future, as high schools move toward becoming learning communities.

Sincerely,



Lyonel B. Tracy, Commissioner
New Hampshire Department of Education



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Quotations from high school focus group and summit participants – students, parents, educators, counselors, school and district administrators, community members, higher education personnel, policy makers, state-level education leaders- appear throughout this document.

EXECUTIVE SUMMARY

THE NEW HAMPSHIRE DEPARTMENT OF EDUCATION has released a report, *New Hampshire's Vision for Redesign: Moving from High Schools to Learning Communities*. This report brings together state, regional, and national resources with the work of New Hampshire educators in a plan to support the improvement of our secondary schools.

One hundred years ago, less than 20% of secondary students completed high school. Today, every student must complete a rigorous high school curriculum leading to graduation. But in 2005, an estimated 2,300 of our students dropped out of high school.

To address these issues, education leaders have come together over the past several years to gather research, opinion, and data on the New Hampshire high school experience. A series of meetings, forums, and focus groups was held, including two New Hampshire education summits, three statewide student forums, and the activities of a state-level high school leadership team. These activities generated input from administration, teachers, councilors, students, school boards, business and community members as well as state and national organizations as the Association of School Principals, the U.S. Department of Education, the New England Association of Schools and Colleges, and the National Governors Association's high school redesign initiatives.

Six guiding principles for the future of our high schools emerged from this body of discussion and research:

- Personalization and Relationships
- Rigor and High Standards
- Relevance and Engagement
- Results
- Empowered Educators
- Follow The Child

PERSONALIZATION AND RELATIONSHIPS

Personalization means implementing individualized teaching and learning methods to best meet the needs of each student. Part of personalization involves building relationships between students and adults—teachers, administrators, parents, and community members—as well as between those adults. Schools that report success with high school redesign efforts mention personalization as an important aspect of all learning relationships.

RIGOR AND HIGH STANDARDS

Every student deserves a course of study that allows them to learn in a deep, meaningful and practical way.

Achieving this requires high standards that clearly identify and describe what is expected of students across the curriculum. Such standards serve as a common target for students, staff, and parents. High standards should address character and emotional development as well as academic growth. They should apply to all programs, including Career and Technical Education programs. They should apply to all students, not just those in certain academic tracks. Standards should address not only academic knowledge but everyday life skills such as problem-solving, team building, and time management. In developing high standards, everyone should be involved, including school personnel, students, parents and community members.

(b)(6)

RELEVANCE AND ENGAGEMENT

Relevance connects what students learn to the skills they practice in real-life situations. By engaging every student in learning we can dramatically reduce the number of dropouts and allow students to acquire the skills they need to be successful and contributing citizens. Expanding the scope of extended learning opportunities (such as through internships and independent study) is a practical way to make this connection and ensure that students are engaged in their education. The challenge for educators is to engage each student, showing relevance while at the same time keeping the students' horizons broad, because we know that we cannot predict today what may or may not be relevant in students' later lives.

RESULTS

Collecting and analyzing data on results is vital to the success of high school redesign efforts. This data should first be used to determine the steps to support a student's growth. It can also help a school understand whether it has reached its goals or whether a program needs to be modified. Assessment should include both academic and non-academic goals, and schools should have a plan to collect and report the data internally and to the greater community. Such a system should encourage teachers to be reflective about their teaching so they can improve it and therefore improve student learning.

(b)(6)

EMPOWERED EDUCATORS

This goal incorporates several components:

Effective Leadership

Educators must become effective leaders, making choices that serve the vision and mission of the school, creating environments in which others share in the leadership process, and reaching out to community members to draw them into a relationship with the schools. Schools must nurture effective leadership with ongoing training and support.

Teachers as Learning Facilitators

Teachers should transition from a traditional delivery approach toward coaching, mentoring and facilitating student learning. As learning facilitators, teachers become more active designers of curriculum. They encourage students to assume responsibility for their learning and move from teacher-centered to student-centered education. The transition to new roles for teachers will require a strong professional development effort, but will lead to more exciting and rewarding careers for teachers.

Whole Community Involvement

New Hampshire defines parent and community partnerships as collaborations among educators, parents/guardians, and the greater community, all actively engaged in defining, implementing and sustaining relationships to ensure a personalized learning experience for each learner. These collaborations create schools that share the responsibility for the delivery of education, as a vital part of the whole community's involvement in the education of young people.

Professional Learning Communities

Professional learning communities are places of continuous learning and growth. They are vital and spirited environments in which the openness to exchange ideas, to share information and insights, and to establish mutually supportive relationships enhances the learning process. Leadership in professional learning communities is visionary, committed, and inclusive. The physical environment reflects the inclusive nature of leadership and the school structure facilitates engaged learning. This may sound like an ideal, but it is both possible and necessary if each and every student is to emerge from the school system as an engaged and successful learner.

FOLLOW THE CHILD

The student-centered Follow The Child initiative calls for personalized learning and assessment so that each child can flourish in four domains: personally, socially, physically and academically. In this initiative, each student's educational plan is personalized through an analysis of who the student is as a person. Parents, educators, and students work together to determine the student's learning pathway. The strategies for learning are both short-term and long-term, and draw from resources inside and outside of the school. They combine classroom and community learning, coached or mentored learning, and independent learning. The student's learning path is monitored, and the delivery plan is adjusted as needed. Schools that develop this type of personalized approach to education help students learn more, encourage more students to graduate from high school, and ensure that those graduates are better prepared for their next steps in life.

REDESIGN AND STATE STANDARDS

Beyond the guiding principles mentioned above, the report addresses New Hampshire's recently passed *Minimum Standards for School Approval* and their relation to high school redesign. Important objectives within the new standards are:

- **greater flexibility in developing a school calendar**
Schools now have the option of maintaining a

New Hampshire Plan Raising High School Graduation Rates and Addressing Dropouts

Goal: NH will have Zero Dropouts by 2012

Introduction:

Problem: Despite a stable infrastructure and relatively positive community indicators favoring education, New Hampshire continues to suffer from a dropout rate that is too high. At the close of the last century, approximately 3,000 students annually dropped out, and even today, the 4 year leaving rate is close to 10% of high school students. A concerted leadership effort, addressing statute, policy, practice, and resources is needed to further reduce the dropout rate state-wide. State and local leaders in communities, schools, parents, and students need to work together to address this pernicious problem. Only through a comprehensive effort over time will New Hampshire realize its goal of zero dropouts by 2012.

Supportive State Leadership: When he came into office, Governor John Lynch immediately made reducing the dropout rate and raising the compulsory age of education a priority. Through tenacity, support from a myriad of state and local community, education, and business groups, and the NH Legislature, Senate Bill 18 was signed into law. Governor Lynch also ensured that New Hampshire's budget, sparse in difficult economic times, continues to provide \$4.5 million for supports to students, parents, schools, and communities to make this dream a reality.

“As a state, we have set a goal of reducing our state's dropout rate over the next three years. This is a lofty goal, but one we must embrace. We recognized the necessity of a high school diploma in today's economy by increasing the compulsory school attendance age to 18. We must continue to support alternative learning programs and make it possible for every child in New Hampshire to graduate from High School.”

Governor John H. Lynch, New Hampshire
2009 Inaugural Speech

Existing Data for New Hampshire ~ Progress Is Being Made!

School Year	Annual Rate	Estimated Cumulative Rate	Number of Students that Dropped Out
2000-2001	5.3%	19.6%	3131
2001-2002	4.0%	15.1%	2553
2002-2003	3.8%	14.4%	2441
2003-2004	3.8%	14.4%	2500
2004-2005	3.4%	12.9%	2306
2005-2006	3.1%	11.8%	2129
2006-2007	3.2%	12.2%	2185
2007-2008	3.0%	11.3%	1986

The Department of Education's dropout data for the state has shown a marked improvement between the 2000-2001 school year and the 2005-06 year with a 2.2% reduction in dropouts or 946 more students graduated. In real numbers, since 2000, New Hampshire's dropouts have decreased from 3,131 students to 1,986, or a reduction of over a third, 36.6%. 2006-2007 marked the first year when the data system was based on individually identified students, and the numbers increased slightly, by 56 students. The 2007-2008 numbers have continued the downward trend.

Implementation Plan:

In the summer of 2007, the Department of Education met with a number of stakeholders and developed a draft implementation plan resulting from community, business and academic input. The plan was then brought forward to Governor Lynch, who set the overall goal of 0 dropouts by 2012. The State Board of Education adopted the overall goal of 0 dropouts on January 9th, 2008, and requested that the Department regularly report on the status of meeting that goal. The document, (Attachment C), identified immediate goals, accomplishments, long-term goals, legislative budget, rule change recommendations, and programmatic and budgetary recommendations. The plan has been reviewed regularly with updates provided to the Governor, State Board of Education, business, academic and community stakeholders. (Attachment D)

Plan of Action:

Who is responsible? Ensuring that all students graduate from high school prepared for college and the workplace is the responsibility of all stakeholders including the State of NH, the NH Department of Education, Local School Districts, Parents, Community and Business, and State and Local Partners – Division for Children, Youth, and Families, Division for Juvenile Justice Services, Vocational Rehabilitation, Corrections, Special Education Regional Centers and the Youth Council.

Strategies: There are a number of strategies to be employed in ensuring all students graduate from high school. It is recognized that no single strategy will alone achieve the goal. The following strategies, though not all-inclusive and recognizing that there are many to be yet identified, are recommended.

- Creation of local district graduation teams and dropout prevention plans
- High School Redesign, creating multiple pathways to graduation where methods, curriculum, instruction and assessment is more personalized to the learner
- Public Relations Dropout Prevention Awareness Campaign
- Assessment of Current Initiatives
- School Attendance Officer/Truancy Policies and practices be reviewed with local ordinances that support family and student success in school
- Integration of day high school and adult education offerings
- Dropout prevention and recovery programs
- Federal Programs/Funding Opportunities be explored
- Research Partnerships between districts, higher education, and/or state and regional research organizations.

Capacity Development is a critical element for ensuring high school graduation.

- **State:** At the department level, we need to ensure dropout prevention strategies and expectation of high school graduation are embedded in all professional development activities. Furthermore, we need to ensure that applicable conferences and workshops are available to all stakeholders. Future technical advisories need to ensure the criteria and expectation of high school graduation.
- **Local:** Understanding and implementation of successful instructional methodology and dropout prevention strategies needs to be woven into all staff development for administrative and instructional personnel at all grade levels: elementary, middle, and high school

Community/District/School Plans for Zero Dropouts: At the Governor's Summit funded by America's Promise, local plans will be either reviewed or begun through the afternoon facilitated session. Input will also be provided on the state-level plan. It is anticipated that after the summit, the state team will complete the State Dropout Prevention Plan, based on input from the summit. Local Community Plans will be completed over the coming year, as part of the on-going America's Promise process.

Community Engagement: Community stakeholders across New Hampshire are engaged in after school or summer programming that assists students in academic, personal, and/or social development. Many businesses and colleges have adopted a school or class with the goal of preparing students for successful transition from high school to post-secondary or the workforce. Equally as important are the supports provided by the Department of Health and Human Services in responding to the needs of youth under various auspices, including the Division for Children, Youth and Families, the Division for Juvenile Justice Services, the Office of Substance and Alcohol Prevention and Treatment, and the Division of Behavioral Health. NHDoE staff have been working with representatives of these agencies and other entities, such as the Manchester Mayor's Youth Advisory Council, Making it Happen, and the state Advisory Council for Juvenile Justice, over the last year and a half. Targeting local, community based services for students is the goal. Current wraparound committees are being piloted in Hillsborough County, with the hope of expansion, if resources become available. In addition, connections with local courts, police departments, and homeless shelters have been key in local planning, with the recent downturn in the economy. Without these partners and stakeholders involvement, we cannot achieve our goal of zero dropouts in 2012 due to the complexities of issues that many students at risk bring to the class on a daily basis.

Student/Family Engagement:

One aspect of dropout prevention included state and district rules and policies that affect student attendance. In 2008, truancy legislation was introduced that resulted in a legislative study committee looking at truancy issues during the summer. Subsequent legislation has been introduced in 2009 that provides more flexibility to local the towns and cities in responding to truancy issues. Changes in the truancy legislation should also address concerns where parents are

either prioritizing needs other than school (e.g. adult or child daycare or other family tasks), as well as parental intimidation, sometimes found with older youth.

In addition, high school practices in other states have resulted in less truancy. Both Vermont and Rhode Island high schools engaged in secondary redesign strategies have found that student-led conferences with teachers, parents, and guidance personnel on the topic of oversight of students' personalized learning has resulted in greater parent involvement in school and increased student engagement in learning. The results were not the same with adult-led meetings. New Hampshire high school redesign is exploring this option in the context of Extended Learning Opportunities. Including State and Local PTA groups in this effort will lead to greater success at the local level.

Educational Initiatives:

Follow The Child: Commissioner Lyonel Tracy instituted Follow The Child as a core effort to address the needs of the whole child, personally, physically, socially, and academically, soon after his term began. His work in this regard stemmed from his 30+ career in education, and includes student and adult surveys of perspectives on youth development provided by the Quaglia Institute. The Follow The Child theme has underpinned all educational initiatives since 2006, and is crucial to increasing the graduation rate and lowering the dropout rate. Understanding the whole child as they move through school, monitoring progress of that student, and assessing the need for and the success of various interventions to help the student succeed is a primary tenant of this effort.

High School Redesign: Since 2005, the NH DoE and several high schools, have engaged in a series of high school redesign efforts aimed at increasing high school student engagement in learning, reducing drop outs, and re-engaging at-risk and underserved learners. Schools have implemented personalized learning, extended learning opportunities, advisories, summer groups, and other strategies. Early analysis indicates that extended learning opportunities, in combination with the school structure and culture supports indicated, are effective in re-engaging students poised to drop out of school.

American Reinvestment and Recovery Act (ARRA) Educational Funding: ARRA funding to education in New Hampshire is substantial over the next 12 to 24 months. The following is a list of monies flowing into the state:

Education for the Disadvantaged – Title I	\$30,959,481
Educational Technology State Grants - Title II Part D	\$3,209,375
Independent Living State Grants	\$242,913
School Nutrition United State Department of Agriculture	\$215,765
Services for Older Individuals who are Blind	\$80,095
Special Education - IDEA Part B	\$47,461,265

Special Education - IDEA Part B - Preschool Grants	\$1,616,311
Vocational Rehabilitation Grants	\$1,923,884
Workforce Investment Act Youth	\$2,100,000

Title I and IDEA Part B funds will flow by formula to the districts, based on eligibility established by the individual programs. Districts and schools are being given lists of activities that will be allowable under the grants. Each of the programs above may be used in ways that will enhance the performance of this project. Several sources of the monies ~ Vocational Rehabilitation and Workforce Youth ~ have been dedicated to recovering at risk youth for both summer and year round school and transitional activities. Local partners will be encouraged to respond to requests for proposals to help supplement their dropout prevention and recovery plans.

P-16 Initiatives: In 2005, Governor Lynch appointed a P-16 Working Group to implement Follow The Child initiatives, including a single student identifier system from pre-school through college.

Initiative for School Empowerment and Excellence (I4see) has changed the way the department of education collects and leverages student and school data. Beginning in 2007, State reports on dropouts have been based on individually identified student data. Central to the effort is an overarching principle that we should not only collect data for reporting needs, but also we should add value to the data being collected and provide information back to schools. I4see empowers teachers, administrators, policy makers, and parents to increase student achievement - enabling schools to follow every child and to analyze groups of students over time.

The working group continues to work on this project, as well as a “Common Assessment” effort, where HS completion assessments can be calibrated to meet cut score expectations for college and workplace entry. In the last year, NH signed on as part of the “Tough Choices, Tough Times (TCTT)” State Consortium with the *New Commission on the Skills of the American Workforce*. One of the first priorities of that consortium is to identify internationally recognized State Board Qualifying Examination systems, which could serve the purpose of NH’s “Common Assessment” initiative. Also, the TCTT Consortium will be addressing Early College entry for students who demonstrate the requisite skills to matriculate into credit-bearing college coursework. Pilot work in this area is now taking place between the New Hampshire Community College System and the NH Department of Education.

Early Childhood Education: The P-16 Working Group is also addressing early childhood education. The NH Legislature has made it mandatory for part time public kindergarten to be offered by all school districts, and most are moving to comply with this edict. A number of school districts are beginning to offer full day kindergarten, based on research that shows a higher percentage of students who receive full day instruction by the age of five are more apt to be on grade level in subsequent grades, particularly in reading, writing, and numeric functions. ARRA monies under IDEA have been targeted to special needs early childhood education, and this will help to grow the capacity of regional centers created in partnership between the state departments of education and health and human services that will meet the needs of newly identified infants, toddlers and pre-grade school children.

K-12 Initiatives:

Response to Intervention, (RTI): The Department of Education has formed a NH-RTI Task Force to provide leadership through the State Response to Intervention (RtI) plan for NH school districts that supports the understanding and effective implementation of an RtI model for all NH children.

Response to Intervention (RtI) is a multi-step process of providing educational support and instruction to children who are struggling learners. Each child's progress is monitored and results are used to make decisions about further instruction and intervention. RtI is most commonly used in addressing problems with reading and math but can also be used in other areas, such as attendance and dropout prevention. The RtI process is flexible and designed by school districts to meet the needs of their students.

The RtI process typically has three tiers. Each tier provides different levels of support:

- In Tier I, all students receive high quality curriculum and instruction in the regular classroom. The teacher assists all learners.
- In Tier II, the school provides interventions to students who need more support than they are receiving from the general curriculum.
- In Tier III, students are given individualized instruction.

Literacy Plan: Despite substantial gains in early literacy achievement, the performance of students in NH mimics national statistics – declining through the grades into high school (NAEP and NECAP data). There is a direct correlation between students who struggle to read and those who drop out of high school.

New Hampshire's Literacy Plan is based on providing targeted personalized instruction consisting of the following components:

- Assessment-Driven Tiered Model of Instruction and Intervention
- Research Based Effective Practices in Reading and Writing Across Content Areas
- A Classroom Instructional Model based on differentiation of student reading levels
- System of Support for Struggling Readers and English Language Learners
- Consistent Assessment and Evaluation

Quantitative Literacy Project (Numeracy Plan): The primary goal of the first year of the Quantitative Literacy Project (QLP) has been to devise and disseminate a Quantitative Literacy Action Plan (QLAP) that will help New Hampshire teachers understand all aspects of what it means to be quantitatively literate and to have quantitative literate students in their classes. This in turn will help with the goal of ensuring that the graduates of every high school in New Hampshire are quantitatively literate.

The Department of Education is beginning the development of a statewide mathematics literacy plan.

Positive Behavior Intervention and Supports (PBIS): The primary dropout prevention component within the APEX Dropout Prevention Model is a P-12 comprehensive systems-change model called Positive Behavioral Intervention and Supports (PBIS). PBIS is a systemic, data driven behavioral support and improvement process that consists of three tiers, consistent with RtI, each specifically designed to prevent disruption and address the behavioral support needs of students at risk of school failure:

- **School-wide Tier:** A School-wide Leadership or “Universal” team is formed in each APEX school and consists of approximately 10-12 teachers, administrators, student support professionals, special educators, parents, and students. An APEX staff member guides the Universal team in its work to evaluate and re-design the discipline systems using the Positive Behavior Supports mode; to assess the school’s current behavior profile; to redesign the school’s behavioral expectations; to sharpen the school’s data collection and retrieval systems; and to design and implement school-wide interventions that will benefit all students. Universal Team initiatives are designed to address the needs of the majority of the student body who have the fewest social, behavioral or academic challenges.
- **Secondary Tier:** APEX schools also develop a secondary tier, or “Targeted Team” of specialists and administrators that focus on those students who exhibit challenging behaviors and who are at risk for school failure due to academic, social or behavioral issues. The goal of this team is to design interventions for the student or group of students based upon a functional and contextual assessment or Functional Behavioral Analysis (FBA). These “Function-based” interventions have been proven highly effective in the reduction of problem behaviors and the associated negative consequences.
- **Intensive Tier:** An APEX II facilitator trained in an individualized, school-to-career service model called “RENEW” works with staff members at each high school and with specialists from community-based organizations to identify individual students who are struggling to complete their program or who have already dropped out of school. A support team is formed around each student and works with the student to develop individualized, student-directed school-to-career plans designed to help the student earn credit toward graduation through appropriate alternative means.

Elementary Initiatives: From the perspective of accountability to state and federal statutes, elementary schools are looking at student attendance data as well as their scores for English Language Arts, math and science to determine what supports and strategies are needed to improve test scores for NCLB compliance. School improvement efforts around New Hampshire at the elementary level are focused on the needs of both the individual schools and the school district, depending on the Adequate Yearly Progress (APY) status of the district or school. School /district improvement plans are required as soon as AYP is determined. The focus is on identified cohorts of students that are not making the grade. Interventions include leadership training in data analysis and program improvement, professional learning community and other embedded training in literacy, numeracy, and STEM related activities.

Middle-to-HS transition programming Studies have shown that many students begin the process of disengaging from schooling during the transition from middle school to high schools. Schools with consistent, all-student transition programming have been shown to have fewer students dropping out in subsequent high school years. This transition programming needs to go beyond a one-day tour of the high school. Some strategies that NH high schools employ include a two-week

pre-high school summer experience. Those these vary in content, many include introduction to peers by peers, getting to know teachers, study skills, and some include introduction to extended learning opportunities and career and introduction to career and technical education opportunities.

The department of education would like to examine further which districts employ transition plans and what those programs look like to better understand the most effective strategies for engaging students and reducing the numbers of student who drop out due to lack of engagement during the high school transition.

High School Initiatives:

New Hampshire High School Redesign provides leadership and guidance for secondary schools as they engage in this change process. New Hampshire is deeply engaged in a vision for high school redesign that encompasses the creation of learning communities in which every participant is actively involved in the process of learning. New Hampshire's goal is that each student will receive a rigorous and personalized education. Every student deserves a course of study that allows him or her to learn in a deep, meaningful and practical way. Not only do students need to know facts, they need to know how to apply those facts to new situations, how to solve problems, and how to expand their knowledge and opportunities. All students deserve a rigorous secondary education that prepares them for post-secondary education and meaningful careers. "New Hampshire's Vision for High School Redesign, Moving from High Schools to Learning communities," may be found on the New Hampshire Department of Education website, www.ed.state.nh.us.

Minimum Standards: In 2005, the State Board of Education completed a broad sweep of changes to the Minimum Standards through state rulemaking that provides School Boards and Educators permission to be flexible and creative in the awarding of credits to students in a variety of settings, including:

- The student placed at the center of education, through personalization of learning
- High School Credits awarded on the basis of mastery of competencies by school year 2008-2009
- Extended Learning Opportunities for credit toward graduation
- Flexibility in the School Calendar

Extended Learning Opportunities (ELO's): Extended Learning Opportunities allow for the primary acquisition of knowledge and skills through instruction of students outside of the traditional classroom including, but not limited to Independent Study, private instruction, performing groups, internships, community service, apprenticeships, and online courses. ELO's validate the learning that takes place outside of school that is youth-centered and focuses both on the acquisition of skills and knowledge and on youth development.

New Hampshire's Minimum Standards for School Approval allows schools to grant credit towards graduation for learning outside the traditional classroom. ELOs expand the options of the traditional high school classroom. Students of all abilities will have the option to learn in rigorous and relevant real-world settings and gain high school credit for that learning, based on demonstrated mastery of pre-determined course-level competencies. Since the Fall of 2007, New Hampshire has been

piloting an ELO process with four high schools and seven extended network sites, through monies awarded by the Nellie Mae Education Foundation (NMEF).

APEX II (Achievement in Dropout Prevention and Excellence): The US Department of Education awarded a national dropout prevention grant that focused on the top ten high schools with the highest dropout rate or numbers of students dropping out in 2004 focusing on school change through positive behavior interventions. Need for funding of both federal and state dropout prevention and recovery programming has been included in the criteria for funding decisions.

APEX II staff members work with students, families, teachers, and administrators at ten (10) high schools and their sending middle schools to adopt and implement strategies plus 8th to 9th grade transition systems in select school districts in order to reduce the school's annual dropout rate, create consistency and predictability in the school environment, develop pro-active strategies based on data and designed to prevent problem behavior and reduce failure rates, create a positive learning environment, use data to make decisions, foster student leadership, and implement a research-based individualized school-to-career intervention for the most at risk students. The APEX II school staff provides training and technical support to the ten (10) high schools to implement these strategies.

Freshman Follow The Child: Based on a successful initiative implemented in the Chicago Public School System and researched by the Consortium of Chicago School Research, led by John Easton, the new director of the USDoE Institute of Education Sciences, (the major educational research section for the federal department of education). This effort follows the progress of students entering high school in two key areas, attendance and on-time academic progress. Evidence shows that students who do not attend school regularly or who enter high school with a significant achievement gap are much more likely to dropout of school. This initiative will seek to marry and develop upon the progress made through the Follow The Child efforts advanced by Commissioner Lyonel Tracy over the last four years and the success found through the APEX II Project, where school improvement teams followed on-task behaviors, such as attendance, and student academic success indicators.

GED Options Program: In 2008, New Hampshire became one of ten states approved to offer the GED Options Program. Local schools must meet requirements established by the GED Testing Service and complete a GED Options application. Participation is voluntary for schools and students.

The GED Option is designed to target students who have the capabilities to complete high school, but for a variety of reasons lack the credits needed to graduate with their class and are at risk of leaving school without a high school diploma. Students remain enrolled in their regular high school as a full-time student, and upon passing the GED test will be designated a "completer", rather than a dropout.

A minimum of 15 hours of academic instruction per week will be provided. Students will work on the five content areas of the GED Test: Math, Science, Social Studies, Communication Arts and Reading. Students may also be enrolled in other school supervised instructional activities (career education courses, elective classes, work experience, etc.) that lead to student's classification by the

district as a full-time student. Students have access to all educational programs and services available in the school district.

Alternative Education

Legislative Funding for Alternative Education (focus 16-18 year old youth): In late winter, 2007, The Department of Education staff developed a comprehensive report describing current Alternative Education programming and included a proposal for expansion of alternative education programs. The proposal sought to build upon existing federal and state dropout prevention strategies for students at risk of dropping out across the state. Students would attend regional Career and Technical Education (CTE) Centers with dropout prevention programs and night high school capacity in place in those districts to support student success in reaching high school graduation. The legislature acknowledged the need with funding for FY09 of \$700,000 (period 1/1/08-6/30/08) and FY10 with \$2,100,000 (7/1/08-6/30/08) while maintaining the existing funding for dropout prevention (\$700,000 per year).

Alternative Education Network: The above has resulted in a network of regional programs designed at the local level to meet the needs of students at risk of dropping out. Most programs are either directly connected with, or associated with, existing regional Career and Technical Centers. Other programs are primarily designed to offer an integrated day and adult high school model, with courses offered from 7:30 am to 8 pm in a given community. Several others are Charter Schools, serving a region, like the North Country Charter Academy, with a primary focus on dropout prevention and recovery. Multiple sources of funds have been found to build this network, which is a work in progress. The priority is to make programs and resources available where the need is high, based on current dropout figures. **Attachment D** is a summary of state funded dropout prevention programs. **Attachment E** is a list of Alternative Programs, CTE Centers, and Adult Education programs associated with each New Hampshire High School.

K-12 New Hampshire Curriculum Frameworks

(b)(6)



K-12 Reading New Hampshire Curriculum Framework

(b)(6)

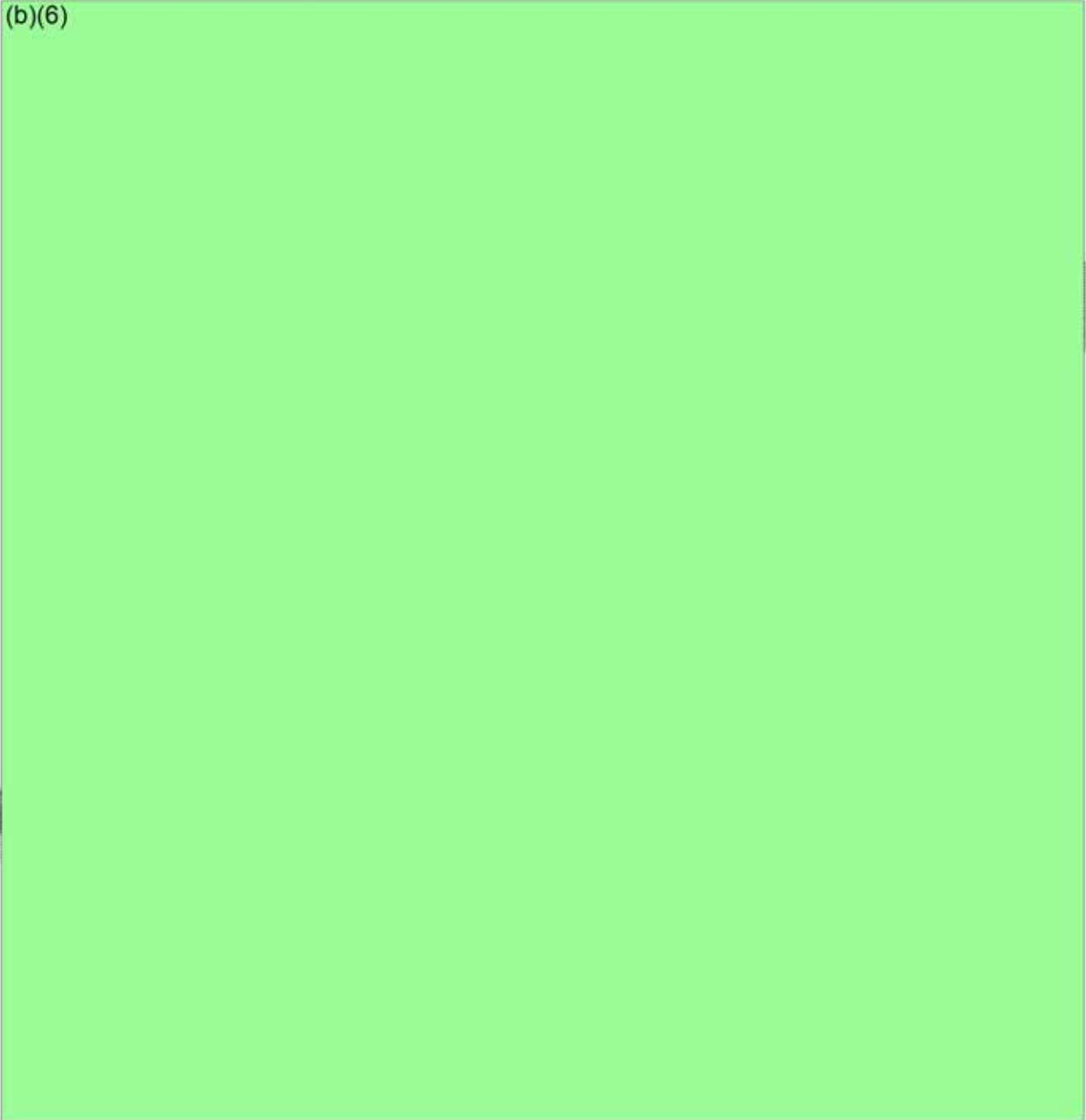


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K-12 New Hampshire Curriculum Frameworks

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Introduction

The purpose of this framework is to serve (1) as the basis for the development of assessment instruments to be administered statewide and (2) as a guide for making local decisions about curriculum development and delivery, in accordance with RSA 193-C relative to the New Hampshire Educational Improvement and Assessment Program.

This framework establishes curriculum and expectations for English language arts. This is the accepted professional term for the subject area of reading and language arts as it is taught throughout the grades. “English” is more commonly used in high school; “language arts,” in most elementary and middle/junior high schools. The English language arts consist of the interactive processes of reading, writing, speaking, listening, and viewing.

This framework will be used at the local level, in conjunction with assessment results, as a guide for making decisions about development of curriculum, delivery of instruction and utilization of classroom, school, and district assessments. Educators, school board members, and citizens are encouraged to work cooperatively to develop local educational improvement and assessment plans that build on and complement the state effort.

How this framework is organized

The *K-12 English Language Arts Curriculum Framework* is organized into Grade-Level Expectations (GLEs) and Grade-Span Expectations (GSEs). Both the GLEs and GSEs contain statements about what all New Hampshire students are expected to know and be able to do. The GLEs are delineated by grade level across grades K-8. The GSEs are organized by grade spans of 9-10 and 11-12. Both the GLEs and GSEs are built upon the *K-12 English Language Arts Curriculum Framework* (1995).

Both the GLEs and GSEs are organized into five content strands for Reading: Vocabulary, Initial Understanding of Literary Texts, Analysis and Interpretation of Literary Texts, Initial Understanding of Informational Texts and Analysis and Interpretation of Informational Texts. There are eight strands for Written and Oral Communication: Habit of Writing, Structures of Language, Writing in Response to Literary Text, Writing in Response to Informational Text, Narratives, Informational Writing, Writing Conventions and Oral Communication Strategies.

At the beginning of each strand is a purpose statement which places the strand in the context of the K-12 English Language Arts curriculum. Furthermore, each strand contains a number of big ideas referred to as stems. The stems articulate the main curricular focus across grades K-12.

There are two types of expectations throughout the document, those identified for state assessment purposes and those identified for local curriculum and assessment. The state assessment expectations appear in bold boxes; all other expectations are guidance for local curriculum and assessment.

K-12 Broad Goals for English-Language Arts

These goal statements establish general expectations of what New Hampshire students should know and be able to do in English language arts.

- Students will read fluently with understanding and appreciation.
- Students will write effectively for a variety of purposes and audiences.
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- Students will use reading, writing, speaking, listening, and viewing to:
 - gather and organize information;
 - communicate effectively; and
 - succeed in educational, occupational, civic, and social settings.

Reading

Purpose: The ability to read is essential for students to succeed as learners, both in school and throughout their lives, and to become contributing members of society. Students must be able to deal critically with a variety of complex texts including literary, informational, and practical. Good readers combine the inclination to read with the ability to use monitoring and discussion to develop understanding. They employ multiple strategies and processes to understand the written word. Throughout their formal instruction, students should read authentic materials including worthy examples of literature as well as texts that reinforce other content areas of the school's curriculum.

Writing

Purpose: Through writing students transmit information, construct and communicate good ideas. Good writers employ language successfully in a wide range of settings for academic, personal, occupational, and public uses. Frequent writing practice across a variety of situations and tasks and in all content areas enables students to refine and expand both their knowledge base and their thinking skills.

English Language Uses

Purpose: Students need to learn how to use language to communicate in multiple ways and for multiple purposes. To this end, the language processes of reading, writing, speaking, listening, and viewing must become integral parts of their lives. By systematically employing these interactive processes, students are able to gather needed information and to prioritize and organize this material. The skillful use of these language processes provides students with the means of acquiring, constructing, and expressing knowledge in all school content areas and in the human experience. In order to be successful, students must become powerful users of language.

K-12 Written and Oral Communication New Hampshire Curriculum Framework

(b)(6)



June 2006

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New Hampshire Curriculum Framework Written and Oral Communication

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New Hampshire Curriculum Framework **Written and Oral Communication**

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New Hampshire Curriculum Framework Written and Oral Communication

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Writing

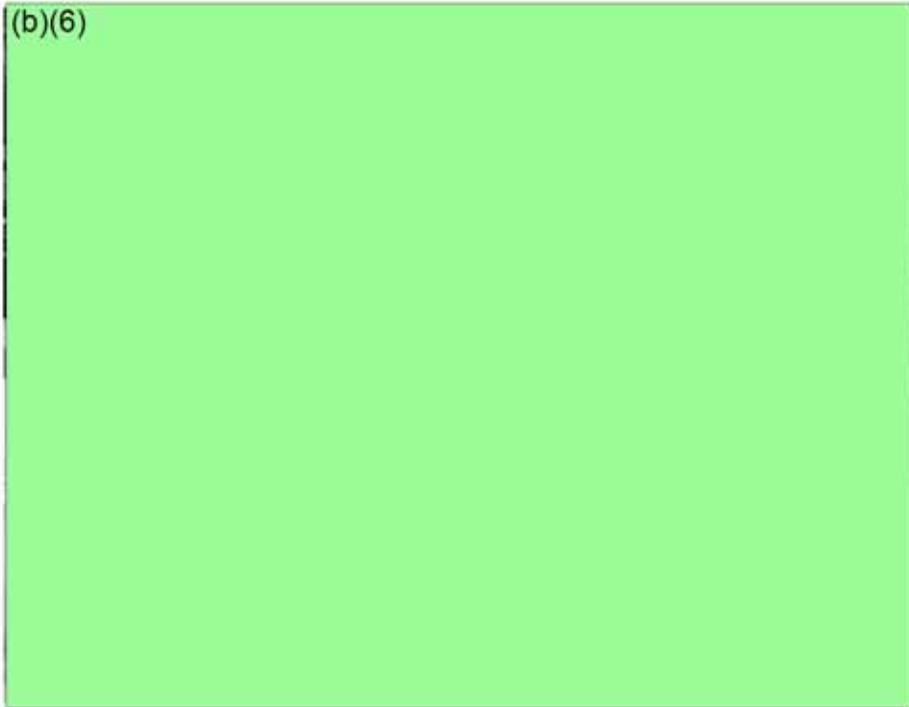
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K–12 Mathematics New Hampshire Curriculum Framework

(b)(6)



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How this framework is organized

The material in the K-12 Mathematics Curriculum Framework is organized into Grade-Level Expectations (GLEs) and Grade-Span Expectations (GSEs). Both GLEs and GSEs contain statements about what ALL New Hampshire students are expected to know and be able to do. GLEs are standards that are delineated by grade level covering grades K-8. GSEs are standards that cover the high school span. Both the GLEs and GSEs are built upon the extensive work that went into the 1995 K-12 Mathematics Curriculum Framework and the earlier 1993 K-3 monograph.

Both the GLEs and GSEs are organized into four content strands (Number and Operations; Geometry and Measurement; Functions and Algebra; Data, Statistics, and Probability) and two process strands (Problem Solving, Reasoning, and Proof; Communication, Connections, and Representations).

At the beginning of each strand is a purpose statement which places the strand in the context of a K-12 mathematics program. Furthermore, each strand contains a number of big ideas referred to as stems. The stems articulate the main curricular focus and stay the same or similar across grades.

There are two types of standards throughout the document. Those identified for state assessment purposes and those identified for local curriculum and assessment. The state assessment standards appear in bold boxes; all other standards are guidance for local curriculum and assessment.

The organization of the GLEs and GSEs is further clarified in *About the Mathematics GLEs*, *Reading the Mathematics GLEs*, *About the Mathematics GSEs*, and *Reading the Mathematics GSEs*.

Rationale

In the early part of the 20th century, the needs of our society were dominated by an emerging industrial age driven by mass production. The needs of that society were served by mathematics education in which the acquisition of computational skills was the primary focus. Computational skills alone are no longer sufficient for the United States to remain competitive in the world marketplace. The economy is global, the economic environment is more competitive, the workforce is more mobile, and developments in technology are changing rapidly.

The level of mathematics needed for both intelligent citizenship and the workplace has increased dramatically. Although the acquisition of computational skills remains important, it is not sufficient. The definition of basics skills in mathematics must change to include mathematical problem solving, reasoning, the ability to communicate, and the use of appropriate technology in addition to being able to compute. Individuals need to be able to apply their understanding of mathematics to solve real-world problems for which there are no simple formulas and standard procedures. Individuals need to be able to use their knowledge of mathematics to make sense of complex situations and then communicate that understanding to others. Individuals need to be able to solve tomorrow's problems, as well as today's. Mathematics education in our schools must address these needs.

GOALS FOR MATHEMATICS EDUCATION

We commit to six primary goals. These goals are closely aligned with those espoused by various national commissions and groups in their efforts to reshape the teaching and learning of mathematics.

- All students will develop a firm grounding in number sense that includes computational fluency.
- All students will develop a basic understanding of key concepts and principles central to the study of geometry, algebra, probability, and data analysis, while appreciating the interrelationships of all areas of mathematics.
- All students will develop strong mathematical problem solving and reasoning abilities.
- All students will develop positive attitudes about mathematics.
- All students will develop the ability to use appropriate technology to solve mathematical problems.
- All students will develop the ability to communicate their understanding of mathematics effectively.

THE LEARNING ENVIRONMENT

The New Hampshire Mathematics Curriculum Framework provides a set of goals and standards for what ALL New Hampshire students are expected to know and be able to do. However, the “what” of the goals and standards needs to be considered in the context of the “how” of mathematics teaching and learning (i.e., what type of learning environments will foster students’ mathematical development consistent with the goals and standards). Every school-learning environment has several key components including the teachers, the learners, and the curriculum.

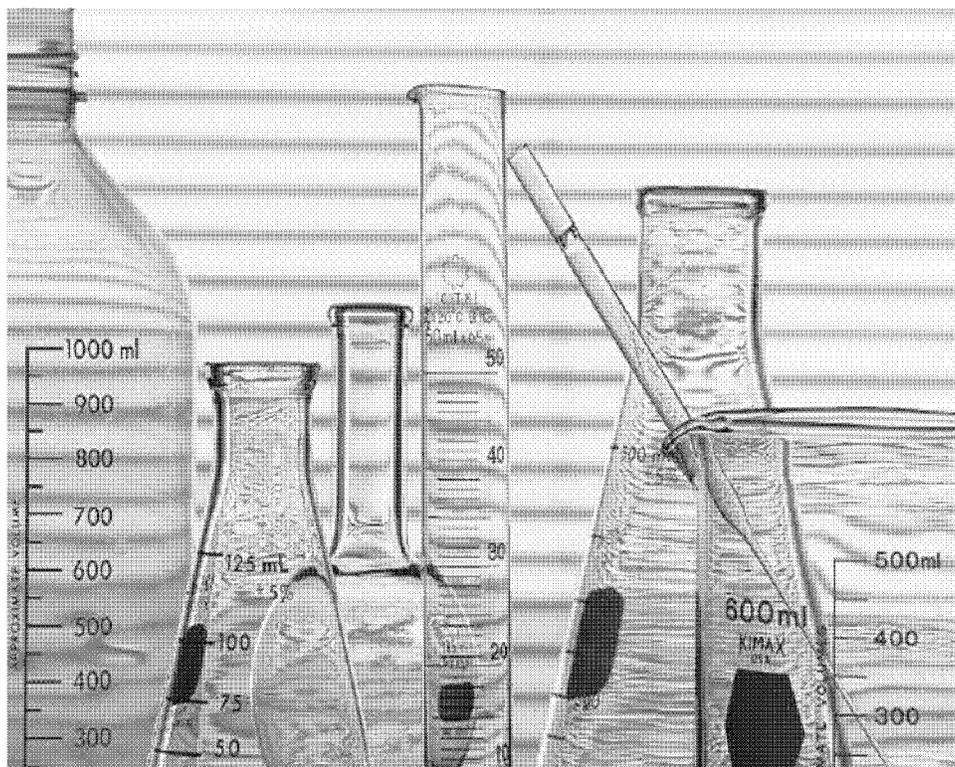
Knowledge needs to be well connected. Students who have memorized facts and procedures without understanding often do not know when or how to apply them. When students learn mathematics by doing mathematics, by exploring and discussing concepts in the context of physical situations, what emerges from these experiences are skills that are anchored in understanding and clarity. The students not only know the basic procedures, but also know how to apply them to new situations.

The attitudes students form influence their thinking and performance, and later, influence their decisions about studying mathematics. Students are active individuals who build new knowledge from experience and prior knowledge. The learning of mathematics must be an active process. The teacher plays a key role in establishing a learning environment where discussion and collaboration are expected and fostered, students are expected to justify their thinking, construct mathematical arguments, and experiment with various approaches. Beyond the physical environment, an attitude needs to be prevalent that all students can learn and that they will all be supported in efforts to attain this goal.

A learning environment that supports the stated goals for mathematics education has the following characteristics:

- students are actively involved in doing mathematics;
- problem solving, thinking, reasoning, and communicating are everyday activities;
- central mathematical concepts are understood;
- an appropriate balance between application and acquisition of knowledge and skills exists;
- manipulatives are used, when appropriate, to connect conceptual to procedural understanding;
- technology is used in appropriate ways;
- the curriculum is coherent and well-articulated across grade levels; and
- assessment is an integral part of instruction.

K-12 Science Literacy New Hampshire Curriculum Framework



June 2006

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Philosophy of the Frameworks**How do the new frameworks differ from the old ones?**

Science should not be approached as a collection of isolated abilities and bits of information, but as a rich fabric of mutually supported ideas and skills that must develop overtime. From primary school to high school what students learn should build on what they learned before, makes sense in terms of what else they are learning, and prepare them for what they will learn next¹. This framework looks at how kids perceive and interact with the world.

One of the major changes from the earlier framework can be seen the structure of the new frameworks reflecting the developmental stages of children. To help districts develop curricula for all grade levels, the new Frameworks for Science Literacy includes Grade Span Expectations (GSEs) that break down the content into specific grade spans (K-2, 3-4, 5-6, 7-8, 9-12). Each span lists proficiencies which indicate what all students should know and be able to do by the end of that grade span.

The old framework had six strands: 1) Inquiry; 2) Science, Technology and Society; 3) Life Science; 4) Earth Space Science; 5) Physical Science; and 6) Unifying Themes. Many district curricula had little to no emphasis on strands 1, 2, and 6. In the new edition, Science is divided into three content domains (Earth Space Science, Life Science, and Physical Science) and one Science Process Skills domain. Ideas and objectives which correspond to the 1995 Science Framework strands 1, 2, and 6 have been rolled into each of the new strands.

Science Process Skills (SPS) is a new addition to the Frameworks. It reflects the need to make sure that in the early years students develop specific skill sets that will help them be successful in future science experiences. The last section of the skills strand, SPS4, looks at goals for Information and Computer Technology standards in Science. This was included to help districts meet the needs of all students and to meet the new ICT requirements for K-8 and 9-12 digital portfolios.

Everything in the old framework could be the subject of the state assessment in science. In the new framework, only specific proficiencies will be part of the upcoming NECAP Science Assessment. These “NECAP Science Targets” are clearly marked in bold boxes throughout the GSEs for each grade span. They are also referenced in the Science Process Skills documents as they connect to Inquiry and the Unifying themes of science. The other proficiencies should become part of each districts local science assessment system.

¹ *Atlas of Science Literacy*, American Association for the Advancement of Science, 2001, page 3

Why include Design Technology in Science?

Science comprises our knowledge about the natural world and the processes by which that knowledge is acquired, synthesized, evaluated, and applied. Therefore, science education must emphasize hands-on exploration and direct experience with the natural world. Students should be engaged in the observation of these phenomena whenever possible. Science is, above all, an inquiry activity that seeks answers to questions by collecting and analyzing data in an attempt to offer a rational explanation of naturally-occurring events. The knowledge that results from scientific problem solving is most useful when it is organized into concepts, generalizations, and unifying principles, which lead to further investigation of objects and events in the environment.

Science and technology are practiced in the context of human culture, and therefore, dynamic interactions occur among science, technology, and society. Each component-- inquiry and problem solving, and how these relate to each other and to society-- is critically important to instruction at every grade level.

Technology concerns the human-made world. Technology is much older than science, and has its roots in the very early use of tools by our human-like ancestors. Enabling our children to understand how humans modify the natural world to solve problems and to meet human needs and desires is equally as important as teaching them how to inquire about the natural world. And of course, these two endeavors are related. The reason for including technology along with science in the curriculum is stated in the National Science Education Standards: “Although these are science education standards, the relationship between science and technology is so close that any presentation of science without developing an understanding of technology would portray an inaccurate picture of science.”² The National Standards goes on to define technology and its relationship to science as follows:

“As used in the Standards, the central distinguishing characteristic between science and technology is a difference in goal: The goal of science is to understand the natural world, and the goal of technology is to make modifications in the world to meet human needs. Technology as design is included in the Standards as parallel to science as inquiry.”³

In order to broaden our students’ career opportunities and awareness it is also important that they learn distinction between the occupations of scientist and engineer: Scientists propose explanations for questions about the natural world, and engineers propose solutions relating to human problems, needs, and aspirations. Scientists and engineers frequently work together in teams, along with people from other fields, to tackle the essential issues facing our society.

² *National Science Education Standards*, National Research Council, Washington, D.C.: National Academy Press, 1996, page 190.

³ *Ibid.* page 24.

K-12 Broad Goals of Science Education

1. Students will use inquiry strategies to investigate and understand the natural world.
2. Students will demonstrate an understanding of key concepts and principles central to the biological, physical, and earth sciences, and engineering, while recognizing the interrelationship of all the sciences.
3. Students will demonstrate an understanding of the basic laws which govern and explain phenomena observed in the natural world
4. Students will demonstrate an understanding of, and be able to practice, the basic processes which scientists use to obtain and continually revise knowledge about the natural world.
5. Students will perceive that scientific and technological knowledge is the result of the cumulative efforts of people, past and present, who have attempted to explain the world through an objective, peer-tested, rational approach to understanding natural phenomena and occurrences.
6. Students will display a sense of curiosity and wonder about the natural world, and demonstrate an increasing awareness of the interdependence between all living things and the environment.
7. Students will demonstrate their abilities to identify human needs and concerns and to engage in problem-solving processes to define the problem, research and generate solutions, and develop simulations and prototypes to test their ideas before implementation.
8. Students will be able to apply rational, creative-thinking, and investigative skills and use scientific and technical knowledge in their roles as citizens, workers, family members, and consumers in an increasingly technological society.
9. Students will use oral and written communication, mathematical representation, and physical and conceptual models to describe and explain scientific concepts and ideas, and will be able to apply scientific and technical knowledge.
10. Students will know and employ safe practices and techniques in the laboratory, in field work or any other scientific investigation, and when using scientific or technological materials at home or work.

The History of the New Hampshire Science Frameworks

The state of New Hampshire adopted the NH Science Frameworks in February 1995. These frameworks, based on the draft *National Science Education Standards*⁴ and *Benchmarks for Science Literacy*⁵, provided guidance for what we would assess in our state science assessment. We tested all students in NH in science at the ends of grades 6 and 10 to determine how well districts were developing science curricula which would improve what all students should know and be able to do in science. Due to budgetary constraints, NH suspended the Science Assessment in school year 2003-2004.

Realizing that NCLB required a science assessment by 2008, in March 2004 we began a thorough review of the NH Science Frameworks and relative research and literature. The goal of this process was to revise our science frameworks to reflect changes in our understanding of how children learn science in the classroom and to guide the development of a rigorous science assessment that will drive change in instructional practice.

As we began our internal review, we joined with Rhode Island and Vermont to develop guidance for a common assessment that would look at specific content covered in all three states frameworks (standards). We spent a great deal of time analyzing the research about how students learn and looked at how to focus our assessment on those things that would improve classroom practice and expose more students, across all three states, to challenging science curricula. The NECAP Science Assessment will be given at the end of Grades 4, 8, and 11 and will consist of three test sessions (one session will be performance).

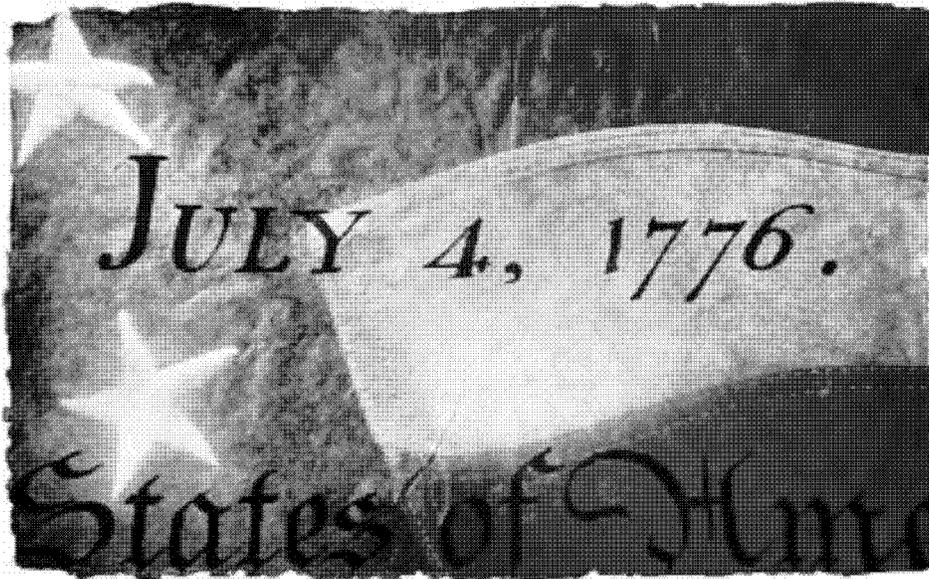
More than one hundred and fifty NH educators and community members were involved with the revision process. The revised frameworks, now referred to as the *New Hampshire Frameworks for Science Literacy K-12*, were approved by the New Hampshire State Board of Education in June 2006.

The New Hampshire Frameworks for Science Literacy K-12 includes Grade Span Expectations (GSEs) which clearly delineate expected content for 2 or 3 year grade spans. NECAP Science Assessment Targets are highlighted but they are not the only things included in the framework. In order to provide guidance but allow for some local flexibility, grade spans include: K to 4 (K-2, 3-4); 5 to 8 (5-6, 7-8); and 9 to 12 (9-11 basic, 11 -12 advanced level).

⁴ *National Science Education Standards*, © 1995, National Academy of Science

⁵ *Benchmarks for Science Literacy*, © 1993, American Association for the Advancement of Science

K-12 Social Studies New Hampshire Curriculum Framework



June 2006

www.ed.state.nh.us/frameworks

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**Achieve's Comparison of the
American Diploma Project (ADP) English Benchmarks
with the
Rhode Island High School Grade-Span Expectations (GSEs) for
Reading, Writing, and Oral Communication for Grades 9-10, 11-12**

June 30, 2006

**ACHIEVE'S
BENCHMARKING INITIATIVE**

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ACHIEVE'S METHODOLOGY

Achieve, Inc. has been asked to review the Rhode Island expectations for high school exit in reading, writing and oral communication against the American Diploma Project (ADP) English Benchmarks to determine any gaps in alignment. For the purposes of this comparison, Achieve staff constructed a side-by-side chart comparing Achieve's ADP Benchmarks to the draft Rhode Island High School Grade Span Expectations (GSEs) for Grades 9-10 and Grades 11-12 in reading, writing, and oral communication.

Achieve has been conducting reviews of standards for seven years, by benchmarking a state's Academic Standards to "exemplary standards." In this review, Achieve's American Diploma Project (ADP) Benchmarks for College and Workplace Readiness were used as the basis of comparison for the review of the Rhode Island GSEs.

THE DEVELOPMENT OF THE AMERICAN DIPLOMA PROJECT (ADP) BENCHMARKS FOR COLLEGE AND WORKPLACE READINESS

The American Diploma Project (ADP) commissioned leading economists to examine labor market projections for the most promising jobs—those that pay enough to support a small family and provide real potential for career advancement—to pinpoint the academic knowledge and skills required for success in those occupations. ADP then surveyed officials from 22 occupations, ranging from manufacturing to financial services, about the skills they believe are most useful for their employees to bring to the job. Following those conversations, ADP worked closely with two- and four-year postsecondary leaders in the partner states to determine the prerequisite English and mathematics knowledge and skills required for success in entry-level, credit-bearing courses in English, mathematics, the sciences and the humanities. The resulting ADP Benchmarks reflect an unprecedented convergence in what these employers and postsecondary faculty say are needed for new employees and freshmen entering credit-bearing coursework to be successful. In mathematics, the Benchmarks reflect a rigorous four-year course sequence that includes content typically taught in Algebra I, Geometry and Algebra II, as well as some data analysis and statistics. In English, the Benchmarks reflect four years of grade-level high school courses that emphasize logic, writing and research. The ADP Benchmarks and sample tasks from employers and postsecondary faculty may be found at www.achieve.org.

Achieve, Education Trust and the Thomas B. Fordham Foundation launched ADP to help states restore the diploma's value by anchoring high school graduation standards to those of jobs and colleges. Toward that end, ADP moves beyond the kinds of standards that reflect experts' consensus view of what is *desirable* for students to learn, to expectations linked directly to the *essential* demands faced by students preparing for college, work and citizenship. These benchmarks are not test blueprints; a fair number of the benchmarks are not able to be assessed through on-demand measures, for example. Rather, they are intended to describe the knowledge and skills that are needed by high school graduates in order to be prepared to achieve in multiple postsecondary venues.

DOCUMENTS USED FOR REVIEW

The New England Common Assessment Program Reading and Writing Grade Level Expectations (GLEs) have been developed as a means to identify the reading and writing content knowledge and skills expected of all students of reading in Grades 3-8 and of writing in Grades 5 and 8. Reviewed in this report are the draft Rhode Island High School GSEs for Grades 9-10 and Grades 11-12, which have been developed for public review and comment. GLEs and GSEs are intended to capture the “big ideas” of reading, writing, and speaking that can be assessed without narrowing the curriculum locally.

Achieve also analyzed the Rhode Island Board of Governors for Higher Education Entry-Level Expectations, which were developed by the PK-16 Language Arts Advisory Committee, a working committee of the PK-16 Council chaired by Governor Donald Carcieri, which describe the skills and knowledge required by incoming students if they are to succeed in the state’s higher education institutions. Since these were developed with the same intention of assuring that Rhode Island’s high school graduates are ready to succeed in the postsecondary world, Achieve examined the alignment of these two sets of goals for high school students.

ALIGNMENT OF RHODE ISLAND’S HIGH SCHOOL ENGLISH GSEs WITH THE ADP BENCHMARKS

In general, the Rhode Island GSEs for reading, writing, and oral communication align quite well with the ADP Benchmarks. The state acknowledges that these expectations are not intended to define the complete range of instruction for reading, writing, and oral communication, and, in the same manner, the ADP Benchmarks are not intended to encompass all instruction but rather to call out those skills that are necessary for postsecondary success. Both documents align in terms of major skills in language, oral communication, writing, research, informational text, and literature. Particularly strong agreement, for example, is evident in both documents’ descriptions of what is entailed in effective oral presentations.

ADP	Rhode Island GSE
<p>B6. Make oral presentations that:</p> <ul style="list-style-type: none"> ▪ exhibit a logical structure appropriate to the audience, context and purpose; ▪ group related ideas and maintain a consistent focus; 	<p>OC—10—2 [OC—12—2] In oral communication, students make oral presentations ...</p> <p>OC—10—2.1 Exhibiting logical organization and language use, appropriate to audience, context, and purpose</p> <p>OC—10—2.2 [OC—12—2.2] Maintaining a consistent focus</p>
<ul style="list-style-type: none"> ▪ include smooth transitions ▪ support judgments with sound evidence and well-chosen details; ▪ make skillful use of rhetorical devices; ▪ provide a coherent conclusion; 	<p>OC—10—2.3 [OC—12—2.3] Including smooth transitions, supporting thesis with well-chosen details, and providing a coherent conclusion</p>
<ul style="list-style-type: none"> ▪ employ proper eye contact, speaking rate, volume, enunciation, inflection and gestures to communicate ideas effectively 	<p>OC—10—2.5 [OC—12—2.5] Using a variety of strategies of address (e.g., eye contact, speaking rate, volume, articulation, enunciation, pronunciation, inflection, voice modulation, intonation, rhythm, and gesture) to communicate ideas effectively</p>

Rhode Island’s GSEs are among the few state standards that document the criteria for an effective oral presentation so well. Indeed, the necessity for being able to present ideas in an oral presentation format is present in many venues, both in the academic and business world. It is important that such skills be clearly delineated and practiced.

Only two elements cited in the ADP Benchmarks are absent from the Rhode Island GSE—supporting judgments with sound evidence and making skillful use of rhetorical devices (highlighted in the above table). Although seemingly minor, these elements of rigor that are repeatedly emphasized in the ADP document and may be somewhat weak in the Rhode Island GLEs. As argued by George Hillocks, Jr. in his book *The Testing Trap: How State Writing Assessments Control Learning*¹:

¹ Teachers College Press, 2002.

Most scoring rubrics that we examined do not call for evidence, only support. In most cases, the benchmark papers indicate that support means general elaboration . . . rather than specific, warranted evidence. (202)

Although Hillocks is referring specifically here to writing assessments, the caution remains the same—details are not the same as evidence. Just as Hillocks argues for logic and evidence, so do the ADP Benchmarks place a priority on critical thinking in messages delivered in all media, including the both the oral and the written.

In the case of the academic essay, however, the GSEs are not only aligned to the ADP Benchmarks, but also go beyond those set by ADP in terms of the level of detail provided. These GSEs should prove extremely helpful both to students and teachers in determining those elements of writing an essay that contribute to a successful piece of writing, thus guiding the development of both internal and external criteria for students.

ADP	Rhode Island GSE
<p>C9. Write an academic essay (for example, a summary, an explanation, a description, a literary analysis essay) that:</p> <ul style="list-style-type: none"> ▪ develops a thesis; 	<p>W—10—3 [W—12—3] In response to literary or informational text, students make and support analytical judgments about text by...</p> <p>W—10—3.1a Establishing an interpretive claim/assertion in the form of a thesis (purpose), when responding to a given prompt (state)</p> <p>W—10—3.1b [W—12—3.1b] Establishing an interpretive claim/assertion in the form of a thesis (purpose)</p> <p>W—10—7.2 [W—12—7.2] Stating and maintaining a focus/controlling idea/thesis</p>
<ul style="list-style-type: none"> ▪ creates an organizing structure appropriate to purpose, audience and context; 	<p>W—10—1.4 [W—12—1.4] Applying a format and text structure appropriate to purpose, audience, and context</p> <p>W—10—7.3 Writing with a sense of audience, when appropriate</p>

<ul style="list-style-type: none"> ▪ includes relevant information and excludes extraneous information; ▪ makes valid inferences; ▪ supports judgments with relevant and substantial evidence and well-chosen details; and provides a coherent conclusion. 	<p>W—10—6.2 [W—12—6.2] Selecting appropriate and relevant information (excluding extraneous details) to set context</p> <p>W—10—8.2 [W—12—8.2] Including facts and details relevant to focus/controlling idea or thesis, and excluding extraneous information</p> <p>W—10—3.2 [W—12—3.2] Making inferences about the relationship(s) among content, events, characters, setting, theme, or author’s craft</p> <p>W—10—3.3 [W—12—3.3] Using specific details and references to text or relevant citations to support thesis, interpretations, or conclusions</p> <p>W—10—8.3 [W—12—8.3] Including sufficient details or facts for appropriate depth of information: naming, describing, explaining, comparing, contrasting, or using visual images to support intended purpose</p> <p>W—10—3.4 [W—12—3.4] Organizing ideas, using transitional words/phrases and drawing a conclusion by synthesizing information (e.g., demonstrate a connection to the broader world of ideas)</p> <p>W—10—6.4 [W—12—6.4] Drawing a conclusion by synthesizing information</p>
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In other areas, the match between the ADP Benchmarks and the GSEs is weaker, as in, for instance, the research essay. ADP found an unprecedented convergence between the knowledge and skills employers seek in new workers and those that college faculty expect of entering students. Both groups expect that high school graduates can complete a significant research report, for example. Several significant aspects of the research essay are called out by the ADP Benchmarks, but the Rhode Island GSEs address only parts of these criteria and also do not stipulate explicitly the production of such a piece of writing.

ADP	Rhode Island GSE
<p>D5. Write an extended research essay (approximately six to 10 pages), building on primary and secondary sources, that:</p> <ul style="list-style-type: none"> ▪ marshals evidence in support of a clear thesis statement and related claims; ▪ paraphrases and summarizes with accuracy and fidelity the range of arguments and evidence supporting or refuting the thesis, as appropriate; and ▪ cites sources correctly and documents quotations, paraphrases and other information using a standard format. 	<p>R—10—15.3 [R—12—15.3] Organizing, analyzing, and interpreting the information</p> <p>R—10—15.4 [R—12—15.4] Drawing conclusions/judgments and supporting them with evidence</p> <p>W—10—6.6 [W—12—6.6] Listing and citing sources using standard format</p>

Additionally, although the state expects students to participate in structured discussions, the demands of functioning within a work team as described by the ADP Benchmarks are markedly different.

ADP	Rhode Island GLE
<p>B7. Participate productively in self-directed work teams for a particular purpose (for example, to interpret literature, write or critique a proposal, solve a problem, make a decision), including:</p> <ul style="list-style-type: none"> ▪ posing relevant questions; ▪ listening with civility to the ideas of others; ▪ extracting essential information from others' input; ▪ building on the ideas of others and contributing relevant information or ideas in group discussions; ▪ consulting texts as a source of ideas; ▪ gaining the floor in respectful ways; ▪ defining individuals' roles and responsibilities and setting clear goals; ▪ acknowledging the ideas and contributions of individuals in the group; ▪ understanding the purpose of the team project and the ground rules for decision-making; ▪ maintaining independence of judgment, offering dissent courteously, ensuring a hearing for the range of positions on an issue and avoiding premature consensus; ▪ tolerating ambiguity and a lack of consensus; and ▪ selecting leader /spokesperson when necessary. 	<p>R—10—17.2 [R—12—17.2] Participating in in-depth discussions about text, ideas, and student writing by offering comments and supporting evidence, recommending books and other materials, and responding to the comments and recommendations of peers, librarians, teachers, and others.</p> <p>OC—10—1.4 [OC—12—1.4] Participating in large and small group discussions showing respect for a range of individual ideas</p> <p>OC—10—1.5 [OC—12—1.5] Reaching consensus to solve a problem, make a decision, or achieve a goal</p>

The ability to participate productively in work teams is more and more an aspect of both collegiate classrooms and the world of work at all levels. The more specifically the characteristics of performances are identified, the more likely it is that clear criteria are set and achieved by students, and the more likely the success.

A side-by-side chart that compares all of the ADP English Benchmarks to the Rhode Island GSEs in reading, writing, and speaking is included in Appendix A at the end of this report.

Areas of Non-Alignment of Rhode Island GSEs with the ADP Benchmarks

A major area of non-alignment between the ADP Benchmarks and the state's GSEs occurs because the high school standards do not explicitly address the analysis and evaluation of media. Unlike printed materials, electronic media use sound and moving images; therefore, they can convey information, entertain, and persuade in ways that are distinct from the printed word alone. Students need to view non-print media with an equally appreciative, yet discriminating, eye to learn how a work changes when it is

adapted from print to non-print media. Similarly, an equally appreciative, yet discriminating, eye is necessary for students when learning how to create their own media.

Other areas that are emphasized in the ADP Benchmarks and not in the Rhode Island GSEs include some logic, writing, and literature elements. A full listing of all the expectations included in the ADP Benchmarks and not addressed by the Rhode Island GSEs is included with commentary in Appendix B at the end of this report.

Alignment of Rhode Island GSEs to the RIBGHE Entry-Level Expectations

The RIBGHE Entry-Level Expectations also describe the skills and knowledge required of the state's students in order to succeed in the state's higher education institutions.

Addressing the areas of reading and writing, these expectations are clearly stated and are well matched by the states GSEs. Both the high school and the college-ready expectations place an emphasis on like skills in reading, including attention to vocabulary, the use of reading strategies, reading informational as well as literary texts. In terms of writing, the two sets are also well aligned, focusing on both the products of writing in a variety of genres, and also on the processes of composition. The GSEs also include expectations for oral presentations and active listening. Although the college-ready expectations do not include these areas, attention to such skills could only serve to increase a student's success in a college course.

The two sets of expectations deliver a singular message to the state's high school students. Students who meet the high school skill levels described will also be well prepared to meet those expectations described by RIBGHE.

Conclusion

The standard against which student expectations are measured is whether or not the public description of the knowledge and skills is clear enough to articulate a goal for students and transparent enough to guide instruction toward that goal. The Rhode Island GSEs appear to provide sufficient guidance in many aspects of the ADP Benchmarks so that the state's students are offered the opportunity to succeed in their postsecondary endeavors.

In English, the ADP Benchmarks demand strong communication skills, as well as the analytic and reasoning skills typically associated with today's advanced and honors classes. Whether interpreting an introductory economics text in a college classroom or communicating safety rules to a construction crew, high school graduates must master content and skills beyond those expected by present state standards. The state's GSEs appear to approach quite clearly those postsecondary needs.

APPENDIX A: SIDE-BY-SIDE COMPARISON OF THE ADP ENGLISH BENCHMARKS TO THE RHODE ISLAND GRADE SPAN EXPECTATIONS

American Diploma Project	Rhode Island Grade Span Expectations POST Field Review draft NH and RI High School Reading GSEs Version 5.0; 9/2004 Written and Oral Communication GSEs Version 4.0; 9/2004
A. Language	
A1. Demonstrate control of standard English through the use of grammar, punctuation, capitalization and spelling.	<p>W—10—9 [W—12—9] In independent writing, students demonstrate command of appropriate English conventions by...</p> <p>W—10—9.1 [W—12—9.1] Applying rules of standard English usage to correct grammatical errors</p> <p>W—10—9.2 [W—12—9.2] Applying capitalization rules</p> <p>W—10—9.4 [W—12—9.4] Applying appropriate punctuation to various sentence patterns to enhance meaning</p> <p>W—10—9.5 [W—12—9.5] Applying conventional and word-derivative spelling patterns/rules</p>
A2. Use general and specialized dictionaries, thesauruses and glossaries (print and electronic) to determine the definition, pronunciation, etymology, spelling and usage of words.	<p>R—10—2.1 [R—12—2.1] Using strategies to unlock meaning (e.g., knowledge of word structure, including prefixes/suffixes, base words, common roots, or word origins; or context clues; or general and specialized print or electronic resources, including dictionaries, glossaries, or thesauruses to determine definition, pronunciation, etymology, or usage of words; or prior knowledge)</p>
A3. Use roots, affixes and cognates to determine the meaning of unfamiliar words.	
A4. Use context to determine the meaning of unfamiliar words.	
A5. Identify the meaning of common idioms, as well as literary, classical and biblical allusions; use them in oral and written communication.	<p>R—10—3.1 [R—12—3.1] Identifying synonyms, antonyms, homonyms/ homophones, shades of meaning, analogies, idioms, or word origins, including words from dialects, or other languages that have been adopted into our language/standard English.</p>
A6. Recognize nuances in the meanings of words; choose words precisely to enhance communication.	<p>R—10—3.2 [R—12—3.2] Selecting appropriate words or explaining the use of words in context, including connotation or denotation, shades of meanings of words/nuances, or idioms; or use of content-specific vocabulary, words with multiple meanings, precise language, or technical vocabulary</p>
A7. Comprehend and communicate quantitative, technical and mathematical information.	
B. Communication	
B1. Give and follow spoken instructions to perform specific tasks, to answer questions or to	<p>OC—10—1.1 [OC—12—1.1] Following verbal instructions, to perform specific tasks, to answer</p>

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solve problems.	questions, or to solve problems
B2. Summarize information presented orally by others.	OC—10—1.2 Summarizing, paraphrasing, questioning, or contributing to information presented [OC—12—1.2: to advance understanding]
B3. Paraphrase information presented orally by others.	
B4. Identify the thesis of a speech and determine the essential elements that elaborate it.	OC—10—1.3 [OC—12—1.3] Identifying the thesis of a presentation, determining the essential elements of elaboration, and interpreting or evaluating the message
B5. Analyze the ways in which the style and structure of a speech support or confound its meaning or purpose.	W—10—1.3 [W—12—1.3] Recognizing organizational structures within paragraphs or within texts EXAMPLES (of text structures): description, sequence, chronology, proposition/support, compare/contrast, problem/solution, cause/effect, investigation, <u>deductive/inductive</u>
B6. Make oral presentations that: ▪ exhibit a logical structure appropriate to the audience, context and purpose;	OC—10—2 [OC—12—2] In oral communication, students make oral presentations ... OC—10—2.1 Exhibiting logical organization and language use, appropriate to audience, context, and purpose
▪ group related ideas and maintain a consistent focus;	OC—10—2.2 [OC—12—2.2] Maintaining a consistent focus
▪ include smooth transitions	OC—10—2.3 [OC—12—2.3] Including smooth transitions, supporting thesis with well-chosen details, and providing a coherent conclusion
▪ support judgments with sound evidence and well-chosen details;	
▪ make skillful use of rhetorical devices;	
▪ provide a coherent conclusion;	OC—10—2.5 [OC—12—2.5] Using a variety of strategies of address (e.g., eye contact, speaking rate, volume, articulation, enunciation, pronunciation, inflection, voice modulation, intonation, rhythm, and gesture) to communicate ideas effectively
▪ employ proper eye contact, speaking rate, volume, enunciation, inflection and gestures to communicate ideas effectively.	
B7. Participate productively in self-directed work teams for a particular purpose (for example, to interpret literature, write or critique a proposal, solve a problem, make a decision), including: ▪ posing relevant questions; ▪ listening with civility to the ideas of others; ▪ extracting essential information from others' input; ▪ building on the ideas of others and contributing relevant information or ideas in group discussions; ▪ consulting texts as a source of ideas; ▪ gaining the floor in respectful ways; ▪ defining individuals' roles and responsibilities	R—10—17.2 [R—12—17.2] Participating in in-depth discussions about text, ideas, and student writing by offering comments and supporting evidence, recommending books and other materials, and responding to the comments and recommendations of peers, librarians, teachers, and others. OC—10—1.4 [OC—12—1.4] Participating in large and small group discussions showing respect for a range of individual ideas OC—10—1.5 [OC—12—1.5] Reaching consensus to solve a problem, make a decision, or achieve a

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<p>and setting clear goals;</p> <ul style="list-style-type: none"> ▪ acknowledging the ideas and contributions of individuals in the group; ▪ understanding the purpose of the team project and the ground rules for decision-making; ▪ maintaining independence of judgment, offering dissent courteously, ensuring a hearing for the range of positions on an issue and avoiding premature consensus; ▪ tolerating ambiguity and a lack of consensus; and ▪ selecting leader /spokesperson when necessary. 	goal
C. Writing	
C1. Plan writing by taking notes, writing informal outlines and researching.	
C2. Select and use formal, informal, literary or technical language appropriate for the purpose, audience and context of the communication.	<p>W—10—7.4 [W—12—7.4] Establishing an authoritative voice</p> <p>W—10—7.5 [W—12—7.5] Using precise and descriptive language that clarifies and supports intent</p> <p>W—12—7.3 Selecting and using formal, informal, literary, or technical language appropriate to audience and context</p>
C3. Organize ideas in writing with a thesis statement in the introduction, well-constructed paragraphs, a conclusion and transition sentences that connect paragraphs into a coherent whole.	<p>W—10—3.4 [W—12—3.4] Organizing ideas, using transitional words/phrases and drawing a conclusion by synthesizing information (e.g., demonstrate a connection to the broader world of ideas)</p> <p>W—10—1 [W—12—1] Students demonstrate command of the structures of sentences, paragraphs, and text by...</p> <p>W—10—1.2 [W—12—1.2] Using paragraph structures appropriately (e.g., block or indented format)</p> <p>W—10—6.3 [W—12—6.3] Using transitional words or phrases appropriate to text structure</p>
C4. Drawing on readers' comments on working drafts, revise documents to develop or support ideas more clearly, address potential objections, ensure effective transitions between paragraphs and correct errors in logic.	
C5. Edit both one's own and others' work for grammar, style and tone appropriate to audience, purpose and context.	<p>W—10—9 [W—12—9] In independent writing, students demonstrate command of appropriate English conventions by...</p> <p>W—10—9.1 [W—12—9.1] Applying rules of</p>

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	<p>standard English usage to correct grammatical errors</p> <p>W—10—9.2 [W—12—9.2] Applying capitalization rules</p> <p>W—10—9.4 [W—12—9.4] Applying appropriate punctuation to various sentence patterns to enhance meaning</p> <p>W—10—9.5 [W—12—9.5] Applying conventional and word-derivative spelling patterns/rules</p>
C6. Cite print or electronic sources properly when paraphrasing or summarizing information, quoting, or using graphics.	W—10—6.6 [W—12—6.6] Listing and citing sources using standard format
C7. Determine how, when and whether to employ technologies (such as computer software, photographs and video) in lieu of, or in addition to, written communication.	OC—10—2.6 [OC—12—2.6] Using tools of technology to enhance message
C8. Present written material using basic software programs (such as Word, Excel and PowerPoint) and graphics (such as charts, ratios and tables) to present information and ideas best understood visually.	
<p>C9. Write an academic essay (for example, a summary, an explanation, a description, a literary analysis essay) that:</p> <ul style="list-style-type: none"> ▪ develops a thesis; 	<p>W—10—3 [W—12—3] In response to literary or informational text, students make and support analytical judgments about text by...</p> <p>W—10—3.1a Establishing an interpretive claim/assertion in the form of a thesis (purpose), when responding to a given prompt (state)</p> <p>W—10—3.1b [W—12—3.1b] Establishing an interpretive claim/assertion in the form of a thesis (purpose)</p> <p>W—10—7.2 [W—12—7.2] Stating and maintaining a focus/controlling idea/thesis</p>
<ul style="list-style-type: none"> ▪ creates an organizing structure appropriate to purpose, audience and context; 	<p>W—10—1.4 [W—12—1.4] Applying a format and text structure appropriate to purpose, audience, and context</p> <p>W—10—7.3 Writing with a sense of audience, when appropriate</p>
<ul style="list-style-type: none"> ▪ includes relevant information and excludes extraneous information; 	<p>W—10—6.2 [W—12—6.2] Selecting appropriate and relevant information (excluding extraneous details) to set context</p> <p>W—10—8.2 [W—12—8.2] Including facts and details relevant to focus/controlling idea or thesis.</p>

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	and excluding extraneous information
<ul style="list-style-type: none"> ▪ makes valid inferences; 	W—10—3.2 [W—12—3.2] Making inferences about the relationship(s) among content, events, characters, setting, theme, or author’s craft
<ul style="list-style-type: none"> ▪ supports judgments with relevant and substantial evidence and well-chosen details; and 	<p>W—10—3.3 [W—12—3.3] Using specific details and references to text or relevant citations to support thesis, interpretations, or conclusions</p> <p>W—10—8.3 [W—12—8.3] Including sufficient details or facts for appropriate depth of information: naming, describing, explaining, comparing, contrasting, or using visual images to support intended purpose</p>
<ul style="list-style-type: none"> ▪ provides a coherent conclusion. 	<p>W—10—3.4 [W—12—3.4] Organizing ideas, using transitional words/phrases and drawing a conclusion by synthesizing information (e.g., demonstrate a connection to the broader world of ideas)</p> <p>W—10—6.4 [W—12—6.4] Drawing a conclusion by synthesizing information</p>
<p>C10. Produce work-related texts (for example, memos, e-mails, correspondence, project plans, work orders, proposals, bios) that:</p>	
<ul style="list-style-type: none"> ▪ address audience needs, stated purpose and context; 	
<ul style="list-style-type: none"> ▪ translate technical language into non-technical English; 	
<ul style="list-style-type: none"> ▪ include relevant information and exclude extraneous information; 	W—10—6.2 [W—12—6.2] Selecting appropriate and relevant information (excluding extraneous details) to set context
<ul style="list-style-type: none"> ▪ use appropriate strategies, such as providing facts and details, describing or analyzing the subject, explaining benefits or limitations, comparing or contrasting, and providing a scenario to illustrate; 	W—10—8.5 [W—12—8.5] Commenting on the significance of the information (in reports, throughout the piece; in procedural or persuasive writing, as appropriate)
<ul style="list-style-type: none"> ▪ anticipate potential problems, mistakes and misunderstandings that might arise for the reader; 	W—10—8.4 [W—12—8.4] Addressing readers’ concerns (anticipating and addressing potential problems, mistakes, or misunderstandings that might arise for the audience)
<ul style="list-style-type: none"> ▪ create predictable structures through the use of headings, white space and graphics, as appropriate; and 	
<ul style="list-style-type: none"> ▪ adopt a customary format, including proper salutation, closing and signature, when appropriate. 	
D. Research	
<p>D1. Define and narrow a problem or research topic.</p>	

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D2. Gather relevant information from a variety of print and electronic sources, as well as from direct observation, interviews and surveys.	R—10—15.1 [R—12—15.] Identifying and evaluating potential sources of information W—10—6.5 Synthesizing information from multiple research studies, including primary sources
D3. Make distinctions about the credibility, reliability, consistency, strengths and limitations of resources, including information gathered from Web sites.	R—10—15.2 [R—12—15.2] Evaluating and selecting the information presented, in terms of completeness, relevance, and validity
D4. Report findings within prescribed time and/or length requirements, as appropriate.	
D5. Write an extended research essay (approximately six to 10 pages), building on primary and secondary sources, that: ▪ marshals evidence in support of a clear thesis statement and related claims;	R—10—15.3 [R—12—15.3] Organizing, analyzing, and interpreting the information R—10—15.4 [R—12—15.4] Drawing conclusions/judgments and supporting them with evidence
▪ paraphrases and summarizes with accuracy and fidelity the range of arguments and evidence supporting or refuting the thesis, as appropriate; and	
▪ cites sources correctly and documents quotations, paraphrases and other information using a standard format.	W—10--6.6 [W—12—6.6] Listing and citing sources using standard format
E. Logic	
E1. Distinguish among facts and opinions, evidence and inferences.	R—10—8.4 Distinguishing fact from opinion, and evaluating possible bias/propaganda or conflicting information within or across texts
E2. Identify false premises in an argument.	
E3. Describe the structure of a given argument; identify its claims and evidence; and evaluate connections among evidence, inferences and claims.	
E4. Evaluate the range and quality of evidence used to support or oppose an argument.	R—12—8.4 Critiquing author’s use of strategies to achieve intended purpose or message (e.g., to inform, explain, entertain, persuade) EXAMPLE (critique public documents): May include analysis of using anecdotes, addressing counterclaims, appealing to audience, using emotionally-laden language EXAMPLE (critique functional documents): May include visual appeal, logical sequences, awareness of possible reader misunderstanding
E5. Recognize common logical fallacies, such as the appeal to pity (<i>argumentum ad misericordiam</i>), the personal attack (<i>argumentum ad hominem</i>), the appeal to common opinion (<i>argumentum ad populum</i>) and the false dilemma (assuming only two options when there are more options available); understand why these	

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fallacies do not prove the point being argued.	
E6. Analyze written or oral communications for false assumptions, errors, loaded terms, caricature, sarcasm, leading questions and faulty reasoning.	
E7. Understand the distinction between a deductive argument (where, if the premises are all true and the argument's form is valid, the conclusion is inescapably true) and inductive argument (in which the conclusion provides the best or most probable explanation of the truth of the premises, but is not necessarily true).	W—10—1.3 [W—12—1.3] Recognizing organizational structures within paragraphs or within texts EXAMPLES (of text structures): description, sequence, chronology, proposition/support, compare/contrast, problem/solution, cause/effect, investigation, <u>deductive/inductive</u>
E8. Analyze two or more texts addressing the same topic to determine how authors reach similar or different conclusions.	R—10—8.1 Explaining connections about information <i>within</i> a text, <i>across</i> texts, or to related ideas R—12—8: Analyze and interpret informational text (which may include technical writing), citing evidence as appropriate by... R—12—8.1 Explaining connections among ideas <i>across multiple</i> texts
E9. Construct arguments (both orally and in writing) that: <ul style="list-style-type: none"> ▪ develop a thesis that demonstrates clear and knowledgeable judgment; ▪ structure ideas in a sustained and logical fashion; ▪ use a range of strategies to elaborate and persuade, such as descriptions, anecdotes, case studies, analogies and illustrations; ▪ clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations and/or expressions of commonly accepted beliefs and logical reasoning; ▪ anticipate and address the reader's concerns and counterclaims; and ▪ provide clear and effective conclusions. 	
F. Informational Text	
F1. Follow instructions in informational or technical texts to perform specific tasks, answer questions or solve problems.	R—12—7.2 Using information from the text to answer questions, perform specific tasks, or solve problems; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or to interpret maps, charts, timelines, tables, or diagrams
F2. Identify the main ideas of informational text and determine the essential elements that elaborate them.	R—10—7.2 Using information from the text to answer questions, to state the main/central ideas, to provide supporting details, to explain visual components supporting the text, or to interpret

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	maps, charts, timelines, tables, or diagrams.
F3. Summarize informational and technical texts and explain the visual components that support them.	<p>R—10—7.3 [R—12—7.3] Organizing information to show understanding or relationships among facts, ideas, and events (i.e., representing main/central ideas or details within text through charting, mapping, paraphrasing, summarizing, comparing/contrasting, outlining, or connecting information with related ideas)</p> <p>W—10—2.1 [W—12—2.1] Selecting and summarizing key ideas to set context, appropriate to audience</p>
F4. Distinguish between a summary and a critique.	
F5. Interpret and use information in maps, charts, graphs, time lines, tables and diagrams.	<p>R—10—7.1 [R—12—7.1] Obtaining information from text features [e.g., table of contents, glossary, index, transition words/phrases, transitional devices (including use of white space), bold or italicized text, headings, subheadings, graphic organizers, charts, graphs, or illustrations]</p> <p>W—12—2.4 Explaining the visual components (e.g., charts, diagrams, artwork) of the text, when appropriate</p>
F6. Identify interrelationships between and among ideas and concepts within a text, such as cause-and-effect relationships.	R—10—8.1 Explaining connections about information <i>within</i> a text, <i>across</i> texts, or to related ideas
F7. Synthesize information from multiple informational and technical sources.	<p>R—10—8.2 [R—12—8.2] Synthesizing and evaluating information within or across text(s) (e.g., constructing appropriate titles; or formulating assertions or controlling ideas)</p> <p>R—12—8.1 Explaining connections among ideas <i>across multiple</i> texts</p> <p>W—12—6.5 Synthesizing information from multiple sources to draw conclusions <i>beyond</i> those found in any single source</p>
F8. Draw conclusions based on evidence from informational and technical texts.	R—10—8.3 [R—12—8.3] Drawing inferences about text, including author's purpose (e.g., to inform, explain, entertain, persuade) or message; or explaining how purpose may affect the interpretation of the text; or using supporting evidence to form or evaluate opinions/judgments and assertions about central ideas that are relevant
F9. Analyze the ways in which a text's organizational structure supports or confounds its meaning or purpose.	W—10—1.3 [W—12—1.3] Recognizing organizational structures within paragraphs or within texts
F10. Recognize the use or abuse of ambiguity, contradiction, paradox, irony, incongruities,	R-10-8.6 [R-12--8.6] Evaluating the clarity and

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overstatement and understatement in text and explain their effect on the reader.	accuracy of information (e.g. consistency, effectiveness of organizational pattern, or logic of arguments)
F11. Evaluate informational and technical texts for their clarity, simplicity and coherence and for the appropriateness of their graphics and visual appeal.	
G. Media	
G1. Evaluate the aural, visual and written images and other special effects used in television, radio, film and the Internet for their ability to inform, persuade and entertain (for example, anecdote, expert witness, vivid detail, tearful testimony and humor).	
G2. Examine the intersections and conflicts between the visual (such as media images, painting, film and graphic arts) and the verbal.	
G3. Recognize how visual and sound techniques or design (such as special effects, camera angles and music) carry or influence messages in various media.	
G4. Apply and adapt the principles of written composition to create coherent media productions using effective images, text, graphics, music and/or sound effects — if possible — and present a distinctive point of view on a topic (for example, PowerPoint presentations, videos).	
H. Literature	
H1. Demonstrate knowledge of 18th and 19th century foundational works of American literature.	
H2. Analyze foundational U.S. documents for their historical and literary significance (for example, The Declaration of Independence, the Preamble to the U.S. Constitution, Abraham Lincoln’s “Gettysburg Address,” Martin Luther King’s “Letter from Birmingham Jail”).	
H3. Interpret significant works from various forms of literature: poetry, novel, biography, short story, essay and dramatic literature; use understanding of genre characteristics to make deeper and subtler interpretations of the meaning of the text.	R—10—4.4 [R—12—4.4] Identifying the characteristics of a variety of types/genres of literary text (e.g., literary texts : poetry, plays, fairytales, fantasy, fables, realistic fiction, folktales, historical fiction, mysteries, science fiction, legends, myths, short stories, epics, novels, dramatic presentations, comedies, tragedies, satires, parodies, memoirs, epistles)
	R—10—4.5 [R—12—4.5] Identify literary devices as appropriate to genre (e.g., similes, metaphors,

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	<p>alliteration, rhyme scheme, onomatopoeia, imagery, repetition, flashback, foreshadowing, personification, hyperbole, symbolism, allusion, diction, syntax, bias, or point of view</p> <p>R—10—5.4 Explaining how the narrator’s point of view or author’s style is evident and affects the reader’s interpretation</p> <p>R—12—5.4 Explaining how the narrator’s point of view, or author’s style, or tone is evident and affects the reader’s interpretation or is supported throughout the text(s)</p> <p>R—10—6.1 Demonstrating knowledge of author’s style or use of literary elements and devices (i.e., [R—12—6.1: simile, metaphor, point of view] imagery, repetition, flashback, foreshadowing, personification, hyperbole, symbolism, allusion, diction, syntax, genre, or bias, or use of punctuation) to analyze literary works</p>
<p>H4. Analyze the setting, plot, theme, characterization and narration of classic and contemporary short stories and novels.</p>	<p>R—10—4.1 [R—12—4.1] Identifying, describing, or making logical predictions about character (such as protagonist or antagonist), setting, problem/solution, or plots/subplots, as appropriate to text; or identifying any significant changes in character, relationships, or setting over time; or identifying rising action, climax, or falling action</p> <p>R—10—5.1 [R—12—5.1] Explaining and supporting logical predictions or logical outcomes (e.g., drawing conclusions based on interactions between characters or evolving plot)</p> <p>R—10—5.2 [R—12—5.2] Examining characterization (e.g., stereotype, antagonist, protagonist), motivation, or interactions (including relationships), citing thoughts, words, or actions that reveal character traits, motivations, or changes over time</p>
<p>H5. Demonstrate knowledge of metrics, rhyme scheme, rhythm, alliteration and other conventions of verse in poetry.</p>	<p>W—10—13.2 [W—12—13.2] Using rhyme, rhythm, meter, literary elements (e.g., setting, plot, characters) or figurative language</p>
<p>H6. Identify how elements of dramatic literature (for example, dramatic irony, soliloquy, stage direction and dialogue) articulate a playwright’s vision.</p>	
<p>H7. Analyze works of literature for what they suggest about the historical period in which they were written.</p>	

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<p>H8. Analyze the moral dilemmas in works of literature, as revealed by characters' motivation and behavior.</p>	
<p>H9. Identify and explain the themes found in a single literary work; analyze the ways in which similar themes and ideas are developed in more than one literary work.</p>	<p>R—10—5.3 Making inferences about cause/effect, internal or external conflicts (e.g., person versus self, person versus person, person versus nature/society/fate), or the relationship among elements within text (e.g., describing the interaction among plot/subplots [R—12--5.3: theme/setting, symbolism/characterization])</p> <p>R—10—5.5 [R—12—5.5] Explaining how the author's message or theme (which may include universal themes) is supported within the text</p> <p>R—10—14.3 [R—12—14.3] Reading multiple texts for depth of understanding an author, a subject, a theme, or genre</p>

APPENDIX B: ADP BENCHMARKS NOT INCLUDED IN RHODE ISLAND HIGH SCHOOL STANDARDS

American Diploma Project	Achieve Commentary
B. Communication	
<p>B7. Participate productively in self-directed work teams for a particular purpose (for example, to interpret literature, write or critique a proposal, solve a problem, make a decision), including:</p> <ul style="list-style-type: none"> ▪ posing relevant questions; ▪ listening with civility to the ideas of others; ▪ extracting essential information from others' input; ▪ building on the ideas of others and contributing relevant information or ideas in group discussions; ▪ consulting texts as a source of ideas; ▪ gaining the floor in respectful ways; ▪ defining individuals' roles and responsibilities and setting clear goals; ▪ acknowledging the ideas and contributions of individuals in the group; ▪ understanding the purpose of the team project and the ground rules for decision-making; ▪ maintaining independence of judgment, offering dissent courteously, ensuring a hearing for the range of positions on an issue and avoiding premature consensus; ▪ tolerating ambiguity and a lack of consensus; and ▪ selecting leader /spokesperson when necessary. 	<p>Although some elements of ADP B7 are addressed by elements within the Rhode Island high school standards, the most important aspect of this Benchmark is that students have experience in working in groups. Not only is such collaboration a prime expectation in the workplace, but also often in the post-secondary classroom as well.</p>
C. Writing	
<p>C1. Plan writing by taking notes, writing informal outlines and researching.</p>	<p>Not including the planning stage of the writing process may simply be an oversight here, but Achieve reviewers regard the planning process as so necessary to the successful execution of writing that it should be called out in any set of writing standards.</p>
<p>C4. Drawing on readers' comments on working drafts, revise documents to develop or support ideas more clearly, address potential objections, ensure effective transitions between paragraphs and correct errors in logic.</p>	<p>Likewise, attention needs to be drawn to the necessity of peer review and collaboration in the revision process.</p>
<p>C10. Produce work-related texts (for example, memos, e-mails, correspondence, project plans, work orders, proposals, bios) that:</p> <ul style="list-style-type: none"> • address audience needs, stated purpose and context; • translate technical language into non-technical English; • include relevant information and exclude extraneous information; • use appropriate strategies, such as providing facts and details, describing or analyzing the subject, explaining benefits or limitations, comparing or contrasting, and providing a scenario to illustrate; • anticipate potential problems, mistakes and misunderstandings that might arise for the reader; • create predictable structures through the use of headings, white space and graphics, as appropriate; • adopt a customary format, including proper 	<p>Although as noted in regard to workgroups, the Colorado standards address some elements of workplace documents. Since the ADP is focused not solely on academic writing, however, the reviewers suggest that more explicit attention be drawn to the need for the student to be familiar with a broader range of writing tasks.</p>

Appendix B-1-2: Achieve Comparison Studies

American Diploma Project	Achieve Commentary
salutation, closing and signature, when appropriate.	
D. Research	
D1. Define and narrow a problem or research topic.	The vast majority of secondary and post-secondary teachers cite the definition and specification of a research topic as a major element in successful research. For this reason, this skill is worthy of being singled out for attention in standards.
D4. Report findings within prescribed time and/or length requirements, as appropriate.	Although timelines are typically a part of any secondary assignment, the necessity of producing materials on time is so crucial to success in both the college and work place that it is helpful to draw attention to this ability.
E. Logic	
E2. Identify false premises in an argument.	High school standards typically pay scant attention to elements of logic, but clear and substantiated thinking is highly valued in any venue. Attention, therefore, is recommended to these elements.
E3. Describe the structure of a given argument; identify its claims and evidence; and evaluate connections among evidence, inferences and claims.	
E5. Recognize common logical fallacies, such as the appeal to pity (<i>argumentum ad misericordiam</i>), the personal attack (<i>argumentum ad hominem</i>), the appeal to common opinion (<i>argumentum ad populum</i>) and the false dilemma (assuming only two options when there are more options available); understand why these fallacies do not prove the point being argued.	
E6. Analyze written or oral communications for false assumptions, errors, loaded terms, caricature, sarcasm, leading questions and faulty reasoning.	
E9. Construct arguments (both orally and in writing) that: <ul style="list-style-type: none"> • develop a thesis that demonstrates clear and knowledgeable judgment; • structure ideas in a sustained and logical fashion; • use a range of strategies to elaborate and persuade, such as descriptions, anecdotes, case studies, analogies and illustrations; • clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations and/or expressions of commonly accepted beliefs and logical reasoning; • anticipate and address the reader’s concerns and counterclaims; and • provide clear and effective conclusions. 	Argumentation is part and parcel of the academic life as well as in business. The elements of this type of presentation need to be clarified and taught in order to prepare students for their futures.
Informational Text	
F4. Distinguish between a summary and a critique.	A typical error made by students at all levels is to regard summary as critique, believing that a re-telling is also an analysis. ADP poses this Benchmark as an important element in students’ response to informational texts.
G. Media	
G1. Evaluate the aural, visual and written images and other special effects used in television, radio, film and the Internet for their ability to inform, persuade and entertain (for example, anecdote, expert witness, vivid detail, tearful testimony and humor).	Rhode Island should consider drawing attention to the need for students to be thoughtful consumers of media by addressing this area specifically.
G2. Examine the intersections and conflicts between the visual (such as media images, painting, film and graphic arts) and the verbal.	
G3. Recognize how visual and sound techniques or design (such as special effects, camera angles and music) carry or influence messages in various media.	

Appendix B-1-2: Achieve Comparison Studies

American Diploma Project	Achieve Commentary
<p>G4. Apply and adapt the principles of written composition to create coherent media productions using effective images, text, graphics, music and/or sound effects — if possible — and present a distinctive point of view on a topic (for example, PowerPoint presentations, videos).</p>	
<p>H. Literature</p>	
<p>H1. Demonstrate knowledge of 18th and 19th century foundational works of American literature.</p>	<p>ADP calls out these specific areas of study to acknowledge the power of literature to teach cultural as well as literary values. It may be the case that Rhode Island has developed a recommended or model reading list that highlights such texts. If not, the state may consider doing so.</p>
<p>H2. Analyze foundational U.S. documents for their historical and literary significance (for example, The Declaration of Independence, the Preamble to the U.S. Constitution, Abraham Lincoln’s “Gettysburg Address,” Martin Luther King’s “Letter from Birmingham Jail”).</p>	
<p>H6. Identify how elements of dramatic literature (for example, dramatic irony, soliloquy, stage direction and dialogue) articulate a playwright’s vision.</p>	<p>The state should consider adding a standard that draws attention to the need to understand dramatic conventions as well as poetic.</p>
<p>H7. Analyze works of literature for what they suggest about the historical period in which they were written.</p>	<p>Although great works of literature are so because they are relevant to any historical period, it is the case that texts do grow out of the culture and times in which they are created. Attention to the era of a text can expand the analysis of it.</p>
<p>H8. Analyze the moral dilemmas in works of literature, as revealed by characters’ motivation and behavior.</p>	<p>Employers report that employees who have considered the moral dilemmas encountered by literary characters are better able to tolerate ambiguity and nurture problem solving in the workplace.</p>

APPENDIX C: BIOGRAPHIES

ACHIEVE STAFF

JOANNE THIBAUT ERESH, SENIOR ASSOCIATE, ENGLISH LANGUAGE ARTS, ACHIEVE

JoAnne Thibault Eresh is a senior associate at Achieve, where she leads the English language arts aspects of the reviews of standards and assessments. She taught writing at the university level and English at public and private high schools in St. Louis, Mo., and in Fitchburg, Mass. She began her work in curriculum design and performance assessment in 1979 under Superintendent Richard C. Wallace, Jr., and from 1981 to 1994 was director of the Division of Writing and Speaking for the Pittsburgh Public Schools. During that time, she directed The Pittsburgh Discussion Model Project, funded by the Rockefeller Foundation and part of the CHART network, and she later directed the imaginative writing part of the ARTS Propel Project, a joint project with Harvard's Project Zero and the Educational Testing Service. She was the Pittsburgh district coordinator for the New Standards Project and wrote the teachers' guides for the New Standards ELA Portfolios. In 1995, she was one of the original resident fellows at the Institute for Learning at the University of Pittsburgh's Learning Research and Development Center. She also coordinated the New Standards Linking Projects. From 1997 to March 2001, she was the coordinator of staff development in Community District Two in New York City where she was responsible for the hiring, training, and coordination of that district's staff development group. JoAnne holds a bachelor's degree in English from Webster College in St. Louis, Mo., and a master's degree in English from the University of Missouri, St. Louis.

LAURA MCGIFFERT SLOVER, DIRECTOR, CONTENT & POLICY RESEARCH, ACHIEVE

Laura McGiffert Slover is director of Content & Policy Research at Achieve, where she has senior responsibility for overseeing a number of Achieve's major initiatives. She supervises Achieve's Benchmarking Initiative, leads its work with states on building mathematics capacity, and oversees the organization's research agenda. Laura has extensive experience reviewing academic standards and education policies in the United States and abroad, and she has written a number of reports and articles on the topic. Before joining Achieve in 1998, Laura was a high school English teacher in Eagle County, Colorado, where she was involved in the district's early efforts to develop standards and benchmark assessments. She also taught writing and composition at Colorado Mountain College. A native Washingtonian, Laura earned a bachelor's degree in English and American Literature from Harvard University; a master's in Education Curriculum and Instruction from the University of Colorado at Boulder; and a master's in Education Policy from Georgetown University. She is a mentor and a member of the Board of Directors of Project Northstar, an organization that provides mentoring and tutoring to homeless and at-risk students in the District of Columbia.



**Achieve's Comparison of the
American Diploma Project (ADP) Mathematics Benchmarks
with the
Rhode Island High School Grade-Span Expectations (GSEs)
for Mathematics for Grades 9-10, 11-12 and Advanced Mathematics**

June 30, 2006

ACHIEVE'S
BENCHMARKING INITIATIVE

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ACHIEVE'S METHODOLOGY

Achieve, Inc. has been asked to review Rhode Island's expectations for high school mathematics to determine the degree to which they align with the American Diploma Project (ADP) Mathematics Benchmarks. For purposes of this analysis, Achieve staff constructed a side-by-side chart comparing Achieve's American Diploma Project (ADP) Mathematics Benchmarks with the Rhode Island Mathematics Grade-Span Expectations (GSEs) for grade spans 9-10, 11-12 and Advanced Mathematics (AM). Since the ADP Benchmarks are cumulative in nature, in select instances content from Grades 5-8 was used to complete the chart.

THE DEVELOPMENT OF THE AMERICAN DIPLOMA PROJECT (ADP) BENCHMARKS FOR COLLEGE AND WORKPLACE READINESS

The American Diploma Project (ADP) commissioned leading economists to examine labor market projections for the most promising jobs—those that pay enough to support a small family and provide real potential for career advancement—to pinpoint the academic knowledge and skills required for success in those occupations. ADP then surveyed officials from 22 occupations, ranging from manufacturing to financial services, about the skills they believe are most useful for their employees to bring to the job. Following those conversations, ADP worked closely with two- and four-year postsecondary leaders in the partner states to determine the prerequisite English and mathematics knowledge and skills required for success in entry-level, credit-bearing courses in English, mathematics, the sciences and the humanities. The resulting ADP Benchmarks reflect an unprecedented convergence in what these employers and postsecondary faculty say are needed for new employees and freshmen entering credit-bearing coursework to be successful. In mathematics, the Benchmarks reflect a rigorous four-year course sequence that includes content typically taught in Algebra I, Geometry and Algebra II, as well as some data analysis and statistics. In English, the Benchmarks reflect four years of grade-level high school courses that emphasize logic, writing and research. The ADP Benchmarks and sample tasks from employers and postsecondary faculty may be found at www.achieve.org.

Achieve, Education Trust and the Thomas B. Fordham Foundation launched ADP to help states restore the diploma's value by anchoring high school graduation standards to those of jobs and colleges. Toward that end, ADP moves beyond the kinds of standards that reflect experts' consensus view of what is *desirable* for students to learn, to expectations linked directly to the *essential* demands faced by students preparing for college, work and citizenship. These benchmarks are not test blueprints; a fair number of the benchmarks are not able to be assessed through on-demand measures, for example. Rather, they are intended to describe the knowledge and skills that are needed by high school graduates in order to be prepared to achieve in multiple postsecondary venues.

In the area of mathematics, the ADP Benchmarks include expectations that are roughly equivalent to what students should encounter in a 4-year high school mathematics program that includes Algebra I, Geometry, Algebra II and at least a portion of Precalculus. Certain ADP Mathematics Benchmarks are marked with an asterisk (*). These asterisked benchmarks

represent content that is recommended for all students but is required for those students who plan to take calculus in college—a requisite for mathematics majors and many mathematics-intensive majors.

DOCUMENTS USED FOR REVIEW

Reviewed in this report are the draft GSEs for Grades 9-10 and 11-12, plus GSEs for Advanced Mathematics. The ADP Benchmarks in mathematics are used as the basis of comparison in this analysis to help Rhode Island ensure that its high school graduates are ready to succeed in the postsecondary world.

The Rhode Island High School Grade-Span Expectations (GSEs) that are being reviewed in this report have been developed as a means to identify the mathematics content knowledge and skills expected of high school students. The GSEs for Grades 9-10 include expectations that are to be assessed on the state-level assessment administered in the fall of Grade 11, plus other expectations that will be a local curriculum and assessment option. As such, the GSEs defined for Grades 9-10 describe expectations for the end of Grade 10, or the beginning of Grade 11. The high school GSEs are an extension of the expectations defined in the New England Common Assessment Program (NECAP) Mathematics Grade Level Expectations (GLEs) that identify the concepts and skills expected of all students for large-scale assessment of mathematics in Grades 3-8. These expectations are not intended to represent the full mathematics curriculum at each grade level but rather to capture concepts and skills related to the “big ideas” of mathematics that can be assessed in an on-demand setting. They are intended to focus—but not narrow—the curriculum. All expectations are organized into four content strands: Number and Operations, Geometry and Measurement, Functions and Algebra, and Data, Statistics, and Probability. The mathematical process expectations—problem solving, reasoning, connections, and communications—are embedded throughout the GLEs and GSEs instead of being in separate strands.

The College Readiness Standards reviewed in this report consist of guidelines for college readiness in mathematics developed by Rhode Island’s PK-16 Mathematics Advisory Council. The committee was chaired by Professor Lewis Pakula of URI and co-chaired by Judith Keeley of RIDE, with representatives from RIC, CCRI, RIDE, and a number of Rhode Island high school. The expectations are comprised of two sets of standards. The first is a set of Basic Skill and Knowledge Expectations that apply to all students entering four-year college programs or intending to transfer to such programs from a community college, and these standards indicate the level of proficiency implicit in Geometry and Algebra II expectations. The second set of standards defines readiness for technical/scientific programs and acknowledges that students intending to enter such programs need more substantial training in precalculus mathematics, including trigonometry and advanced topics in algebra.

ALIGNMENT OF RHODE ISLAND'S HIGH SCHOOL MATHEMATICS GSEs WITH THE ADP BENCHMARKS

In general, there is very strong alignment between the ADP Mathematics Benchmarks and the Rhode Island GSEs for Grades 9-10, 11-12, and Advanced Mathematics (AM). The state acknowledges that these expectations are not intended to define the complete range of instruction for high school mathematics, and, in the same manner, the ADP Benchmarks are not intended to encompass all instruction, but rather to call out the knowledge and skills necessary for postsecondary success. Although the nuances of the language may be somewhat different, most of the ADP Benchmarks have at least one Rhode Island expectation that aligns with them. There are several Rhode Island expectations that are not explicitly addressed in the ADP Benchmarks, and a number of Rhode Island expectations extend beyond the expectations articulated in the ADP Benchmarks.

What follows is a description of commonalities and differences found between the two sets of standards.

- Both the ADP Benchmarks and the Rhode Island Geometry and Measurement GSEs clearly address the concept of mathematical proof. The ADP Benchmarks, however, are much more explicit in that they provide examples of the types of theorems students should be expected to prove. The Rhode Island GSEs tend to cluster expectations with respect to proof in more generically-worded statements than the ADP Benchmarks, but these expectations can have the same effect if they are presumed to overarch all aspects of the domain. Rhode Island explicitly mentions only two theorems: the Pythagorean Theorem and the Triangle Inequality Theorem. The GSEs related to proof are as follows:

M(G&M)—10—2	Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).
M(G&M)—10—2	Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).
M(G&M)—12—2	Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).
M(G&M)—AM—2	Extends and deepens knowledge and usage of proofs and proof techniques.

It is important, however, that teachers have clear and consistent understandings of what types and levels of proof students are expected to perform, and it may be that Rhode Island provides such detail in supporting documents. Simply listing angles, lines, circles, distance, midpoint, triangle ratios, right triangle ratios (sine, cosine, tangent) and polygons including triangle congruence and similarity is not explicit enough to ensure consistent levels of expectation across high school geometry courses in the state. More importantly, it is not clear how the rigor of the expectations changes from grade span 9-10 to grade span 11-12 to AM. This variation in specificity between the ADP

Benchmarks and the Rhode Island GSEs is illustrated in the side-by-side chart included as an appendix to this report. The Rhode Island GSEs involving proof are repeatedly cited as the expectations aligning with the ADP Benchmarks involving proof of basic theorems (K1.2), parallel lines (K2.1), perpendicular lines (K2.2), angles (K2.3), congruence and similarity (K3), circles (K4), Pythagorean Theorem (K5), right triangle trigonometry (K11.1) (K11.2), and again in MR3 (mathematical reasoning involving proof). Regardless, the inclusion of geometric proof in mathematics is a topic of contention in the mathematics world, and it is noteworthy that both Rhode Island and the ADP Benchmarks include it.

- The ADP Benchmarks include geometric construction, which is parsed across a number of Benchmarks, including examples of constructions provided that tie to the content defined in the individual Benchmarks. While Rhode Island includes a reference to construction, it does not include any specificity as to types of geometric construction within its GSEs.

M(G&M)—12—10 Perform and justify construction with compass and straightedge or dynamic geometric software.

The GSEs would benefit from greater specificity if the intent is to ensure that all students receive the same rich mathematics education with the same level of mathematical rigor.

- Both the ADP Benchmarks and the Rhode Island GSEs clearly expect student to use appropriate technology in the classroom to further their mathematical understandings. The ADP Benchmarks address technology both in stand-alone Benchmarks and embedded within content-focused Benchmarks, calling on students not only to use calculators and computers but also to understand the capabilities and limitations of technology in solving problems. The Rhode Island GSEs tend to be explicit about technology use within the context of content-specific expectations. They also make clear the intent that students meet most expectations with and/or without using technology and that students be able to use dynamic geometry software for spatial reasoning and geometric constructions.
- There are no instances where Rhode Island's expectations for a student completing two years of high school level mathematics, as defined by the GSEs for Grades 9-10, exceed those of the non-asterisked ADP Benchmarks identified as needed by all students.
- There are several instances where Rhode Island's expectations for a student completing four years of high school level mathematics, as defined by the GSEs for Grades 11-12, exceed those of the non-asterisked Benchmarks. The following Rhode Island GSEs for Grades 11-12 align wholly or in part with ADP Benchmarks identified with asterisks—indicating that they are recommended for all students but required for students intending to take calculus. The expectations identified below do not include those GSEs identified as AM, which exceed those articulated for Grades 9-10 and 11-12. Bolded text indicates

those portions of GSEs that extend beyond the ADP Benchmarks for all students. GSEs containing no bolded text align in their entirety with asterisked ADP Benchmarks.

RHODE ISLAND EXPECTATIONS (GRADES 11-12) ALIGNING WITH ASTERISKED ADP BENCHMARKS
Number and Operations
M(N&O)—12—4 Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals . Computes by hand in simple cases (e.g. $4^{3/2}$), and using a calculator when appropriate. Interprets numbers given in scientific notation and carries out computations of them with and without a calculator.
Functions and Algebra
M(F&A)—12—1 Identifies arithmetic and geometric sequences and finds the nth term; then uses the generalization to find a specific term.
M(F&A)—12—3 Understands properties of logarithms and can convert between logarithmic and exponential forms.
M(F&A)—12—3 Manipulates, evaluates, and simplifies expressions involving rational exponents and radicals and can convert between expressions with rational exponents and expressions with radicals.
M(F&A)—12—4 Understands and applies the various processes of solving equations and systems of equations or inequalities. Interprets the solutions algebraically and graphically. Solves 2×2 and 3×3 systems of linear equations and graphically interprets the solutions.
Geometry and Measurement
M(G&M)—12—3 Knows the characterization of circles as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for circles
M(G&M)—12—6 Applies trigonometric formulas (law of sines/cosines, $A = \frac{1}{2} ab \sin C$) to find angles, lengths and areas of polygons.

- There are also several asterisked ADP Benchmarks that align with expectations defined in Rhode Island's AM topics. All Rhode Island students are currently required to pass two years of mathematics, with requirements increasing in 2008 to three years of high school mathematics and a fourth year of an applied course. Students who are intending to pursue mathematics-related careers will likely take courses that include these expectations but only if they complete the expectations listed in the GSEs for Grades 9-10 and 11-12 in three years or less. With the state's assessment occurring in the fall of Grade 11, it is likely that a number of students will not exceed the content expectations defined in the GSEs for Grades 9-10, with fewer encountering the Grade 11-12 GSEs, and only the most mathematically advanced students enrolling in courses that address the AM expectations.

RHODE ISLAND EXPECTATIONS FROM ADVANCED MATHEMATICS THAT ALIGN WITH ASTERISKED ADP BENCHMARKS
Functions and Algebra
M(F&A)—AM—1 Computes partial sums of infinite arithmetic and geometric sequences, determines when an infinite geometric series converges, and finds its sum. Connects arithmetic and geometric sequences to linear and exponential functions, respectively. (Study of this concept begins in 11-12)
M(F&A)—AM—2 Understands domain restriction and the effects of it on the function and its properties.
M(F&A)—AM—2 Understands functions and relations from a set-theoretic perspective, and operations on functions including composition and inverse including computing inverses algebraically.
M(F&A)—AM—2 Analyzing characteristic of classes of functions and inverse functions (exponential, logarithmic, trigonometric) to include domain, range, intercepts, increasing and decreasing intervals and rates of change, periodicity, end behavior, maximum and minimum values, continuity, and asymptotes. (Study of this concept begins in 11-12)
M(F&A)—AM—2 Recognizes properties of families of functions including logarithmic and trigonometric, and graphs them.
M(F&A)—AM—4 Solves equations and verifies identities involving trigonometric expressions.
Geometry and Measurement
M(G&M)—AM—3 Explores and interprets the characteristics of conic sections graphically and algebraically. Understands how different planar slices of a double cone yield different conic sections. Knows the characterization of conic sections as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for the conic sections.
M(G&M)—AM—7 Understands why radian measure is useful and converts between radian measure of angles and degrees.
M(G&M)—AM—9 Solves specific problems using analytic geometry (including in three dimensions) and circular trigonometry (e.g. find the equation of a circle inscribed in a triangle given the coordinates of the vertices; the distance between opposite vertices in a rectangular solid).

- There are a few ADP Benchmarks defined for all students that are not included in the Rhode Island expectations prior to the AM topics.

M(N&O)—AM—1 Understands the structure of the real number system as an extension of the rational numbers by representing real numbers as infinite decimal expansions (that provide successive rational approximations to the number) and as points on a number line. Determines whether the decimal expansion of a rational number eventually repeats or terminates (without using a calculator).
M(N&O)—AM—8 Knows and uses the principle of mathematical induction
M(G&M)—AM—6 Derives and uses formulas for lengths of arcs and areas of sectors and segments.
M(DSP)—AM—2 Analyzes and interprets measures of dispersion (standard deviation, variance, and percentiles) and central tendency for normal distributions.

- There are several instances where the Rhode Island GSEs are more detailed and explicit than the ADP Benchmarks. For example, ADP Benchmark J2 states that students need to be able to understand functions, their representations, and their properties. More detailed expectations categorized under this broad ADP Benchmark reference students recognizing whether a relationship is a function, determining domain, using notation, performing composition and operations on functions, understanding inverses, and knowing/applying the inverse relationship between exponential and logarithmic functions. The Rhode Island GSEs include all of the ADP Benchmarks but also include:

M(F&A)—10—2 Demonstrates conceptual understanding of linear and nonlinear functions and relations (including characteristics of classes of functions) through an analysis of constant, variable, or average rates of change, intercepts, domain, range, maximum and minimum values, increasing and decreasing intervals and rates of change (e.g., the height is increasing at a decreasing rate); describes how change in the value of one variable relates to change in the value of a second variable; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).
M(F&A)—12—2 Represents and analyzes functions in several ways. Recognizes properties of functions and characteristics properties of families of functions. Applies knowledge of functions to interpret, model, and solve problems.
Analyzes characteristics of classes of functions (polynomial, rational, and exponential) to include domain, range, intercepts, increasing and decreasing intervals and rates of change.
Represents functions numerically, algebraically, graphically, and verbally (i.e. in written words). Recognizes properties of a function from these representations, and transfers information from one representation to another.
Graphs polynomial, rational and exponential functions, including vertical and horizontal shifts, stretches, and compressions as well as reflections across vertical and horizontal axes.
Applies knowledge of functions to interpret and understand situations, design mathematical models, and solve problems in mathematics as well as in natural and social sciences
M(F&A)—12—4 Finds approximate solutions to equations by graphing each side as a function using technology. Understand that any equation in x can be interpreted as the equation $f(x) = g(x)$ and interpret the solutions of the equation as the x -value(s) of the intersection point(s) of the graphs of $y = f(x)$ and $y = g(x)$.
M(F&A)—AM—2 Analyzes properties of functions including injectivity (1-1), surjectivity (onto), critical points and inflection points. Determine graphically and analytically whether a function is even, odd or neither. Analyzes informally the idea of continuity and limits.
M(F&A)—AM—2 Analyzes characteristics of classes of functions and inverse functions (exponential, logarithmic, trigonometric) to include domain, range, intercepts, increasing and decreasing intervals and rates of change, periodicity, end behavior, maximum and minimum values, continuity, and asymptotes
M(F&A)—AM—2 Recognizes properties of families of functions including logarithmic and trigonometric, and graphs them.

Rhode Island exceeds the ADP Benchmarks' expectations within this strand particularly with respect to the families of functions students are to identify and work with. Included

in the GSEs are function families that the ADP Benchmarks exclude, such as logarithmic, trigonometric, polynomial, rational, and exponential functions. Students graph polynomial, rational, and exponential functions, including vertical and horizontal shifts, stretches, and compressions as well as reflections across vertical and horizontal axes. These expectations, although consistent with the ADP Benchmarks, extend beyond the comparable ADP Benchmarks.

Rhode Island includes relatively sophisticated expectations with respect to properties of functions and their inverses, including the domain, range, intercepts, increasing and decreasing intervals and rates of change, periodicity, end behavior, maximum and minimum values, continuity, asymptotes, injectivity (1-1), surjectivity (onto), critical points, and inflection points. Rhode Island also expects students to determine graphically and analytically whether a function is even, odd, or neither and to analyze informally the idea of continuity and limits. This comprehensive set of expectations involving function analysis will build strong mathematics reasoning skills in students and equip them with powerful tools for recognizing and modeling functions arising in real world applications across disciplines.

- In addition to the function extensions mentioned above, the Rhode Island standards include additional content in each strand that is not part of the ADP Benchmarks. The majority of this content is contained in the AM topics. This additional content includes:

Rhode Island Expectations That are Either not Included in the ADP Benchmarks or are Extensions of ADP Benchmarks	
Number and Operation	
M(N&O)—10—6	Mentally calculates benchmark perfect squares and related square roots (e.g., 12, 22, ..., 122, 152, 202, 252, 1002, 10002). Determines any whole number percentage of a number or any multiples of 100% up to 500%. Determines benchmark fractions of a number. (IMPORTANT: The intent of this GSE is to embed mental arithmetic throughout the instructional program, not to teach it as a separate unit.)
M(N&O)—12—4	Demonstrates understanding of complex numbers by interpreting them geometrically and by computing with them (e.g., adding, multiplying, dividing, finding the n th root, or by finding conjugates). Understand complex numbers as an extension of the real numbers (e.g. arising in solutions of polynomial equations). Manipulates complex numbers using rectangular and polar coordinates. Knows the fundamental theorem of algebra and knows that non-constant polynomials always factor into linear factors over the complex numbers.
M(N&O)—12—4	Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals. Computes by hand in simple cases (e.g. $4^{3/2}$), and using a calculator when appropriate. Interprets numbers given in scientific notation and carries out computations of them with and without a calculator.
M(N&O)—12—8	Determine whether a given subset of numbers is closed under a given arithmetic operation.
M(N&O)—AM—8	Add and multiply numerical matrices with attention to the arithmetic properties of these operations. Algebraically and geometrically interpret vectors, vector addition, and scalar multiplication in the plane, with attention to arithmetic properties.

Functions and Algebra
M(F&A)—10—1 Identifies, extends, and generalizes a variety of patterns (linear and nonlinear) represented by models, tables, sequences, or graphs to solve problems.
M(F&A)—12—4 Solves equations involving polynomial, rational, and radical expressions. Graphs and interprets the solutions.
M(F&A)—12—4 Solves systems of equations involving nonlinear expressions and graphically interprets the solutions.
M(F&A)—12—4 Solves systems of linear and quadratic inequalities.
M(F&A)—AM—3 Uses the remainder theorem, the factor theorem and rational root theorem for polynomials.
M(F&A)—AM—3 Understands the difference between factoring polynomials over integer, rational, real and complex numbers
M(F&A)—AM—4 Solves equations involving exponential and logarithmic expressions. Graphs and interprets the solutions.
M(F&A)—AM—4 Knows and applies the intermediate value theorem to find exact or approximate solutions of equations or zeros of continuous functions.
M(F&A)—AM—4 Interprets systems as matrix equations and solves them by computing the appropriate matrix inverse and multiplication, with or without technology.
Geometry and Measurement
M(G&M)—10—7 Applies informal concepts of successive approximation, upper and lower bounds, and limits in measurement situations (e.g., use successive approximation to find the area of a pond); uses measurement conversion strategies (e.g., unit/dimensional analysis).
M(G&M)—AM—3 Explores and interprets the characteristics of conic sections graphically and algebraically. Understands how different planar slices of a double cone yield different conic sections. Knows the characterization of conic sections as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for the conic sections.
M(G&M)—AM—4 Uses matrices to represent reflections, translations, rotations.
M(G&M)—AM—6 Knows Cavalieri's principle and uses it to find volumes.
M(G&M)—AM—9 Solves specific problems using analytic geometry (including in three dimensions) and circular trigonometry (e.g. find the equation of a circle inscribed in a triangle given the coordinates of the vertices; the distance between opposite vertices in a rectangular solid).
Data, Statistics and Probability
M(DSP)—10—4 Uses counting techniques to solve contextualized problems involving combinations or permutations (e.g., organized lists, tables, tree diagrams, models, Fundamental Counting Principle, or others).
M(DSP)—12—1 Given a regression function (linear, quadratic, and exponential), analyze the data to make inferences and to formulate, justify, and critique conclusions.
M(DSP)—12—3 Find or estimate linear, quadratic, and exponential regression functions by organizing and displaying data with or without using technology.
M(DSP)—12—4 Solves problems involving combinations and permutations using a variety of strategies including nCr , nPr , or $n!$. Finds unions, intersections, and complements of sets.
M(DSP)—AM—3 Uses technology to explore the method of least squares and median-median for linear regression.

- There are also instances in which content that is clearly addressed in the ADP Benchmarks is not **explicitly** cited in the Rhode Island expectations. For example, it is apparent that Rhode Island values mathematical modeling, but the ADP Benchmarks are much more specific about the types of functions to be modeled and cite examples that clarify the intent.

ADP Benchmarks That are not Explicitly Cited in the Rhode Island Expectations
Algebra
J5.3. Recognize and solve problems that can be modeled using a quadratic equation, such as the motion of an object under the force of gravity.
J5.5. * Recognize and solve problems that can be modeled using an exponential function but whose solution requires facility with logarithms, such as exponential growth and decay problems.
J5.6. Recognize and solve problems that can be modeled using a finite geometric series, such as home mortgage problems and other compound interest problems.
J6. * Understand the binomial theorem and its connections to combinatorics, Pascal's triangle and probability.
Geometry
K1.1. Identify, explain the necessity of and give examples of definitions, axioms and theorems.
Data Interpretation, Statistics and Probability
L1.4. Compare data sets using graphs and summary statistics.
L2.1. Evaluate reports based on data published in the media by considering the source of the data, the design of the study, and the way the data are analyzed and displayed.
L2.2. Identify and explain misleading uses of data.
L2.3. Recognize when arguments based on data confuse correlation with causation.
L3.3. Explain the differences between randomized experiments and observational studies.
L4.2. Explain how the relative frequency of a specified outcome of an event can be used to estimate the probability of the outcome.
L4.3. Explain how the law of large numbers can be applied in simple examples.
Mathematical Reasoning
MR4. Using the special symbols of mathematics correctly and precisely.
MR6. Distinguishing relevant from irrelevant information, identifying missing information and either finding what is needed or making appropriate estimates.
MR8. When solving problems, thinking ahead about strategy, testing ideas with special cases, trying different approaches, checking for errors and reasonableness of solutions as a regular part of routine work, and devising independent ways to verify results.

- The ADP Benchmarks and the Rhode Island expectations tend to be “packaged” differently. Many of the Rhode Island expectations are compound in nature, encompassing multiple ADP Benchmarks in one expectation statement. They are, therefore, repeated multiple times in the side-by-side chart. For example, the ADP Benchmarks have separate expectations in algebra for the laws of integer exponents and

roots (J1.1), operations with and the simplification of rational expressions (J1.5), and evaluation of polynomial, rational, radical, and absolute value expressions (J1.6). The Rhode Island GSE M(F&A)—10—3 appears to address all three topics in one expectation.

M(F&A)—10—3 Demonstrates conceptual understanding of algebraic expressions by solving problems involving algebraic expressions, by simplifying expressions (e.g., simplifying polynomial or rational expressions, or expressions involving integer exponents, square roots, or absolute values), by evaluating expressions, or by translating problem situations into algebraic expressions.

Similarly, the ADP Benchmarks tend to have separate expectations for solving, graphing, and modeling various types of equations and functions while the Rhode Island expectations tend to combine these performances in one objective. For example, aspects of Rhode Island's GSE M(F&A)—10—4 align with nine separate ADP Benchmarks.

M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.

Other examples of compound expectations from the Rhode Island standards document that tend to be repeated several times in the side-by-side chart include:

M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).

M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).

(Used as a match for 10 ADP Benchmarks)

M(DSP)—10—1 Interprets a given representation (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts) to make observations, to answer questions, to analyze the data to formulate or justify conclusions, critique conclusions, make predictions, or to solve problems within mathematics or across disciplines or contexts (e.g. media, workplace, social and environmental situations).

(IMPORTANT: Analyzes data consistent with concepts and skills in M(DSP)—10—2.)

M(DSP)—10—2 Analyzes patterns, trends, or distributions in data in a variety of contexts by determining, using, or analyzing measures of central tendency (mean, median, or mode), dispersion (range or variation), outliers, quartile values, estimated line of best fit, regression line, or correlation (strong positive, strong negative, or no correlation) to solve problems; and solve problems involving conceptual understanding of the sample from which the statistics were developed.

M(DSP)—10—3 Identifies or describes representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M(DSP)—10—1.

M(DSP)—10—3 Organizes and displays one- and two-variable data using a variety of representations (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts). Analyzes the data to formulate or justify conclusions, make predictions, or to solve problems. Identifies representations that best display a given set of data.

The organization and grain size of Rhode Island's GSEs vary—most noticeably between the GSEs for Grades 9-10 and 11-12. As seen in the preceding table, a number of GSEs for Grades 9-10, which guide development of the state assessment, are compound in nature. It would seem that this grade span might benefit from expectations with more specificity and clarity about exactly what is expected with respect to each skill and concept defined in the GSEs. In contrast, the GSEs for Grades 11-12 tend to be composed of more finely grained statements that are often listed separately but identified using a single GSE label, such as M(F&A)—12—3. Examples of more finely grained expectation statements—from across the various GSE levels—include:

M(F&A)—12—3 Factors quadratic and higher degree polynomials, including difference of squares.

M(F&A)—12—3 Adds, subtracts, multiplies and divides rational expressions.

M(F&A)-12—3 Simplifies complex fractions.

M(F&A)—AM—2 Understands domain restriction and the effects of it on the function and its properties.

M(F&A)—AM—3 Uses the remainder theorem, the factor theorem and rational root theorem for polynomials.

M(G&M)—10—5 Applies concepts of similarity by solving problems within mathematics or across disciplines or contexts.

- The Rhode Island GSEs are to be commended for clearly placing considerable emphasis on conceptual understanding of content. For example, the following expectations specifically highlight conceptual understanding:

M(F&A)—10—2 Demonstrates conceptual understanding of linear and nonlinear functions and relations (including characteristics of classes of functions) through an analysis of constant, variable, or average rates of change, intercepts, domain, range, maximum and minimum values, increasing and decreasing intervals and rates of change (e.g., the height is increasing at a decreasing rate); describes how change in the value of one variable relates to change in the value of a second variable; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).

M(F&A)—10—3 Demonstrates conceptual understanding of algebraic expressions by solving problems involving algebraic expressions, by simplifying expressions (e.g., simplifying polynomial or rational expressions, or expressions involving integer exponents, square roots, or absolute values), by evaluating expressions, or by translating problem situations into algebraic

expressions.
M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.
M(G&M)—10—10 Demonstrates conceptual understanding of spatial reasoning and visualization by sketching or using dynamic geometric software to generate three-dimensional objects from two-dimensional perspectives, or to generate two-dimensional perspectives from three-dimensional objects, or by solving related problems.

Other Rhode Island expectations are explicit about how conceptual understanding will be demonstrated. The expectations often include the phrases such as “demonstrate understanding of... by...” and “understand... by...”.

M(N&O)—AM—1 Understands the structure of the real number system as an extension of the rational numbers by representing real numbers as infinite decimal expansions (that provide successive rational approximations to the number) and as points on a number line. Determines whether the decimal expansion of a rational number eventually repeats or terminates (without using a calculator).
M(F&A)—12—3 Understands properties of logarithms and can convert between logarithmic and exponential forms.

When the verb “understand” is used alone, it would be wise to include modifiers explaining how the understanding should be demonstrated. Examples of Rhode Island expectations that would benefit from such modification include:

M(F&A)—12—4 Understands the effect of simplifying radical or rational expressions on the solution set of equations involving such expressions. (e.g. $x^2/x = x$ for $x \neq 0$).
M(F&A)—AM—2 Understands domain restriction and the effects of it on the function and its properties.
M(F&A)—AM—2 Understands functions and relations from a set-theoretic perspective, and operations on functions including composition and inverse including computing inverses algebraically.
M(F&A)—AM—3 Understands the difference between factoring polynomials over integer, rational, real and complex numbers

- The performance expectations in the Rhode Island GSEs, through the use of certain verbs, clearly convey a high level of cognitive demand. Students are asked to represent, analyze, solve, apply, design and critique, graph, describe, construct, interpret, model, create, make and defend, perform and justify, and derive and use. Even the verb “know,” which usually is ambiguous and can be interpreted as low level recall, tends to be coupled with “use,” implying a higher level of demand. Similarly, the verb “understand” is often clarified in the GSEs by explanation of how the student will be expected to show understanding. There are very few expectations that are unclear with regard to the

performances expected. The only ones noted are:

M(N&O)—12—1 Knows that rational numbers are precisely those with eventually repeating or terminating decimal expansions
M(F&A)—12—4 Understands the effect of simplifying radical or rational expressions on the solution set of equations involving such expressions. (e.g. $x^2/x = x$ for $x \neq 0$).
M(F&A)—AM—3 Understands the difference between factoring polynomials over integer, rational, real and complex numbers

- Rhode Island is quite specific about its intent that mental mathematics and estimation are to be embedded throughout the curriculum. This is a commendable goal, and the GSEs are much more specific about this aspect of mathematics than the ADP Benchmarks. Specifically, these two GSEs are as follows:

M(N&O)—10—6 Mentally calculates benchmark perfect squares and related square roots (e.g., 12, 22, ..., 122, 152, 202, 252, 1002, 10002). Determines any whole number percentage of a number or any multiples of 100% up to 500%. Determines benchmark fractions of a number. (IMPORTANT: The intent of this GSE is to embed mental arithmetic throughout the instructional program, not to teach it as a separate unit.)
M(N&O)—10—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. Estimates tips, discounts, and tax and estimates the value of a non-perfect square root or cube root. (IMPORTANT: The intent of this GSE is to embed estimation throughout the instructional program, not to teach it as a separate unit.)

- The Rhode Island high school expectations tend to be less comprehensive than the ADP Benchmarks with respect to Data Interpretation, Statistics, and Probability. For example, ADP Benchmark L2 and its subcomponents address the need for students to be able to explain and critique alternative ways of presenting and using information. Specifically, the ADP Benchmarks call for students to be able to evaluate reports based on data published in the media by considering the source of the data, the design of the study, and the way the data are analyzed and displayed, identify and explain misleading uses of data, and recognize when arguments based on data confuse correlation with causation. The Rhode Island GSE that most closely aligns with this Benchmark is neither explicit about precisely what is expected nor about the depth of understanding expected, as seen in the language below:

M(DSP)—10—1 Interprets a given representation (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts) to make observations, to answer questions, to analyze the data to formulate or justify conclusions, critique conclusions, make predictions, or to solve problems within mathematics or across disciplines or contexts (e.g. media, workplace, social and environmental situations).(IMPORTANT: Analyzes data consistent with concepts and skills in M(DSP)—10—2.)
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Likewise, the ADP Benchmarks call for students to be explicit in explaining the differences between randomized experiments and observational studies, to explain how

the relative frequency of a specified outcome of an event can be used to estimate the probability of the outcome, and to explain how the law of large numbers can be applied in simple examples. The Rhode Island expectations are not explicit about these concepts but rather place more emphasis on solving probability problems using concepts not explicitly addressed in the ADP Benchmarks.

- The ADP Benchmarks articulated under Benchmark J5 are very explicit about the types of real world problems students should be able to model and solve (i.e., time/rate/distance problems, percentage increase or decrease problems, ratio and proportion problems, mixture problems, motion of an object under the force of gravity, compound interest problems, exponential growth and decay problems, home mortgage problems, and other compound interest problems). Rhode Island does not specifically list types of problems but instead uses the generic phrase “model and solve problems.” Greater specificity—either in this document or in a supplementary resource—would prove helpful to teachers.

Alignment of Rhode Island’s High School Mathematics GSEs with the Rhode Island College Readiness Standards

Rhode Island’s PK-16 Mathematics Advisory Committee has developed guidelines for college readiness in mathematics that define two tiers of expectations. First, a set of basic skill and knowledge expectations defines the level of mathematics needed for all students to enter college and be successful. These standards indicate the scope and level of proficiency implicit in Geometry and Algebra II expectations. By design, they do not include all of the mathematics—such as statistics—that constitutes a strong high school mathematics program. Rather, they focus on areas that college mathematics professors define as critical underpinnings for success in entry-level college mathematics courses. The second set of standards defines readiness for technical/scientific programs and acknowledges that students intending to enter mathematics-intensive programs need substantially more exposure in high school to precalculus topics, including trigonometry and more advanced topics in algebra. The College Readiness Standards are intentionally light on data, probability, and statistics—unlike the Rhode Island GSEs and the ADP Benchmarks. In fact, they contain only one expectation addressing this area—an expectation involving permutations, combinations, and probability calculations that is in the basic skill and knowledge expectations. With respect to the more advanced levels of knowledge and skill, there is only one asterisked ADP Benchmark—dealing with the binomial theorem—that is not included in the Rhode Island College Readiness Standards.

A student who completes a course of study in high school that encompasses the expectations defined in the GSEs for Grades 9-10 and 11-12 should be prepared for college—as defined by the basic skill and knowledge expectations component of Rhode Island’s College Readiness Standards. Such a student will have even been taught content—most particularly in data, probability, and statistics—that is not deemed by the PK-16 Mathematics Advisory Committee that drafted the College Readiness Standards—to be an important precursor to success in college. An issue seems to be, however, whether all students completing high school—even those with four credits of mathematics—and intending to enter college with a mathematics-

intensive major will be able to meet the expectations defined in the College Readiness Standards. Many of the expectations defined in the College Readiness Standards applicable to these students will only be studied by students who have taken courses that address the AM expectations defined to build on the GSEs for Grades 9-10 and 11-12. Rhode Island's plan to move from a graduation requirement of two years of mathematics to three years of mathematics plus a fourth year of an applied course will be instrumental in ensuring that students have adequate preparation to pursue college majors and careers of their choosing.

Conclusion

In general, the Rhode Island GSEs and AM expectations are comprehensive in scope and rigorous in their level of cognitive demand. They tend to align well with the ADP Benchmarks, and students who learn the content and skills defined in the GSEs should be prepared for success in entry-level mathematics in college. It is only those students completing a more rigorous mathematics program in high school—one that addresses the expectations defined for AM—who will be prepared for success in mathematics-intensive majors. As revisions are made to the high school GSEs, consideration should be given to adding detail in the areas of mathematical modeling and geometry. Another recommendation is to separate the compound expectations that comprise many of the GSEs for Grades 9-10 into more manageable subsets that would clearly delineate the specific expectations with regard to how students will demonstrate their knowledge and more clearly outline what they will be expected to know. This detail will help teachers focus on the important mathematics and ensure that all students across the state are not only being held to the same high expectations but also engaged with challenging tasks and rich applications of mathematics.

APPENDIX A: SIDE-BY-SIDE COMPARISON OF THE ADP MATHEMATICS BENCHMARKS TO THE RHODE ISLAND GRADE SPAN EXPECTATIONS

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>Certain mathematics benchmarks are marked with an asterisk (*). These asterisked benchmarks represent content that is recommended for all students, but is required for those students who plan to take calculus in college, a requisite for mathematics and many mathematics intensive majors.</p>	<p>In the case of RI expectations with compound performance and/or content expectations the subset of content that aligns with the ADP benchmark is bolded.</p> <p>Shaded rows denote extensions of ADP benchmarks.</p>	<p>COMMENTS ARE DIRECTED TOWARDS ISSUES WITH ADP ALIGNMENT.</p>
<p>I. Number Sense and Numerical Operations - The high school graduate can:</p>	<p>Numbers and Operations</p>	
<p>I1. Compute with rational numbers fluently and accurately without a calculator:</p>		
<p>I1.1. Add, subtract, multiply and divide integers, fractions and decimals.</p>	<p>M(N&O)—10—6 Mentally calculates benchmark perfect squares and related square roots (e.g., 12, 22 , ..., 122, 152, 202, 252, 1002, 10002). Determines any whole number percentage of a number or any multiples of 100% up to 500%. Determines benchmark fractions of a number. (IMPORTANT: The intent of this GSE is to embed mental arithmetic throughout the instructional program, not to teach it as a separate unit.)</p>	<p>Mental math is not included in the ADP Benchmarks.</p>
	<p>M(N&O)—10—8 Applies properties of numbers to solve problems, to simplify computations, or to compare and contrast the properties of numbers and number systems.</p>	
	<p>M(N&O)—6—4 Accurately solves problems involving single or multiple operations on fractions (proper, improper, and mixed), or decimals; and addition or subtraction of integers; percent of a whole; or problems involving greatest common factor or least common multiple.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(N&O)—8—4 Accurately solves problems involving proportional reasoning (percent increase or decrease, interest rates, markups, or rates); multiplication or division of integers; and squares, cubes, and taking square or cube roots.	
I1.2. Calculate and apply ratios, proportions, rates and percentages to solve problems.	M(N&O)—8—4 Accurately solves problems involving proportional reasoning (percent increase or decrease, interest rates, markups, or rates); multiplication or division of integers; and squares, cubes, and taking square or cube roots. (IMPORTANT: Applies the conventions of order of operations.)	
	M(N&O)—10—4 Accurately solves problems that involve but are not limited to proportional relationships, percents, ratios, and rates. (The problems might be drawn from contexts outside of and within mathematics including those that cut across content strands or disciplines.) Solves problems involving compound interest	
	M(N&O)—10—6 Mentally calculates benchmark perfect squares and related square roots (e.g., 12, 22, ..., 122, 152, 202, 252, 1002, 10002). Determines any whole number percentage of a number or any multiples of 100% up to 500%. Determines benchmark fractions of a number. (IMPORTANT: The intent of this GSE is to embed mental arithmetic throughout the instructional program, not to teach it as a separate unit.)	
	M(N&O)—10—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. Estimates tips, discounts, and tax and estimates the value of a non-perfect square root or cube root. (IMPORTANT: The intent of this GSE is to embed estimation throughout the instructional program, not to teach it as a separate unit.)	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>I1.3. Use the correct order of operations to evaluate arithmetic expressions, including those containing parentheses.</p>	<p>M(N&O)—8—4 Accurately solves problems involving proportional reasoning (percent increase or decrease, interest rates, markups, or rates); multiplication or division of integers; and squares, cubes, and taking square or cube roots. (IMPORTANT: Applies the conventions of order of operations.)</p>	
<p>I1.4. Explain and apply basic number theory concepts such as prime number, factor, divisibility, least common multiple and greatest common divisor.</p>	<p>M(N&O)—8—8 Applies properties of numbers (odd, even, remainders, divisibility, and prime factorization) and field properties (commutative, associative, identity [including the multiplicative property of one, e.g. $20 \times 23 = 20+3 = 23$, so $20 = 1$], distributive, inverses) to solve problems and to simplify computations, and demonstrates conceptual understanding of field properties as they apply to subsets of real numbers when addition and multiplication are not defined in the traditional ways.</p>	
	<p>M(N&O)—5—4 Accurately solves problems involving multiple operations on whole numbers or the use of the properties of factors, multiples, prime, or composite numbers; and addition or subtraction of fractions (proper) and decimals to the hundredths place. (Division of whole numbers by up to a two-digit divisor.)</p>	
	<p>M(N&O)—6—4 Accurately solves problems involving single or multiple operations on fractions (proper, improper, and mixed), or decimals; and addition or subtraction of integers; percent of a whole; or problems involving greatest common factor or least common multiple.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>I1.5. Multiply and divide numbers expressed in scientific notation.</p>	<p>M(N&O)—12—4 Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals. Computes by hand in simple cases (e.g. $4^{3/2}$), and using a calculator when appropriate. Interprets numbers given in scientific notation and carries out computations of them with and without a calculator.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.</p>
<p>I2. Recognize and apply magnitude (absolute value) and ordering of real numbers:</p>		
<p>I2.1. Locate the position of a number on the number line, know that its distance from the origin is its absolute value and know that the distance between two numbers on the number line is the absolute value of their difference.</p>	<p>M(N&O)—10—2 Demonstrates understanding of the relative magnitude of real numbers by solving problems involving ordering or comparing rational numbers, common irrational numbers (e.g., square root of 2 , π), rational bases with integer exponents, square roots, absolute values, integers, or numbers represented in scientific notation using number lines or equality and inequality symbols.</p>	
<p>I2.2. Determine the relative position on the number line of numbers and the relative magnitude of numbers expressed in fractional form, in decimal form, as roots or in scientific notation.</p>	<p>M(N&O)—10—2 Demonstrates understanding of the relative magnitude of real numbers by solving problems involving ordering or comparing rational numbers, common irrational numbers (e.g., square root of 2 , π), rational bases with integer exponents, square roots, absolute values, integers, or numbers represented in scientific notation using number lines or equality and inequality symbols.</p>	
	<p>M(N&O)—12—2 Demonstrates understanding of the relative magnitude of real numbers by solving problems that involve ordering or comparing.</p>	<p>How does this expectation differ from the expectation at Grades 9-10?</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(N&O)—AM—1 Understands the structure of the real number system as an extension of the rational numbers by representing real numbers as infinite decimal expansions (that provide successive rational approximations to the number) and as points on a number line . Determines whether the decimal expansion of a rational number eventually repeats or terminates (without using a calculator).	RI designates this standard as advanced. ADP holds this expectation for all.
I3. Understand that to solve certain problems and equations, number systems need to be extended from whole numbers to the set of all integers (positive, negative and zero), from integers to rational numbers, from rational numbers to real numbers (rational and irrational numbers) and from real numbers to complex numbers; define and give examples of each of these types of numbers.	M(N&O)—10—8 Applies properties of numbers to solve problems, to simplify computations, or to compare and contrast the properties of numbers and number systems .	
	M(N&O)—12—1 Knows that rational numbers are precisely those with eventually repeating or terminating decimal expansions	All students will not study the structure of the number system since these expectations are included at grade span 11-12 and advanced mathematics.
	M(N&O)—AM—1 Understands the structure of the real number system as an extension of the rational numbers by representing real numbers as infinite decimal expansions (that provide successive rational approximations to the number) and as points on a number line. Determines whether the decimal expansion of a rational number eventually repeats or terminates (without using a calculator).	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	<p>M(N&O)—12—4 Demonstrates understanding of complex numbers by interpreting them geometrically and by computing with them (e.g., adding, multiplying, dividing, finding the nth root, or by finding conjugates). Understand complex numbers as an extension of the real numbers (e.g. arising in solutions of polynomial equations). Manipulates complex numbers using rectangular and polar coordinates. Knows the fundamental theorem of algebra and knows that non-constant polynomials always factor into linear factors over the complex numbers.</p>	<p>This Benchmark is an extension of ADP. The study of complex numbers is a much more in-depth in the RI standards.</p>
	<p>M(N&O)—12—8 Determine whether a given subset of numbers is closed under a given arithmetic operation</p>	<p>This concept is an extension of ADP.</p>
	<p>M(N&O)—AM—8 Add and multiply numerical matrices with attention to the arithmetic properties of these operations. Algebraically and geometrically interpret vectors, vector addition, and scalar multiplication in the plane, with attention to arithmetic properties.</p> <p>Knows and uses the principle of mathematical induction.</p>	<p>Matrices and Vectors are not included in ADP.</p>
<p>I4. Understand the capabilities and the limitations of calculators and computers in solving problems:</p>		
<p>I4.1. Use calculators appropriately and make estimations without a calculator regularly to detect potential errors.</p>	<p>M(N&O)—10—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. Estimates tips, discounts, and tax and estimates the value of a non-perfect square root or cube root. (IMPORTANT: The intent of this GSE is to embed estimation throughout the instructional program, not to teach it as a separate unit.)</p>	<p>ADP does not explicitly include the intent of "embedding estimation throughout the instructional program."</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(N&O)—12—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. (IMPORTANT: The intent of this GSE is to embed estimation throughout the instructional program, not to teach it as a separate unit.)	
14.2. Use graphing calculators and computer spreadsheets.	M(DSP)—12—3 Find or estimate linear, quadratic, and exponential regression functions by organizing and displaying data with or without using technology	
	M(N&O)—AM—1 Understands the structure of the real number system as an extension of the rational numbers by representing real numbers as infinite decimal expansions (that provide successive rational approximations to the number) and as points on a number line. Determines whether the decimal expansion of a rational number eventually repeats or terminates (without using a calculator).	
	M(N&O)—12—4 Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals. Computes by hand in simple cases (e.g.), and using a calculator when appropriate . Interprets numbers given in scientific notation and carries out computations of them with and without a calculator	
	M(G&M)—10—10 Demonstrates conceptual understanding of spatial reasoning and visualization by sketching or using dynamic geometric software to generate three-dimensional objects from two-dimensional perspectives, or to generate two-dimensional perspectives from three-dimensional objects, or by solving related problems.	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(G&M)—12—10 Perform and justify construction with compass and straightedge or dynamic geometric software .	
	M(F&A)—12—4 Finds approximate solutions to equations by graphing each side as a function using technology . Understand that any equation in x can be interpreted as the equation $f(x) = g(x)$ and interpret the solutions of the equation as the x -value(s) of the intersection point(s) of the graphs of $y = f(x)$ and $y = g(x)$.	
	M(F&A)—AM—4 Interprets systems as matrix equations and solves them by computing the appropriate matrix inverse and multiplication, with or without technology .	
	M(DSP)—AM—3 Uses technology to explore the method of least squares and median-median for linear regression	
	M(DSP)—12—5 Designs and critiques experimental models (with or without technology) to approximate desired probabilities.	
J. Algebra - The high school graduate can:	Functions and Algebra	
J1. Perform basic operations on algebraic expressions fluently and accurately:		
	M(F&A)—10—1 Identifies, extends, and generalizes a variety of patterns (linear and nonlinear) represented by models, tables, sequences, or graphs to solve problems.	Generalizing patterns is not included in ADP.
J1.1. Understand the properties of integer exponents and roots and apply these properties to simplify algebraic expressions.	M(F&A)—10—3 Demonstrates conceptual understanding of algebraic expressions by solving problems involving algebraic expressions, by simplifying expressions (e.g., simplifying polynomial or rational expressions, or expressions involving integer exponents, square roots , or absolute values), by evaluating expressions, or by translating problem situations into algebraic expressions.	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>J1.2. * Understand the properties of rational exponents and apply these properties to simplify algebraic expressions.</p>	<p>M(N&O)—12—4 Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals. Computes by hand in simple cases (e.g. $4^{3/2}$), and using a calculator when appropriate. Interprets numbers given in scientific notation and carries out computations of them with and without a calculator.</p>	
	<p>M(F&A)—12—3 Manipulates, evaluates, and simplifies expressions involving rational exponents and radicals and can convert between expressions with rational exponents and expressions with radicals.</p>	
<p>J1.3. Add, subtract and multiply polynomials; divide a polynomial by a low degree polynomial.</p>	<p>M(F&A)—12—3 Manipulates, evaluates, and simplifies algebraic and numerical expressions. Adds, subtracts, multiplies and divides polynomials.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.</p>
<p>Polynomial Theorems</p>	<p>M(F&A)—AM—3 Uses the remainder theorem, the factor theorem and rational root theorem for polynomials.</p>	<p>The polynomial theorems are an extension of ADP.</p>
<p>J1.4. Factor polynomials by removing the greatest common factor; factor quadratic polynomials.</p>	<p>M(F&A)—12—3 Factors quadratic and higher degree polynomials, including difference of squares.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.</p>
	<p>M(F&A)—AM—3 Understands the difference between factoring polynomials over integer, rational, real and complex numbers</p>	<p>This concept is an extension of ADP.</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>J1.5. Add, subtract, multiply, divide and simplify rational expressions.</p>	<p>M(F&A)—10—3 Demonstrates conceptual understanding of algebraic expressions by solving problems involving algebraic expressions, by simplifying expressions (e.g., simplifying polynomial or rational expressions, or expressions involving integer exponents, square roots, or absolute values), by evaluating expressions, or by translating problem situations into algebraic expressions.</p>	
	<p>M(F&A)—12—3 Adds, subtracts, multiplies and divides rational expressions.</p> <p>Simplifies complex fractions.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.</p>
<p>J1.6. Evaluate polynomial and rational expressions and expressions containing radicals and absolute values at specified values of their variables.</p>	<p>M(F&A)—10—3 Demonstrates conceptual understanding of algebraic expressions by solving problems involving algebraic expressions, by simplifying expressions (e.g., simplifying polynomial or rational expressions, or expressions involving integer exponents, square roots, or absolute values), by evaluating expressions, or by translating problem situations into algebraic expressions.</p>	
	<p>M(F&A)—12—4 Understands the effect of simplifying radical or rational expressions on the solution set of equations involving such expressions. (e.g. $x^2/x = x$ for $x \neq 0$).</p>	<p>Consistent with the intent of ADP but not explicitly referenced in ADP.</p>
<p>J1.7. * Derive and use the formulas for the general term and summation of finite arithmetic and geometric series; find the sum of an infinite geometric series whose common ratio, r, is in the interval $(-1, 1)$.</p>	<p>M(F&A)—12—1 Identifies arithmetic and geometric sequences and finds the nth term; then uses the generalization to find a specific term.</p>	
	<p>M(F&A)—AM—1 Computes partial sums of infinite arithmetic and geometric sequences, determines when an infinite geometric series converges, and finds its sum. Connects arithmetic and geometric sequences to linear and exponential functions,</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	respectively.	
J2 Understand functions, their representations and their properties: Conceptual understanding of linear and nonlinear functions	M(F&A)—10—2 Demonstrates conceptual understanding of linear and nonlinear functions and relations (including characteristics of classes of functions) through an analysis of constant, variable, or average rates of change, intercepts, domain, range, maximum and minimum values, increasing and decreasing intervals and rates of change (e.g., the height is increasing at a decreasing rate); describes how change in the value of one variable relates to change in the value of a second variable; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).	<p>The general study of classes or families of functions is not referenced in the ADP Benchmarks.</p> <p>These expectations are laudable. The goal of building conceptual understanding is explicitly highlighted and thus valued. Looking across functions for analysis of characteristics and properties such as constant, variable, or average rates of change, intercepts, domain, range, maximum and minimum values, increasing and decreasing intervals and rates of change and working between and among different representations</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>Families of functions</p>	<p>M(F&A)—12—2 Represents and analyzes functions in several ways. Recognizes properties of functions and characteristics properties of families of functions. Applies knowledge of functions to interpret, model, and solve problems.</p> <p>Analyzes characteristics of classes of functions (polynomial, rational, and exponential) to include domain, range, intercepts, increasing and decreasing intervals and rates of change.</p> <p>Represents functions numerically, algebraically, graphically, and verbally (i.e. in written words). Recognizes properties of a function from these representations, and transfers information from one representation to another.</p> <p>Graphs polynomial, rational and exponential functions, including vertical and horizontal shifts, stretches, and compressions as well as reflections across vertical and horizontal axes.</p> <p>Applies knowledge of functions to interpret and understand situations, design mathematical models, and solve problems in mathematics as well as in natural and social sciences</p>	<p>of functions and relations (e.g., graphs, tables, equations, function notation) will give students the foundations of a more generalized function study that can be more readily applied to real world problems across the disciplines.</p>
<p>Classes of functions/inverses</p>	<p>M(F&A)—AM—2 Analyzing characteristic of classes of functions and inverse functions (exponential, logarithmic, trigonometric) to include domain, range, intercepts, increasing and decreasing intervals and rates of change, periodicity, end behavior, maximum and minimum values, continuity, and asymptotes</p>	<p>Consistent with the intent of ADP, but not all of these characteristics are explicitly referenced in ADP.</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
Properties of Functions	M(F&A)—AM—2 Analyzes properties of functions including injectivity (1-1), surjectivity (onto), critical points and inflection points. Determine graphically and analytically whether a function is even, odd or neither. Analyzes informally the idea of continuity and limits.	These properties of functions are beyond the scope of ADP.
Understanding solutions to equations as two functions	M(F&A)—12—4 Finds approximate solutions to equations by graphing each side as a function using technology. Understand that any equation in x can be interpreted as the equation $f(x) = g(x)$ and interpret the solutions of the equation as the x -value(s) of the intersection point(s) of the graphs of $y = f(x)$ and $y = g(x)$.	This concept is not explicitly referenced in ADP but was a MAP 6-8 expectation.
J2.1 Recognize whether a relationship given in symbolic or graphical form is a function	M(F&A)—12—2 Represents and analyzes functions in several ways. Recognizes properties of functions and characteristics properties of families of functions. Applies knowledge of functions to interpret, model, and solve problems.	ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.
J2.2. * Determine the domain of a function represented in either symbolic or graphical form.	M(F&A)—AM—2 Understands domain restriction and the effects of it on the function and its properties.	Only students in Advanced Mathematics will encounter this concept, it is not included in the four year expectations.
J2.3. Understand functional notation and evaluate a function at a specified point in its domain.	M(F&A)—10—2 describes how change in the value of one variable relates to change in the value of a second variable; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).	
J2.4. * Combine functions by composition, as well as by addition, subtraction, multiplication and division.	M(F&A)—AM—2 Understands functions and relations from a set-theoretic perspective, and operations on functions including composition and inverse including computing inverses algebraically.	Only students in Advanced Mathematics will encounter this concept, it is not included in the four year expectations.

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
J2.5. * Identify whether a function has an inverse and when functions are inverses of each other; explain why the graph of a function and its inverse are reflections of one another over the line $y = x$.	M(F&A)—AM—2 Understands functions and relations from a set-theoretic perspective, and operations on functions including composition and inverse including computing inverses algebraically.	Only students in Advanced Mathematics will encounter this concept; it is not included in the four year expectations.
J2.6. * Know the inverse of an exponential function is a logarithm, prove basic properties of a logarithm using properties of its inverse and apply those properties to solve problems.	M(F&A)—12—3 Understands properties of logarithms and can convert between logarithmic and exponential forms.	
	M(F&A)—AM—2 Analyzing characteristic of classes of functions and inverse functions (exponential, logarithmic, trigonometric) to include domain, range, intercepts, increasing and decreasing intervals and rates of change, periodicity, end behavior, maximum and minimum values, continuity, and asymptotes	
J3. Apply basic algebraic operations to solve equations and inequalities:	M(F&A)—10—4 Works with a wide variety of equations.	
J3.1. Solve linear equations and inequalities in one variable including those involving the absolute value of a linear function.	M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.	
J3.2. Solve an equation involving several variables for one variable in terms of the others.	M(F&A)—10—2 describes how change in the value of one variable relates to change in the value of a second variable ; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	<p>M(F&A)—8—4 Demonstrates conceptual understanding of equality by showing equivalence between two expressions (expressions consistent with the parameters of the left- and right-hand sides of the equations being solved at this grade level) using models or different representations of the expressions, solving formulas for a variable requiring one transformation (e.g., $d = rt$; $d/r = t$); by solving multi-step linear equations with integer coefficients; by showing that two expressions are or are not equivalent by applying commutative, associative, or distributive properties, order of operations, or substitution; and by informally solving problems involving systems of linear equations in a context.</p>	
<p>J3.3. Solve systems of two linear equations in two variables.</p>	<p>M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.</p>	
<p>J3.4. * Solve systems of three linear equations in three variables.</p>	<p>M(F&A)—12—4 Understands and applies the various processes of solving equations and systems of equations or inequalities. Interprets the solutions algebraically and graphically.</p> <p>Solves 2x2 and 3x3 systems of linear equations and graphically interprets the solutions.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
J3.5. Solve quadratic equations in one variable.	M(F&A)—12—4 Factors, completes the square, uses the quadratic formula, and graphs quadratic functions to solve quadratic equations.	ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.
Polynomial, Rational, and Radical Equations	M(F&A)—12—4 Solves equations involving polynomial, rational, and radical expressions. Graphs and interprets the solutions.	These expectations are extensions of ADP J3 Benchmarks involving solving equations.
Exponential and Logarithmic Equations	M(F&A)—AM—4 Solves equations involving exponential and logarithmic expressions. Graphs and interprets the solutions.	
Intermediate Value Theorem	M(F&A)—AM—4 Knows and applies the intermediate value theorem to find exact or approximate solutions of equations or zeros of continuous functions.	
J4. Graph a variety of equations and inequalities in two variables, demonstrate understanding of the relationships between the algebraic properties of an equation and the geometric properties of its graph, and interpret a graph:		
J4.1. Graph a linear equation and demonstrate that it has a constant rate of change.	M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically , or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	<p>M(F&A)—8—2 Demonstrates conceptual understanding of linear relationships ($y = kx$; $y = mx + b$) as a constant rate of change by solving problems involving the relationship between slope and rate of change; informally and formally determining slopes and intercepts represented in graphs, tables, or problem situations; or describing the meaning of slope and intercept in context; and distinguishes between linear relationships (constant rates of change) and nonlinear relationships (varying rates of change) represented in tables, graphs, equations, or problem situations; or describes how change in the value of one variable relates to change in the value of a second variable in problem situations with constant and varying rates of change.</p>	
<p>J4.2. Understand the relationship between the coefficients of a linear equation and the slope and x- and y-intercepts of its graph.</p>	<p>M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(F&A)—8—2 Demonstrates conceptual understanding of linear relationships ($y = kx$; $y = mx + b$) as a constant rate of change by solving problems involving the relationship between slope and rate of change; informally and formally determining slopes and intercepts represented in graphs, tables, or problem situations; or describing the meaning of slope and intercept in context ; and distinguishes between linear relationships (constant rates of change) and nonlinear relationships (varying rates of change) represented in tables, graphs, equations, or problem situations; or describes how change in the value of one variable relates to change in the value of a second variable in problem situations with constant and varying rates of change.	
J4.3. Understand the relationship between a solution of a system of two linear equations in two variables and the graphs of the corresponding lines.	M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.	
	M(F&A)—12—4 Solves 2x2 and 3x3 systems of linear equations and graphically interprets the solutions.	
Solving using matrices	M(F&A)—AM—4 Interprets systems as matrix equations and solves them by computing the appropriate matrix inverse and multiplication, with or without technology.	Matrices are not included in ADP.
Systems of nonlinear equations	M(F&A)—12—4 Solves systems of equations involving nonlinear expressions and graphically	Only linear systems are included in ADP.

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>J4.4. Graph the solution set of a linear inequality and identify whether the solution set is an open or a closed half-plane; graph the solution set of a system of two or three linear inequalities.</p>	<p>interprets the solutions. M(F&A)—12—4 Solves systems of linear and quadratic inequalities.</p>	<p>Systems of quadratic inequalities are not included in ADP ADP expects this Benchmark from all students. RI includes linear inequalities at 11-12.</p>
<p>J4.5. Graph a quadratic function and understand the relationship between its real zeros and the x-intercepts of its graph.</p>	<p>M(F&A)—12—4 Factors, completes the square, uses the quadratic formula, and graphs quadratic functions to solve quadratic equations.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th grade level.</p>
<p>J4.6. * Graph ellipses and hyperbolas whose axes are parallel to the x and y axes and demonstrate understanding of the relationship between their standard algebraic form and their graphical characteristics.</p>	<p>M(G&M)—AM—3 Explores and interprets the characteristics of conic sections graphically and algebraically. Understands how different planar slices of a double cone yield different conic sections. Knows the characterization of conic sections as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for the conic sections.</p>	<p>Only students in Advanced Mathematics will encounter this concept, it is not included in the four year expectations.</p>
<p>J4.7. Graph exponential functions and identify their key characteristics.</p>	<p>M(F&A)—12—2 Graphs polynomial, rational and exponential functions, including vertical and horizontal shifts, stretches, and compressions as well as reflections across vertical and horizontal axes.</p>	<p>ADP designates this Benchmark for all. RI includes this Benchmark at the 11-12th and advanced level.</p>
	<p>M(F&A)—AM—4 Solves equations involving exponential and logarithmic expressions. Graphs and interprets the solutions.</p>	<p>Graphing polynomial, rational and logarithmic equations are not included in the ADP Benchmarks under J4.</p>
<p>J4.8. Read information and draw conclusions from graphs; identify properties of a graph that provide useful information about the original problem.</p>	<p>This ADP Benchmark is embedded throughout the expectations in the RI Function and Algebra strand.</p>	
	<p>M(F&A)—12—4 Understands and applies the various processes of solving equations and systems of equations or inequalities. Interprets the solutions algebraically and graphically.</p>	
<p>Logarithmic Function Graphs</p>	<p>M(F&A)—AM—2 Recognizes properties of families of functions including logarithmic and trigonometric, and graphs them.</p>	<p>ADP does not explicitly include logarithmic graphs.</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>J5. Solve problems by converting the verbal information given into an appropriate mathematical model involving equations or systems of equations; apply appropriate mathematical techniques to analyze these mathematical models; and interpret the solution obtained in written form using appropriate units of measurement:</p>	<p>M(F&A)—12—2 Applies knowledge of functions to interpret and understand situations, design mathematical models, and solve problems in mathematics as well as in natural and social sciences</p>	<p>This expectation is not specific enough to know which classes of functions students will be expected to apply.</p>
<p>J5.1. Recognize and solve problems that can be modeled using a linear equation in one variable, such as time/rate/distance problems, percentage increase or decrease problems, and ratio and proportion problems.</p>	<p>M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.</p>	
<p>J5.2. Recognize and solve problems that can be modeled using a system of two equations in two variables, such as mixture problems.</p>	<p>M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.</p>	
<p>J5.3. Recognize and solve problems that can be modeled using a quadratic equation, such as the motion of an object under the force of gravity.</p>		<p>There is not explicit mention of using quadratic equations to model problems.</p>

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ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
J5.4. Recognize and solve problems that can be modeled using an exponential function, such as compound interest problems.	M(N&O)—10—4 Solves problems involving compound interest	
J5.5. * Recognize and solve problems that can be modeled using an exponential function but whose solution requires facility with logarithms, such as exponential growth and decay problems.		There is not explicit mention of using exponential functions to model problems.
J5.6. Recognize and solve problems that can be modeled using a finite geometric series, such as home mortgage problems and other compound interest problems.		There is not explicit mention of using finite geometric series to model situations.
J6. * Understand the binomial theorem and its connections to combinatorics, Pascal's triangle and probability.		These concepts are not explicitly addressed in RI.
K. Geometry - The high school graduate can:	Geometry and Measurement	
K1. Understand the different roles played by axioms, definitions and theorems in the logical structure of mathematics, especially in geometry:		
K1.1. Identify, explain the necessity of and give examples of definitions, axioms and theorems.	M(G&M)—AM—2 Extends and deepens knowledge and usage of proofs and proof techniques.	Definitions, axioms and theorems are not referenced in the RI expectations with the intent of ADP.
K1.2. State and prove key basic theorems in geometry such as the Pythagorean theorem, the sum of the angles of a triangle is 180 degrees, and the line joining the midpoints of two sides of a triangle is parallel to the third side and half its length.	M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).	
	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	Theorem). M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).	
K1.3. Recognize that there are geometries, other than Euclidean geometry, in which the parallel postulate is not true.	M(G&M)—10—2 Uses geometric models to represent and distinguish between Euclidian and non-Euclidian systems.	
K2. Identify and apply the definitions related to lines and angles and use them to prove theorems in (Euclidean) geometry, solve problems, and perform basic geometric constructions using a straight edge and compass:	M(G&M)—12—10 Perform and justify construction with compass and straightedge or dynamic geometric software.	Constructions are included in ADP for all students. RI includes constructions at grade span 11-12.
K2.1. Identify and apply properties of and theorems about parallel lines and use them to prove theorems such as two lines parallel to a third are parallel to each other and to perform constructions such as a line parallel to a given line through a point not on the line.	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines , polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).	
	M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines , circles, distance, midpoint and polygons including triangle ratios).	
	M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines , circles, distance, midpoint and polygons including triangle congruence and similarity).	

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ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>K2.2. Identify and apply properties of and theorems about perpendicular lines and use them to prove theorems such as the perpendicular bisectors of line segments are the set of all points equidistant from the two end points and to perform constructions such as the perpendicular bisector of a line segment.</p>	<p>M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).</p>	
	<p>M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).</p>	
	<p>M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).</p>	
<p>K2.3. Identify and apply properties of and theorems about angles and use them to prove theorems such as two lines are parallel exactly when the alternate interior angles they make with a transversal are equal and to perform constructions such as the bisector of an angle</p>	<p>M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).</p>	
	<p>M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).</p>	
	<p>M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).</p>	
<p>K3. Know the basic theorems about congruent and similar triangles and use them to prove additional theorems and solve problems.</p>	<p>M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).</p>	<p>ADP expects proof involving congruence and similarity for all. RI places these proofs at grade span 11-12.</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
K4. Know the definitions and basic properties of a circle and use them to prove basic theorems and solve problems.	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles , or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).	
	M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles , distance, midpoint and polygons including triangle ratios).	
	M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles , distance, midpoint and polygons including triangle congruence and similarity).	
	M(G&M)—AM—6 Derives and uses formulas for lengths of arcs and areas of sectors and segments.	ADP expects the properties of circles for all. RI places these properties in advanced mathematics.
K5. Apply the Pythagorean theorem, its converse and properties of special right triangles to solve problems.	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem , Triangle Inequality Theorem).	
	M(G&M)—8—2 Applies the Pythagorean Theorem to find a missing side of a right triangle, or in problem solving situations.	
K6. Use rigid motions (compositions of reflections, translations and rotations) to determine whether two geometric figures are congruent and to create and analyze geometric designs.	M(G&M)—10—4 Applies the concepts of congruency by solving problems on or off a coordinate plane involving reflections, translations, or rotations; or solves problems using congruency involving problems within mathematics or across disciplines or contexts	
Matrices	M(G&M)—AM—4 Uses matrices to represent	Matrices are not included in ADP

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
K7. Know about the similarity of figures and use the scale factor to solve problems.	reflections, translations, rotations. M(G&M)—10—5 Applies concepts of similarity by solving problems within mathematics or across disciplines or contexts.	
K8. Know that geometric measurements (length, area, perimeter, volume) depend on the choice of a unit and that measurements made on physical objects are approximations; calculate the measurements of common plane and solid geometric figures:	;	
K8.1. Understand that numerical values associated with measurements of physical quantities must be assigned units of measurement or dimensions; apply such units correctly in expressions, equations and problem solutions that involve measurements; and convert a measurement using one unit of measurement to another unit of measurement.	M(G&M)—10—7 Uses units of measure appropriately and consistently when solving problems across content strands; makes conversions within or across systems and makes decisions concerning an appropriate degree of accuracy in problem situations involving measurement in other GSEs.	
	M(G&M)—10—6 Applies the appropriate unit of measure	
K8.2. Determine the perimeter of a polygon and the circumference of a circle; the area of a rectangle, a circle, a triangle and a polygon with more than four sides by decomposing it into triangles; the surface area of a prism, a pyramid, a cone and a sphere; and the volume of a rectangular box, a prism, a pyramid, a cone and a sphere.	M(G&M)—10—6 Solves problems involving perimeter, circumference, or area of two-dimensional figures (including composite figures) or surface area or volume of three-dimensional figures (including composite figures) within mathematics or across disciplines or contexts.	
Cavalieri's principle	M(G&M)—AM—6 Knows Cavalieri's principle and uses it to find volumes.	Cavalieri's principle is not included in ADP.

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>K8.3. Know that the effect of a scale factor k on length, area and volume is to multiply each by k, k^2 and k^3, respectively.</p>	<p>M(G&M)—6—5 Demonstrates conceptual understanding of similarity by describing the proportional effect on the linear dimensions of polygons or circles when scaling up or down while preserving the angles of polygons, or by solving related problems (including applying scales on maps). Describes effects using models or explanations</p>	
	<p>M(G&M)—7—5 Applies concepts of similarity by solving problems involving scaling up or down and their impact on angle measures, linear dimensions and areas of polygons, and circles when the linear dimensions are multiplied by a constant factor. Describes effects using models orsc explanations.</p>	
	<p>M(G&M)—8—5 Applies concepts of similarity to determine the impact of scaling on the volume or surface area of three-dimensional figures when linear dimensions are multiplied by a constant factor; to determine the length of sides of similar triangles, or to solve problems involving growth and rate.</p>	
<p>K9. Visualize solids and surfaces in three-dimensional space when given two-dimensional representations (e.g., nets, multiple views) and create two-dimensional representations for the surfaces of three-dimensional objects.</p>	<p>M(G&M)—10—10 Demonstrates conceptual understanding of spatial reasoning and visualization by sketching or using dynamic geometric software to generate three-dimensional objects from two-dimensional perspectives, or to generate two-dimensional perspectives from three-dimensional objects, or by solving related problems.</p>	
	<p>M(G&M)—7—10 Demonstrates conceptual understanding of spatial reasoning and visualization by sketching three-dimensional solids; and draws nets of rectangular and triangular prisms, cylinders, and pyramids and uses the nets as a technique for finding surface area.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
K10. Represent geometric objects and figures algebraically using coordinates; use algebra to solve geometric problems:	M(G&M)—AM—9 Solves specific problems using analytic geometry (including in three dimensions) and circular trigonometry (e.g. find the equation of a circle inscribed in a triangle given the coordinates of the vertices; the distance between opposite vertices in a rectangular solid).	These concepts though not inconsistent with ADP are not explicitly addressed in ADP.
K10.1. Express the intuitive concept of the “slant” of a line in terms of the precise concept of slope, use the coordinates of two points on a line to define its slope, and use slope to express the parallelism and perpendicularity of lines.	M(G&M)—10—9 Solves problems on and off the coordinate plane involving distance, midpoint, perpendicular and parallel lines, or slope.	
K10.2. Describe a line by a linear equation.	M(F&A)—10—4 Demonstrates conceptual understanding of equality by solving problems involving algebraic reasoning about equality; by translating problem situations into equations; by solving linear equations (symbolically and graphically) and expressing the solution set symbolically or graphically, or provides the meaning of the graphical interpretations of solution(s) in problem-solving situations; or by solving problems involving systems of linear equations in a context (using equations or graphs) or using models or representations.	
K10.3. Find the distance between two points using their coordinates and the Pythagorean theorem.	M(G&M)—10—9 Solves problems on and off the coordinate plane involving distance , midpoint, perpendicular and parallel lines, or slope.	
K10.4. * Find an equation of a circle given its center and radius and, given an equation of a circle, find its center and radius.	M(G&M)—12—3 Knows the characterization of circles as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for circles	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
Conic Sections	M(G&M)—AM—3 Explores and interprets the characteristics of conic sections graphically and algebraically. Understands how different planar slices of a double cone yield different conic sections. Knows the characterization of conic sections as loci of points in the plane satisfying certain distance requirements, and uses the distance formula to obtain equations for the conic sections.	Conic Sections in general are not a benchmark in ADP. ADP does include circles K10.4, ellipses and hyperbolas J4.6 and parabolas J4.5.
K11. Understand basic right-triangle trigonometry and apply it to solve problems:		
K11.1. Understand how similarity of right triangles allows the trigonometric functions sine, cosine and tangent to be defined as ratios of sides and be able to use these functions to solve problems.	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).	
	M(G&M)—12—5 Knows that similarity of right triangles allows the trigonometric functions to be defined as ratios of sides of triangles, and uses the ratios of the sides of special right triangles (30-60-90 and 45-45-90) to determine the sine, cosine and tangent (30,45, 60) and solve related problems.	ADP includes this Benchmark for all. RI places this expectation at 11-12.
K11.2. Apply the trigonometric functions sine, cosine and tangent to solve for an unknown length of a side of a right triangle, given one of the acute angles and the length of another side.	M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>K11.3. Use the standard formula for the area of a triangle, $A = \frac{1}{2}bh$, to explain the area formula, $A = \frac{1}{2}absinC$ where a and b are the lengths of two sides of a triangle and C is the measure of the included angle formed by these two sides, and use it to find the area of a triangle when given the lengths of two of its sides and the included angle.</p>	<p>M(G&M)—12—6 Applies trigonometric formulas (law of sines/cosines, $A = \frac{1}{2} ab \sin C$) to find angles, lengths and areas of polygons.</p>	<p>ADP includes this Benchmark for all. RI places this expectation at 11-12.</p>
<p>K12. * Know how the trigonometric functions can be extended to periodic functions on the real line, derive basic formulas involving these functions, and use these functions and formulas to solve problems:</p>		
<p>K12.1. * Know that the trigonometric functions sine and cosine, and thus all trigonometric functions, can be extended to periodic functions on the real line by defining them as functions on the unit circle, that radian measure of an angle between 0 and 360 degrees is the arc length of the unit circle subtended by that central angle, and that by similarity, the arc length s of a circle of radius r subtended by a central angle of measure t radians is $s = rt$.</p>	<p>M(G&M)—AM—7 Understands why radian measure is useful and converts between radian measure of angles and degrees.</p>	<p>ADP 12.1-ADP 12.3 will only be studied by students in the advanced level.</p>
	<p>M(G&M)—AM—9 Solves specific problems using analytic geometry (including in three dimensions) and circular trigonometry (e.g. find the equation of a circle inscribed in a triangle given the coordinates of the vertices; the distance between opposite vertices in a rectangular solid).</p>	
<p>K12.2. * Know and use the basic identities, such as $\sin^2(x) + \cos^2(x) = 1$ and $\cos(\pi/2-x) = \sin(x)$ and formulas for sine and cosine, such as addition and double angle formulas.</p>	<p>M(F&A)—AM—4 Solves equations and verifies identities involving trigonometric expressions.</p>	
<p>K12.3. * Graph sine, cosine and tangent as well as their reciprocals, secant, cosecant and</p>	<p>M(F&A)—AM—2 Recognizes properties of families of functions including logarithmic and</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
cotangent; identify key characteristics.	trigonometric, and graphs them.	
K12.4. * Know and use the law of cosines and the law of sines to find missing sides and angles of a triangle.	M(G&M)—12—6 Applies trigonometric formulas (law of sines/cosines, $A = \frac{1}{2} ab \sin C$) to find angles, lengths and areas of polygons.	
L. Data Interpretation, Statistics and Probability - The high school graduate can:	Data, Statistics, and Probability	
L1. Explain and apply quantitative information:		
L1.1. Organize and display data using appropriate methods (including spreadsheets) to detect patterns and departures from patterns.	M(DSP)—10—1 Interprets a given representation (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts) to make observations, to answer questions, to analyze the data to formulate or justify conclusions, critique conclusions, make predictions, or to solve problems within mathematics or across disciplines or contexts (e.g. media, workplace, social and environmental situations). (IMPORTANT: Analyzes data consistent with concepts and skills in M(DSP)—10—2.)	
L1.2. Read and interpret tables, charts and graphs.		
	M(DSP)—10—3 Identifies or describes representations or elements of representations that best display a given set of data or situation, consistent with the representations required in M(DSP)—10—1.	
	M(DSP)—10—3 Organizes and displays one- and two-variable data using a variety of representations (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts). Analyzes the data to formulate or justify conclusions, make predictions, or to solve problems. Identifies representations that best display a given set of data.	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>L1.3. Compute and explain summary statistics for distributions of data including measures of center (mean, median) and spread (range, percentiles, variance, standard deviation).</p>	<p>M(DSP)—10—2 Analyzes patterns, trends, or distributions in data in a variety of contexts by determining, using, or analyzing measures of central tendency (mean, median, or mode), dispersion (range or variation), outliers, quartile values, estimated line of best fit, regression line, or correlation (strong positive, strong negative, or no correlation) to solve problems; and solve problems involving conceptual understanding of the sample from which the statistics were developed.</p>	
	<p>M(DSP)—12—2 Calculates and analyzes measures of dispersion (standard deviation, variance, and percentiles).</p>	<p>ADP includes this Benchmark for all. RI places this expectation at 11-12.</p>
<p>L1.4. Compare data sets using graphs and summary statistics.</p>		<p>Comparing data sets is not explicitly included in RI.</p>
<p>L1.5. Create scatter plots, analyze patterns and describe relationships in paired data.</p>	<p>M(DSP)—10—3 Organizes and displays one- and two-variable data using a variety of representations (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts). Analyzes the data to formulate or justify conclusions, make predictions, or to solve problems. Identifies representations that best display a given set of data.</p>	
	<p>M(DSP)—10—2 Analyzes patterns, trends, or distributions in data in a variety of contexts by determining, using, or analyzing measures of central tendency (mean, median, or mode), dispersion (range or variation), outliers, quartile values, estimated line of best fit, regression line, or correlation (strong positive, strong negative, or no correlation) to solve problems; and solve problems involving conceptual understanding of the sample from which the statistics were developed.</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>L1.6. Know the characteristics of the Gaussian normal distribution (bell-shaped curve).</p>	<p>M(DSP)—AM—2 Analyzes and interprets measures of dispersion (standard deviation, variance, and percentiles) and central tendency for normal distributions.</p>	<p>ADP expects the characteristics of the Gaussian normal distribution for all. RI places this distribution in advanced mathematics.</p>
<p>L2. Explain and critique alternative ways of presenting and using information:</p>	<p>M(DSP)—10—1 Interprets a given representation (e.g., box-and-whisker plots, scatter plots, bar graphs, line graphs, circle graphs, histograms, frequency charts) to make observations, to answer questions, to analyze the data to formulate or justify conclusions, critique conclusions, make predictions, or to solve problems within mathematics or across disciplines or contexts (e.g. media, workplace, social and environmental situations). (IMPORTANT: Analyzes data consistent with concepts and skills in M(DSP)—10—2.)</p>	<p>ADP L2 does not have parallel expectations with strong alignments in RI.</p>
<p>L2.1. Evaluate reports based on data published in the media by considering the source of the data, the design of the study, and the way the data are analyzed and displayed.</p>		
<p>L2.2. Identify and explain misleading uses of data.</p>		
<p>L2.3. Recognize when arguments based on data confuse correlation with causation.</p>		
<p>L3. Explain the use of data and statistical thinking to draw inferences, make predictions and justify conclusions:</p>		

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>L3.1. Explain the impact of sampling methods, bias and the phrasing of questions asked during data collection and the conclusions that can rightfully be made.</p>	<p>M(DSP)—10—2 Analyzes patterns, trends, or distributions in data in a variety of contexts by determining, using, or analyzing measures of central tendency (mean, median, or mode), dispersion (range or variation), outliers, quartile values, estimated line of best fit, regression line, or correlation (strong positive, strong negative, or no correlation) to solve problems; and solve problems involving conceptual understanding of the sample from which the statistics were developed.</p>	
<p>L3.2. Design simple experiments or investigations to collect data to answer questions of interest.</p>	<p>M(DSP)—10—6 Designs an experiment in response to a teacher or student generated question or hypothesis. Designs an effective methodology to answer the questions (e.g., survey, observation, research, experimentation). Uses an appropriate sampling techniques to collect the data necessary to answer the question (e.g., random sample, stratified random sample). Collects, organizes, and appropriately displays the data. Analyzes the data to draw conclusions about the questions or hypothesis being tested while considering the limitations of the data that could affect interpretations. Finally when appropriate makes predictions, asks new questions, or makes connections to real-world situations. (IMPORTANT: Analyzes data consistent with concepts and skills in M(DSP)—10—2.)</p>	
<p>L3.3. Explain the differences between randomized experiments and observational studies.</p>		<p>This expectation is not included in RI.</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>L3.4. Construct a scatter plot of a set of paired data, and if it demonstrates a linear trend, use a graphing calculator to find the regression line that best fits this data; recognize that the correlation coefficient measures goodness of fit and explain when it is appropriate to use the regression line to make predictions</p>	<p>M(DSP)—AM—3 Uses technology to explore the method of least squares and median-median for linear regression</p>	<p>Linear regression is expected for all students in ADP.</p> <p>RI designates this expectation as advanced.</p> <p>RI includes quadratic and exponential regression.</p>
	<p>M(DSP)—12—3 Find or estimate linear, quadratic, and exponential regression functions by organizing and displaying data with or without using technology.</p>	
	<p>M(DSP)—12—1 Given a regression function (linear, quadratic, and exponential), analyze the data to make inferences and to formulate, justify, and critique conclusions.</p>	
<p>L4. Explain and apply probability concepts and calculate simple probabilities:</p>		
<p>L4.1. Explain how probability quantifies the likelihood that an event occurs in terms of numbers.</p>	<p>M(DSP)—5—5 For a probability event in which the sample space may or may not contain equally likely outcomes, determines the experimental or theoretical probability of an event and expresses the result as a fraction; and predicts the likelihood of an event as a fraction and tests the prediction through experiments; and determines if a game is fair.</p>	
	<p>M(DSP)—3—5 For a probability event in which the sample space may or may not contain equally likely outcomes, determines the likelihood of the occurrence of an event (using “more likely”, “less likely”, or “equally likely”); and predicts the likelihood of an event using “more likely,” “less likely,” “equally likely,” certain, or impossible and tests the prediction through experiments; and determines if a game is fair.</p>	
<p>L4.2. Explain how the relative frequency of a specified outcome of an event can be used to estimate the probability of the outcome.</p>		<p>Not specifically mentioned in RI</p>

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
L4.3. Explain how the law of large numbers can be applied in simple examples.		Not specifically mentioned in RI
L4.4. Apply probability concepts such as conditional probability and independent events to calculate simple probabilities.	M(DSP)—12—5 Designs and critiques experimental models (with or without technology) to approximate desired probabilities. Solves probability problems by applying concepts of counting, random variables, independence/dependence of events, and conditional probability.	Conditional probability is included for all students in ADP. RI includes it in 11-12.
	M(DSP)—10—4 Uses counting techniques to solve contextualized problems involving combinations or permutations (e.g., organized lists, tables, tree diagrams, models, Fundamental Counting Principle, or others).	
	M(DSP)—10—5 Solves problems involving experimental or theoretical probability.	
	M(DSP)—12—4 Solves problems involving combinations and permutations using a variety of strategies including nCr , nPr , or $n!$. Finds unions, intersections, and complements of sets.	All extensions of ADP
L4.5. Apply probability concepts to practical situations to make informed decisions.	M(DSP)—10—4 Uses counting techniques to solve contextualized problems involving combinations or permutations (e.g., organized lists, tables, tree diagrams, models, Fundamental Counting Principle, or others).	
	M(DSP)—12—5 Designs and critiques experimental models (with or without technology) to approximate desired probabilities. Solves probability problems by applying concepts of counting, random variables, independence/dependence of events, and conditional probability.	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>Mathematical Reasoning: Woven throughout the four domains of mathematics — Number Sense and Numerical Operations; Algebra; Geometry; and Data Interpretation, Statistics and Probability — are the following mathematical reasoning skills:</p>		
<p>MR1. Using inductive and deductive reasoning to arrive at valid conclusions.</p>	<p>M(N&O)—AM—8 Knows and uses the principle of mathematical induction</p>	<p>ADP includes this Benchmark for all. RI places this expectation in advanced mathematics.</p>
<p>MR2. Using multiple representations (literal, symbolic, graphic) to represent problems and solutions.</p>	<p>M(F&A)—10—2 Demonstrates conceptual understanding of linear and nonlinear functions and relations (including characteristics of classes of functions) through an analysis of constant, variable, or average rates of change, intercepts, domain, range, maximum and minimum values, increasing and decreasing intervals and rates of change (e.g., the height is increasing at a decreasing rate); describes how change in the value of one variable relates to change in the value of a second variable; or works between and among different representations of functions and relations (e.g., graphs, tables, equations, function notation).</p>	
<p>MR3. Understanding the role of definitions, proofs and counterexamples in mathematical reasoning; constructing simple proofs.</p>	<p>M(G&M)—AM—2 Extends and deepens knowledge and usage of proofs and proof techniques.</p>	
	<p>M(G&M)—10—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle ratios).</p>	
	<p>M(G&M)—10—2 Makes and defends conjectures, constructs geometric arguments, uses geometric properties, or uses theorems to solve problems involving angles, lines, polygons, circles, or right triangle ratios (sine, cosine, tangent) within mathematics or across disciplines or contexts (e.g., Pythagorean Theorem, Triangle Inequality Theorem).</p>	

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
	M(G&M)—12—2 Creates formal proofs of propositions (e.g. angles, lines, circles, distance, midpoint and polygons including triangle congruence and similarity).	
MR4. Using the special symbols of mathematics correctly and precisely.		This process standard is not specifically mentioned in RI.
MR5. Recognizing when an estimate or approximation is more appropriate than an exact answer and understanding the limits on precision of approximations.	M(N&O)—12—4 Solves problems involving scientific notation or uses significant digits to assess the precision of an answer. Interprets rational exponents and their relation to radicals. Computes by hand in simple cases (e.g. $4^{3/2}$), and using a calculator when appropriate. Interprets numbers given in scientific notation and carries out computations of them with and without a calculator.	
	M(N&O)—10—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. Estimates tips, discounts, and tax and estimates the value of a non-perfect square root or cube root.	
	M(N&O)—12—7 Makes appropriate estimates in a given situation by determining the level of accuracy needed and analyzing the accuracy of results. (IMPORTANT: The intent of this GSE is to embed estimation throughout the instructional program, not to teach it as a separate unit.)	
	M(G&M)—10—7 Applies informal concepts of successive approximation, upper and lower bounds, and limits in measurement situations (e.g., use successive approximation to find the area of a pond); uses measurement conversion strategies (e.g., unit/dimensional analysis).	
MR6. Distinguishing relevant from irrelevant information, identifying missing information and either finding what is needed or making appropriate estimates.		This process standard is not specifically mentioned in RI.

Appendix B-1-2: Achieve Comparison Studies

ADP Benchmarks: Mathematics	Rhode Island GSEs 9-10, 11-12 and Advanced Mathematics	COMMENTARY
<p>MR7. Recognizing and using the process of mathematical modeling: recognizing and clarifying mathematical structures that are embedded in other contexts, formulating a problem in mathematical terms, using mathematical strategies to reach a solution, and interpreting the solution in the context of the original problem.</p>	<p>M(F&A)—12—2 Applies knowledge of functions to interpret and understand situations, design mathematical models, and solve problems in mathematics as well as in natural and social sciences</p>	<p>ADP includes this Benchmark for all. RI places this expectation in 11-12.</p>
<p>MR8. When solving problems, thinking ahead about strategy, testing ideas with special cases, trying different approaches, checking for errors and reasonableness of solutions as a regular part of routine work, and devising independent ways to verify results.</p>		<p>This process standard is not specifically mentioned in RI.</p>
<p>MR9. Shifting regularly between the specific and the general, using examples to understand general ideas, and extending specific results to more general cases to gain insight.</p>	<p>M(N&O)—AM—8 Knows and uses the principle of mathematical induction</p>	<p>ADP includes this Benchmark for all. RI places this expectation in advanced mathematics.</p>

APPENDIX B: BIOGRAPHIES

ACHIEVE STAFF

KAYE FORGIONE, SENIOR ASSOCIATE, MATHEMATICS, ACHIEVE

Kaye Forgione joined Achieve as senior associate for mathematics in March 2001 where she leads Achieve's Standards and Benchmarking Initiatives involving mathematics. Prior to joining Achieve, Kaye served as assistant director of the Systemic Research Collaborative for Mathematics, Science and Technology Education (SYRCE), a project at the University of Texas at Austin funded by the National Science Foundation. Her responsibilities at the University of Texas also included management and design responsibilities for UTeach, a collaborative project of the College of Education and the College of Natural Sciences to train and support the next generation of mathematics and science teachers in Texas. Before her work at the University of Texas, Kaye was director of academic standards programs at the Council for Basic Education, a nonprofit education organization located in Washington, DC. Prior to joining the Council for Basic Education in 1997, Kaye worked in the K–12 arena in a variety of roles, including several leadership positions with the Delaware Department of Education. Kaye began her education career as a high school mathematics teacher. She taught mathematics at the secondary and college levels as part of adult continuing education programs. Kaye received a bachelor's degree in mathematics and education from the University of Delaware, a master's degree in systems management from the University of Southern California, and a doctorate in educational leadership from the University of Delaware.

LAURA MCGIFFERT SLOVER, DIRECTOR, CONTENT & POLICY RESEARCH, ACHIEVE

Laura McGiffert Slover is director of Content & Policy Research at Achieve, where she has senior responsibility for overseeing a number of Achieve's major initiatives. She supervises Achieve's Benchmarking Initiative, leads its work with states on building mathematics capacity, and oversees the organization's research agenda. Laura has extensive experience reviewing academic standards and education policies in the United States and abroad, and she has written a number of reports and articles on the topic. Before joining Achieve in 1998, Laura was a high school English teacher in Eagle County, Colorado, where she was involved in the district's early efforts to develop standards and benchmark assessments. She also taught writing and composition at Colorado Mountain College. A native Washingtonian, Laura earned a bachelor's degree in English and American Literature from Harvard University; a master's in Education Curriculum and Instruction from the University of Colorado at Boulder; and a master's in Education Policy from Georgetown University. She is a mentor and a member of the Board of Directors of Project Northstar, an organization that provides mentoring and tutoring to homeless and at-risk students in the District of Columbia.

CONTENT EXPERTS IN MATHEMATICS

MARY LYNN RAITH

Mary Lynn Raith received her B.S in mathematics from Indiana University at Pittsburgh and her M.Ed. in mathematics education from the University of Pittsburgh. She is recently retired from the position of Mathematics Specialist in the Division of Instructional Support of the Pittsburgh Public Schools. As such, her responsibilities included leadership roles in curriculum development, textbook selection, design of alternative assessments, in-service program design and implementation, and coordination of mathematics programs across levels and schools. Ms. Raith was also the Co-Director of the Pittsburgh Reform in Mathematics Education project (PRIME), a K-12 professional development system. She has also been involved with a number of national projects, including the development of both the New Standards Reference Examination and the Portfolio project for the middle grades, the Assessment Communities of Teachers project (ACT), and the Alternative Assessment in Mathematics project (A²IM). She has also worked extensively with both NCTM and NCEE on its America's Choice school design and has presented at numerous national conferences.

Dear Education Policymaker,

In coming months, you, as a state policymaker, will confront many challenges associated with adoption and implementation of the state-led Common Core State Standards Initiative. As the nation's only organization representing all branches of government, The Council of State Governments (CSG) is fielding questions from members concerning what the common core state standards will mean for their states – both from an academic and a fiscal perspective.

In an effort to provide expert information to New Hampshire's legislators and education leadership, CSG cordially invites you to attend a dinner meeting beginning at 5 p.m. at the Granite Restaurant in Concord on Tuesday, June 1. This policy roundtable is made possible through generous educational support of the Bill & Melinda Gates Foundation.

We realize you face numerous conflicts for your time. We are convinced this policy roundtable will be a valuable source of information to help you make informed decisions as well as an opportunity for legislators and state education officials to engage in an important dialogue about what happens in New Hampshire *before and after* the adoption of the common core state standards.

CSG is a non-partisan organization. This meeting will be a facilitated discussion involving state legislators as well as state education leaders. We are not a lobbying organization and we want to emphasize that this meeting is not intended to show either support of or opposition to adoption of the common core state standards. It is our goal to give you the information you need to make informed decisions on pressing education issues like the common core state standards.

CSG is working closely with national experts on this issue, including the National Governors Association, the Council of Chief State School Officers, the National Association of State Boards of Education and the Hunt Institute, among others. We hope that your schedule will permit you to attend the meeting on the Common Core State Standards Initiative. Please contact us if you have questions, comments or if you have dietary restrictions. We look forward to meeting you on June 1. To register, please complete the enclosed registration form and fax to Eddie Vandebroek at 859-244-8001. For further information, you may contact Jennifer Ginn at 859-244-8236.

Sincerely,

(b)(6)

David Adkins
Executive Director

The Council of State Governments National Headquarters

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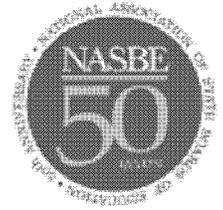
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State Innovations

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State Assessment Collaboratives: Lessons from the New England Common Assessment Program

With the increasing importance of all students reaching world class standards for college and workplace readiness, collaboration across state lines in standards, assessments, and other areas is one strategy policymakers are approaching with less hesitancy than in the past. However, such efforts are not happening for the first time in today's context. In response to the No Child Left Behind (NCLB) legislation in 2002, New Hampshire, Vermont, Rhode Island, and later Maine, leveraged resources and political will to build a consortium to drive the New England Common Assessment Program (NECAP). The state's commissioners and deputy commissioners of education acknowledged the patchwork nature of tests then current in each of their states would not independently meet the requirements for testing in grades 3-8 specified in NCLB compliance regulations. Joining forces produced efficiencies and an opportunity to create better quality tests for less money. Of particular benefit to the states, the cost savings rendered from shared capacity meant they would not have to default to multiple choice tests.

Additionally, given the regional similarities and shared investment in graduates who often shuffle among New England states, this process also provided a venue to establish collective "must haves" for graduates. Measured Progress, Inc. was contracted as the consortium's assessment developer and the National Center for the Improvement of Educational Assessment, Inc. as the facilitator. As a first step, the states had to reconcile their standards. Common Grade-Level Expectations (GLEs) were determined for mathematics, reading, and writing first for grades 3-8. Later, targets were set for science assessments, and Grade-Span Expectations (GSEs) were created for high school students in grades 9-10 and 11-12 in mathematics, reading, and writing content areas. The states integrated GLEs and GSEs into curriculum frameworks that were subsequently approved by their state boards. By establishing shared standards up front, NECAP has built capacity for cross-state comparisons as well as a powerful shared commitment to prepare New England graduates to meet the needs and demands of the 21st century workforce.

The same states involved in NECAP later joined together as the New England Compact to conduct research funded by the U.S. Department of Education from 2005 to 2007.

Their work in this capacity centered on "students in the gaps" in large-scale state assessment systems and explored adaptive technologies for testing. Results from the research clarified that there are multiple groups of students whose abilities and skills are not fairly or accurately reflected on large-scale, state-wide assessments. These include students who achieve at grade level in classroom assignments but significantly below on state tests, as well as students who perform significantly below grade level in both classwork and state test measures of achievement. The research began exploring possible uses of technology to support students through computer-automated read alouds, single-screen presentations of reading passages, and word processor editing functions. In sum, the work with Reaching Students in the Gaps and the Enhanced Assessment Project showed promise for the use of technology in adaptive assessment, while also drawing attention to the impact of quality classroom instruction on proficiency.

Perhaps equal in value to the research contributions and testing materials generated by these two major efforts is the human capital contained within the four states. Despite transitions in leadership, the shared work continues. This continuity speaks volumes to the issues of capacity that are often substantial barriers, and emphasizes how a tradition of speaking across state lines has long-term institutional value. Indeed, at the end of last year, in the context of bringing attention to the drop-out crisis and high school reform, the Nellie Mae Education Foundation and the Bill and Melinda Gates Foundation announced they would be providing financial support to the New England Secondary School Consortium. With coordination and organizational support from the Great Schools Partnership, the New England SSC has set a mission of ensuring "that by 2016 every public high school student in the four partner states will receive an education that will prepare them for college, career, and civic responsibility in the interconnected global community of the 21st century." Efforts around this goal are speeding up, particularly in the context of the stimulus, and the states remain open to expanding the consortium.

Issues to Consider

While NECAP is often regarded as the best example of an assessment/accountability consortium to date, this work was

neither clean nor easy. Dr. Stuart Kahl, CEO of Measured Progress, Inc., is NECAP's assessment developer. Based on his experiences, he urges states to consider the following issues before building or joining a consortium around testing:

- ★ **Timing:** This work takes significant quantities of time and is not a one-time commitment. States that are not scheduled to revise standards may have to make significant changes to their workscope calendars to begin such work. Once engaged in a collaborative, before the clock for assessment development can even start, states have to agree on testing windows and shared standards. In Maine's case, while the state was part of the GLE effort, its commitment to NECAP came later. Maine's delay was attributed to passing the legislation necessary to enable implementation of the fall testing schedule followed by the rest of the collaborative.
- ★ **Shared Values and Proximity:** Several similarities among the NECAP states illustrate why this regional collaborative has been more successful than it may have been with a grouping of four different states. They share similar budgetary, resource, and capacity obstacles that helped draw them into collaborative work. Moreover, they hold similar priorities for assessment: they all value constructed responses, challenging tests, and high standards enforced by rigorous cut scores. Regional proximity also allowed NECAP members to readily conduct face-to-face meetings. On the development end, the common geography also allowed for the use of "regionally flavored" content (e.g. reading passages on cold weather as opposed to hurricanes) which can boost student engagement and motivation during testing.
- ★ **Strong Leadership:** "Don't start telling me what the barriers are, because we are going to do this." According to Dr. Kahl, this sentiment expressed by Rhode Island Commissioner Peter McWalters in the early stages was pivotal to the success of the group. The nature of compromise in consortiums is both tricky and critical. In order for the people who will be implementing an assessment system to buy in to a new strategy, strong commitment to a unilateral approach must be solidified at the top. This is not to say that quality should be sacrificed to a least common denominator of agreement, Kahl said. But there has to be some degree of coercion in support of a mission to avoid expending too much energy on the small fraction of disagreement that may surface among states' perspectives.
- ★ **External Management:** Contracting with a program manager outside of the states and assessment developer

is another step in building a successful consortium. An independent facilitator offers logistical support in terms of planning and chairing meetings, as well as serving as a mediator and ensuring that one vision is conveyed to the test contractor.

- ★ **Identical Standards and Tests:** Efficiencies are not a certain result of forming consortia. If states do not accept *identical* standards and the same tests, the payoffs in production and scoring are lost. While a shared test significantly lowers printing and scoring expenses, allowing every state to augment unique pieces of the test substantially detracts from benefits in cost and comparability.
- ★ **Cost Sharing Formulas:** Establishing how states will pay for the various expenditures associated with building assessments is an important step in the planning process. Since states differ in size, a hybrid formula is typically needed. In such an arrangement, states share fixed costs such as those for development and divide variable costs such as shipping and scoring according to number of pupils being tested in each state.
- ★ **Standards and Assessments Will Not Do It All:** While the benefits can be significant, there are two cautions states should acknowledge. First, common standards do not allow for comparability in state test results unless the same test is also administered. Second, the disparity between student performance in the United States and Singapore, which uses U.S.- created standards, is a testament to the reality that standards do not guarantee improvements. Performance growth takes place at the classroom level.

For More Information

More information about the consortium is available on each state education department's NECAP webpage at:

New Hampshire: www.ed.state.nh.us/education/doe/organization/curriculum/NECAP/NECAP.htm;

Rhode Island: www.ride.ri.gov/assessment/NECAP.aspx;

Vermont: www.education.vermont.gov/new/html/pgm_assessment/necap.html; and

Maine: www.maine.gov/education/lsalt/necap/.

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NAEP Math Scores Idle at 4th Grade, Advance at 8th

By Sean Cavanagh

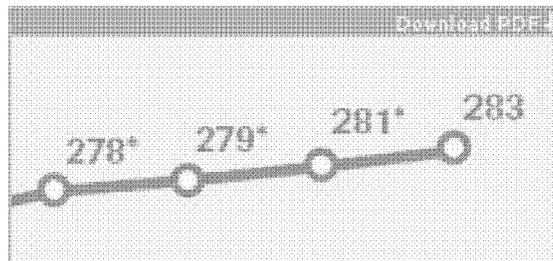
After marching steadily upward for the past two decades, students' scores in 4th grade mathematics have stagnated on a prominent nationwide exam. That result seems likely to prompt calls for an inspection of state and federal efforts to boost elementary instruction in the subject.

Scores among 8th graders on the exam, the National Assessment of Educational Progress, continued to rise, meanwhile—a fairly consistent trend since the early 1990s.

Yet the scores on the 4th grade NAEP, a federally administered test touted as "the nation's report card," are bound to receive close scrutiny. Federal officials released the results at both grade levels today.

Since 1990, students' NAEP performance in 4th and 8th grade math has been a story of steady, if slow, progress. Policymakers have been more puzzled and concerned by the **leveling-off** that occurs among older students, whose scores on a separate NAEP, **designed to measure long-term trends**, have been nearly unchanged at the high school level since the late 1970s.

NAEP Scores



SOURCE: National Center for Education Statistics

Today's **NAEP results**, however, show that 4th graders' scores were the same, 240, in 2009 as they were in 2007, on a 500-point scale. By comparison, those scores jumped from

226 to 235 from 2000 to 2003, and rose by at least 2 points in the two testing cycles prior to the current one.

"The failure of our 4th graders to make progress nationally is a cause for concern," said David P. Driscoll, the chairman of the National Assessment Governing Board, the independent panel that sets policy for NAEP. "With a lack of progress at 4th grade and large achievement gaps that are relatively unchanged, we need to re-examine our efforts to improve student achievement in math."

At an event where the scores were officially released, Mr. Driscoll said he believes there is a link between flat-line 4th grade scores and shaky math content knowledge among teachers. Mr. Driscoll, a former Massachusetts commissioner of education, backed up his argument by pointing to NAEP data showing that 8th grade students who were taught by teachers with math majors scored better than those who did not.

He noted that Massachusetts has revamped its math testing requirements for teachers seeking certification, having seen large numbers of aspiring educators struggle with that subject.

"Strong content knowledge needs attention," Mr. Driscoll said. Effective elementary and middle-grades math educators, he added, "provide the building blocks for mathematics."

Racial Gaps Unchanged

While 4th grade scores among the nation's white, black, Hispanic, and Asian students all have improved since 1990, they remained flat from 2007 to 2009. The gap separating black and white students' scores, and that between Hispanics and non-Hispanic whites, also stayed the same—a discrepancy that has not narrowed in recent testing cycles.

"The test-taking population has undergone a major shift over time. From 1990 to 2009, the proportion of participating Hispanic students taking the 4th grade NAEP rose from 6 percent to 21 percent. The proportion of white students fell from 75 percent to 56 percent during that same period. Those percentages, which are similar at the 8th grade level, reflect the racial-ethnic makeup of the U.S. student population at that grade on the whole, federal officials say."

"A total of about 330,000 4th and 8th graders from all 50 states, the District of Columbia, and federal Department of Defense schools took part in the 2009 math test."

In 8th grade, overall math scores rose from 281 to 283, a statistically significant increase, on a 500-point scale. Since 1990, the nationwide NAEP 8th grade scores have climbed by a combined 20 points.

NAEP reports student performance at three levels of achievement: "basic," "proficient," and "advanced." Even though the gap between 8th grade black and Hispanic students and their white counterparts remained unchanged from 2007 to 2009, students at all three achievement levels made progress at that grade level.

In recent years, policymakers and education advocates have seized on rising or falling NAEP scores in math and reading as evidence of the positive or negative effects of the No Child Left Behind Act, the bipartisan federal law signed by President George W. Bush in 2002. That law, the current version of the Elementary and Secondary Education Act, requires schools and districts to test students annually in both subjects in grades 3-8 and once in high school, and make progress or else face penalties.

But many researchers have cautioned against attempts to link NAEP scores to the No Child Left Behind law. Test gains or losses are just as likely to have been influenced by a myriad of state policies—in such areas as standards, curriculum, and professional development—and by differences between NAEP and state exams, they say, as they are by any federal policy. ("**NAEP Gains: Experts Mull Significance,**" Oct. 3, 2007.)

Policymakers and private organizations have made numerous attempts to improve elementary and middle school math instruction in recent years. President Bush commissioned a group of experts, the National Mathematics Advisory Panel, to study how to prepare students for advanced math, specifically algebra, which more are taking earlier in school. The panel released a report last year that recommended a more focused, streamlined approach to teaching math in the early grades. ("**Panel Calls for Systematic, Basic Approach to Math,**" March 19, 2008.)

U.S. Secretary of Education Arne Duncan voiced concern about the 4th grade results, and said they were evidence of the need to reward teachers who bring about student academic gains, as well as the need for improved data collection and more demanding standards.

"These NAEP results are a call to action to reform the teaching and learning of mathematics and other related subjects in order to prepare our students to compete in the global economy," he said in a statement.

In addition, the country's largest organization of math educators, the 100,000-member National Council of Teachers of Mathematics, in 2006 released "**Curriculum Focal Points for Prekindergarten Through Grade 8 Mathematics,**" a document that calls for a more orderly, logical approach to covering math topics in those grades.

State, D.C. Gains

The 4th and 8th grade NAEP, given every two years and referred to as the "main NAEP," reports results for the entire nation, as well as for individual states. A separate exam, given every four years and known as the "long-term trend," reports results for 9-, 13-, and 17-year olds on a nationwide basis. In general, 9- and 13-year-olds' NAEP math scores have risen since the 1970s, while those of 17-year-olds have stayed mostly flat over that time.

The main NAEP results are typically released at the same time as NAEP reading scores. This year, though, federal officials said that because the framework for the reading test was changed, the results will require additional analysis. Consequently, 4th and 8th grade reading scores aren't expected to be released until the spring, federal officials told *Education Week*.

Several individual states saw significant gains or declines in the math scores.

In 4th grade, scores rose in Colorado, the District of Columbia, Kentucky, Maryland, New Hampshire, Nevada, Rhode Island, and Vermont. Scores fell in Delaware, Indiana, West Virginia, and Wyoming. They remained statistically unchanged elsewhere.

At the 8th grade level, 14 states, plus the District of Columbia, made significantly relevant gains: Connecticut, Georgia, Hawaii, Idaho, Missouri, Montana, New Hampshire, New Jersey, Nevada, Rhode Island, South Dakota, Utah, Vermont, and Washington. The rest of the states saw no significant changes.

The NAEP scores were released amid a major, state-driven effort to create common, multistate standards and assessments. That undertaking is being led by the National

Governors Association and the Council of Chief State School Officers, and 48 states have agreed to take part.

Three of the states making gains—New Hampshire, Rhode Island, and Vermont—already have cooperated in a venture to use their own common grade level expectations and assessments, a project known as the New England Common Assessment Program. David Gebhardt, the NAEP state coordinator in New Hampshire, said that the common assessment system was not the only factor behind the gains, though it probably deserves some credit.

"The standards were set quite high—maybe that's beginning to show some fruit," Mr. Gebhardt said. New Hampshire officials have also worked hard to make those standards clear and useful to teachers, he added.

As a result, Mr. Gebhardt said, educators "had ownership in them."

**Computer-Based Enhanced Assessment Grants
with NECAP State Involvement:
2008-2011**

	<p align="center">New Hampshire EAG: <i>Examining the Feasibility, Effect, and Capacity to Provide Universal Access through Computer-Based Testing</i> (2008-2011)</p> <p>This project examines the feasibility, effect, and capacity of schools participating in a multi-state testing program to improve access to test content through the use of a universally designed computer-based test delivery system. To this end, the project is divided into three main components: a) modifying and employing a universally designed computer-based test delivery system to deliver an operational state test to students requiring assistance to access test content; b) examining the effect of improved access on student performance under non-operational conditions; and c) developing and validating a capacity index that measures the capacity of a given school to deliver a universally designed computer-based test. In addition to these primary goals, the project aims to work collaboratively with partner states for parts b and c, and to share the findings more broadly with testing programs across the nation.</p> <p align="center">12 Participating States</p>	<p align="center">Minnesota EAG: <i>The Accessible Portable Item Protocol Project (APIP)</i> (2009-2011)</p> <p>Computer-based test delivery holds promise to increase the efficiency with which tests are administered and the speed with which results are returned to schools. Two challenges to computer-based delivery, however, are the provision of test accommodations and the ability to easily deliver test items across different delivery systems. The Accessible Portable Item Protocol (APIP) Project brings together a consortium of states to develop a standard item mark up language for accessible computer-based test items. The APIP will ensure that test items are accessible for students with a variety of needs and that items are portable across delivery systems that apply the APIP standards.</p> <p align="center">11 Participating States</p>
	7 states are in both projects	
1	New Hampshire-lead	New Hampshire
2	Maine	
3	Rhode Island	
4	Vermont	Vermont
5	Connecticut	
6	Florida	Florida
7	Georgia	
8	Iowa	
9	Maryland	Maryland
10		Massachusetts
11		Michigan
12		Minnesota-lead
13	Montana	Montana
14	North Carolina	North Carolina
15	South Carolina	South Carolina
16		Utah

WIDA (World-Class Instructional Design and Assessment) Consortium

The WIDA Consortium is a non-profit cooperative of twenty-three states working together to meet the requirements of No Child Left Behind (NCLB) for English Language Learners (ELLs) with innovative standards and assessments. It is housed at the Wisconsin Center for Educational Research in Madison, Wisconsin. WIDA was founded in 2002 when it received a federal enhanced assessment grant. Those funds, along with subsequent earnings and awards, have been used to develop WIDA educational products and services that fall into three main categories: standards and assessments, professional development for educators, and research.

The WIDA Consortium consists of twenty-three partner states:

Alabama
Delaware
District of Columbia
Georgia
Hawaii
Illinois
Kentucky
Maine
Mississippi
Missouri
New Hampshire
New Jersey
New Mexico
North Carolina
North Dakota
Oklahoma
Pennsylvania
Rhode Island
South Dakota
Vermont
Virginia
Wisconsin
Wyoming

Smarter Balance Assessment Consortium Document of Commitment

Please sign and return by April 15, 2010 to
Tony Alpert, Director of Assessment, Oregon Department of Education

Email as PDF attachment to: Tony.Alpert@ode.state.or.us , or

Fax: 503-378-5156

The Document of Commitment may be returned after April 15, allowing a state to begin to participate as a voting Member State from the date of commitment. Signature on this document indicates support of decisions made prior to Consortia receipt of this document.

Complete descriptions of the responsibilities and time commitments of various levels of consortium governance are provided in the Governance Structure document. This initial governance structure refers to the *proposal process only*. Governance structure will be revised after proposal acceptance to reflect long-term needs during the grant implementation period.

State Name: New Hampshire

Please indicate which governance levels are of interest to your state at this time.

- Member State** – May also sign as member state for other consortia, may participate in setting general direction, may vote on selected issues.
- Governing State** – May only sign with one consortia per competition category; has an active role in policy decisions, is committed to using the assessment system or program developed.
- Please consider my state for representation on the **steering committee**. (10 hr/wk)
- Please consider my state for representation on the **proposal design team** (20 hr/wk)
- We are interested in participating in the following **work groups** (variable hr/wk)
 - Item Specs/Quality Control, Writing/Constructed Response Scoring/Validity
 - Psychometrics, Reliability, Standard Setting, Reporting
 - Universal Design, Test Administration, Accommodations, Special Populations
 - Technical Specifications/Requirements
 - Communications and Documentation
 - External Validation, Research and Innovations
 - Professional Development and Capacity Building (IT and Human)
 - Formative and Benchmark Assessment
 - Performance-Based, Curriculum-Embedded Assessments
 - High School and Higher Education



Chief State School Officer

Date: April 13, 2010

**States Participating in the SMARTER Consortium
(as of 4/29/10)**

State	Date	Member/Governing State
Connecticut	April 13	Member
Delaware	April 14	Member
Georgia	April 28	Member
Hawaii	April 15	Member
Idaho	April 15	Governing
Illinois	April 15	Member
Iowa	April 14	Member
Kansas	April 15	Governing
Kentucky	April 15	Member
Maine	April 14	Governing
Michigan	April 16	Governing
Minnesota	April 27	Governing
Missouri	April 14	Governing
Montana	April 14	Member
Nebraska	April 13	Member
Nevada	April 19	Member
New Hampshire	April 19	Member
New Jersey	April 15	Member
New Mexico	April 13	Member
North Carolina	April 15	Governing
North Dakota	April 15	Member
Ohio	April 20	Member
Oregon	April 15	Governing
Pennsylvania	April 27	Member
South Carolina	April 20	Member
South Dakota	April 15	Member
Utah	April 14	Governing
Vermont	April 15	Governing
Washington	April 14	Governing
West Virginia	April 13	Governing
Wisconsin	April 14	Governing
Wyoming	April 14	Member
Total		Member 32 Governing 13

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS

MEMORANDUM OF UNDERSTANDING

Purpose. This document commits states to participate in the Partnership for Assessment of Readiness for College and Career, a state-led consortium that will collaborate on the development of common, high-quality assessments aligned to the Common Core State Standards (CCSS) in English language arts and mathematics for grades 3-8 and high school. The primary goal of the Partnership's work is to measure and document students' college and career readiness against common academic standards and to measure students' progress toward this target throughout the rest of the system.

While participating in the Partnership demonstrates the state's commitment to pursue a common assessment system that enables comparisons against the CCSS across all Partnership states, it does not commit the state to a specific assessment design at this point. Partnership states are still considering several options for the design of a common assessment system in pursuit of the Race to the Top (RTTT) Comprehensive Assessments Grant and will not be asked to commit to the Partnership's application until a later date. Until that time, all participating states will have the opportunity to contribute to and shape the Partnership's proposal.

Preliminary Design Principles. Partnership states have identified the following major purposes and uses for the assessment system. As the Partnership collaborates to develop its application for the RTTT assessment competition, these purposes will guide its work.

- The primary purpose is to measure and document students' **college and career readiness** and to measure students' progress toward this target throughout the rest of the system. Students meeting the college and career readiness standards will be eligible for placement into entry-level credit-bearing, rather than remedial, courses in public 2- and 4-year postsecondary institutions in participating states.
- Additionally, the partnership is committed to ensuring that the assessment results:
 - Are **comparable across states** at the student level;
 - Meet **internationally rigorous benchmarks**;
 - Support valid assessment of **student longitudinal growth**; and
 - Serve as a **signal for good instructional practices**.
- The results must be able to support multiple levels and forms of accountability including:
 - Decisions about **promotion and graduation for individual students**,
 - **Teacher and leader evaluations**, and
 - **School accountability** determinations.

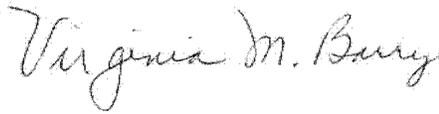
Roles and Responsibilities of Partnership States. The Partnership will employ a multi-level governance and management structure designed to guide the partnership through the submission of the proposal.

- The **Governing States** are comprised of a representative group of leaders from Partnership states that are committed to implementing the assessment system developed by the partnership, should it win a grant from the Race to the Top Comprehensive Assessment System competition, and are responsible for guiding the proposal development process. Each Governing State will commit a team comprised of the chief, assessment director, and other key officials from the SEA, Governor's office, and higher education as appropriate.
- The **Proposal Design Team** will include officials from partnership states who will work with an advisory group of national and international experts to create an assessment system design for the Partnership's proposal. The design team will include as many states as are interested in and capable of contributing to and shaping the design of the proposed next generation assessment system.

- design team but will provide rapid feedback on drafts of the proposal through the development phase.

State Commitment. This memorandum of understanding is voluntary and non-binding for states. States signing this MOU should do so with the intent of continuing in the Partnership through the proposal development, assessment development, and implementation phases. However, there will be an opportunity for states re-assess their participation in the Partnership before it submits its application for a Race to the Top Comprehensive Assessment Systems Grant by June 23, 2010.

Agreement. The undersigned state leader agrees to the process and structure as described above and attests accordingly by his/her signature below.

Signature(s) for the State of: New Hampshire	
Authorized State Signature: 	
Name: Virginia M. Barry, Ph.D.	Date: May 10, 2010
Title: Commissioner of Education	

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS

PARTICIPATING STATES

MAY 13, 2010

1. Alabama
2. Arizona
3. Arkansas
4. Colorado
5. Delaware
6. District of Columbia
7. Florida
8. Georgia
9. Hawaii
10. Illinois
11. Indiana
12. Kentucky
13. Louisiana
14. Maryland
15. Massachusetts
16. Mississippi
17. New Hampshire
18. New Jersey
19. New York
20. North Dakota
21. Ohio
22. Oklahoma
23. Pennsylvania
24. Rhode Island
25. South Carolina
26. Tennessee

The New England Common Assessment Program: Notes on the Collaboration Among Four New England States

**compiled by Charles A. DePascale
Center for Assessment (NCIEA)**

**on behalf of the NECAP states:
Maine, New Hampshire, Rhode Island, and Vermont**

November 2009

Educational and economic factors have intersected to make the concept of collaboration among states to produce common standards and common assessments a high-profile topic at the national level as well as at the regional level. Eight years into No Child Left Behind, there is a growing belief that the disparity in performance across states (i.e., percentage of proficient students) can best be addressed through common standards and common assessments. Current economic conditions combined with concerns about international competitiveness in a global economy also make common standards and common assessments attractive approaches to save money in the short-term and produce students better prepared to compete globally in the long-term.

Recent frenetic activity at the national and federal levels, particularly with regard to the Common Core State Standards Initiative (CCSSI) sponsored by CCSSO and NGA, the USED \$350 million Race to the Top assessment grant, and the possible interrelationship between those two projects have raised interest in issues related to cross-state collaboration and assessment consortia to a new level.

Currently, four New England states Maine, New Hampshire, Rhode Island, and Vermont serve as a national model of the positive potential of collaboration among states. The high-profile New England Common Assessment Program (NECAP) has drawn national interest since its inception in 2004. The success of Rhode Island, New Hampshire, and Vermont on the recently released NAEP 2009 Mathematics tests is being touted as evidence of the efficacy of and need for common standards and assessments.

Introduction: Desperation, Innovation, Collaboration

The relationship among desperation, innovation, and collaboration is well-established, and cannot be underestimated in the case of the collaboration among states that has resulted in the New England Common Assessment Program. In 2001, states were faced with increasing their statewide testing programs from three grades to seven grades to meet the requirements of impending No Child Left Behind Act (NCLB). New Hampshire, Rhode Island, and Vermont concluded that it would be impossible for them to maintain the type of state assessment program they desired across seven grade levels.

Like many states, during the 1990s New Hampshire, Rhode Island, and Vermont implemented state assessment programs that went beyond traditional, norm-referenced, standardized, multiple-choice tests. Rhode Island and Vermont adopted the standards

and assessments of the New Standards Project as their state assessment. Although perhaps falling short of the project's original goals, the New Standards exams available in 2002 still included broad-based tasks designed to measure problem solving and other high level skills. The states were also involved in landmark efforts in portfolio assessment and direct writing assessment. In the early 1990s, New Hampshire began development of the New Hampshire Educational Improvement and Assessment Program (NHEIAP) which included a custom-developed state assessment at grades 3, 6, and 10. In addition to constructed-response items, the NHEIAP tests also included innovations such as a video-based listening test.

Even with additional federal funding provided under NCLB, the states were left with two options in 2002-2003:

1. Switch to primarily multiple-choice tests that were commercially available.
2. Explore options for collaboration with other states that would allow them to continue to offer the type of assessments they valued.

Developing and administering custom state assessments as individual states was not an option. With no attractive, alternative options available the will to succeed and the commitment to make the collaboration work was strong within each of the states.

It is worth noting that New Hampshire, Rhode Island, and Vermont were not alone in initial discussion regarding a collaborative effort among New England states. Preliminary discussions included all six New England states. Connecticut and Massachusetts, with custom state assessment programs and the ability to scale to seven grades to meet NCLB requirements were not in the same position as New Hampshire, Rhode Island, and Vermont and quickly left the conversation. Maine remained in the conversation through the initial development of common content standards but left the discussion of common assessments in an attempt to preserve the well-established Maine Educational Assessment (MEA) at grades 4, 8, and 11. After several cost-saving adjustments to the MEA across five years, Maine ultimately was faced with the same "multiple-choice or collaboration" decision as the other states. In November 2008, Maine became the fourth partner state participating in the New England Common Assessment Program.

Level of Collaboration, Control, and Commitment

After deciding to collaborate on a common assessment, the states were faced with a series of decisions regarding the level of collaboration that they intended, the amount of control they expected to exercise with regard to the development and administration of the common assessment, and the level of commitment each partner state would make to the consortium. The initial meetings among the states to discuss and resolve these issues played a major role in defining the partnership and establishing the principles that have guided the operation of the consortium during the last six years. The investment of start-up time is essential to building clear expectations, common language, strong lines of communication, and partner trust, as well as indentifying the differing strengths among the states that can be used to meet the needs of the consortium as a whole.

Level of Collaboration

Having agreed to collaborate on a common assessment program, the states had to define what was and what was not included in that program – what’s on the table. At an initial meeting, the states decided that their accountability systems and alternate assessment programs (AA-AAS) would not be included in the collaboration. It was also decided that this collaboration would not impinge on individual data warehouse projects that each state had already started. In part, this decision reflected and respected the differences in approaches and philosophies the states had in these areas (e.g., percent proficient v. proficiency index as the basis for accountability, level of emphasis on progress v. status on the alternate assessment). In part, however, the decision also reflected recognition on the part of the states of the need to limit their task to areas directly related to producing a series of operational tests for the 2005-2006 school year. In that same spirit, the states decided to delay collaboration on a common high school assessment and to defer a decision on collaboration on a common science assessment¹. The consortium agreed that the initial collaborative assessment effort would be limited to grade 3 through 8 tests in reading, mathematics, and writing (grades 5 and 8) – not coincidentally, the areas in which the states’ collaborative development and dissemination of common content standards was well underway.

At this point in the process, the states also reached agreement on what would be *common* in their common assessment program. Prior to often intense discussions surrounding specific details, it was not always clear which aspects of the program needed to be common, which components it was desirable to have in common, and which could be kept unique across the states. Critical, high-level, components that would be common among the states included:

- All test materials (e.g., test booklets, answer documents, manuals) would be common and would include the program name rather than individual state names.
- There would be a single set of achievement standards across the states.
- There would be common administration procedures across the states.
- There would be a common policy on the use of accommodations and a single table of allowable standard test accommodations².
- There would be a single set of reports – although compromise led to an expansion of what is included in the single set of reports and variation in the emphasis/use of the particular reports across the partner states.

¹ Development of common high school standards began immediately and a common high school assessment was administered operationally during the 2007-2008 school year. Joint meetings among the states’ science specialists to review existing content standards also led to the decision to collaborate on a common assessment program at grades 4, 8, and 11 that also had its first operational administration during the 2007-2008 school year.

² Within the common table of Standard Test Accommodations, there was an option for schools to request state DOE approval for accommodations not included on the list. Approval of these requests was granted at the state level with the understanding that state decisions would not contradict consortium policy explicitly or implicitly expressed through the table of Standard Test Accommodations.

- There would be a common administration period – although the period became slightly expanded to accommodate the variety of locally observed holidays, teacher workshop days, etc. across the three states.

There was also agreement on some key components regarding the program that would not be common:

- Although there would be a single contractor, there would be individual contracts with each state rather than a single contract across states³.
- Although all technical analyses such as item calibration, scaling, equating, standard setting would be conducted with data combined across the states, there would be no reporting of combined NECAP results. Results would only be reported at the individual state level.
- The purpose of the program was not to make comparisons across states, and there would be no reports directly comparing the results across states.
- The release of results would be handled individually by each state.

Finally, there was also agreement on the general principle that the states would continue to work together to keep as much common across the consortium as possible.

Level of Control

A key decision that the states had to make as a consortium was the level of ownership and control that they wished to have over the design, development, and implementation of the common assessment program. Rhode Island and Vermont were part of the New Standard Project – a collaborative in which they were involved in some aspects of the development of the tests but exerted little direct control over the program and did not own the assessments. New Hampshire had a custom-developed state assessment in which working with their assessment contractor they were deeply involved in almost all aspects of the program and owned all materials developed for the program.

The states determined that for the purposes of this assessment program they would be working with an assessment contractor to design, develop, and administer a set of custom assessments that would be jointly owned by the states⁴. In many respects, the program would operate in the same manner as a single state implementing a custom state assessment. It should be noted that the size of the consortium, the states, and departments of education in this collaborative played a role in the execution of this decision. With the consortium consisting of three (and now four) small states with small numbers of assessment staff within each state the size of the program and the total number of state staff involved in the process was comparable to some single-state assessment efforts. The physical proximity of the consortium states and the contractor also played a key role in the execution of this decision.

³ The task of determining how to enter into a single multi-state contract was too daunting and time-consuming for the New England consortium.

⁴ Like many aspects of this consortium, a legal definition of joint ownership has not been established.

Level of Commitment

From the very beginning of the collaboration, the states had to make a decision on the level of commitment that they were willing to make to the project. Beyond their commitment to the success of the project, this decision involved the commitment of staff time and related resources to the ongoing operation of the project. As discussed in the previous sections, the decision to form a consortium and collaborate on a common assessment program can require various levels of effort and responsibility on the part of the partner states.

The states determined that the assessment and content staff from each of the consortium states would be fully involved in the administration of the New England Common Assessment Program – consistent with their decision to treat this project as a custom state assessment. This decision required the ongoing involvement of the state assessment directors in the management of NECAP and the ongoing involvement of the state content specialists in the test development process throughout the test development cycle. From the beginning, this decision placed additional, significant burdens on the state staff in terms of the time and effort needed to reach agreement with their counterparts in other states as well as the additional physical demands of meeting with counterparts in departments across states rather than across offices within a department.

Although cost was a key factor influencing the states decision to collaborate to attain the quality assessments that they desired, available staff resources was also a critical factor. With their existing staff, it was not feasible for the states to consider developing the type of custom assessments that they desired at grades 3 through 8 and high school in reading and mathematics – as well as additional assessments in writing and science. There was an expectation that collaboration across states would lead to an overall increase in the number of state staff available to participate in the process, and that the act of working together with colleagues from other states to discuss issues related to the assessment development would result in a better product than could be produced by a single state even with the same number of staff (i.e., the whole is greater than the sum of its parts). For the collaboration to achieve this expectation and be maximally effective, however, a division of labor among states is essential. This division of labor (e.g., allowing other states to take the lead on particular tasks), however, requires a fair degree of trust among participants that can only be developed over time and fostered through careful planning, facilitation, and the development of a common understanding of which aspects of the project require full review and approval by all states.

Layers of Support

One lesson learned through the initial work on the development of common standards, subsequent work over the last six years on the common assessment program, and additional collaborative efforts that have emerged during that period (e.g., Enhanced Assessment Grants, WIDA, secondary school reform/restructuring efforts) is that layers of support from within and outside of the departments of education are needed to make the project successful. Within each state, support from the legislature, governor's office, board of education, commissioner, and critical units within the Department of Education is needed to implement a collaborative project that requires giving up some local control

and policies and practices in support of the common goals. Maintaining bottom-up design principles and local involvement/buy-in a regional, collaborative effort that by its nature tends to favor a top-down rather than bottom-up approach also requires tremendous support. Finally, finding the appropriate external partners to support each phase of the projects has been a critical factor in their success. In addition to specific content expertise, the importance of external support in organizing, facilitating, and negotiating among the partner states cannot be underestimated.

As a matter of best practice, and as required by law, state boards of education (and to some extent legislatures and Governors) are directly involved in the adoption of state content and achievement standards as well as in policy shaping the design, purposes, and uses of the state assessment. In a collaborative program such as NECAP, those groups must join the assessment staff from the Department of Education in their willingness to cede some degree of individual control over issues such as the development of achievement standards and the establishment of cut scores on the individual tests. Although there are real and perceived benefits of collaboration that are readily obvious to policy makers within each state, it is necessary to devote sufficient time and resources to developing an understanding of the impact of collaboration on local control. The policy makers also have an understanding of smaller issues such as the need to remain supportive of cross-state efforts at times when out-of-state travel is curtailed or eliminated as a routine cost-savings measure in an historically insular economic and political environment such as a state.

At least as important as the commitment to the project of state policy makers is the support, buy-in, and participation of local educators and other stakeholders in the project. One of the key lessons learned during the last two decades of development and implementation of high quality content standards and standards-based assessments is that local educators are critical to the successful implementation of standards and assessments. The importance of significant stakeholder involvement in development and implementation of content standards and the importance of efforts to disseminate those content standards have been documented across states. With regard to assessment, each of the partner states involved in NECAP has long histories of teacher participation in the assessment program through membership on committees, participation in scoring institutes, and related professional development activities. The level of understanding and acceptance of the assessment program that results from these efforts is substantial.

Participation in a consortium limits the availability and feasibility of many traditional opportunities for teacher involvement in the assessment process. For example, at the state level item review committees often involve the participation of 20-25 teachers per committee. With multiple committees and teachers participating on a rotating basis, several hundred teachers and schools across the state are directly participating in the assessment program within a relatively short period of time. Scoring institutes in which teachers participate in the operational scoring of assessments has been another common activity in some of the states – particularly in the case of the writing assessment. Operating within a consortium, however, given that the number and size of the committees cannot simply be increased, the number of participants per state must be

reduced⁵. Consequently, the number of educators actively participating in the assessment program within a year and across years is reduced, and the exposure and understanding of the program across the state is diminished. It then becomes necessary for the states to develop and offer other avenues for local educators to participate in the assessment.

Managing the Collaboration

Another lesson learned through the last eight years is that although collaboration among several New England states to develop a custom common assessment program has many benefits, the mere consideration of collaboration is a process that requires planning, organization, and a great commitment from each of the partner states. Further, the shift from a conceptual discussion of collaboration to an operational implementation of a program such as NECAP requires an exponential increase in planning, organization, and commitment along with the additional element of compromise. To a large extent, the success or failure of a multi-state collaborative is dependent on the up-front decision that are made on how the project will govern itself and the processes and procedures that are established to manage the project. From their initial efforts in the development of common standards through their shared management of NECAP, the partner states in the consortium have incorporated external support from organizations such as Education Development Center, Inc. (EDC) and the Center for Assessment (NCIEA) into the management of the consortium.

During the process of developing the initial assessment RFP, the states determined that it would be necessary for them to have someone serving in a program management role to coordinate the efforts of the states. The primary function of this person would be to coordinate the efforts among the states and to serve as a liaison between the states and their assessment contractor. Note that this is different from the project management role served by staff of the assessment contractor. A key part of the states' program management effort is reaching consensus on major program issues before placing demands on the assessment contractor. The states considered multiple options for this management function including a) on a rotating basis, assigning a single state assessment director or staff person as project director for a specified period, and b) hiring a permanent employee as consortium project director through one of the state departments of education, before deciding to contract with an external organization to provide management services in support of the consortium.

As the process of designing, developing, and implementing a common assessment program began, it quickly became clear that several procedural and governance decisions would have to be made. One of the first decisions was whether the consortium would exist as a separate legal entity or as loosely coupled association of individual state departments of education working together for a common purpose. Having decided to move ahead as an informal federation of states committed to the success of a common assessment project, the consortium states had to make a series of key procedural decisions that would shape the consortium, including:

⁵ As the size of the consortium increases, participation on some committees may be limited to state department staff or a single local educator.

- Will there be some decisions that require unanimous agreement and others based on majority opinion?
- On issues where there is not a clear consensus among the states, how will each state have an equal vote in making the decision or will voting be proportional based on a factor such as K-12 enrollment? Although New Hampshire has twice as many students as Vermont, the relatively small and similar size of each of the states helped make the desired solution of one state/one vote feasible. That decision may have been more difficult with the addition of a state such as Massachusetts where the combined K-12 enrollment of the four NECAP states is only 70 percent of the K-12 enrollment of Massachusetts or a state such as California with a K-12 enrollment more than 10 times greater than the combined K-12 enrollment of the NECAP states.
- How will fiscal and contractual requirements be handled? Which costs will be shared equally and which costs will be divided proportionally?

Summary

Beyond the formal procedures and rules established for governance, however, the operation of the consortium has been based on a shared sense of purpose of coming together toward a common cause and a sense of trust that an individual state's willingness to compromise on one issue will be met by a similar willingness by the other states on subsequent issues – without the need for formal quid pro quo agreements among all of the states, or worse yet, subgroups of states. There has also been an understanding of the importance of not requiring each state to abandon all of its unique practices and traditions. Of course, there have been cases where different opinions or philosophies of assessment, instruction, or a particular discipline, in general, make it clear that a debate on an issue is not going to end with a clear consensus. For those cases, norms have been established to end debates and either make a decision or, in the case of content committees, defer a decision to the management team.

The discussion presented in this document has focused almost exclusively on the role of the states in the operation of an assessment consortium. Before concluding, it is important to note that the assessment contractor(s) working with the consortium also play a critical role in determining the success or failure of the consortium. The contractor must be strong and flexible enough to engage in the work of the consortium with an understanding of which areas of the assessment program require complete uniformity across states and those areas in which the consortium might be strengthened by slight variations across states that do not damage the quality of the product or impact the overall cost of the project. It can require a substantially different set of skills to function as a general contractor serving multiple states on a common project than to function as a vendor selling the same product to multiple, individual states.

As a final point, it is also important to note that the experiences of the states in the management and operation of NECAP are shaped by the particular context of that assessment – that is, the NCLB requirements, size of the program, physical proximity of the states, etc. The NECAP states are also active participants in the WIDA consortium and administer the ACCESS for ELLs tests of English language proficiency. The

management and operation of that consortium has some similarities to and some differences from the NECAP consortium that are better suited to its context. It would be a mistake to conclude that all consortia must operate in a similar manner or that a state cannot effectively participate in multiple consortia.

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- [North Country Education Services](#)
- [Seacoast Professional Development Center](#)
- [Sugar River Professional Development Center](#)
- [Southwestern NH Education Support Center](#)

Appendix B-3-11: Open NH Information

The screenshot displays the homepage of the New Hampshire e-Learning for Educators website. At the top left is the logo for "New Hampshire e-LEARNING FOR EDUCATORS". The main header area features the text "Online Professional Education Network NH" and "Providing high quality online courses". Below the header, the date "May 24, 2010" is shown on the left, and "Tnoodle Course Login" is on the right. A left-hand navigation menu lists: Home, About, Courses, Registration, Research, Facilitator & Developer Training, Contact Us, Site Map, and eLearning Blog. The main content area begins with "Welcome to" followed by the "OPEN NH" logo, which includes a stylized mountain peak. Below this, a paragraph states: "OPEN NH is growing a cost-effective statewide online professional development system geared to school or district needs. We do this by selecting and training facilitators, designing online courses specifically tied to the needs of NH schools and educators, and researching effective online professional development." A photograph of a woman looking at a chalkboard follows, with handwritten text on the board: "if OPEN NH = mighty cool cool and OPEN NH = E-Learning then E-Learning = mighty cool cool". To the right of the main content is a sidebar titled "WAYS TO PARTICIPATE" containing the text: "Grant Opportunities for Online Professional Development Through OPEN NH! New Hampshire e-Learning for Educators announces a 'Request for Proposals' for districts to apply for funds to develop cohorts of teachers taking online professional development courses and hosting face to face orientation sessions during the 2009-2010 academic school year. For complete details".

Appendix B-3-11: Open NH Information

You are not logged in. (Login)

OPEN NH
Online Professional Education Network
New Hampshire

NH e-LEARNING FOR EDUCATORS

New Hampshire e-Learning for Educators is funded by a Ready to Teach grant and represents a partnership between the New Hampshire Department of Education and New Hampshire Public Television.

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Welcome New Hampshire Educators

General Information

Notes for Course Participants

The Spring 2010 Session of OPEN NH begins April 6th. For updates on the status of courses, visit the e-Learning Blog.

The Winter 2010 Session courses were moved to their respective content categories by course number (BP = Best Practices, SS = Social Studies, etc). Courses covering more than one content area are placed in the "General Courses" category.

We now offer all our OPEN NH courses through this OPEN NH Moodle site. Both NH developed and EDC developed courses will now be accessible through this site. Past EDC courses will still be accessible on the EDC Moodle site.

- Setting up an account with OPEN NH to access courses
- Spring 2010 Session: Plymouth State University Course Numbers

CALENDAR

May 2010

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

OPEN NH SESSION NEWS & UPDATES

MAIN MENU

- OPEN NH Session News & Updates
- OPEN NH Registration Information
- OPEN NH Registration Form
- NH e-Learning Blog
- e-Learning for Educators Video

STEM EQUITY PIPELINE

NH e-Learning for Educators is a proud partner of the STEM Equity Pipeline Project

Appendix B-3-12: NH High School Course Competencies Validation Rubric

COMPETENCY VALIDATION RUBRIC

	4	3	2	1
	The competency statement			
<p>Relevance to Content Area</p> <p><i>How does this competency statement align with standards, leading students to conceptual understanding of content?</i></p>	<p>...aligns with national, state, and/or local standards/ frameworks; areas may be combined or clustered for learning.</p> <p>...articulates, in a clear and descriptive way, what is important in understanding the content area.</p> <p>...connects the content to higher concepts.</p>	<p>...aligns with national, state, and/or local standards/ frameworks; areas may be combined or clustered for learning.</p> <p>...states what is important in understanding the content area</p> <p>...addresses conceptual content</p>	<p>...has beginning alignment with national, state, and/or local standards/frameworks.</p> <p>... is either too abstract or too specific in its content area focus.</p> <p>...is so granular as to obscure the connection to higher concepts.</p>	<p>...has little evidence of alignment with standards or frameworks</p> <p>...focus on content is factual in nature without connection to concepts</p>
<p>Enduring Concepts</p> <p><i>To what extent does this competency statement reflect enduring concepts?</i></p>	<p>...includes skills that are transferable across content areas and applicable to real-life situations.</p> <p>...requires an understanding of relationships between/among theories, principles, and/or concepts.</p>	<p>...includes skills that are transferable across content areas with real-life connections.</p> <p>...is based on concepts supported by topics and/or facts.</p>	<p>...is a statement specific to program/resource used.</p> <p>...is based on topics applicable to the course.</p>	<p>...is limited to scope and sequence of textbook/program/resource.</p> <p>...is very specific to facts in content.</p>
<p>Cognitive Demand</p> <p><i>What depth of knowledge does this competency statement promote?</i></p>	<p>...requires deep understanding of content as well as application of knowledge to a variety of settings.</p> <p>...asks students to create conceptual connections and exhibit a level of understanding that is beyond the stated facts or literal interpretation and defend their position or point of view through application of content.</p> <p>...promotes complex connections through creating, analyzing, designing, proving, developing, or formulating.</p>	<p>...reflects academic rigor and implies opportunities for students to apply knowledge in a variety of ways.</p> <p>...asks students to create conceptual connections and exhibit a level of understanding that is beyond the stated facts or literal interpretation.</p> <p>...promotes deep knowledge using reasoning, planning, interpreting, hypothesizing, investigating, or explaining.</p>	<p>...is limited in academic rigor and/or opportunities to apply knowledge.</p> <p>... asks students to show what they know in ways that limit their ability to build conceptual knowledge.</p> <p>...requires engagement of mental practices such as identifying, defining, constructing, summarizing, displaying, listing, or recognizing.</p>	<p>...asks for routine or rote thinking or basic recall, and lacks opportunities to apply knowledge</p> <p>...asks students to show what they know in simplistic ways.</p> <p>...requires recall of information, facts, definitions, and terms such as reciting, stating, recognizing, listing, reproducing memorizing or performing simple tasks or procedures.</p>
<p>Relative to Assessment</p> <p><i>To what extent does the competency statement promote opportunities for students to demonstrate evidence of learning?</i></p>	<p>...defines what is to be measured in clear and descriptive language.</p> <p>...promotes multiple and varied opportunities to demonstrate evidence of learning in interdisciplinary fashion.</p>	<p>...defines what is to be measured.</p> <p>...promotes either multiple or varied opportunities to demonstrate evidence of learning.</p>	<p>... is disconnected from the product of learning.</p> <p>...implies limited opportunities to demonstrate evidence of learning.</p>	<p>...lacks description of what is to be measured.</p> <p>...implies limited opportunities to demonstrate evidence of learning or, evidence of learning is limited to recall rather demonstration.</p>

Memorandum of Understanding The State Consortium on Board Examination Systems

The purpose of this Memorandum of Understanding is to reflect the mutual understandings that the state partners and the National Center on Education and the Economy (NCEE) have of the purposes of the State Consortium on Board Examination Systems and the obligations of the member states and NCEE during the initial planning period. The description of the system design presented here is not intended to be legally binding on the states. The signature of the chief state school officer on this document is intended to signify that the chief state school officer intends to make his or her best effort to achieve the goals described below, it being understood that realization of those goals will require the subsequent action of many people, including legislators, the governor, the state board of education, key figures in the higher education community, major stakeholders in the elementary and secondary education community, the business community and so on. Similarly, the signature of the president of the National Center on Education and the Economy on this document signifies a pledge by NCEE to do everything it can do to reach the goals described below.

Purposes

Overall, the aim of the members of the consortium is to install in the member states a system based on international best practice that will greatly raise the proportion of their high school students who leave high school ready to do college-level work. The principle features of that system can be found in the Brief Prospectus for a State Board Examination System, available from NCEE.

Near term, in the Consortium's first year of operation, our goal is to conduct the initial planning and research needed to prepare for implementation of the plan put forward in the Brief Prospectus. Most succinctly, that involves establishment of a system in which the member states will, when the system is in operation:

- Require their high schools to offer at least one board examination system (as that term is defined in the Brief Prospectus) at the lower secondary (freshman and sophomore year) level and one at the upper division (junior and senior year) level. These board exam systems would be chosen from a list approved by the state, and these in turn will be chosen from a list approved by the Consortium;
- Offer the examinations for these systems every year, and, at the lower secondary level, allow the students to take them as often as they wish; students would be able to take the full set of lower secondary exams as early as the end of their sophomore year;
- Tell the students that, as soon as they pass their lower secondary exams, they will be able to go to any open-admissions postsecondary institution in the state without having to take any remedial courses, if they choose to do so;

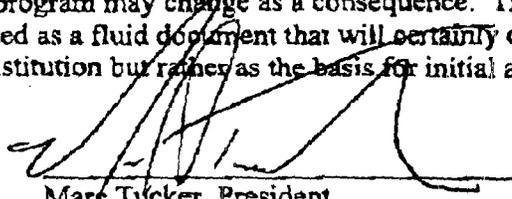
- Decide whether to be a member of the cohort of states beginning implementation in the 2010-11 school year or the cohort beginning implementation in the 2011-2012 school year, and begin the organizational work needed to implement the program in the chosen cohort year;
- Work with NCEE to include language about the Consortium's program in its Race to the Top proposal and other similar proposals as appropriate, as well as requests for funds to support both the state's expenses and NCEE's expenses in connection with this program.

During the initial year, NCEE agrees to:

- Recruit the states and organize the work of the Consortium;
- Raise the money required to fund the work of the Consortium, from both federal and foundation sources;
- Recruit the Technical Advisory Committee, staff it and carry out those of its recommendations that are approved by the governing body;
- Create the governing body and act as its staff;
- Provide support to the leaders in the member states as they seek to build support for the Consortium program among policymakers, key stakeholders and the public;
- Negotiate with the board examination providers to persuade them to modify their offering to reflect the needs of Consortium states and to get the best prices for their products and services for Consortium members;
- Provide the Consortium with high quality analysis to support the continued development of the standards, curriculum, assessments and teacher training delivered to the schools; and
- Provide the Consortium with high quality analysis of the Consortium's program as it evolves over time and is actually experienced by schools, teachers, students and communities, to provide accurate feedback to the governing body as the basis of a program of continuing improvements to the system.

The participants expect that, during the first year, some states will join the Consortium and others will drop out. As the first cohorts of implementing states start implementation, new issues will arise. The shape of the Consortium program may change as a consequence. Thus, this Memorandum of Understanding is intended as a fluid document that will certainly change over time. It is intended therefore not as a constitution but rather as the basis for initial action.


Virginia M. Barry, Ph.D.
Commissioner of Education
New Hampshire Department of Education


Marc Tucker, President
National Center on Education and the
Economy

Board Exam Consortium States

Arizona

Connecticut

Kentucky

Maine

New Hampshire

New Mexico

Pennsylvania

Rhode Island

Utah

Vermont

Performance Tracker Trainings June 2009-May 2010

<i>Location</i>	<i>Number of Visits</i>	<i>Total Attending</i>
<i>Allenstown</i>	1	6
<i>Alton Central School (Elem)</i>	1	5
<i>Alvirne High School</i>	1	20
<i>Amherst Street School</i>	1	20
<i>Andover Elementary School</i>	1	12
<i>Barnstead Elementary School</i>	1	10
<i>Barrington</i>	1	3
<i>Barrington Elementary School</i>	1	15
<i>Barrington Middle School</i>	1	12
<i>Bartlett Elementary School</i>	1	10
<i>Bedford</i>	3	74
<i>Belmont Middle School</i>	3	55
<i>Berlin</i>	1	25
<i>Bethlehem Elementary School</i>	1	12
<i>Bridgewater-Hebron Village School</i>	1	20
<i>Campbell High School</i>	1	15
<i>Captain Samuel Douglass Academy</i>	1	20
<i>Center Woods School</i>	2	18
<i>Charlestown Middle School</i>	1	6
<i>Charlestown Primary School</i>	2	16
<i>Colebrook Academy</i>	1	35
<i>Concord</i>	1	10
<i>Cooperative Middle School</i>	1	5
<i>Derry Cooperative</i>	1	2
<i>DOE Workshop</i>	64	1577
<i>Dover</i>	9	91
<i>Dover Middle School</i>	3	43
<i>Dover Senior High School</i>	4	42
<i>Dr. Norman W. Crisp School</i>	1	10
<i>Elm Street Middle School</i>	4	45
<i>Elm Street School</i>	2	32
<i>Epping Elementary School</i>	1	15
<i>Epsom Central School</i>	3	58
<i>Errol Consolidated Elementary Sch</i>	1	6
<i>Exeter High School</i>	1	10

Appendix B-3-14: PerformancePLUS Training Data

<i>Location</i>	<i>Number of Visits</i>	<i>Total Attending</i>
<i>Exeter Region Cooperative</i>	1	22
<i>Fairgrounds Middle School</i>	1	14
<i>Fall Mountain Regional High Scho</i>	1	6
<i>Freedom Elementary School</i>	2	20
<i>Garrison School</i>	2	28
<i>Goffstown</i>	1	15
<i>Governor Wentworth Regional</i>	3	44
<i>Hampstead Central School</i>	2	25
<i>Hanover</i>	1	10
<i>Harold Martin School</i>	1	10
<i>Henniker Community School</i>	2	28
<i>Hills Garrison Elementary School</i>	2	69
<i>Hillsboro-Deering Cooperative</i>	1	23
<i>Hilltop School</i>	2	30
<i>Hinsdale Elementary School</i>	1	0
<i>Hinsdale High School</i>	1	0
<i>Hinsdale Middle High School</i>	1	0
<i>Hooksett</i>	1	1
<i>Horne Street School</i>	2	30
<i>Hudson Memorial School</i>	1	20
<i>Iber Holmes Gove Middle School</i>	1	15
<i>Jaffrey Grade School</i>	1	15
<i>John Stark Regional High School</i>	1	9
<i>Jonathan M. Daniels School</i>	2	50
<i>Josiah Bartlett Elementary School</i>	1	10
<i>Kearsarge Regional</i>	2	25
<i>Keene</i>	1	15
<i>Laconia High School</i>	1	10
<i>Laconia Middle School</i>	1	15
<i>Lafayette Regional School</i>	1	10
<i>Lamprey River Elementary School</i>	3	40
<i>Lebanon</i>	1	15
<i>Lebanon Junior High School</i>	1	20
<i>Library Street School</i>	1	20
<i>Lincoln-Woodstock Cooperative</i>	1	18
<i>Lin-Wood Public School (Elem)</i>	2	30
<i>Lin-Wood Public School (Middle)</i>	1	15

Appendix B-3-14: PerformancePLUS Training Data

<i>Location</i>	<i>Number of Visits</i>	<i>Total Attending</i>
<i>Lisbon Regional School (Elem)</i>	1	32
<i>Littleton</i>	1	9
<i>Madison Elementary School</i>	2	30
<i>Manchester</i>	2	12
<i>Manchester Memorial High School</i>	1	0
<i>Maple Wood Elementary School</i>	1	25
<i>Mascenic Regional High School</i>	1	20
<i>Mast Way School</i>	1	30
<i>Mildred C. Lakeway School</i>	1	22
<i>Nashua High School South</i>	1	10
<i>New Boston Central School</i>	1	20
<i>New Franklin School</i>	2	5
<i>Newport Middle High School (High</i>	1	6
<i>Newport Middle School</i>	2	14
<i>Nottingham West Elementary Schoo</i>	4	63
<i>Nute High School</i>	1	30
<i>Oyster River Coop</i>	2	35
<i>Oyster River Middle School</i>	2	40
<i>Parker-Varney School</i>	1	10
<i>Paul Elementary School</i>	3	79
<i>Pelham Elementary School</i>	4	51
<i>Pembroke</i>	3	72
<i>Peterborough Elementary School</i>	1	15
<i>Pierce Elementary School</i>	1	6
<i>Pinkerton Academy</i>	1	24
<i>Prospect Mountain High School</i>	1	30
<i>Raymond High School</i>	2	10
<i>Rindge Memorial School</i>	3	41
<i>Rollinsford Grade School</i>	2	16
<i>SAU# 1</i>	1	10
<i>SAU# 29</i>	1	5
<i>SAU# 39</i>	1	16
<i>Seabrook Middle School</i>	3	72
<i>Somersworth</i>	1	20
<i>Souhegan Coop High School</i>	2	19
<i>Stratham Memorial School</i>	1	8
<i>Westmoreland School</i>	1	10

Appendix B-3-14: PerformancePLUS Training Data

<i>Location</i>	<i>Number of Visits</i>	<i>Total Attending</i>
<i>White Mountains Regional High Sc</i>	2	30
<i>Wilson School</i>	2	20
<i>Windham Middle School</i>	4	50
<i>Woodbury School</i>	1	15
<i>Woodman Park School</i>	2	25
<i>Grand Total</i>	245	4139

Next Generation Visualization of Student Growth Data:

A Multi-State Reporting Consortium

New Hampshire Department of Education

Project Overview: Student academic growth is a primary component of both the Race to the Top requirements and of the ESEA re-authorization blueprint. NH has a history of using growth data to track the academic achievement of students, but as is the case in most states, we have just begun the process of defining what student growth means in terms that teachers and parents can use and how it might be used to improve education and educator quality. Building upon the award winning student growth model and reporting tools developed by Colorado, Indiana has proposed a multi-state student growth and reporting consortium to assist participating SEAs in implementing a sustainable state growth model together with effective ways of communicating results to stakeholders. New Hampshire has joined this effort.

Project Objectives & Outcomes: We envision three objectives in line with the absolute priorities defined in the notice (i) implementing the Colorado Growth Model (student growth percentiles) in each participating state (absolute priority 3) (ii) build a multi-state consortium, using the same growth model, tasked with developing effective growth data use (absolute priority 1) and (iii) working with multiple states and, the Center for Assessment and the technology development firm Universal Mind, constructing a multi-state reporting platform enabling states to take advantage of next generation public and private reporting tools developed by Colorado (absolute priority 1).

Relationship to State Assessment Systems: The work helps states turn their assessment data into useful information for the variety of stakeholders associated with the state education system.

Special Features: This project will deploy across multiple states the award winning, innovative and user centered reporting tools developed by the Colorado Department of Education and NCIEA to produce a non-commercial, open source, student growth data reporting platform based available subsequently to any state.

Consortium Participants: Indiana, Colorado, Massachusetts, New Hampshire, Virginia, West Virginia, New York, Wisconsin, Missouri, Nevada, Washington, Wisconsin

Other Participants: **National Center for the Improvement of Educational Assessment, Universal Mind**

Virginia M. Barry, Ph.D.
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STATE OF NEW HAMPSHIRE
DEPARTMENT OF EDUCATION
101 Pleasant Street
Concord, N.H. 03301
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Citizens Services Line 1-800-339-9900

State Collaboration Longitudinal Data Systems, Data Visualization, Research and Development

Agreement for Execution Effective Date: May 10th, 2010

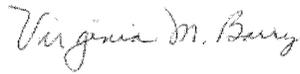
The terms on these two pages outline the initial agreement for a collaborative effort to co-locate state longitudinal growth data sets for the purpose of creating common data visualizations that build upon the Colorado Growth Model.

- 1. Agreement to Participate.** Each Chief State School Officer signs on to the collaborative research and development effort and agrees to the participation of the Chief's designee, chief information officer, and state assessment director or director of research and evaluation.
- 2. Common Longitudinal Growth Measure.** Each state agrees to calculate growth percentiles in the same manner using R (programming language) to allow common cross-state comparisons and data visualization development related to normative and criterion-referenced growth.
- 3. Common Display Platform.** Each state agrees to use the Colorado Growth Model Version 2.0 display layer as an initial common visualization platform.
- 4. State Branding.** Each state may rebrand the display layer (e.g., "The Indiana Growth Model") and will provide mutually agreed upon attribution to Colorado and the National Center for the Improvement of Educational Assessment.
- 5. Common Development Environment.** To the extent practicable, each state agrees to load its longitudinal data set into a common, standardized data storage environment with appropriate security. This storage environment may be a cloud-based, virtual environment. The purpose is to permit common cross-state enhancement of the data visualization tools by the application developers as well as leverage parallel processing allowing states to analyze their data in a fraction of the time it takes on a single high speed workstation. The application developers for the next version of the application deployed across multiple states (version 3.0) will be the Consortium of States, the National Center for the Improvement of Educational Assessment, and Universal Mind.
- 6. Enhancements to the Display Layer.** Each state agrees to collaborate in the development of a common Version 3.0 of the Growth Model Display Layer. Such modifications will include, but not be limited to, postsecondary metrics, multi-year visualization and animation, inclusion of teacher identifiers, enhanced mapping functionality. Each state may engage in the custom development of different enhancements of the display layer. For example, a state may fund development of displays incorporating unique teacher identifiers and interim assessment data.

Appendix B-3-15: Student Growth Percentile Abstract and Consortium Agreement
Enhancement priorities will be established through consensus among the participating states.

7. **Modifications Shared.** Each state agrees to collaborate in, and contribute know-how to the development of modifications and enhancements, which will be shared freely among each participating state, subject to the Creative Commons Attribution-Non-Commercial-Share Alike 3.0 Public License (<http://creativecommons.org/licenses/by-nc-sa/3.0/legalcode>).
8. **Non-disclosure.** States agree to not share source code, design specifications, and visualization know-how with organizations that are not a part of the multi-state collaborative.
9. **Roll-out plan.** States agree to specify a roll out plan for how the growth data will be deployed in their state. This plan will define personnel responsible for overseeing data analysis and explaining the growth model results as well as how the data visualization elements developed as part of the state collaborative will be utilized by stakeholders statewide.
10. **Communications and Publicity.** Each state will collaborate on communications and publicity related to the collaborative effort, including an initial press release announcing the agreement.

The undersigned parties agree to the terms outlined above.



Signature _____

Virginia M. Barry, Commissioner
New Hampshire Department of Education

Date: May 20, 2010

PROJECT ABSTRACT:

NEW HAMPSHIRE'S SLDS: Improving Student Achievement and Student Success

New Hampshire continues to receive national recognition for bringing data driven decision-making to the classroom teacher. Throughout our implementation of the student level data warehouse, NH consistently maintains a collaborative relationship with the districts and other stakeholders to focus not only on collecting data, but also on using the data to inform decisions, particularly at the instructional level. There is significant work to complete in order to reach the vision of the ARRA Assurances, to complete the required seven capabilities and twelve elements and to support the increased reporting requirements of the State Fiscal Stabilization Fund. This round of Statewide Longitudinal Data System funding will enable New Hampshire to address current shortcomings of the data warehouse.

The NH Department of Education (NHDOE) formed several key collaborations to meet the project goals. Through the NH P-16 Working Group there is strong collaboration with the University System of NH, the Community College System of NH, several private Institutes of Higher Education, the Department of Health and Human Services and the Department of Employment Security. The NHDOE has critical multi-state collaborations with Maine, Vermont, Rhode Island and now Connecticut. The multi-state endeavor between NH, RI, ME and VT to create the *New England Common Assessment Program (NECAP)* demonstrates a monumental multi-state achievement.

The project goals and major activities include addressing the required capabilities and elements of the America Competes Act, developing technical solutions and policy to support a PK-20 data system, supporting a research office that will drive data driven decision-making at a policy level, and facilitating data driven decision-making at the classroom level.

The proposed project is organized around six outcomes to achieve the goals and major activities:

1. **Data Availability:** An expanded set of required data to support PK-20 instruction.
2. **Data Sharing:** Expansion of data systems to collect early childhood, higher education, workforce and other state agency data.
3. **Data Sharing K-12:** An expanded, enhanced, and efficient flow of data among the K-12 system to improve accuracy and timeliness.
4. **Data Informed Research:** Establish an office for data-driven P-20 educational research.
5. **Data Use:** Establish an office for implementing education improvements using data.
6. **Governance:** Structures and leadership including data and program governance.

Implementation and ongoing work on the NH SLDS enhances educational decision-making in New Hampshire. More development efforts are necessary to meet all of the required capabilities and key elements and to provide quality improvements to the data systems, policies and processes – and then to promote practices that extend beyond the requirements in order to facilitate improved student achievement.

New Hampshire has a track record of creating capacity within our organization that can sustain the efforts supported by grant funds. In fact, we have assisted several states by sharing our knowledge and tools as they consider leveraging our work in their efforts. We look forward to the opportunity to create significant value both in NH and throughout the country if awarded funds for this grant request.

Appendix C-2-2: REL Project Profile: How State Education Agencies in the Northeast and Islands Support Data-Driven Decision Making in Districts and Schools

How State Education Agencies in the Northeast and Islands Region Support Data-Driven Decision-Making in Districts and Schools

SEA Initiatives Findings. Analysis of the SEA DDDM initiatives in Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, the U.S. Virgin Islands, and Vermont indicates they have implemented one or more of the following four components to support data use by schools and districts:

- **Centralized data system or warehouse:** A centralized data system or warehouse combines data from multiple sources into a centralized repository. Data can include a range of evidence including classroom assessment data, school-level information about students and staff, demographic data, and state test scores.
- **Tools for data analysis and reporting:** Data tools allow users to collect, organize, and analyze data to transform it into actionable knowledge.
- **Training on data systems/warehouses and tools:** Training helps educators learn to effectively and efficiently use the analysis tools provided to facilitate understanding the available data.
- **Professional development in the process of using data for decision-making:** Teachers and administrators initially require extensive professional development to build their expertise in identifying and analyzing relevant data and adjusting instructional practices and school processes in response to relevant data.

Reviewing each SEA initiative, only New Hampshire appears able to provide all four components to every school in the state. Despite a dearth of comprehensive initiatives, SEA officials across the region mentioned the importance of providing a range of DDDM supports to schools but noted that limited funding and a lack of capacity force them to make choices about which components they can provide.

Service Provider Findings. To augment their ability to support DDDM, SEAs contract with outside service providers. According to SEA officials, the following service providers support the implementation of DDDM initiatives in the region: Center for Assessment, Cognos, the Connecticut Alliance of Regional Educational Service Centers (CT RESC Alliance), ESP Solutions Group, Measured Progress, the New York Board of Cooperative Educational Services (BOCES), Pearson School Systems, Performance Pathways, and TetraData. From these nine service providers, the research team selected three to profile in depth: the Connecticut RESC Alliance, Measured Progress, and Performance Pathways. These service providers assist SEAs in implementing the four components of DDDM. Two (Performance Pathways, Measured Progress) create a centralized data system. The same two also create online tools to access and analyze data and provide training on those tools. All three provide some professional development on the process of DDDM.

Contact Information

For more information about this project, e-mail Rebecca Carey (rcarey@edc.org) or visit REL-NEI online (www.relnei.org).



Using Data in New Hampshire Schools

Presented By:

Agenda

- Overview of Performance Plus
- Reports from Different Perspectives
- Discussion of Training Options



What's in Performance Tracker?

- Assessments
 - NECAP
 - NWEA
 - DIBELS
 - AIMSweb
 - Stanford Reading First
 - Access for ELL
 - Local assessments
- Demographics & student characteristics
- Courses & Classes
- Interventions
- Content Library

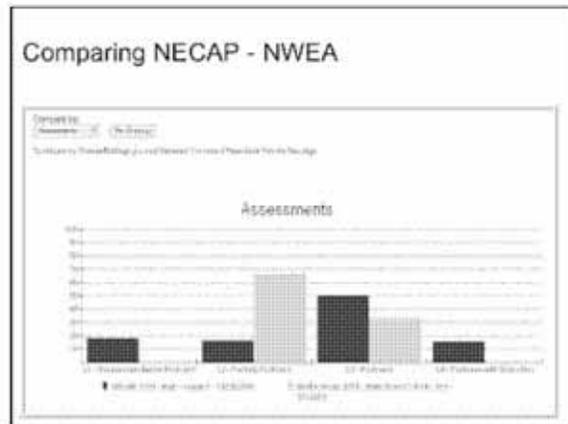
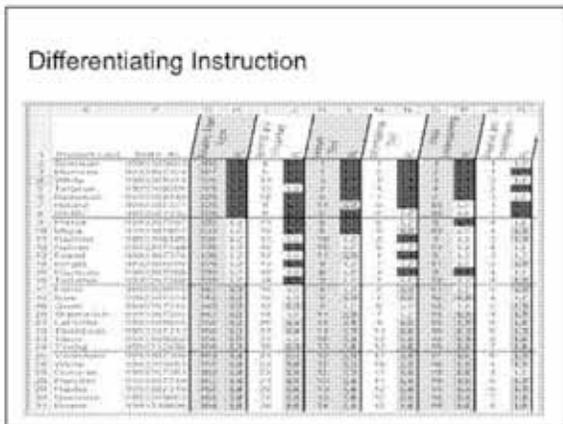
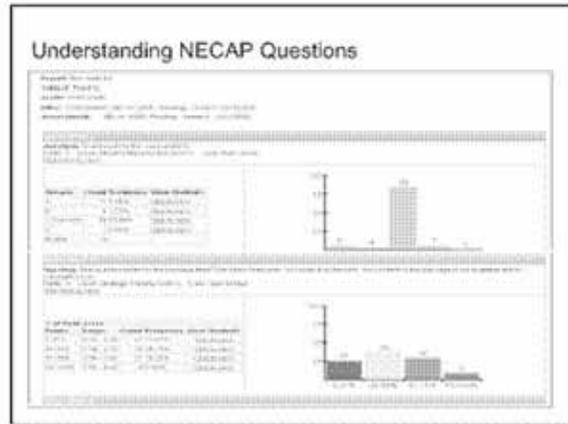
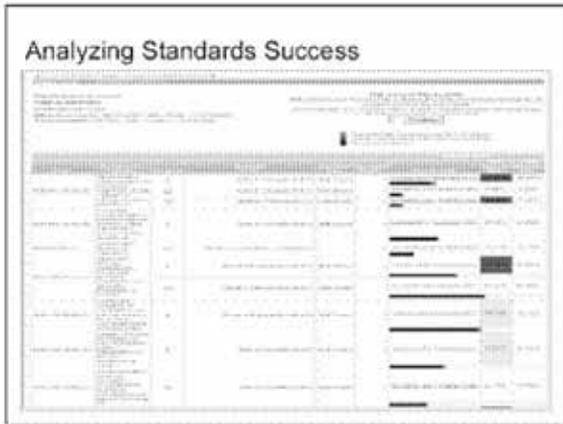
Accessing the Tools



The Teacher's Perspective

(b)(6)

C-3-3: Using Data in NH Schools



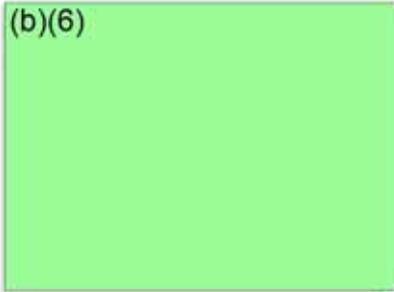
The Specialist's Perspective

(b)(6)

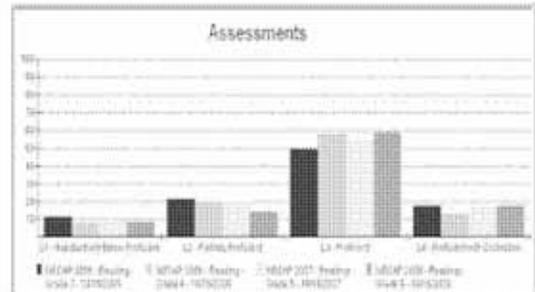
Searching for Students

This screenshot shows a search interface for finding students. It includes several input fields: 'First Name', 'Last Name', 'School District', 'School Number', 'Student Number', and 'Race'. There are also checkboxes for 'Show private groups?' and a 'Search' button. The interface is designed to help users locate specific students within a database.

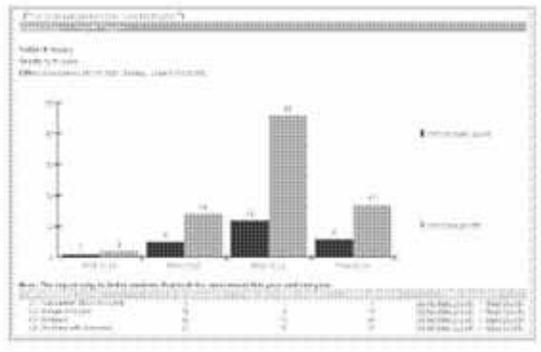
The Administrator's Perspective



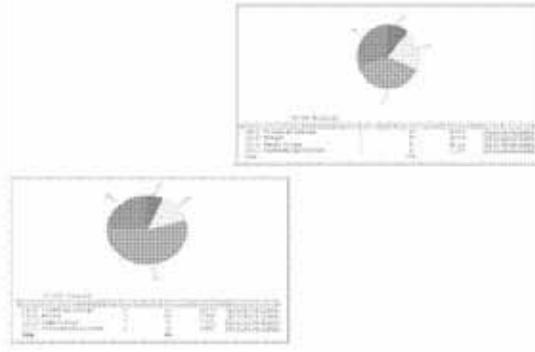
Monitoring Program Success



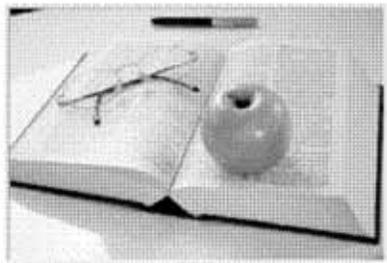
Monitoring Growth



Comparing Classroom Success



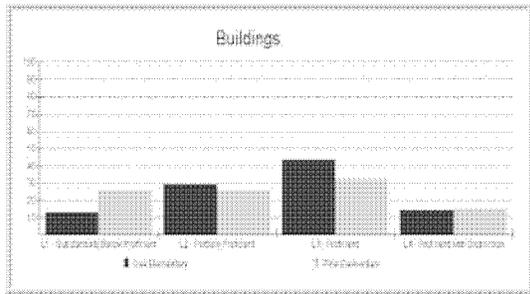
The District's Perspective



Analyzing Sub-Groups

Category	Value
Industrial/Basic	10
Industrial/Proficient	20
Industrial/Advanced	60
Industrial/Excellent	10

Comparing Schools



P+ Upload Frequency

Assessments:

- e.g. NWEA- every week
- Filters- e.g. attendance- end of year
- Courses- nightly as provided

To view the complete schedule for upload frequency, go to:

<http://www.ed.state.nh.us/education/datacollection/4see/PerformanceTracker.htm>

Training Offerings

Support by phone, email, online, regional and onsite

- Core training
 - Course and class uploads
 - Performance Tracker
 - Assessment Builder
- Targeted training
 - Administrative overview
 - Addressing district improvement plan
 - Special Education
 - Data teams
 - Career and Tech Ed (CTE)
 - Math and/or Literacy teams
 - Train the Trainer

When planning for P+ in your district:

Consider:

- Data teams
- Collaborative structures for teachers
- Permissions for access to P+
- Goals
- Time allotted for use

Contact Us

For Training Requests:
 Karen Matso
 207-752-2432
karen.matso@ed.state.nh.us

Paula Churchill 603-986-5287 paula@ncedservices.org	Rebecca Gagnon 630-9174 rebecca_gagnon@myfairpoint.net
Cyndy Currier 801-0444 ccurrier@mac.com	Charlotte Greenhalgh 358-2750 cgreenhalgh@sau29.org

For online instructions for all reports, other help sheets, PowerPoints, videos and regional trainings go to:
<http://www.ed.state.nh.us/4see>

Training Calendar Snapshot

4/3/2010	Churchill, Paula	DOE	3	'hands-on'	20	GMPDC Assessment Builder Understanding at a planning level morning
4/5/2010	Churchill, Paula	Nottingham West Elementary School	6	'hands-on'	10	Follow up training
4/5/2010	Matso, Karen	Stratham Memorial School	2	'hands-on'	8	Special Education focus beginning level 12 thirty to 3.
4/6/2010	Matso, Karen	Raymond High School	6	'hands-on'	8	Working with discipline reps that are creating Reading and Math assessments for incoming 9th graders
4/6/2010	Currier, Cyndy	SAU# 13	2	'hands-on'	3	Went through the course uploads with the Asst. Supt. and secretaries. There were supposed to be 10, but there were only 3 when I got there. They still had one that I am going to go through it with on the phone. They were clear on how to do this and seemed comfortable with it.
4/10/2010	Greenhalgh, Charlotte	Rindge Memorial School	6	'hands-on'	9	I will rotate through grade levels from 9-3 follow up to initial training.
4/10/2010	Matso, Karen	Epping Elementary School	3	'hands-on'	15	1 thirty to 4 thirty training teachers. Beginning level. Focus TBA
4/11/2010	Matso, Karen	DOE	3	'hands-on'	10	Training School Improvement Team to use P PLUS
4/12/2010	Matso, Karen	Somersworth	2	'hands-on'	20	Career and Tech Ed in Somersworth rescheduled their January training because they are having trouble with their data.

TITLE XV EDUCATION

CHAPTER 186 THE STATE SCHOOL ORGANIZATION

State Board of Education

Section 186:11

186:11 Duties of State Board of Education. – The state board of education shall, in addition to the duties assigned by RSA 21-N:11:

I. [Repealed.]

II. Supervision. Supervise the expenditure of all moneys appropriated for public schools, and inspect all institutions in which or by which such moneys are used.

III. Budget: Information. Prepare a budget for such expenditures, give to the public information as to the educational conditions in different parts of the state and the opportunities open to pupils in the public schools, and all such further information in respect to educational matters as will promote the cause of education. For this purpose it may employ lecturers and publish and distribute books and pamphlets on education and educational subjects.

IV, V. [Repealed.]

VI. School Registers. Prescribe the form of the register to be kept concerning the schools, the form of blanks and inquiries for the returns to be made by the school boards, and seasonably send the same to the clerks of the several cities and towns for the use of the school boards therein.

VII. Public Documents. Keep on file in its office and distribute all state documents in relation to public schools and education.

VIII. District Returns. Preserve in accessible form the returns of school boards and of all other officers required to make returns to the board.

IX. Instruction as to Child Abuse Prevention, Youth Suicide Prevention, Intoxicants, Drugs, HIV/AIDS, and Sexually Transmitted Diseases.

(a) Direct the department to develop curriculum frameworks in health, physiology, and hygiene as they relate to the effects of alcohol and other drugs, child abuse, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), and sexually transmitted diseases on the human system, and which are designed to help students lead longer, healthier lives.

(b) Provide information about HIV/AIDS to all public and private schools to facilitate the delivery of appropriate courses and programs.

(c) Review HIV/AIDS curriculum materials to assure relevancy in assisting students to become health-literate citizens and lead longer, healthier lives.

(d) Provide information about youth suicide prevention to all public and private schools to facilitate the delivery of appropriate courses and programs.

(e) Submit a report no later than December 1, 2010, and biennially thereafter, prepared in conjunction with the commissioner of the department of education, to the chairpersons of the house and senate education committees, the house health, human services and elderly affairs committee, and the senate health and human services committee, detailing the state's efforts in fulfilling the policies relating to health education in kindergarten through grade 12 as set forth in subparagraphs (a)-(d).

IX-a. [Repealed.]

IX-b. Health and Sex Education. Require school districts to adopt a policy allowing an exception to a particular unit of health or sex education instruction based on religious objections. Such policy shall include a provision for alternative learning sufficient to enable the child to meet state requirements for health education.

X. Adopt rules, pursuant to RSA 541-A, relative to:

(a) Certification of teachers, supervisors, and administrators in the public schools. The state board shall also examine the qualifications of candidates for those positions and issue certificates to those who meet the requirements of said rules.

(b) Fees to be paid to the commissioner of education for the administration of proficiency exams and other competence evaluations and other related fees including, but not limited to, fees for late filing and duplicate credentials, and for the issuance of educational credentials. These fees must bear a reasonable relationship to the actual costs related to such activities. Funds collected from these fees shall be expended only for purposes of fulfilling the requirements of this paragraph. No portion of the funds collected from these fees shall lapse, nor be used for any other purpose than fulfilling the requirements of this paragraph, nor be transferred to any other appropriation.

(c) Approval of professional preparation programs.

(d) Procedures for the electronic certification of educational credentials.

XI. [Repealed.]

XII. Vocational Education. Cooperate with the U.S. Department of Education for the purpose of carrying the Carl D. Perkins Vocational Education Act of 1984 and its successor acts into effect insofar as that act relates to this state.

XIII. Education for Persons with Disabilities. Prepare, develop and administer plans to provide educational facilities for persons with disabilities.

XIV. Lectures. Lecture on educational subjects in as many cities and towns in this state as the time occupied by the commissioner's other duties will permit.

XV. Truant Officers. Report frequently to the chairman of the several school boards the relative efficiency of the several truant officers in the state.

XVI. [Repealed.]

XVII. District Contracts. Examine contracts made by districts with academies, high schools and other literary institutions, for the purpose of deciding whether they are calculated to promote the cause of education.

XVIII. School Attendance. Enforce the laws relative to school attendance and the employment of minors; and for this purpose the board and its deputies are vested with the power given by law to truant officers.

XIX. School Laws. Compile and issue, at the close of each session of the legislature, an edition of the school laws.

XX-XXIV. [Repealed.]

XXV. Assistants. Employ as many supervisors, inspectors, stenographers, accountants,

clerks and agents as may be necessary to enable it to perform the duties imposed on it by law.

XXVI. Conferences. Hold conferences from time to time with superintendents, other school administrative unit personnel, principals, and teachers, or their representatives, for the purpose of inspiring mutual cooperation in the carrying on of their work and of unifying educational aims and practices.

XXVII. Programs. Prepare, publish and distribute such school programs, outlines of work and courses of study as will best promote education interests of the state.

XXVIII. Health. Have authority to employ a competent person or persons to examine and care for the health of pupils, subject to the provisions of RSA 200.

XXIX. Adopt rules, pursuant to RSA 541-A, relative to reasonable criteria for approving non-public schools for the purpose of compulsory attendance requirements. The rules may contain criteria for conditional approval as specified by the state board. The state board of education may, upon request, designate which schools meet those criteria, and may, upon the request of a non-public school, approve or disapprove its education program and curriculum.

XXIX-a. Adopt rules pursuant to RSA 541-A, relative to establishing a process for receiving, investigating, and resolving complaints from parents or legal guardians concerning school safety and school violence in nonpublic schools.

XXX. [Repealed.]

XXXI. Driver Education. Establish jointly with the department of safety, teacher qualifications, course content and standards, in connection with the driver education program conducted in secondary schools in this state; and adopt such rules as may be necessary to carry out the program and supervise the driver education program in the secondary schools of the state. Driver education instructors shall not be required to be certified as secondary school teachers. Although authority is shared by the departments of safety and education, those regulations, directions and procedures that have a direct or indirect relationship to a life or safety issue shall rest with the department of safety as the final and ultimate authority.

XXXII. Learning Disability Teacher. Establish the qualifications, conditions and exceptions for providing a learning disability teacher in each school district.

XXXIII. Discrimination. Insure that there shall be no unlawful discrimination in any public school against any person on the basis of sex, race, creed, color, marital status or national origin in educational programs, and that there shall be no denial to any person on the basis of sex, race, creed, color, marital status or national origin of the benefits of educational programs or activities.

XXXIV. Missing Child Education Program. Administer the missing child education program as established in RSA 193:31.

XXXV. Certification Standards for the Credential of Master Teacher. Adopt rules creating the educational credential of master teacher based on the provisions of RSA 189:14-f.

XXXVI. Pupil Safety and Violence Prevention. Develop and distribute to school districts a technical assistance advisory for the purpose of providing guidance to school districts on the implementation of pupil safety and violence prevention policies as required under RSA 193-F.

Appendix D-1-1: NH Regulations and Statues

Source. 1919, 106:9. 1921, 85, I:8. PL 116:11. 1929, 145:3. 1939, 8:1. RL 134:11. 1953, 243:1-4. RSA 186:11. 1957, 252:1, 2. 1961, 196:1-3. 1963, 117:2; 147:1; 303:7; 305:1-3. 1965, 199:1; 339:4. 1967, 448:1. 1969, 69:1-3. 1971, 371:4, 5; 443:4. 1973, 140:15; 209:2; 242:1. 1974, 28:1. 1975, 23:1; 207:1; 505:6. 1977, 432:1; 452:6. 1979, 53:1; 459:4, 9, 10. 1981, 318:1. 1985, 318:4. 1986, 41:8-10, 29, II. 1987, 161:1. 1988, 262:7. 1989, 266:37. 1990, 28:1; 140:2, III. 1992, 123:1. 1993, 322:9, I, II. 1996, 298:5, I. 1998, 174:4, 5; 314:3; 389:8, 9. 1999, 157:1. 2000, 190:2. 2003, 39:1; 186:2. 2005, 92:1, eff. Aug. 6, 2005. 2008, 251:1, 4, 5, eff. Aug. 23, 2008. 2009, 105:1, eff. June 15, 2009; 280:1, eff. Sept. 27, 2009.

TITLE XV EDUCATION

CHAPTER 186 THE STATE SCHOOL ORGANIZATION

Professional Standards Board

Section 186:60

186:60 Professional Standards Board. –

I. There is hereby established a professional standards board to advise the state board of education regarding professional growth, certification and governance of the education profession in this state. The board shall consist of the following 21 members:

- (a) The director of the division of program support, or designee, who shall be the executive secretary of the board;
- (b) 9 members representing classroom teachers or education specialists, or both;
- (c) 9 members representing higher education and education administration; and
- (d) 2 members representing qualified lay persons.

II. The state board of education shall appoint the 20 members of the board specified in paragraph I(b), (c) and (d) from nominations submitted by the education profession and interested persons.

III. The appointed members of the board shall serve for 3-year terms and may not serve for more than 2 full terms.

IV. The appointed members of the board shall serve without compensation and shall be entitled to reimbursement by the state board of education for mileage and expenses incurred in performing required duties. The state board of education shall furnish the board with materials, secretarial assistance and meeting facilities.

V. The members of the board shall annually elect a chairman from among their membership. The chairman shall present budget requests to the state board of education.

VI. The board shall have the following powers and duties:

(a) The board shall recommend policies to the state board of education including, but not limited to, pre-service education, continuing education, professional growth, initial certification, recertification, para-professional training and certification, revocation of credentials, performance evaluation and staffing patterns. In making policy recommendations on the certification process, the board shall consider complaints it receives from persons who feel aggrieved by the process.

(b) The board shall meet at least 5 times annually.

(c) The board shall annually submit 2 reports to the state board of education concerning its activities and containing policy recommendations.

(d) The board shall maintain records and minutes of its meetings and shall file them in the office of teacher education and professional standards.

Source. 1975, 122:1. 1986, 41:12. 1994, 379:4, eff. June 9, 1994.

TITLE XV EDUCATION

CHAPTER 190 COUNCIL FOR TEACHER EDUCATION

Section 190:1

190:1 Establishment. – An advisory and coordinating council for teacher education, hereinafter called the council for teacher education, is hereby established.

Source. 1951, 143:1, eff. June 6, 1951.

Section 190:2

190:2 Members. – The council for teacher education shall consist of: the commissioner of education and the chairman of the department of education of the university of New Hampshire; 3 members appointed by them for terms not exceeding 3 years, one from a private educational institution, one from the professional personnel of the public schools and one layman; and the presidents of Keene state college and Plymouth state university, or staff members designated by them; provided that additional members may be appointed by these 7 for such terms as they may determine. Members of the council shall be entitled to reimbursement by the state board of education for mileage and expenses incurred in the performance of their required duties. The state board of education shall furnish the council with suitable meeting facilities, administrative assistance, and necessary supplies.

Source. 1951, 143:2. 2003, 159:2. 2007, 21:1, eff. July 1, 2007.

Section 190:3

190:3 Duties. – The council for teacher education shall coordinate teacher education in the state in an advisory capacity through a continuing study and discussion of its problems and shall issue advisory reports to agencies and institutions, public and private, concerned with teacher education or its financing in this state.

Source. 1951, 143:3, eff. June 6, 1951.

Section 190:4

190:4 Meetings. – The council shall meet at least twice each year.

Source. 1951, 143:4, eff. June 6, 1951.

Section 190:5

190:5 Officers. – The council members shall elect a chairman and secretary annually to serve for the ensuing year.

Source. 1951, 143:5, eff. June 6, 1951.

Section 190:6

190:6 Meeting Room; Clerical Assistance. – The state board of education shall provide a meeting room, filing space and clerical assistance to the council.

Source. 1951, 143:6, eff. June 6, 1951.

Section 190:7

190:7 Employment of Consultant. – The council is empowered to employ consultant services subject to the approval of the state board of education. The said board shall pay the expenses of such employment.

Source. 1951, 143:7, eff. June 6, 1951.



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DEPARTMENT OF EDUCATION
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May 24, 2010

Report to the New Hampshire State Board of Education

RE: Update on 2009-2010 Rulemaking from the Professional Standards Board

From: Professional Standards Board; Karen Soule, Chairperson

Professional Development Master Plans

The Professional Development Master Plan (PDMP) regulations require all certified staff to create an Individual Professional Development Plan (IPDP). The IPDP must include professional growth goals based on both school improvement and individual educator learning goals. The Professional Standards Board (PSB) recommends that the rules governing the PDMP require that the IPDP include goals for professional learning that are documented from and link to performance evaluations. The PSB also recommends that the PDMP provide for differentiated professional growth opportunities for beginning educators and alternative candidates for certification as compared to the experienced educators. The language for the proposed regulations will be finalized during the summer of 2010.

Beginning Educator Credential, Experienced Educator Credential, Master Teacher Credential relative to the 21st century learners

The Professional Standards Board recommends that the criteria for the Experienced Educator Credential (EEC) require a performance component. The new language will require that a Superintendent recommend the educator for an EEC based on evidence of effective teaching and not solely on a requirement to teach for three years.

The professional educator standards will be revised to reflect the new CCSSO INTASC standards to be released this summer. These standards are expected to guide revisions to the standards that will address the 21st century learner as well as an emphasis on educator collaboration.

Teacher preparation approval process and program accountability requirements

The Council for Teacher Education is piloting new regulations which require evidence of candidates' work to demonstrate the standards for program approval.

Nontraditional routes to certification

The processes for preparing alternative certification plans and granting intern licenses at the NH Department of Education have been strengthened to require more alignment between the alternative certification plans and the standards for meeting the credentialing requirements.

DRAFT

PART Ed 505 QUALIFYING METHODS FOR OBTAINING A TEACHING CREDENTIAL

Ed 505.01 Alternative 1: Approved Program in New Hampshire.

(a) Individuals shall qualify for a credential pursuant to Ed 504 by completing a board approved educator preparation program(s) at a college, university or teacher training institution in New Hampshire in accordance with Ed 600.

(b) Upon completion of a board approved program in accordance with Ed 600, the applicant shall:

(1) Obtain confirmation of completion of the program on the application for certification described in Ed 508.02 by the designated official of the college or university; and

(2) Complete and file the application for certification pursuant to the application procedures of Ed 508.

(c) A current listing of approved programs in New Hampshire shall be kept on file by the bureau.

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96, EXPIRED: 10-5-04

New. #8194, eff 10-26-04

Ed 505.02 Alternative 2: States Other Than NH. Alternative 2 shall have 2 distinct requirements known as Alternative 2A and 2B, as described below:

(a) Alternative 2A relative to the National Association of State Directors of Teacher Education and Certification NASDTEC Interstate Contract shall consist of the following:

(1) Individuals shall qualify for a beginning or experienced educator credential by:

a. Completing a program in another state party to the NASDTEC Interstate Contract, which would qualify the applicant for certification as an educator in the other state, including, but not limited to, an alternative certification program, consistent with the terms of the NASDTEC Interstate Contract with New Hampshire; or

b. Holding an equivalent, valid credential from a state party to the NASDTEC Interstate Contract and having 3 years of educational experience in the last 7 years under a credential from a participating state; and

(2) Applicants seeking to obtain certification under this part shall apply to the bureau pursuant to Ed 508.

(b) Alternative 2B relative to a state not signatory to the NASDTEC Interstate Contract shall consist of the following:

(1) Individuals from a state not a party to the NASDTEC Interstate Contract shall qualify for a beginning or experienced educator credential by:

- a. Completing a program in another state not signatory to the NASDTEC Interstate Contract, which would qualify the applicant for certification as an educator in the other state, including, but not limited to, an alternative certification program, approved by the state department of education in a state not signatory to NASDTEC Interstate Contract; or
- b. Holding an equivalent, valid credential from a state not signatory to NASDTEC Interstate Contract and having at least 3 years of experience as an educator in the last 7 years under a credential issued by that state.

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96; ss by #7923, eff 7-24-03

Ed 505.03 Alternative 3: Demonstrated Competencies and Equivalent Experiences.

(a) Alternative 3A relative to demonstrated competencies and equivalent experiences shall consist of 3 parts, a written application, submission of documentation that the applicant meets the required competencies in the area of endorsement, and an oral interview process as described below:

- (1) An applicant for a credential who has acquired competencies, skills and knowledge through means other than Ed 505.01 or Ed 505.02 may request a credential on that basis;
- (2) An applicant shall hold a bachelor's degree prior to submitting documentation that the applicant meets the required competencies, which may include, depending on the area of endorsement, documentation in the following forms:
 - a. Written materials;
 - b. Videotapes;
 - c. Audiotapes;
 - d. Art portfolio;
- (3) To qualify, an applicant shall have at least 3 months of full-time continuous experience as an educator in the area of endorsement;
- (4) Individuals seeking a credential through this part shall submit to the bureau:
 - a. A completed application form required by Ed 508.03;
 - b. Official college or university transcript(s); and

c. A letter from the employer verifying that the applicant has completed at least 3 months full-time experience in the area of endorsement for which a credential is sought;

(5) Upon receipt of the materials listed in subparagraph (4) requesting processing pursuant to Ed 505.03, the bureau shall evaluate the materials to determine if the applicant qualifies for this application method;

(6) If the bureau determines that an individual does not qualify under this method, the bureau shall:

a. Notify the individual in writing within 15 days of its decision;

b. Provide the reasons for the determination, which shall include a written explanation stating why the materials the applicant has submitted are not acceptable and how they can be corrected; and

c. Recommend another appropriate application method if one is available;

(7) The bureau shall:

a. Review the materials to determine if the application is complete; and

b. Notify the applicant if any additional information is needed to complete the application process;

(8) Upon the determination by the bureau that the application is complete, the applicant shall attend a meeting with the review board;

(9) At the meeting with the review board under (9) above, the board shall review the applicant's application, including the written application, transcript(s), and documentation that the applicant meets the required competencies in the area of endorsement and ask the applicant questions based upon the materials submitted;

(10) The review board shall be appointed by the bureau;

(11) The review board shall consist of a member of the department and 2 other members;

(12) The 2 members who are not department employees shall:

a. Hold valid credentials as experienced educators in the area of endorsement; and

b. Be employed in the subject area in which the applicant is seeking to obtain a credential;

(13) The review board shall make a written recommendation to the administrator, based upon:

- a. Its evaluation of the applicant's written application;
- b. Its evaluation of the quality of the applicant's documentation of meeting the required competencies in the area of endorsement, after considering:
 - 1. The materials submitted to provide the documentation; and
 - 2. The applicant's oral responses to the board's questions regarding the documentation;
- c. Whether the applicant's college or university transcript(s) demonstrates sufficient mastery of the subject matter for which the applicant seeks to be credentialed; and
- d. Whether or not the bureau has received the letter verifying experience as required under Ed 505.03(4)c;

(14) After reviewing the review board's written recommendation and the applicant's application and portfolio, the administrator, shall:

- a. Grant certification if the administrator determines that the applicant meets the education and experience requirements of Ed 504.031(d); or
- b. Deny certification if the administrator determines that the applicant does not meet the education and experience requirements of Ed 504.031(d);

(15) The administrator shall issue a decision in writing stating the reasons for the administrator's decision under (14) above;

(16) An applicant may ask the administrator for a reconsideration of the administrator's decision to deny credentialing; and

(17) An applicant may appeal a decision made by the administrator to deny an application for a credential under this part pursuant to Ed 200.

(b) The department shall pay a stipend for each member on the oral interview review board who is not a department employee. The stipend may be paid to the member or used by the school district where the member is employed to pay for a substitute teacher for the member while the member is serving on the review board.

(c) Alternative 3B relative to demonstrated competencies and equivalent experiences, national or regional examination, shall consist of the following:

(1) Individuals shall be eligible for a New Hampshire credential who possess:

- a. A national level or regional certification which has been validated in the individual's endorsement area achieved by passing a national or regional examination designed to assess the individual's skills in the area in which the individual seeks certification; or
- b. Proof of completion of a specialized program, such as, but not limited to, a bachelor's degree in social work, culminating in a bachelor's degree from

a college or university accredited by a recognized national, regional, or state accrediting agency;

(2) Applicants under this paragraph shall apply for a credential by submitting the scores along with an application for certification pursuant to Ed 508.03 to the bureau with the appropriate filing fees and accompanying documentation as required by Ed 508.

(d) Alternative 3C relative to demonstrated competencies and equivalent experiences, shall consist of the following for superintendent, principal, special education administrator, or career and technical education director:

(1) An applicant for certification as a superintendent under this paragraph shall qualify if the bureau determines, using transcript analysis, that he or she meets the program requirements of Ed 614.05;

(2) An applicant for certification as a principal under this paragraph shall qualify if the bureau determines, using transcript analysis, that he or she meets the program requirements of Ed 614.04;

(3) An applicant for certification as a special education administrator under this paragraph shall qualify if the bureau determines, using transcript analysis, that he or she meets the requirements specified in Ed 506.07(d); and

(4) An applicant for certification as a career and technical education director under this paragraph shall qualify if the bureau determines, using transcript analysis, that he or she meets the requirements specified in Ed 507.01(b).

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96; ss by #7923, eff 7-24-03; amd by #8194, eff 10-26-04; amd by #8843, eff 3-16-07

Ed 505.04 Alternative 4: Individualized Professional Development Plan (Restricted).

(a) Alternative 4 shall be a qualifying method for certification limited to the following:

(1) Applicants recommended for employment under a critical staffing shortage who hold at least a bachelor's degree;

(2) Applicants recommended for employment in the career and technical specialties pursuant to Ed 507;

(3) Applicants recommended for employment as business administrators who have not completed the requirements of Ed 506.03; and

(4) Applicants recommended for employment as a driver education teacher in an approved secondary school program.

(b) An applicant may be employed as an educator after obtaining a statement of eligibility from the bureau while completing an individualized professional development plan.

(c) An educator shall be considered for a credential under (a)(1) above only if the bureau has received notification from the superintendent that the applicant has been employed as an educator.

(d) The process for establishing an individualized professional development plan shall be as follows:

- (1) The individualized professional development plan shall be based on an assessment of the strengths and weaknesses of the applicant;
- (2) Each plan shall include:
 - a. A description of the competencies outlined in Ed 505.06 for general education requirements, in Ed 505.07 for professional education requirements, as appropriate, and in the area in which the applicant seeks certification;
 - b. The means by which these competencies shall be attained, demonstrated and evaluated; and
 - c. An evaluation of resources to be utilized such as, but not limited to, additional coursework, on the job training, and professional development;
- (3) The plan shall be developed collaboratively and agreed to by:
 - a. The applicant;
 - b. A mentor certified in the same subject area that the applicant will be teaching who shall:
 1. Be appointed by the superintendent;
 2. Hold a valid experienced educator credential with the appropriate endorsements in the same subject area in which the applicant is seeking to obtain a credential; and
 - c. The superintendent;
- (4) The superintendent shall submit the plan and identify the mentor appointed in accordance with Ed 501.02(m) to the bureau for approval;
- (5) The bureau shall review the plan to ensure all of the following are included:
 - a. Subject matter content;
 - b. General education requirements as specified in Ed 505.06, if appropriate;
 - c. Professional education requirements as specified in Ed 505.07, if appropriate;
 - d. Performance objectives of educators;
 - e. Evaluation of resources to be utilized such as, but not limited to, additional coursework, on the job training, and professional development; and
 - f. Documentation of how the applicant will overcome weaknesses identified in the assessment process in the applicant's area of endorsement.

(e) If an assessment of the applicant's background determines that some or all of the education requirements under (d)(5)a. through c. have been completed prior to application, the applicant shall not be required to repeat any requirement already completed.

(f) Within 30 days of the bureau's determination under (d)(5) that the plan submission is complete, the bureau shall send written notification to the superintendent and the applicant of the bureau's approval of the plan, if the bureau determines that:

- (1) The subject matter content of the plan is complete;
- (2) Completion of the plan will assure that the applicant will meet the general education requirements as specified in Ed 505.06, if appropriate;
- (3) The plan contains professional education requirements as specified in Ed 505.07, if appropriate;
- (4) The performance objectives specified in the plan are directly related to and substantiate the competency;
- (5) The resources to be utilized in the plan are relevant to and support the activity proposed; and
- (6) The documentation of how the applicant will overcome weaknesses identified in the assessment process in the applicant's area of endorsement proves that the activity proposed in the plan has been completed as defined in the accepted plan.

(g) The bureau shall send written notification to the superintendent and the applicant that the bureau does not approve the plan, within 30 days of the bureau's determination under (d)(5) that the plan submission is complete, if the bureau determines that a plan does not meet the criteria listed in (f)(1) through (6) above.

(h) An individualized professional development plan shall be canceled if the applicant fails to attain the skills and knowledge agreed to by the applicant within the time frame specified by the plan.

(i) The superintendent shall notify the bureau in writing of the applicant's failure to meet the goals which the applicant agreed to as specified in the plan.

(j) Annual progress reports shall be due at the end of each school year, and a final report shall be due at the end of the school year during which an individualized professional development plan is completed.

(k) The reports required by (j) above shall be filed by the superintendent, in consultation with the mentor, attesting to the applicant's:

- (1) Acquisition and demonstration of skills;
- (2) Competencies; and
- (3) Knowledge of the plan.

(l) The bureau shall grant an intern license for up to 3 years upon initial approval of the plan, to coincide with the time period in the plan.

(m) The applicant shall qualify for a beginning educator or experienced educator credential upon successful completion of the plan during the period of the intern license.

(n) Once a plan is filed with the bureau, the educator may obtain employment in a similar position in another school district provided that:

(1) The bureau is notified in writing of the change in place of employment; and

(2) The revised plan is:

a. Approved by the mentor in the district to which the educator is moving;

b. Signed by the superintendent in the district to which the educator is moving; and

c. Resubmitted to the bureau for approval.

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96; ss by #7923, eff 7-24-03; amd by #8194, eff 10-26-04; amd by #8667, eff 7-1-06; amd by #8843, eff 3-16-07

Ed 505.05 Alternative 5: Site-Based Certification Plan.

(a) The site-based certification plan shall be available in elementary and secondary teaching areas, excluding career and technical specialty certification under Ed 507.03 and special education, for those individuals who qualify under the following specific conditions:

(1) The applicant shall possess a bachelor's degree from an institution approved by the New Hampshire postsecondary education commission or equivalent regional accrediting agency such as but not limited to the Northeast Regional Association of Schools and Colleges;

(2) The applicant shall meet one of the following criteria:

a. For secondary education, the applicant shall possess at least 30 credit hours in the subject to be taught and an overall grade point average of at least 2.5, or equivalent;

b. For elementary education, applicants shall have successfully completed courses in mathematics, English, social studies, and science with an overall grade point average of at least 2.5, or equivalent;

(3) An individual who fails to meet the grade point average requirement shall still qualify for the site-based certification plan provided that:

a. All other requirements are met;

b. Collegiate graduation occurred more than 5 years prior to application for the site-based plan; and

c. Occupational experience totaling 5 years directly related to the area to be taught is documented;

(4) Documentation of experience under (a)(3)c. above shall include, but not be limited to:

a. Letters from previous employers;

b. Employment contracts; or

c. Letters of commendation and recommendations from parties knowledgeable about the applicant's background and experience.

(b) The bureau shall issue a statement of eligibility to an applicant who meets the requirements of (a)(1)-(4) above.

(c) An applicant may be employed as an educator after obtaining an Alternative 5 statement of eligibility from the bureau while completing a site-based certification plan.

(d) The process for establishing a site-based certification plan shall be as follows:

(1) The site-based certification plan shall be based on an assessment of the strengths and weaknesses of the applicant;

(2) Each plan shall include:

a. A description of the competencies outlined in Ed 505.07 for professional education requirements, as appropriate, and in the area in which the applicant seeks certification;

b. The means by which these competencies shall be attained, demonstrated and evaluated; and

c. An evaluation of resources to be utilized such as, but not limited to, additional coursework, on the job training, and professional development; and

(3) The plan shall be developed collaboratively and agreed to by:

a. The applicant;

b. A mentor certified in the same subject area that the applicant will be teaching who shall:

1. Be appointed by the superintendent; and

2. Hold a valid experienced educator credential with the appropriate endorsements in the same subject area in which the applicant is seeking to obtain a credential; and

c. The superintendent.

(e) The applicant's site-based certification plan shall:

- (1) Require that the applicant meet the professional education competencies outlined in Ed 505.07, if the applicant is not currently certified in New Hampshire;
- (2) Require that the applicant meet the competencies required in the area in which the applicant is teaching; and
- (3) Contain a description of how the applicant plans to meet these competencies.

(f) If an assessment of the applicant's background determines that some or all of this study has been completed prior to employment the applicant shall not be required to repeat any requirement already completed.

(g) The superintendent shall file with the bureau:

- (1) A copy of the completed site-based certification plan; and
- (2) A description of the applicant's teaching assignment.

(h) When the district submits the site-based certification plan, the bureau shall issue an intern license to the applicant, after the applicant has paid the required fee under Ed 508.06(c). An intern license shall be issued for up to 2 years to coincide with the time period in the plan.

(i) The site-based certification plan shall be completed during the period of the intern license.

(j) The site-based certification plan shall be developed and filed with the bureau by the end of the school year. The plan may be modified by those responsible for the work of the applicant, but any modifications shall be filed with the bureau.

(k) Upon completion of the site-based certification plan, the superintendent shall submit a statement to the bureau verifying that all portions of the plan have been implemented by the district and satisfactorily completed by the applicant. This statement shall include a recommendation for certification.

(l) A positive recommendation shall not obligate a school district to continue the employment of an applicant.

(m) Failure by a candidate to complete the site-based certification plan shall result in a negative certification recommendation by the superintendent.

(n) Upon successful completion of the site-based certification plan and the superintendent's positive recommendation, the bureau, according to the requirements of RSA 21-N:7, I, shall issue the credential with the endorsement sought by the applicant.

(o) Once a plan is filed with the bureau, the educator may obtain employment in a similar position in another school district provided that:

- (1) The bureau is notified in writing of the change in place of employment; and
- (2) The revised plan is:

- a. Approved by the mentor in the district to which the educator is moving;
- b. Signed by the superintendent in the district to which the educator is moving; and

c. Resubmitted to the bureau for approval.

Source. #6349, eff 10-5-96; ss by #7923, eff 7-24-03; amd by #8194, eff 10-26-04; amd by #8229, eff 12-17-04

Description of New Hampshire Educator Certification Pathways

	Pathways to Certification	Description of Certification Pathways
<p>↑</p> <p>Traditional Certification Pathways</p> <p>↓</p>	<p>Method 1: Preparation through NH professional educator preparation programs</p>	<p>Ed 505.01. Completion of a professional educator preparation program at one of the public or private institutions of higher education in NH, including a practical/experience-based field practicum.</p>
	<p>Method 2: Reciprocity</p>	<p>Ed 505.02 NH accepts candidates from all states and other jurisdictions if the candidates graduated from an approved state program, have been employed as a certified teacher for at least three years out of the last seven, or completed an alternative certification program.</p>
<p>↑</p> <p>Non-traditional/ Alternative Certification Pathways</p> <p>↓</p>	<p>Method 3: Non-traditional path demonstrated competencies</p>	<p>Ed 505.03 There are three options to Alternative 3:</p> <p>Alternative 3-A – Educators: Requires a demonstration of teacher competencies through submission of a portfolio and interview with a board of examiners. Must have at least 3 months of full-time continuous experience as an educator in the area of endorsement.</p> <p>Alternative 3-B – Educators: A national level or regional certification such as National Board for Professional Teaching Standards (NBPTS) or American Board for Certification of Teacher Excellence (ABCTE), which has been validated in the individual’s endorsement area and achieved by passing a national or regional examination designed to assess the individual’s skill in the area in which the individual seeks certification.</p> <p>Alternative – 3-C – Administrators: Superintendent of schools, principals, special education administrators, or Career Technical Directors can qualify for certification if the Bureau of Credentialing determines, using transcript analysis, that the candidate meets specific requirements for that area of administration.</p>
	<p>Method 4: Critical shortage areas, career and technical education and business administrator</p>	<p>Ed 505.04 Completion of a professional development plan in a critical shortage teacher area, career and technical education and/or business administration; successful teaching under a mentor teacher; and recommendation for certification from the local Superintendent of Schools.</p>
	<p>Method 5: Site-based certification plan</p>	<p>Ed 505.05 Graduation from a four-year institution of higher education with a Bachelor’s degree plus 30 credit hours in the discipline associated with the endorsement; one year successful teaching under a mentor teacher; completion of a professional development plan; and a recommendation from the local Superintendent of Schools.</p>

Appendix D-1-4: Teacher Completers Report

10/3/09

New Hampshire Department of Education
Division of Program Support
Bureau of Credentialing

2009 NH Teacher College Graduates
College Detail

College	Credentials	Candidates	Issued	Employed	Percent Employed	
Antioch University New England						
<i>New Teacher</i>	1301-General Science Education	6	2	1	17%	
	1301-General Science Education / 1302-Biology Education	1	1	0	0%	
	1302-Biology Education	3	2	0	0%	
	1811-Elementary Education (K-8)	18	14	1	6%	
	1811-Elementary Education (K-8) / 1866-Early Childhood Education	5	3	0	0%	
	1866-Early Childhood Education	1	1	0	0%	
		34	23	2	6%	
<i>Previously Certified</i>	0003-Principal	2	2	0	0%	
		Total	36	25	2	6%
Colby-Sawyer College						
<i>New Teacher</i>	0500-English Education (5-12)	2	0	0	0%	
	1500-Social Studies (5-12)	3	1	0	0%	
	1866-Early Childhood Education	12	2	0	0%	
		Total	17	3	0%	
Dartmouth College						
<i>New Teacher</i>	1811-Elementary Education (K-8)	1	0	0	0%	
Franklin Pierce University						
<i>New Teacher</i>	0200-Art Education	2	0	0	0%	
	0500-English Education (5-12)	1	1	0	0%	
	1500-Social Studies (5-12)	1	0	0	0%	
	1811-Elementary Education (K-8)	5	4	1	20%	
		Total	9	5	1	11%

Appendix D-1-4: Teacher Completers Report

College	Credentials	Candidates	Issued	Employed	Employed
Granite State College					
<i>New Teacher</i>	0037-Reading and Writing Specialist	2	2	1	50%
	1811-Elementary Education (K-8)	1	1	1	100%
	1811-Elementary Education (K-8) / 1900-General Special Education	12	12	8	67%
	1900-General Special Education	46	45	33	72%
	1912-Early Childhood Special Education	1	1	0	0%
		<u>62</u>	<u>61</u>	<u>43</u>	<u>69%</u>
<i>Previously Certified</i>	0037-Reading and Writing Specialist	3	3	3	100%
	1833-Intellectual and Developmental Disabilities	1	1	1	100%
	1833-Intellectual and Developmental Disabilities / 1855-Emotional and Behavioral Disabilities / 1907-Specific Learning Disabilities	1	1	1	100%
	1855-Emotional and Behavioral Disabilities / 1907-Specific Learning Disabilities	1	1	1	100%
	1900-General Special Education	12	12	12	100%
		<u>18</u>	<u>18</u>	<u>18</u>	<u>100%</u>
	Total	80	79	61	76%
Keene State College					
<i>New Teacher</i>	0040-Guidance Counselor	4	3	1	25%
	0100-Comprehensive Agricultural Education	5	4	3	60%
	0500-English Education (5-12)	10	3	0	0%
	0619-Spanish	2	2	2	100%
	0800-Physical Education	13	10	2	15%
	1000-Comprehensive Technology Education	1	1	1	100%
	1102-Mathematics (5-8)	3	2	1	33%
	1200-Music Education	13	7	1	8%
	1301-General Science Education	2	1	0	0%
	1302-Biology Education	1	0	0	0%
	1308-Chemistry Education	1	0	0	0%
	1500-Social Studies (5-12)	21	9	3	14%
	1811-Elementary Education (K-8)	86	54	9	10%
	1811-Elementary Education (K-8) / 1900-General Special Education	7	5	4	57%
	1866-Early Childhood Education	10	5	0	0%
	1900-General Special Education	2	2	2	100%
		<u>181</u>	<u>108</u>	<u>29</u>	<u>16%</u>
<i>Previously Certified</i>	0003-Principal	2	2	2	100%
	0040-Guidance Counselor	1	1	0	0%
	0619-Spanish	5	5	2	40%
		<u>8</u>	<u>8</u>	<u>4</u>	<u>50%</u>
	Total	189	116	33	17%

Appendix D-1-4: Teacher Completers Report

College	Credentials	Candidates	Issued	Employed	Employed
New England College					
<i>New Teacher</i>	0003-Principal	5	0	0	0%
	0500-English Education (5-12)	1	1	0	0%
	0800-Physical Education	1	1	0	0%
	1100-Mathematics (7-12)	1	1	0	0%
	1500-Social Studies (5-12) / 1900-General Special Education	1	1	0	0%
	1811-Elementary Education (K-8)	1	0	0	0%
	1811-Elementary Education (K-8) / 1900-General Special Education	9	6	5	56%
		19	10	5	26%
<i>Previously Certified</i>	0003-Principal	10	10	4	40%
	Total	29	20	9	31%
New Hampshire Institute of Art					
<i>New Teacher</i>	0200-Art Education	3	3	3	100%
NH Technical Institute					
<i>New Teacher</i>	1102-Mathematics (5-8)	2	2	0	0%
	1900-General Special Education	3	3	3	100%
		5	5	3	60%
<i>Previously Certified</i>	1900-General Special Education	3	3	1	33%
	Total	8	8	4	50%
Plymouth State University					
<i>New Teacher</i>	0003-Principal	4	2	2	50%
	0006-Special Education Administrator	1	1	0	0%
	0037-Reading and Writing Specialist	4	3	1	25%
	0040-Guidance Counselor	10	9	2	20%
	0200-Art Education	7	3	0	0%
	0500-English Education (5-12)	17	13	6	35%
	0800-Physical Education	12	8	5	42%
	0801-Health Education	1	1	1	100%
	1000-Comprehensive Technology Education	4	4	3	75%
	1100-Mathematics (7-12)	4	3	2	50%
	1100-Mathematics (7-12) / 1102-Mathematics (5-8)	1	0	1	100%
	1102-Mathematics (5-8)	5	4	2	40%
	1200-Music Education	8	3	0	0%
	1302-Biology Education	3	1	0	0%
	1500-Social Studies (5-12)	11	5	3	27%
	1811-Elementary Education (K-8)	54	30	9	17%
	1811-Elementary Education (K-8) / 1900-General Special Education	9	5	4	44%
	1866-Early Childhood Education	2	2	1	50%
	1900-General Special Education	14	13	9	64%
		171	110	51	30%

Appendix D-1-4: Teacher Completers Report

<u>College</u>	<u>Credentials</u>	<u>Candidates</u>	<u>Issued</u>	<u>Employed</u>	<u>Employed</u>
<i>Previously Certified</i>	0003-Principal	30	30	26	87%
	0003-Principal / 0006-Special Education Administrator	3	3	3	100%
	0006-Special Education Administrator	5	5	4	80%
	0008-Curriculum Administrator / 0003-Principal	1	1	1	100%
	0008-Curriculum Administrator / 0006-Special Education Administrator	1	1	0	0%
	0037-Reading and Writing Specialist	12	12	10	83%
	0040-Guidance Counselor	4	4	4	100%
	0500-English Education (5-12)	1	1	1	100%
	0801-Health Education	2	2	2	100%
	1000-Comprehensive Technology Education	1	1	1	100%
	1500-Social Studies (5-12)	1	1	1	100%
	1811-Elementary Education (K-8)	1	1	1	100%
	1900-General Special Education	3	3	2	67%
		65	65	56	86%
		Total	236	175	107
Rivier College					
<i>New Teacher</i>	0003-Principal	2	0	1	50%
	0037-Reading and Writing Specialist	1	1	0	0%
	0040-Guidance Counselor	8	8	1	13%
	0200-Art Education	2	2	0	0%
	0500-English Education (5-12)	2	2	2	100%
	0619-Spanish	1	1	1	100%
	1100-Mathematics (7-12)	5	3	2	40%
	1302-Biology Education	1	0	0	0%
	1500-Social Studies (5-12)	8	3	0	0%
	1811-Elementary Education (K-8)	14	10	3	21%
	1811-Elementary Education (K-8) / 1900-General Special Education	39	32	12	31%
	1855-Emotional and Behavioral Disabilities	6	4	2	33%
	1866-Early Childhood Education	2	1	0	0%
	1866-Early Childhood Education / 1900-General Special Education	10	9	2	20%
1900-General Special Education	2	2	1	50%	
1907-Specific Learning Disabilities	5	5	4	80%	
	108	83	31	29%	

Appendix D-1-4: Teacher Completers Report

<u>College</u>	<u>Credentials</u>	<u>Candidates</u>	<u>Issued</u>	<u>Employed</u>	<u>Employed</u>	
<i>Previously Certified</i>	0001-Superintendent	1	1	1	100%	
	0003-Principal	15	15	15	100%	
	0003-Principal / 0006-Special Education Administrator	1	1	1	100%	
	0006-Special Education Administrator	1	1	1	100%	
	0008-Curriculum Administrator	1	1	0	0%	
	0037-Reading and Writing Specialist	4	4	3	75%	
	0037-Reading and Writing Specialist / 1907-Specific Learning Disabilities	1	1	1	100%	
	0040-Guidance Counselor	4	4	3	75%	
	0046-School Psychologist	2	2	1	50%	
	0500-English Education (5-12)	1	1	1	100%	
	0619-Spanish	4	4	4	100%	
	1100-Mathematics (7-12)	2	2	1	50%	
	1907-Specific Learning Disabilities	7	7	7	100%	
	Total		44	44	39	89%
	Southern New Hampshire University					
<i>New Teacher</i>	0038-Business Administrator	1	1	0	0%	
	0040-Guidance Counselor	2	1	0	0%	
	0046-School Psychologist	5	2	2	40%	
	0300-Comprehensive Business Education	5	4	1	20%	
	0350-Computer Technology Education	1	0	0	0%	
	0500-English Education (5-12)	4	2	0	0%	
	1500-Social Studies (5-12)	8	4	2	25%	
	1500-Social Studies (5-12) / 1900-General Special Education	2	2	2	100%	
	1811-Elementary Education (K-8)	29	23	8	28%	
	1811-Elementary Education (K-8) / 1900-General Special Education	1	1	0	0%	
	1866-Early Childhood Education	7	4	0	0%	
	1866-Early Childhood Education / 1912-Early Childhood Special Education	2	0	0	0%	
	1900-General Special Education	1	0	0	0%	
Total		68	44	15	22%	
<i>Previously Certified</i>	0038-Business Administrator	1	1	1		
Total		69	45	16	23%	
St. Anselm College						
<i>New Teacher</i>	0500-English Education (5-12)	5	5	1	20%	
	1500-Social Studies (5-12)	5	4	0	0%	
Total		10	9	1	10%	

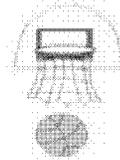
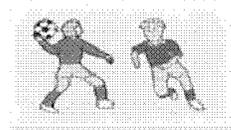
Appendix D-1-4: Teacher Completers Report

College	Credentials	Candidates	Issued	Employed	Employed
University of New Hampshire					
<i>New Teacher</i>	0001-Superintendent	4	2	1	25%
	0003-Principal	9	7	3	33%
	0037-Reading and Writing Specialist	2	1	1	50%
	0040-Guidance Counselor	38	14	8	21%
	0050-Specialist in Assessment of Intellectual Functioning	1	0	0	0%
	0200-Art Education	8	3	0	0%
	0500-English Education (5-12)	21	14	5	24%
	0500-English Education (5-12) / 0607-English for Speakers of Other Languages	2	2	1	50%
	0500-English Education (5-12) / 1811-Elementary Education (K-8)	1	1	1	100%
	0506-Theater / 1500-Social Studies (5-12)	1	1	1	100%
	0506-Theater / 1811-Elementary Education (K-8)	1	0	0	0%
	0607-English for Speakers of Other Languages	1	1	1	100%
	0608-French	1	0	0	0%
	0619-Spanish	2	1	0	0%
	0800-Physical Education	13	8	5	38%
	0800-Physical Education / 0801-Health Education	6	3	1	17%
	1100-Mathematics (7-12)	10	8	4	40%
	1102-Mathematics (5-8)	1	1	0	0%
	1200-Music Education	35	11	4	11%
	1200-Music Education / 1811-Elementary Education (K-8)	1	0	0	0%
	1301-General Science Education	5	3	1	20%
	1301-General Science Education / 1302-Biology Education	2	2	0	0%
	1302-Biology Education	1	1	1	100%
	1304-Earth/Space Science Education	1	1	0	0%
	1500-Social Studies (5-12)	26	17	9	35%
	1500-Social Studies (5-12) / 1811-Elementary Education (K-8)	1	1	0	0%
	1811-Elementary Education (K-8)	43	29	11	26%
	1866-Early Childhood Education	12	5	1	8%
	1900-General Special Education	7	5	3	43%
	1907-Specific Learning Disabilities	3	2	1	33%
	1912-Early Childhood Special Education	14	10	7	50%
		273	154	70	26%

Appendix D-1-4: Teacher Completers Report

<u>College</u>	<u>Credentials</u>	<u>Candidates</u>	<u>Issued</u>	<u>Employed</u>	<u>Employed</u>	
<i>Previously Certified</i>	0001-Superintendent	10	10	9	90%	
	0003-Principal	10	10	9	90%	
	0003-Principal / 0001-Superintendent	1	1	1	100%	
	0003-Principal / 0020-Paraprofessional	1	1	1	100%	
	0037-Reading and Writing Specialist	4	4	4	100%	
	0040-Guidance Counselor	8	8	6	75%	
	0200-Art Education	1	1	0	0%	
	0500-English Education (5-12)	1	1	1	100%	
	0500-English Education (5-12) / 1500-Social Studies (5-12)	1	1	1	100%	
	0800-Physical Education	1	1	1	100%	
	1200-Music Education	2	2	2	100%	
	1500-Social Studies (5-12)	2	2	2	100%	
	1900-General Special Education	1	1	1	100%	
	1907-Specific Learning Disabilities	1	1	1	100%	
	Total		44	44	39	89%
	<hr/>					
	Upper Valley Teacher Institute					
<i>New Teacher</i>	0003-Principal	3	0	0	0%	
	0200-Art Education	1	0	0	0%	
	0500-English Education (5-12)	5	3	0	0%	
	0500-English Education (5-12) / 1500-Social Studies (5-12)	3	2	1	33%	
	0619-Spanish	1	0	0	0%	
	1100-Mathematics (7-12) / 1309-Physics Education	1	1	1	100%	
	1301-General Science Education / 1302-Biology Education	1	0	0	0%	
	1301-General Science Education / 1308-Chemistry Education	1	0	0	0%	
	1304-Earth/Space Science Education	1	0	0	0%	
	1500-Social Studies (5-12)	9	4	2	22%	
	1811-Elementary Education (K-8)	17	9	1	6%	
Total		43	19	5	12%	
<i>Previously Certified</i>	0003-Principal	5	5	3	60%	
	Total		48	24	8	17%
Grand Total		1204	837	424	35%	

Student Name
School Name



My name is _____ and I am a student at _____ School. I am an A student, and was on Principals List all three quarters. I'm not sure about the fourth quarter yet. I am really interested in school activities. I am apart of student council, and some other extra-curricular activities. I have been on student council both years. I am also apart of an extra reading group, where we read books and take notes and other things like that.

I play softball, basketball, and soccer. Sports are a huge part of my life. I love sports so much. I play on the school sports teams. I am a point guard in basketball, a pitcher in softball, and a stopper in soccer. Outside of school I play on a variety of different teams.

My friends are a huge part of my life, too. I have a lot of friends who are like sisters to me, and a lot of boy friends that are like brothers to me. Friends are so important to me because I can go to them with anything. I feel that if I didn't have friends, I would not be the person I am.

A hobby of mine is children. I love children. I love kids though and I want to be a child psychologist when I get older. I hope you enjoy

Appendix D-2-5: Student Work Samples

Click on any cell in the grid below. Green cells have student content to review -- Gray cells are empty:

ICT Portfolio Matrix	PK & K	1st	2nd	3rd	4th	5th	6th	7th	8th	Standard Review
Introduction										
Creativity and Innovation (1)										
Communication and Collaboration (2)										
Research and Information Fluency (3)										
Critical Thinking, Problem Solving, and Decision Making (4)										
Digital Citizenship (5)										
Technology Operations and Concepts (6)										
Range Review										

Student Name

School Name

PK & K	1st	2nd	3rd	4th	5th	<u>6th</u>	7th	8th	Standard Review
--------	-----	-----	-----	-----	-----	------------	-----	-----	-----------------

>> Introduction >>

Creativity and Innovation (1)

Communication and Collaboration (2)

Research and Information Fluency (3)

Critical Thinking, Problem Solving, and Decision Making (4)

Digital Citizenship (5)

Technology Operations and Concepts (6)

Range Review

Navigation

(b)(6)

My name is _____ and I am a sixth grader at _____ School.

This year as a sixth grader, we had a big trip. We went to Environmental Camp. At Environmental Camp we did all sorts of things with recycling, environment, oceans, and other scientific things. When we were there we learned about food waste, and how to recycle your food into a compost pile, and all sorts of things to help the environment. This year we had a _____ Festival. We have it every year and it is so much fun. We do all sorts of events and play for points. The seventh and eighth graders play against each other and the fifth and sixth grade play against each other. The sixth grade won this year! This year we did book buddies. Book buddies is when all the sixth graders go down to the _____ school and partner up with a first grader. We are each assigned to one. We bring a book to read with our book buddy,

Student Name

School Name

PK & K	1st	2nd	3rd	4th	5th	6th	7th	8th	Standard Review
--------	-----	-----	-----	-----	-----	-----	-----	-----	-----------------

Introduction
Creativity and Innovation (1)

>> Communication and Collaboration
(2) >>

Research and Information Fluency (3)

Critical Thinking, Problem Solving, and Decision Making (4)

Digital Citizenship (5)

Technology Operations and Concepts (6)

Range Review

This is a forum post that I did about a book we were reading called The Search for Delicious. This was about how sometimes when people say things they might be kidding, but the other person might take it the wrong way. I wrote about experiences that I've heard about or had of people joking around, but losing a friend. We talked about it through a forum post so everyone could see and read our opinions. When we were reading the Search for Delicious, we had many topics that we had great discussions about. When we started writing them on the computer they got a lot easier. I learned that when you are writing a forum post it's a lot easier to write about your opinion. It's a lot easier, because nobody can tell you if you're wrong or right, because you are typing it on the computer. I also learned how to reply to other people and how to change colors of the font and background. We also learned how to have big discussions on the computer through the forums. We also could write back to people and ask them to answer questions or add more.

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Standards:	Areas:	Completed:
<input type="checkbox"/> communication	<input type="checkbox"/> arts	<input type="checkbox"/> self-designed
<input type="checkbox"/> english	<input type="checkbox"/> english	<input type="checkbox"/> student selections

Appendix D-2-5: Student Work Samples

OLC : TRS-6-I.T.S. : Forums - Windows Internet Explorer

http://sakal.sau53.org:8080/portal/site/56438e99-7723-4ce5-92e2-b35a5901

File Edit View Favorites Tools Help

Schedule
Search
Section Info
Help

I agree with that statement. I think it's true because sometimes when people are trying to explain something important people get the wrong idea and take it as a joke. From experience it annoys me to know that people aren't really listening to what I am saying. In the story *The Search for Delicious* Gailen has to go on the search to find out what the definition of delicious is. When he goes around people just say funny foods what he is looking for is a real answer. When you are goofing around with your friends then you ask a question and nobody takes it serious but you, it can get kind of annoying. Serious problems sometimes start out silly too. Maybe when you are betting money on a card game with your siblings, then you realize you're bankrupt that can be kind of serious. Another way things can get serious is if you are joking around at a practice and you don't think you need to be serious but then when you get to the next game and nobody knows what to do, your coach will be disappointed with you and you won't do good. Now that I have read this book I have learned a very important lesson that you should listen to what people say and sometimes you can joke around but other times you should really try to understand.

Done Internet 100%

start OLC TRS-6-I.T.S. 11:26 AM

Student Name

School Name

PK & K	1st	2nd	3rd	4th	5th	6th	7th	8th	Standard Review
--------	-----	-----	-----	-----	-----	-----	-----	-----	-----------------

>> Introduction >>

Creativity and Innovation (1)

Communication and Collaboration (2)

Research and Information Fluency (3)

Critical Thinking, Problem Solving, and Decision Making (4)

Digital Citizenship (5)

Technology Operations and Concepts (6)

Range Review

Navigation

This year I am in seventh grade. I have played soccer, basketball, and softball for the school. My favorite part about this year was _____ Festival. The seventh graders beat the eighth graders! The eighth graders were really mad! But it was wicked fun, so the seventh graders were really happy! Soccer was wicked fun too! I played a position that I loved and that made it really fun! Basketball was a blast too! Softball season is starting now and I can't wait! I love to pitch, and I think I'll be pitching quite a bit! I am on student council again this year! We have done a lot of activities for that, and I love being on it. I am the public _____ Introduction 7th officer, which means I get to write letters to companies, and do announcements over the intercom at school. I love doing announcements! It's the best part of the morning!

We've only had one field trip this year and it was to see _____ at the _____ Theaters. We've had a couple of big projects. We did one big project in Social Studies. It was a video project. We got into groups of four or five and made a video project about the topic he gave us. It was really fun, because you got to pick your groups. Another big project was the science fair project. We had to pick an experiment to do. I picked something to do with my chickens, and got to go to _____ because I got second in the seventh grade. We've also had a lot of projects for literature and language arts. They do a lot of projects together which is nice because then we get a lot of class time to work on it. My favorite project that we did was we got into groups that were half the class size and were either anti Giver or pro Giver. That means that if you're anti Giver, you disagree that the book, The Giver should be in schools. The other group that was pro Giver meant that you think The Giver should be in schools. It was wicked fun because at the end we got to do a debate back and forth against the two groups. I like the projects this year because they all bring out your personality in many ways, which makes it very enjoyable!

This year has been really fun, and I don't want it to end! I wish that it could just keep going and going! Luckily, I still have a lot of softball left! Probably a few more projects too, but I don't mind those!

Student Name

School Name

PK & K	1st	2nd	3rd	4th	5th	7th	8th	Standard Review
--------	-----	-----	-----	-----	-----	-----	-----	-----------------

Introduction
Creativity and Innovation (1)

Communication and Collaboration (2)

[>> Research and Information Fluency \(3\) >>](#)

Critical Thinking, Problem Solving, and Decision Making (4)

Digital Citizenship (5)
Technology

In this project I learned about salmonella. Salmonella is a very interesting disease. If I didn't do this project then I would know nothing about salmonella, and I wouldn't know how to help people not get it. I also learned a lot about bacteria, and how that affects your body. I learned that bacteria is on everything you touch. I also learned that salmonella is the most common food poisoning.

 [Disease.ppt](#)

 [Disease project.doc](#)

This project is when everyone has to pick a disease that is affected by bacteria. When you pick the disease you have to write an essay about it, and then do a powerpoint. You have to present your powerpoint to the class, and tell them about your disease.

[\[Top\]](#)

Standards: Areas: Completed:

[research](#)
[science](#)
[student selection](#)

Ed 506.04 Principal Instructional Leader and Associate Principal Instructional Leader.

(a) An individual shall have the following entry level requirements to be certified as a principal:

(1) Have completed at least 3 years of successful experience as an educator; and

a. Completed a program approved by the state board of education in school administration/leadership and been recommended for this certification by the designated official of the preparing collegiate department of education; or

b. Demonstrated the competencies, skills, and knowledge as listed in Ed 614.04 through experience in comparable leadership positions in education or other professions as specified in Ed 505.03.

(b) An individual shall have one of the following entry level requirements to be certified as an associate principal:

(1) Have completed at least 3 years of successful experience as an educator; and

a. Have completed an approved program in school administration/leadership and been recommended for this certification by the designated official of the preparing collegiate department of education; or

b. Be enrolled in an approved program in school administration/leadership for no longer than a period of 6 years leading to a recommendation for this certification by the designated official of the preparing collegiate department of education upon completion of the program;

(2) Hold a bachelor's degree from a college or university approved by the New Hampshire post secondary education commission and have received the recommendation of the superintendent who shall submit the candidate's individualized professional development plan to the bureau of credentialing in accordance with Ed 505.04; or

(3) Have demonstrated the competencies, skills, and knowledge as itemized in (d) below through experience in comparable leadership positions in education or other professions in accordance with Ed 505.03.

(c) Candidates shall file the following materials and documents with the bureau of credentialing:

a. Completed application forms containing the information required in Ed 508.04;

b. Previous work record ;

c. Education record; and

d. A minimum of 3 confidential references from persons who can attest to the candidate's proficiencies in the required leadership area.

(d) Qualifications for principal or associate principal shall include the following skills, competencies and knowledge:

(1) Philosophy of learning;

(2) The culture of teaching and learning;

(3) Management of the organization and operation of the school, including effective use of its resources;

(4) Relationships with the broader community to foster learning;

(5) Integrity, fairness and ethics in learning; and

- (6) The political, social, economic, legal, and cultural context of learning.
- (e) In the area of philosophy of learning, the candidate shall have the ability to:
- (1) Develop and apply a philosophy of learning that attempts to ensure the success of all students, or creates one that is applied consistently in as many cases as possible throughout the school program, or both;
 - (2) Apply the philosophy of learning to shape educational programs, plans, and actions;
 - (3) Demonstrate that appropriate stakeholders participated in the development of the philosophy of learning or participated in the development consistently throughout the process;
 - (4) Use data about students in the development of the vision in an equitable manner;
 - (5) Communicate the vision to the school community;
 - (6) Communicate the vision in a manner that reveals a clear link between teaching and learning;
 - (7) Provide a forum for stakeholders to annually engage in a dialogue about the vision;
 - (8) Communicate the vision in a way that is sensitive to the needs and diversity of the community, but might not provide for a complete, critical, public debate;
 - (9) Implement the philosophy of learning throughout school programs, policies, and procedures;

- (10) Link instructional plans and strategies to the vision of the school, and to use student assessment data to inform teaching and learning decisions;
 - (11) Distribute responsibility for implementing the vision to members of the school or community and to seek assistance from these individuals in the allocation of resources to support the vision;
 - (12) Recognize the diversity of the community and the needs of the students and staff, and to use this information to implement the vision in a fair and equitable way;
 - (13) Collect data periodically on the school's progress toward the vision and to use this information to make decisions that promote the success of students;
 - (14) Create a system to monitor teacher performance and student learning throughout the school year, and to demonstrate understanding of what teaching strategies support increased student learning and progress toward the vision;
 - (15) Collect data about the school's progress toward the vision from a variety of stakeholders and to share this information with the school community, providing opportunities for appropriate stakeholders to analyze or review this information; and
 - (16) Provide the community an accurate annual report on the school's progress toward the vision.
- (f) In the area of the culture of teaching and learning, the candidate shall have the ability to:
- (1) Use multiple methods to assess and create a school district culture that recognizes diversity, including, but not limited to:
 - a. Language;

b. Disability;

c. Gender;

d. Race;

e. Ethnicity; and

f. Socioeconomic status;

(2) Use context-appropriate strategies for creating a positive school or district culture;

(3) Use principles of effective instruction, research methods, and other resources;

(4) Make use of and promote technology and information systems to enrich curriculum and instruction;

(5) Develop a school profile, using qualitative and quantitative data, to make recommendations regarding the design, implementation, and evaluation of a curriculum that fully accommodates the diverse needs of individual learners;

(6) Apply human development theories, learning, motivational theories, and concern for diversity to the learning process;

(7) Profile student performance and analyze possible differences among subgroups of students along relevant characteristics such as race, ethnicity, socioeconomic status, and gender;

Appendix D-2-6: ED 506 Rules for Principal Certification

- (8) Promote an environment for increased student learning and achievement and promote increased professional competence of staff and self;
 - (9) Design well-planned and context-appropriate professional development that focuses on student learning, consistent with the school's vision and goals; and
 - (10) Develop and implement personal professional growth plans that reflect a commitment to lifelong learning.
- (g) In the area of management of the organization, operation, and resources, the candidate shall have the ability to:
- (1) Use knowledge of learning, teaching, student development, and organizational development to optimize learning for all students;
 - (2) Apply appropriate models and principles of organizational development and management, including data-based decision-making with indicators of equity, effectiveness, and efficiency to optimize learning for all students;
 - (3) Involve stakeholders in operations and setting priorities;
 - (4) Use appropriate and effective communication and group processing skills to build consensus and resolve conflict in order to link resources to the instructional vision;
 - (5) Model community collaboration for staff and offer opportunities for staff to develop family and community collaboration skills;
 - (6) Use problem-solving skills and knowledge of strategic, long-range operational planning for effective, efficient, and equitable resource allocation and alignment;
 - (7) Seek new resources to facilitate learning;

- (8) Apply and assess current technologies for school management, business procedures, and scheduling; and

- (9) Develop and implement safe, effective, and efficient facilities planning and use.

- (h) In the area of management of the relationships with the broader community to foster learning, the candidate shall have the ability to:
 - (1) Apply comprehensive community relations models;

 - (2) Use effective marketing strategies and processes;

 - (3) Develop outreach programs with different religious, business, political, and service groups;

 - (4) Establish partnerships with business, community, government, and higher education groups;

 - (5) Involve stakeholders in the decision making process;

 - (6) Support the belief that families have the best interest of their children in mind and involve families to impact student learning positively;

 - (7) Collaborate with community agencies to integrate health, social, and other services;

 - (8) Maintain high visibility and active involvement with the community;

 - (9) Acknowledge individuals and groups and analyze their perspectives;

- (10) Appropriately utilize community resources, including youth services, to support student achievement, solve school problems, and achieve school goals;
 - (11) Look for opportunities to offer school resources to serve the community and social service agencies; and
 - (12) Use public resources and funds appropriately and effectively to capitalize on the diversity of the school community to improve school programs and meet diverse needs of all students.
- (i) In the area of integrity, fairness, and ethics in learning, the candidate shall have the ability to:
- (1) Understand how one's office can be used in the service of all students and families to create a caring school community;
 - (2) Demonstrate honesty in all professional and personal endeavors and expect honesty in others;
 - (3) Demonstrate impartiality when dealing with members of diverse groups;
 - (4) Demonstrate sensitivity to the diversity within the school community; and
 - (5) Apply values and beliefs to the decision- making process so as to contribute to the common good;
- (j) In the area of the political, social, economic, legal, and cultural context of learning, the candidate shall have the ability to:

Appendix D-2-6: ED 506 Rules for Principal Certification

- (1) Know the impact that political and policy-making decisions have on teaching and learning;
- (2) Know how the social fabric of the larger community influences the educational enterprise;
- (3) Understand the impact of economic conditions on the availability of resources and on teaching and learning;
- (4) Understand the importance of operating the school within the law and how the law can be used to promote the success of all students; and
- (5) Know and understand the cultural context of the larger community and be able to use this knowledge to develop activities and policies that benefit students and their families.

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96; ss by #8023, eff 7-1-04; amd by #8335, eff 4-23-05

May 19, 2010

Teacher/Principal Evaluation Survey, December 2009

STATE SUMMARY

Percentage of Districts Responding to Each Question

Which of the following are characteristics of the performance evaluation system?	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check all that apply)				
The performance evaluation system is separate and distinct from the individual professional development process.	55%	54%	52%	61%
The only evaluation is compliance with the district's professional development requirements.	13%	13%	13%	7%
The evaluation system is essentially creating and reviewing goals through the professional development process.	18%	18%	21%	24%
Meeting(s) with supervisor	99%	98%	99%	96%
Peer Evaluation	15%	10%	15%	9%
Self-assessment/reflection	83%	83%	85%	85%
Scheduled classroom/building observation	94%	93%	86%	48%
Unannounced classroom/building observation or walkthrough	85%	85%	82%	60%
NECAP results if applicable to subjects taught	15%	15%	15%	21%
Other student assessment results	24%	24%	24%	25%
Student academic growth measure	12%	12%	12%	16%
Growth is a <u>significant</u> evaluation factor	2%	2%	2%	4%

Frequency of <u>scheduled</u> classroom/building observation.	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check one per column)				
None	1%	1%	3%	29%
Regularly, but less than annually	0%	1%	43%	9%
Annually	4%	7%	42%	40%
2-3 times per year	76%	81%	10%	6%
4 or more times per year	20%	11%	2%	16%

Frequency of formal (i.e. retained in personnel file) evaluation.	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check one per column)				
None	0%	0%	1%	1%
Once every 3 years	0%	0%	44%	4%
Once every 2 years	0%	4%	4%	2%
Annually	37%	39%	46%	83%
More than once per year	63%	57%	6%	10%

Appendix D-2-7: NH Survey on Principal and Teacher Evaluation

Format for the <u>majority</u> of the evaluation form.	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check one per column)				
Narrative	48%	48%	46%	46%
Goal setting and review of prior goals	15%	14%	20%	26%
Checklist	9%	9%	8%	2%
Rubric	18%	18%	16%	9%
Scale (low to high)	4%	4%	4%	6%
Other	9%	9%	10%	11%
If used, describe Other:	Please note that while only one format per column could be selected for this question, most districts use evaluation forms containing more than one format.			

What is the purpose of evaluations?	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check all that apply)				
Identify strengths/weaknesses	98%	98%	97%	98%
Identify need for remediation	85%	84%	81%	78%
Recertification recommendation	41%	41%	41%	37%
Contract renewal/non-renewal	87%	87%	70%	68%
Standard promotion/salary step	28%	28%	27%	27%
Merit promotion or bonus pay	2%	2%	2%	12%
Feedback from mentor	33%	30%	19%	21%
Determination of best fit for school/class assignment	41%	38%	31%	19%
Individual professional development planning	70%	70%	70%	64%
Tenure per union contract				
If used, describe union contract tenure:	Because there is no standard definition, tenure data has not been summarized.			

Describe the type of overall evaluation rating assigned to each teacher and principal.	All Beginning Teachers	Experienced Teachers New to District	Veteran Teachers	Principals
(check one per column)				
All narrative or no overall rating	57%	57%	58%	66%
2 levels (e.g. satisfactory/not satisfactory)	6%	6%	7%	2%
3 levels (e.g. below average, average, above average)	9%	9%	9%	4%
4 levels	26%	26%	24%	22%
5 or more levels	1%	1%	1%	4%

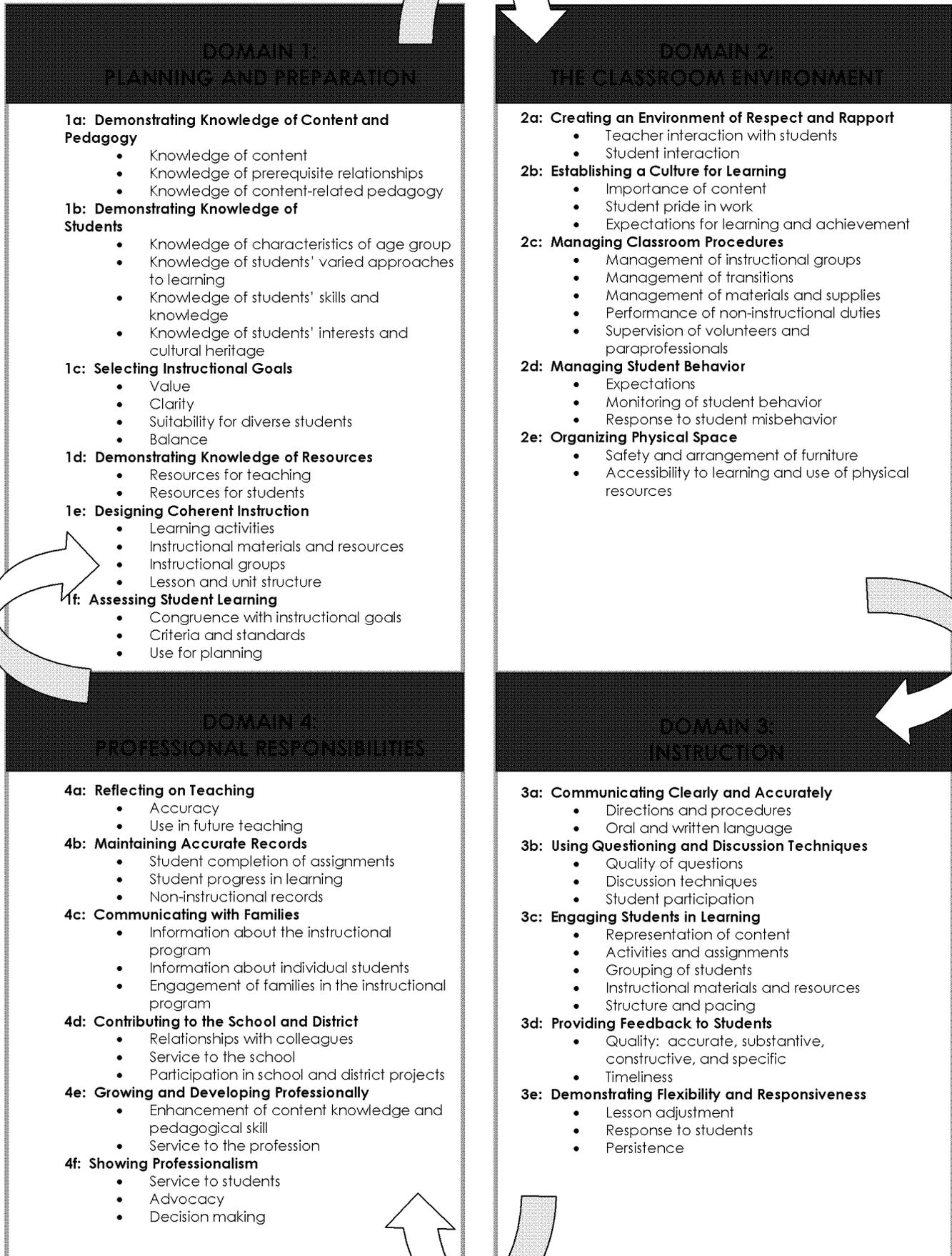
Professional Development Models for Teachers	Danielson	Saphier	Other
(check one if applicable)			
The teacher evaluation system is based on this model.	62%	19%	12%

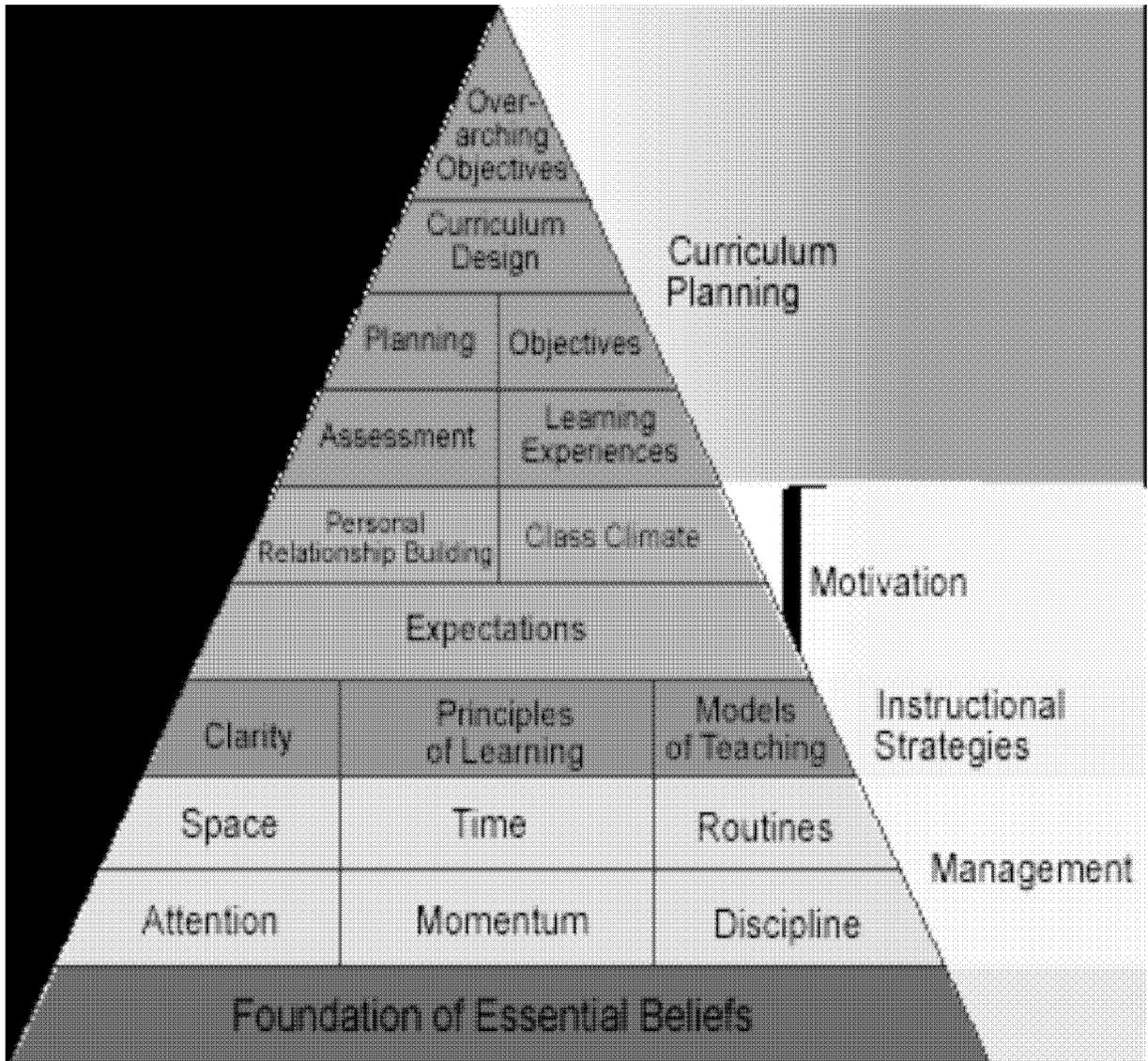
Appendix D-2-7: NH Survey on Principal and Teacher Evaluation

Professional Standards Models for Teachers	INTASC	District Designed	Other
(INTASC = Interstate New Teacher Assessment and Support Consortium) (check one if applicable)			
The teacher evaluation criteria are based on Professional Standards.	10%	45%	9%

	Administrators	Principals	Teachers	Union
(check all that apply)				
This party played a significant role in the selection/development of the teacher evaluation system.	77%	87%	80%	56%
This party played a significant role in the selection/development of the principal evaluation system.	89%	62%	11%	8%

Teacher and Principal Evaluation Ratings by Level				
Number of teachers	15,050			
Number of principals	416			
For ALL full-time teachers and principals provide counts for each overall rating category based on the person's most recent evaluation. (Either 08-09 or 09-10 data may be reported.) Two-level ratings reported as Lowest/Middle or as Not Rated.	Lowest Evaluation Level	Sum of All Middle Levels	Highest (Best) Level	Not Rated
Number of teachers per rating level	216	2,527	1,531	10,776
Number of principals per rating level	6	38	63	309
Percent of teachers per rating level	1%	17%	10%	72%
Percent of principals per rating level	1%	9%	15%	74%





Ed 610.02 Professional Education Requirements. To promote all students' learning, each program of professional preparation shall require each graduate of a teacher preparatory program to demonstrate professional education and the ability to exercise professional judgment by showing achievement of the following knowledge, skills, and dispositions:

(a) The teacher believes that each student can achieve at the highest level possible for that student, shows respect for students' varied talents and perspectives, and persists in helping all students achieve success;

(b) The teacher understands and keeps abreast of the central concepts and tools of inquiry of the subject areas taught, appreciating the ever-changing nature of knowledge, including:

(1) Information and issues relating to the subject area; and

(2) Themes and generalizations pertaining to the subject area;

(c) The teacher creates meaningful learning experiences based upon knowledge of and enthusiasm for the subject matter, the students, the community, local curricula, and state curriculum frameworks;

(d) The teacher understands how students learn and develop and provides opportunities that support their cognitive, linguistic, creative, social, moral, emotional, and physical development;

(e) The teacher understands and identifies differences in students' approaches to learning and designs instruction that is responsive to their diverse needs;

(f) The teacher values and is fluent in a variety of instructional strategies and chooses appropriately from them to encourage and enhance students' thinking, learning, and skilled use of knowledge;

(g) The teacher creates a challenging, dynamic, and safe classroom and school community that:

(1) Is sensitive to the full range of student diversity;

(2) Encourages openness, tolerance, respect, caring, collaboration, and self-motivation;

(3) Emphasizes both individual and collective responsibility; and

(4) Fosters a concern for social justice;

(h) The teacher demonstrates proficient oral, written, and nonverbal communication and promotes the development of these skills in students;

(i) The teacher understands and uses multiple formal and informal strategies to continually assess student learning and uses that information to modify and design instruction and to communicate students' progress to parents;

(j) The teacher is a reflective practitioner who continually evaluates the effects of his or her choices and actions on students, parents, and others in the school and community;

(k) The teacher uses a variety of resources to enhance his or her professional development as a scholar, teacher, and educational leader, including:

- (1) Professional literature;
- (2) Professional organizations;
- (3) Colleagues; and
- (4) Service opportunities, such as, but not limited to, volunteer work in the community;

(l) The teacher understands schools as complex organizations within a larger community and collaborates effectively with school staff, parents, and others to support students' learning and well-being;

(m) The teacher evaluates and uses a variety of current technologies to enhance instruction and to advance students' technological literacy; and

(n) The teacher's practice is based on a clear understanding of professional ethics and the legal rights and responsibilities of educators and students.

Source. (See Revision Note at part heading for Ed 610) #6048, eff 6-2-95; ss by #6366, eff 10-30-96; ss by #7923, eff 7-24-03; ss by #8229, eff 12-17-04

◆ COUNCIL OF CHIEF STATE SCHOOL OFFICERS ◆

Interstate School Leaders Licensure Consortium

Standards For School Leaders

The Council of Chief State School Officers (CCSSO) is a nationwide, nonprofit organization composed of the public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five extra-state jurisdictions. CCSSO seeks its members' consensus on major educational issues and expresses their view to civic and professional organizations, federal agencies, Congress, and the public. Through its structure of standing and special committees, the Council responds to a broad range of concerns about education and provides leadership on major education issues.

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Interstate School Leaders Licensure Consortium

Standards For School Leaders

*Adopted by Full Consortium
November 2, 1996*



Council of Chief State School Officers
State Education Assessment Center
Supported by a grant from The Pew Charitable Trusts

Dear Colleague:

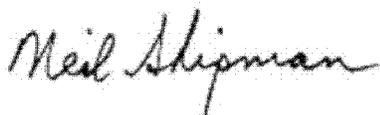
For the past two years, the Interstate School Leaders Licensure Consortium (ISLLC), a program of the Council of Chief State School Officers, has been at work crafting model standards for school leaders. Forged from research on productive educational leadership and the wisdom of colleagues, the standards were drafted by personnel from 24 state education agencies and representatives from various professional associations. The standards present a common core of knowledge, dispositions, and performances that will help link leadership more forcefully to productive schools and enhanced educational outcomes. Although developed to serve a different purpose, the standards were designed to be compatible with the new National Council for the Accreditation of Teacher Education (NCATE) *Curriculum Guidelines* for school administration — as well as with the major national reports on reinventing leadership for tomorrow's schools. As such, they represent another part of a concerted effort to enhance the skills of school leaders and to couple leadership with effective educational processes and valued outcomes.

One intent of the document is to stimulate vigorous thought and dialogue about quality educational leadership among stakeholders in the area of school administration. A second intent is to provide raw material that will help stakeholders across the education landscape (e.g., state agencies, professional associations, institutions of higher education) enhance the quality of educational leadership throughout the nation's schools. Our work is offered, therefore, with these two goals in mind.

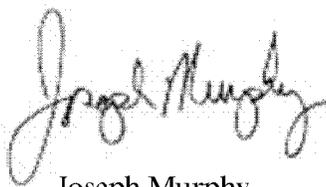
It is the desire of the Consortium to raise the bar for the practice of school leadership. Thus the standards and indicators reflect the magnitude of both the importance and the responsibility of effective school leaders.

We encourage you to heavily use this document — circulate it widely to members of the public and the profession as well as to the policy-making community. It is through this shared vision of education that school leaders will be successful and that our children will be assured of the education they will need to carry out the responsibilities of the future.

Sincerely,



Neil Shipman
Director, ISLLC



Joseph Murphy
Chair, ISLLC

Preface

Over the past quarter-century, significant changes have been reshaping our nation. At the same time, new viewpoints have redefined the struggle to restructure education for the 21st century. From these two foundations, educators and policy makers have launched many helpful initiatives to redefine the roles of formal school leaders. In this document, you see the results of one of these efforts — the work of the Interstate School Leaders Licensure Consortium (ISLLC) to establish common standards for school leaders. In this report, we describe the portrait of leadership and the understanding of society and education that guided the work of the ISLLC team. We also provide an overview of ISLLC activity, describing the process we used to develop the standards and discussing central issues embedded in that process. Finally, we present the ISLLC standards and indicators.

Redesigning Leadership

The model of leadership standards one develops depends a good deal on how the design issue is framed. The Consortium tackled the design strategy in two ways. First, we relied heavily on the research on the linkages between educational leadership and productive schools, especially in terms of outcomes for children and youth. Second, we sought out significant trends in society and education that hold implications for emerging views of leadership — and subsequently for the standards that give meaning to those new perspectives on leadership.

An Understanding of Effective Leadership

Formal leadership in schools and school districts is a complex, multi-faceted task. The ISLLC standards honor that reality. At the same time, they acknowledge that effective leaders

often espouse different patterns of beliefs and act differently from the norm in the profession. Effective school leaders are strong educators, anchoring their work on central issues of learning and teaching and school improvement. They are moral agents and social advocates for the children and the communities they serve. Finally, they make strong connections with other people, valuing and caring for others as individuals and as members of the educational community.

The Changing Nature of Society

Looking to the larger society that envelopes schooling, the Consortium identified a handful of powerful dynamics that will likely shape the future of education and, perforce, the types of leadership required for tomorrow's schools. To begin with, our vision of education is influenced by the knowledge that the social fabric of society is changing, often in dramatic ways. On the one hand, the pattern of the fabric is being rewoven. In particular, we are becoming a more diverse society — racially, linguistically and culturally. On the other hand, the social fabric is unraveling for many children and their families. Poverty is increasing. Indexes of physical, mental, and moral well-being are declining. The stock of social capital is decreasing as well.

The perspective of the Consortium on schooling and leadership is also colored by the knowledge that the economic foundations of society are being recast as well. The shift to a post-industrial society, the advance of the global marketplace, the increasing reliance on technology, and a growing infatuation with market-based solutions to social needs pose significant new challenges for education. We believe that these challenges will require new types of leadership in schools.

An Evolving Model of Schooling

Turning to schooling itself, Consortium members distilled three central changes, all of which augur for a redefined portfolio of leadership skills for school administrators. On one level, we are seeing a renewed struggle to redefine learning and teaching to more successfully challenge and engage all youngsters in the education process. Educators are rethinking long-prevailing views of knowledge, intelligence, assessment and instruction. On a second level, we are hearing strong rumblings that community-focused and caring-centered conceptions of schooling will increasingly compete for legitimacy with more established notions of school organizations as hierarchies and bureaucracies. Finally, stakeholders external to the school building — parents, interested members of the corporate sector and leaders in the community — will increasingly play significantly enhanced roles in education.

ISLLC Initiative

The Consortium's initiative builds on research about skillful stewardship by school administrators and emerging perspectives about society and education. At one level, our work is a continuation of a century's quest to develop a deeper and more productive understanding of school leadership. At the same time, however, primarily because of the fundamental nature of the shift from an industrial to an information society, our work represents one of the two or three major transition points in that voyage.

The Consortium is not alone in its attempt to define the current era of transition in society and schooling and to capture its meaning for educational leadership. Since the 1987 publication of the *Leaders for America's Schools* by the National Commission on Excellence in Educational Administration, all the major professional associa-

tions, both practitioner and university based, have devoted productive energy to this issue. Indeed, the National Policy Board for Educational Administration (NPBEA) was created largely in response to this need and in an effort to generate better and more coordinated purchase on the task. Thus, the work of ISLLC is part of the long tradition of regularly upgrading the profession and, we believe, is a central pillar in the struggle to forge a vision of educational leadership for tomorrow's schools.

The ISLLC initiative began in August 1994. Fueled by the contributions of the 24 member states, a generous foundational grant from The Pew Charitable Trusts, and assistance from the Danforth Foundation and the NPBEA, the program operates under the aegis of the Council of Chief State School Officers. The 24 member states are Arkansas, California, Connecticut, Delaware, Georgia, Illinois, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, Virginia, Washington and Wisconsin. In addition, the following professional associations are affiliated with ISLLC: American Association of Colleges for Teacher Education, American Association of School Administrators, Association for Supervision and Curriculum Development, Association of Teacher Educators, National Association of Elementary School Principals, National Association of Secondary School Principals, National Association of State Boards of Education, National Council of Professors of Educational Administration, National Policy Board of Educational Administration, National School Boards Association, and University Council for Educational Administration.

Representatives of the member states and affiliated organizations have crafted standards and in-

dicators. As noted previously, in the drafting process the Consortium team drew extensively on the research about productive leadership. We also relied heavily on the knowledge of the representatives themselves. Finally, we employed the collective wisdom of colleagues in schools and school districts, institutions of higher education, and various professional associations at both state and national levels to enrich and leaven the work throughout the development process.

Guiding Principles

At the outset of the project, it became clear that our work would be strengthened considerably if we could craft a set of overarching principles to guide our efforts. Over time we saw that these principles actually could serve two functions. First, they have acted as a touchstone to which we regularly returned to test the scope and focus of emerging products. Second, we believe that they help give meaning to the standards and indicators. Here are the seven principles that helped orient all of our work:

- Standards should reflect the centrality of student learning.
- Standards should acknowledge the changing role of the school leader.
- Standards should recognize the collaborative nature of school leadership.
- Standards should be high, upgrading the quality of the profession.
- Standards should inform performance-based systems of assessment and evaluation for school leaders.
- Standards should be integrated and coherent.

- Standards should be predicated on the concepts of access, opportunity, and empowerment for all members of the school community.

Comments on the Standards

Many strategies are being used to upgrade the quality of leadership in the educational arena. For example, institutions of higher education have done extensive work on revising preparation programs for prospective school administrators. Many states have also strengthened licensing requirements and revised procedures for approval of university-based preparation programs. The ISLLC team decided at the outset of this project, however, to focus on standards. This strategy made sense for several reasons. First, based on the work on standards in other arenas of educational reform, especially the efforts of the Interstate New Teachers Assessment and Support Consortium (INTASC), we were convinced that standards provided an especially appropriate and particularly powerful leverage point for reform. Second, we found a major void in this area of educational administration — a set of common standards remains conspicuous by its absence. Finally, we believed that the standards approach provided the best avenue to allow diverse stakeholders to drive improvement efforts along a variety of fronts — licensure, program approval and candidate assessment.

Within that framework, we began work on a common set of standards that would apply to nearly all formal leadership positions in education, not just principals. We acknowledge full well that there are differences in leadership that correspond to roles, but ISLLC members were unanimous in their belief that the central aspects of the role are the same for all school leadership positions.

While acknowledging the full range of responsibilities of school leaders, we decided to focus on those topics that formed the heart and soul of effective leadership. This decision led us in two directions. First, because we didn't want to lose the key issues in a forest of standards, we deliberately framed a parsimonious model at the standard level. Thus, we produced only six standards. Second, we continually focused on matters of learning and teaching and the creation of powerful learning environments. Not only do several standards directly highlight learning and teaching, but all the standards take on meaning to the extent that they support a learning environment. Throughout, the success of students is paramount. For example, every standard begins with the words "A school administrator is an educational leader who promotes the success of all students by ..."

Finally, a word about the framework for the indicators is in order. The design we employed

(knowledge, dispositions, and performances), is borrowed from the thoughtful work of our INTASC colleagues. While there was little debate about the importance of knowledge and performances in the framework, the inability to "assess" dispositions caused some of us a good deal of consternation at the outset of the project. As we became more enmeshed in the work, however, we discovered that the dispositions often occupied center stage. That is, because "dispositions are the proclivities that lead us in one direction rather than another within the freedom of action that we have" (Perkins, 1995, p. 275),¹ in many fundamental ways they nourish and give meaning to performance. Over time, we have grown to understand that these elements — knowledge, dispositions, and performances — belong together. We also find ourselves agreeing with Perkins (1995) that "dispositions are the soul of intelligence, without which the understanding and know-how do little good" (p. 278).

¹ David Perkins (1995), *Outsmarting I.Q.: The Emerging Science of Learnable Intelligence*. New York: The Free Press.

Standards for School Leaders

Standard 1

A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.

Knowledge

The administrator has knowledge and understanding of:

- learning goals in a pluralistic society
- the principles of developing and implementing strategic plans
- systems theory
- information sources, data collection, and data analysis strategies
- effective communication
- effective consensus-building and negotiation skills

Dispositions

The administrator believes in, values, and is committed to:

- the educability of all
- a school vision of high standards of learning
- continuous school improvement
- the inclusion of all members of the school community
- ensuring that students have the knowledge, skills, and values needed to become successful adults
- a willingness to continuously examine one's own assumptions, beliefs, and practices
- doing the work required for high levels of personal and organization performance

Performances

The administrator facilitates processes and engages in activities ensuring that:

- the vision and mission of the school are effectively communicated to staff, parents, students, and community members
- the vision and mission are communicated through the use of symbols, ceremonies, stories, and similar activities
- the core beliefs of the school vision are modeled for all stakeholders
- the vision is developed with and among stakeholders
- the contributions of school community members to the realization of the vision are recognized and celebrated
- progress toward the vision and mission is communicated to all stakeholders
- the school community is involved in school improvement efforts
- the vision shapes the educational programs, plans, and activities
- the vision shapes the educational programs, plans, and actions
- an implementation plan is developed in which objectives and strategies to achieve the vision and goals are clearly articulated
- assessment data related to student learning are used to develop the school vision and goals
- relevant demographic data pertaining to students and their families are used in developing the school mission and goals
- barriers to achieving the vision are identified, clarified, and addressed
- needed resources are sought and obtained to support the implementation of the school mission and goals
- existing resources are used in support of the school vision and goals
- the vision, mission, and implementation plans are regularly monitored, evaluated, and revised

Standard 2

A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Knowledge

The administrator has knowledge and understanding of:

- student growth and development
- applied learning theories
- applied motivational theories
- curriculum design, implementation, evaluation, and refinement
- principles of effective instruction
- measurement, evaluation, and assessment strategies
- diversity and its meaning for educational programs
- adult learning and professional development models
- the change process for systems, organizations, and individuals
- the role of technology in promoting student learning and professional growth
- school cultures

Dispositions

The administrator believes in, values, and is committed to:

- student learning as the fundamental purpose of schooling
- the proposition that all students can learn
- the variety of ways in which students can learn
- life long learning for self and others
- professional development as an integral part of school improvement
- the benefits that diversity brings to the school community
- a safe and supportive learning environment
- preparing students to be contributing members of society

Performances

The administrator facilitates processes and engages in activities ensuring that:

- all individuals are treated with fairness, dignity, and respect
- professional development promotes a focus on student learning consistent with the school vision and goals
- students and staff feel valued and important
- the responsibilities and contributions of each individual are acknowledged
- barriers to student learning are identified, clarified, and addressed
- diversity is considered in developing learning experiences
- life long learning is encouraged and modeled
- there is a culture of high expectations for self, student, and staff performance
- technologies are used in teaching and learning
- student and staff accomplishments are recognized and celebrated
- multiple opportunities to learn are available to all students
- the school is organized and aligned for success
- curricular, co-curricular, and extra-curricular programs are designed, implemented, evaluated, and refined
- curriculum decisions are based on research, expertise of teachers, and the recommendations of learned societies
- the school culture and climate are assessed on a regular basis
- a variety of sources of information is used to make decisions
- student learning is assessed using a variety of techniques
- multiple sources of information regarding performance are used by staff and students
- a variety of supervisory and evaluation models is employed
- pupil personnel programs are developed to meet the needs of students and their families

Standard 3

A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.

Knowledge

The administrator has knowledge and understanding of :

- theories and models of organizations and the principles of organizational development
- operational procedures at the school and district level
- principles and issues relating to school safety and security
- human resources management and development
- principles and issues relating to fiscal operations of school management
- principles and issues relating to school facilities and use of space
- legal issues impacting school operations
- current technologies that support management functions

Dispositions

The administrator believes in, values, and is committed to:

- making management decisions to enhance learning and teaching
- taking risks to improve schools
- trusting people and their judgments
- accepting responsibility
- high-quality standards, expectations, and performances
- involving stakeholders in management processes
- a safe environment

Performances

The administrator facilitates processes and engages in activities ensuring that:

- knowledge of learning, teaching, and student development is used to inform management decisions
- operational procedures are designed and managed to maximize opportunities for successful learning
- emerging trends are recognized, studied, and applied as appropriate
- operational plans and procedures to achieve the vision and goals of the school are in place
- collective bargaining and other contractual agreements related to the school are effectively managed
- the school plant, equipment, and support systems operate safely, efficiently, and effectively
- time is managed to maximize attainment of organizational goals
- potential problems and opportunities are identified
- problems are confronted and resolved in a timely manner
- financial, human, and material resources are aligned to the goals of schools
- the school acts entrepreneurally to support continuous improvement
- organizational systems are regularly monitored and modified as needed
- stakeholders are involved in decisions affecting schools
- responsibility is shared to maximize ownership and accountability
- effective problem-framing and problem-solving skills are used
- effective conflict resolution skills are used
- effective group-process and consensus-building skills are used
- effective communication skills are used
- there is effective use of technology to manage school operations
- fiscal resources of the school are managed responsibly, efficiently, and effectively
- a safe, clean, and aesthetically pleasing school environment is created and maintained
- human resource functions support the attainment of school goals
- confidentiality and privacy of school records are maintained

Standard 4

A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.

Knowledge

The administrator has knowledge and understanding of:

- emerging issues and trends that potentially impact the school community
- the conditions and dynamics of the diverse school community
- community resources
- community relations and marketing strategies and processes
- successful models of school, family, business, community, government and higher education partnerships

Dispositions

The administrator believes in, values, and is committed to:

- schools operating as an integral part of the larger community
- collaboration and communication with families
- involvement of families and other stakeholders in school decision-making processes
- the proposition that diversity enriches the school
- families as partners in the education of their children
- the proposition that families have the best interests of their children in mind
- resources of the family and community needing to be brought to bear on the education of students
- an informed public

Performances

The administrator facilitates processes and engages in activities ensuring that:

- high visibility, active involvement, and communication with the larger community is a priority
- relationships with community leaders are identified and nurtured
- information about family and community concerns, expectations, and needs is used regularly
- there is outreach to different business, religious, political, and service agencies and organizations
- credence is given to individuals and groups whose values and opinions may conflict
- the school and community serve one another as resources
- available community resources are secured to help the school solve problems and achieve goals
- partnerships are established with area businesses, institutions of higher education, and community groups to strengthen programs and support school goals
- community youth family services are integrated with school programs
- community stakeholders are treated equitably
- diversity is recognized and valued
- effective media relations are developed and maintained
- a comprehensive program of community relations is established
- public resources and funds are used appropriately and wisely
- community collaboration is modeled for staff
- opportunities for staff to develop collaborative skills are provided

Standard 5

A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.

Knowledge

The administrator has knowledge and understanding of:

- the purpose of education and the role of leadership in modern society
- various ethical frameworks and perspectives on ethics
- the values of the diverse school community
- professional codes of ethics
- the philosophy and history of education

Dispositions

The administrator believes in, values, and is committed to:

- the ideal of the common good
- the principles in the Bill of Rights
- the right of every student to a free, quality education
- bringing ethical principles to the decision-making process
- subordinating one's own interest to the good of the school community
- accepting the consequences for upholding one's principles and actions
- using the influence of one's office constructively and productively in the service of all students and their families
- development of a caring school community

Performances

The administrator:

- examines personal and professional values
- demonstrates a personal and professional code of ethics
- demonstrates values, beliefs, and attitudes that inspire others to higher levels of performance
- serves as a role model
- accepts responsibility for school operations
- considers the impact of one's administrative practices on others
- uses the influence of the office to enhance the educational program rather than for personal gain
- treats people fairly, equitably, and with dignity and respect
- protects the rights and confidentiality of students and staff
- demonstrates appreciation for and sensitivity to the diversity in the school community
- recognizes and respects the legitimate authority of others
- examines and considers the prevailing values of the diverse school community
- expects that others in the school community will demonstrate integrity and exercise ethical behavior
- opens the school to public scrutiny
- fulfills legal and contractual obligations
- applies laws and procedures fairly, wisely, and considerately

Standard 6

A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

Knowledge

The administrator has knowledge and understanding of:

- principles of representative governance that undergird the system of American schools
- the role of public education in developing and renewing a democratic society and an economically productive nation
- the law as related to education and schooling
- the political, social, cultural and economic systems and processes that impact schools
- models and strategies of change and conflict resolution as applied to the larger political, social, cultural and economic contexts of schooling
- global issues and forces affecting teaching and learning
- the dynamics of policy development and advocacy under our democratic political system
- the importance of diversity and equity in a democratic society

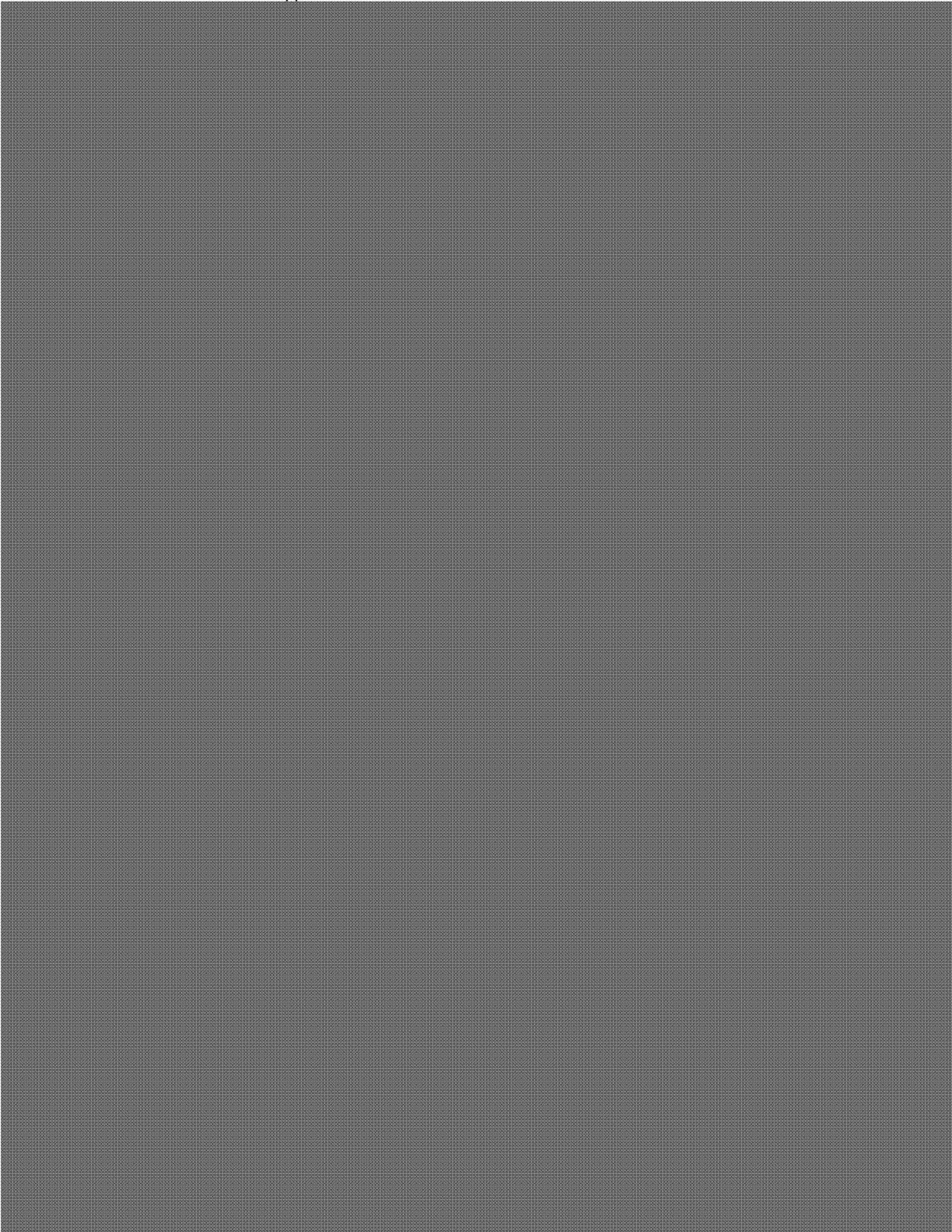
Dispositions

The administrator believes in, values, and is committed to:

- education as a key to opportunity and social mobility
- recognizing a variety of ideas, values, and cultures
- importance of a continuing dialogue with other decision makers affecting education
- actively participating in the political and policy-making context in the service of education
- using legal systems to protect student rights and improve student opportunities

Performances***The administrator facilitates processes and engages in activities ensuring that:***

- the environment in which schools operate is influenced on behalf of students and their families
- communication occurs among the school community concerning trends, issues, and potential changes in the environment in which schools operate
- there is ongoing dialogue with representatives of diverse community groups
- the school community works within the framework of policies, laws, and regulations enacted by local, state, and federal authorities
- public policy is shaped to provide quality education for students
- lines of communication are developed with decision makers outside the school community



Personnel Evaluation Standards

Summary of the Standards

Propriety Standards

The Propriety Standards are intended to ensure that a personnel evaluation will be conducted legally, ethically, and with due regard for the welfare of the evaluatee and those involved in the evaluation.

- **P1 Service Orientation** Personnel evaluations should promote sound education, fulfillment of institutional missions, and effective performance of job responsibilities, so that the educational needs of students, community, and society are met.
- **P2 Appropriate Policies and Procedures** Guidelines for personnel evaluations should be recorded and provided to the evaluatee in policy statements, negotiated agreements, and/or personnel evaluation manuals, so that evaluations are consistent, equitable, and fair.
- **P3 Access to Evaluation Information** Access to evaluation information should be limited to the persons with established legitimate permission to review and use the information, so that confidentiality is maintained and privacy protected.
- **P4 Interactions with Evaluatees** The evaluator should respect human dignity and act in a professional, considerate, and courteous manner, so that the evaluatee's self-esteem, motivation, professional reputations, performance, and attitude toward personnel evaluation are enhanced or, at least, not needlessly damaged.
- **P5 Balanced Evaluation** Personnel evaluations should provide information that identifies both strengths and weaknesses, so that strengths can be built upon and weaknesses addressed.
- **P6 Conflict of Interest** Existing and potential conflicts of interest should be identified and dealt with openly and honestly, so that they do not compromise the evaluation process and results.
- **P7 Legal Viability** Personnel evaluations should meet the requirements of all federal, state, and local laws, as well as case law, contracts, collective bargaining agreements, affirmative action policies, and local board policies and regulations or institutional statutes or bylaws, so that evaluators can successfully conduct fair, efficient, and responsible personnel evaluations.

Utility Standards

The Utility Standards are intended to guide evaluations so that they will be informative, timely, and influential.

- **U1 Constructive Orientation** Personnel evaluations should be constructive, so that they not only help institutions develop human resources but encourage and assist those evaluated to provide excellent services in accordance with the institution's mission statements and goals.
- **U2 Defined Uses** Both the users and intended uses of a personnel evaluation should be identified at the beginning of the evaluation so that the evaluation can address appropriate questions and issues.
- **U3 Evaluator Qualifications** The evaluation system should be developed, implemented, and managed by persons with the necessary qualifications, skills, training, and authority, so that evaluation reports are properly conducted, respected and used.
- **U4 Explicit Criteria** Evaluators should identify and justify the criteria used to interpret and judge evaluatee performance, so that the basis for interpretation and judgment provide a clear and defensible rationale for results.
- **U5 Functional Reporting** Reports should be clear, timely, accurate, and germane, so that they are of practical value to the evaluatee and other appropriate audiences.
- **U6 Professional Development** Personnel evaluations should inform users and evaluatees of areas in need of professional development, so that all educational personnel can better address the institution's missions and goals, fulfill their roles and responsibilities, and meet the needs of students.

Feasibility Standards

The Feasibility Standards are intended to guide personnel evaluation systems so that they are as easy to implement as possible, efficient in their use of time and resources, adequately funded, and viable from a political standpoint.

- **F1 Practical Procedures** Personnel evaluation procedures should be practical, so that they produce the needed information in efficient, non-disruptive ways.
- **F2 Political Viability** Personnel evaluations should be planned and conducted with the anticipation of questions from evaluatees and others with a legitimate right to know, so that their questions can be addressed and their cooperation obtained.
- **F3 Fiscal Viability** Adequate time and resources should be provided for personnel evaluation activities, so that evaluation can be effectively implemented, the results fully communicated, and appropriate follow-up activities identified.

Accuracy Standards

The accuracy standards determine whether an evaluation has produced sound information. Personnel evaluations must be technically adequate and as complete as possible to allow sound judgments and decisions to be made. The evaluation methodology should be appropriate for the purpose of the evaluation and the evaluatees being evaluated and the context in which they work.

- **A1 Validity Orientation** The selection, development, and implementation of personnel evaluations should ensure that the interpretations made about the performance of the evaluatee are valid and not open to misinterpretation.
- **A2 Defined Expectations** The qualifications, role, and performance expectations of the evaluatee should be clearly defined, so that the evaluator can determine the evaluation data and information needed to ensure validity.
- **A3 Analysis of Context** Contextual variables that influence performance should be identified, described, and recorded, so that they can be considered when interpreting an evaluatee's performance.
- **A4 Documented Purposes and Procedures** The evaluation purposes and procedures, both planned and actual, should be documented, so that they can be clearly explained and justified.
- **A5 Defensible Information** The information collected for personnel evaluations should be defensible, so that the information can be reliably and validly interpreted.
- **A6 Reliable Information** Personnel evaluation procedures should be chosen or developed and implemented to assure reliability, so that the information obtained will provide consistent indications of the evaluatee's performance.
- **A7 Systematic Data Control** The information collected, processed, and reported about evaluatees should be systematically reviewed, corrected as appropriate, and kept secure, so that accurate judgments about the evaluatee's performance can be made and appropriate levels of confidentiality maintained.
- **A8 Bias Identification and Management** Personnel evaluations should be free of bias, so that interpretations of the evaluatee's qualifications or performance are valid.
- **A9 Analysis of Information** The information collected for personnel evaluations should be systematically and accurately analyzed, so that the purposes of the evaluation are effectively achieved.
- **A10 Justified Conclusions** The evaluative conclusions about the evaluatee's performance should be explicitly justified, so that evaluatees and others with a legitimate right to know can have confidence in them.
- **A11 Metaevaluation** Personnel evaluation systems should be examined periodically using these and other appropriate standards, so that mistakes are prevented or detected and promptly corrected, and sound personnel evaluation practices are developed and maintained over time



REGIONAL EDUCATIONAL LABORATORY at EDC

Analysis of New Hampshire's Highly Qualified Teacher Data

Prepared by Katie Buckley

Delivered April 4, 2007

About the Request

In February, 2007, the Regional Educational Laboratory for the Northeast and Islands (NEIREL) received a technical assistance request from New Hampshire's Department of Education for an analysis of their highly qualified teacher data. This research brief has addressed this request by developing and responding to several questions related to the distribution of highly qualified and experienced teachers. As a final component to this research brief, additional data are recommended for future analyses.

About the Response

This document is provided in response to a request for technical assistance from the State of New Hampshire to the Regional Educational Laboratory for the Northeast and Islands. The contents of this document have not been reviewed by and do not necessarily reflect the views of the U.S. Department of Education Institute of Education Sciences.

Contact

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To learn more about NEIREL, please visit:
<http://ies.ed.gov/ncee/edlabs/regions/>

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1000 Thomas Jefferson Street, NW
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Analysis of New Hampshire's Highly Qualified Teacher Data Summary

Summary of NH's Request

NEIREL received a request in early February from the New Hampshire Department of Education (NH DOE) for advice on ways to refine their collection of 2005-2006 HQT data and for help in finding the most effective ways to present and understand the data.

New Hampshire's current HQT Plan contains charts displaying the distribution of highly qualified teachers across several variables. Data is presented in the plan for the following variables, at the school level, for the 04-05 year:

1. Percentage of general education highly qualified teachers (referred to in this brief as "HQTs")
2. Percentage of general education classes taught by highly qualified teachers (referred to in this brief as "HQT classes" or "classes taught by HQTs")
3. Percentage of Special Education classes taught by highly qualified teachers¹
4. Percentage of teachers with less than 3 years experience (referred to in this brief as "inexperienced teachers")²
5. Risk Level
 - 0 - Made adequate yearly progress (AYP) in all areas for 2 years
 - 1 - Not APY for 1 year (FY05 or FY06 testing) in one or more areas
 - 2 - Not AYP for 2 years in one or more areas (could be different areas each year)
 - 3 - 06-07 SINI (school in need of improvement) in year 1 in one or more areas, or SINI in 05 but not 06
 - 4 - 06-07 SINI year 2 in one or more areas
 - 5 - 06-07 SINI year 3 or 4 in one or more areas
6. Percentage of free and reduced lunch students (the school's poverty quartile is also provided)
7. REAP (this stands for Rural Education Achievement Program and refers to schools designated by the federal government as small and rural, and therefore eligible for certain exemptions under NCLB)

¹ It should be noted that the variable for the percentage highly qualified special education classes may be misleading as it was calculated by taking the number of highly qualified special education classes and dividing it by the total number of classes within that school, since no data was provided for the total number special education classes. As a result, no analysis has been provided for the special education class variable,

² In order to make the data more understandable, in some cases, the percentage of inexperienced teachers has been recalculated as the percentage of experienced teachers

Overview of Research Brief:

The purpose of this brief is to present the results of an analysis of New Hampshire's current HQT data (2005-2006), in response to specific questions identified by the New Hampshire DOE in conversation with NEIREL staff. To better visualize and comprehend relationships and sub-relationships, a variety of charts and graphs are used to display the data; often times, the relationship between two or more variables is displayed with several graphs to provide NH with a range of ways to look at the same data. When initial relationships do emerge, statistical techniques are performed to determine whether in fact variables are significantly related or are significantly different from each other. Lastly, additional data are recommended for future analyses, which if collected and interpreted correctly, may allow for a more complete picture of highly qualified teachers in NH in future years. To better focus future research on highly qualified teachers, a number of areas for potential further investigation are described.

After reviewing New Hampshire's plan and their 05-06 data, as well as other states' HQT plans, several questions were developed and addressed through descriptive and statistical analyses. Each question and a brief synopsis addressing each question are presented below:

1. What does the distribution of highly qualified teachers look like across the state?
 - In seventy-one percent of all schools, 100% of classes are taught by highly qualified teachers. Approximately 98.5% of elementary school classes are taught by highly qualified teachers, while 97.6% of both middle and high school classes are taught by highly qualified teachers.

2. Is there a relationship between the percentage of classes taught by highly qualified teachers and the risk level of the school? Is there a relationship between the percentage of experienced teachers and the risk level of the school?
 - At the elementary and middle school level, schools with a risk level of 4 or 5 do have slightly lower percentages of classes taught by highly qualified teachers than do schools with a risk level of 0, 1 or 2. No relationship exists at the high school level.
 - For elementary and middle schools, as the risk level increases from 0 to 3, the percent of experienced teachers decreases; however the percent of experienced teachers increases for schools with a risk level of 4 or 5. No relationship exists at the high school level.
 - Statistical analysis suggests that higher percentages of highly qualified teachers and higher percentages of experienced teachers are associated with lower risk levels. While the relationships between HQT and risk, and experience and risk, are significant, they are trivial in size.

3. Is there a correlation between the percentage of experienced teachers and the percentage of classes taught by highly qualified teachers at a school?
 - At the elementary school level, higher percentages of highly qualified classes are associated with higher percentages of experienced teachers. At the middle school level, however, higher percentages of highly qualified classes are associated with lower percentages of experienced teachers. No significant relationship is found to exist at the high school level.

4. Does the percent of classes taught by highly qualified teachers, experienced teachers, and average risk level differ for REAP schools versus non-REAP schools?
 - Statistical analysis, which should be interpreted cautiously, suggests the following:
 - REAP middle and high schools have lower percentages of classes taught by highly qualified teachers than non-REAP middle and high schools. There is no difference in the percentage of highly qualified classes in REAP elementary schools versus non-REAP elementary schools.
 - REAP high schools have higher percentages of experienced teachers than non-REAP high schools.
 - REAP schools, overall and disaggregated by school level, have lower average risk levels than non-REAP schools.

5. Do schools with different levels of student poverty (as measured by the percentage of free and reduced lunch students) differ in the number of highly qualified teachers, the number of experienced teachers and risk level?
 - While some relationships appear, these are not always shown to be statistically significant. Statistical analysis, which should be interpreted cautiously, suggests the following:
 - For high schools only, higher percentages of free and reduced lunch students are correlated with lower percentages of highly qualified classes.
 - There is no significant correlation between the percentage of free and reduced lunch students and the percentage of experienced teachers.
 - Overall and at the elementary school level, higher percentages of free and reduced lunch students are correlated with higher risk levels.

Analysis of New Hampshire's Highly Qualified Teacher Data

Introduction

Title II of the No Child Left Behind Act requires that all new teachers be highly qualified. To be considered highly qualified, new teachers must have: 1) a bachelor's degree, 2) full state certification or licensure, and 3) mastery over each subject they teach. Experienced teachers have more flexibility in showing that they are highly qualified, such as through a combination of teaching experience, professional development and additional courses in the subject they teach, and more flexibility in the time allotted to become highly qualified.

By the end of the 2005-2006 school year, each State Education Agency (SEA) was required to submit a report to the federal government measuring the extent to which all students had highly qualified teachers. Since no state accomplished this goal, each SEA was required to include a plan to demonstrate how this goal would be reached.

NH's Teacher Quality plan analyzed the number of highly qualified and experienced teachers, focusing specifically on the distribution of highly qualified teachers in rural schools (REAP) versus non-rural schools and in poor schools versus non poor schools.

Drawing upon New Hampshire's HQT plan, as well as other states' HQT plans as guides, this Research Brief has posed and analyzed (through a variety of charts/graphs along with statistical analyses) several questions regarding the distribution of highly qualified and experienced teachers. These questions are:

1. What does the distribution of highly qualified teachers look like across the state?
2. Is there a relationship between the percentage of classes taught by highly qualified teachers and the risk level of the school? Is there a relationship between the percentage of experienced teachers and the risk level of the school?
3. Is there a correlation between the number of inexperienced teachers and the number of highly qualified teachers at a school?
4. Does the percent of HQ classes, experienced teachers, and average Risk level differ for REAP schools versus non-REAP schools?
5. Do schools with different levels of student poverty differ in their number of highly qualified classes, the number of experienced teachers and risk level?

The first section of the brief explores the aforementioned questions using New Hampshire's 2005-2006 data. Charts and graphs have been prepared to help break down the data and present it in easily comprehensible ways. This is the most important step since SEAs were required to present descriptive analyses of their HQT data in their plan in order to show which schools and type of schools may be lacking highly qualified and

experienced teachers, and to show how highly qualified teachers are distributed across all schools. Therefore, plotting graphs and making charts of the data, particularly using various cuts and viewpoints of the same variables, makes it easier to visually determine whether interesting patterns exist that may be evaluated further through statistical analysis.

The second section, which involves statistical analyses of the aforementioned questions, is exploratory in nature, and is a preliminary attempt to determine whether two variables are related and the extent to which they are related, or whether two or more groups differ statistically. The following two types of analyses are performed in this research brief:

1. Correlation analyses are used to determine whether there is a linear relationship/correlation between two variables (e.g., HQT percentages and percentage of free and reduced lunch students).
2. T-test analyses, specifically independent samples t-tests, are used to determine if there is a statistically significant difference in the average of one variable cut across another variable (e.g., the percentage of HQ classes for schools with REAP status and for schools without REAP status).

Results from this section should be interpreted with caution for the following reasons: (1) The analyses produced very small correlation and t statistics; (2) Many times results for all schools were significant but failed to pass significance when disaggregated by school level (or vice versa); and (3) The number of schools (n) used in the analyses were often very small since the data was broken down by school level, and then again by poverty and REAP status.

As a final component to this research brief, additional variables and questions have been proposed that might aid NH in future analyses of their HQT data.

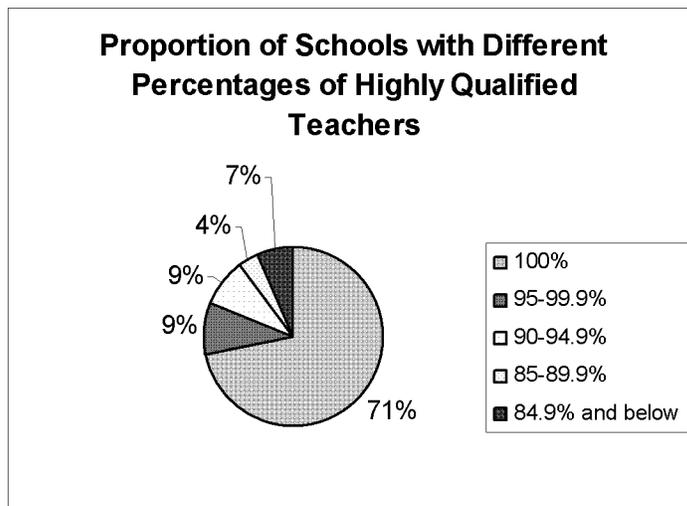
Section 1: Exploring Relationships through Charts and Graphs

1. What does the distribution of highly qualified teachers look like across the state?

- Statewide, 71% of all schools contain 100% HQTs and have 100% of their core classes taught by HQTs. Fourteen percent of schools contain less than 95% of HQT classes and only 3% of schools contain less than 85% of HQT classes. When the data is disaggregated by school level (elementary, middle and high school), it becomes evident that a higher percentage of elementary schools (86%) have 100% HQT classes, than do middle schools (42%) or high schools (39%). Stated differently, 98.5 % of classes at the elementary school level are taught by HQTs, while only 97.6% of classes at the middle and high school level are taught by HQTs.

There are several ways the distribution of HQT data can be displayed graphically. Both pie charts, in which percentage values of a variable are represented as proportionally-sized slices of a pie, and bar graphs, which show overall percentages of a variable, are presented here.³

Figure 1.



³ Although the HQT plan analyzed the data from the viewpoint of percentage of teachers *not* highly qualified, it might be easier to understand the data if number and percentage of teachers that *are* highly qualified was analyzed. Similarly, the percentage of inexperienced teachers has been recalculated for several of the questions to show the percentage of experienced teachers.

Figure 2.

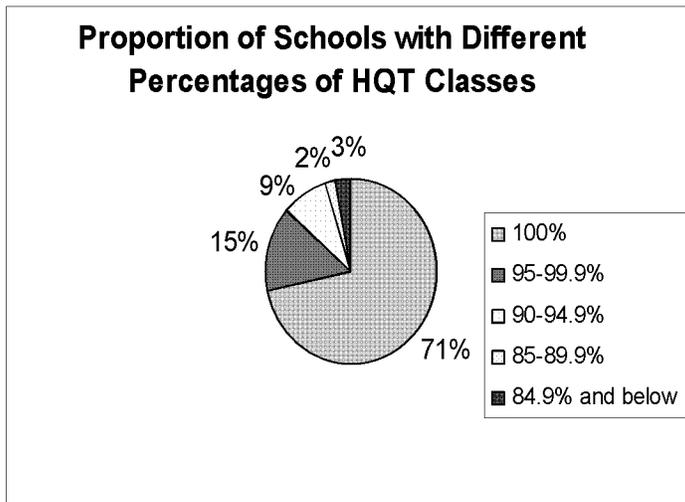


Figure 1 displays the proportion of schools in NH that have different percentage levels of highly qualified teachers, while Figure 2 displays the proportion of schools that have different percentages of classes taught by highly qualified teachers. Throughout New Hampshire, 71% of schools contain both 100% of HQTs and 100% of HQT classes; however it is not always the case that these are the same schools since the measure of HQT classes only takes into effect the number of *core* classes taught by HQTs. Figure 2 indicates that a very small percentage of schools (5%) have less than 89.9% of classes taught by highly qualified teachers (with 2% of schools having between 85% and 89.9% of classes taught by HQTs, and 3% having lower than 85% of their classes taught by HQTs).

Figure 3.

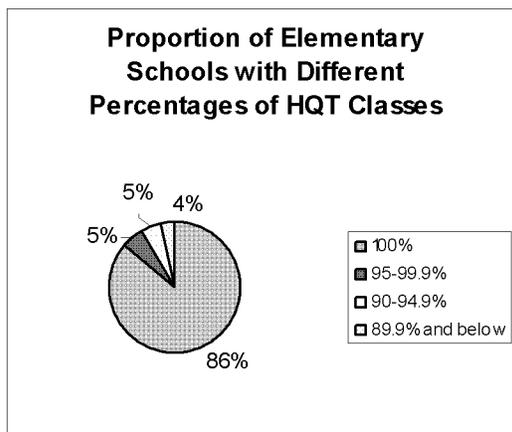


Figure 4.

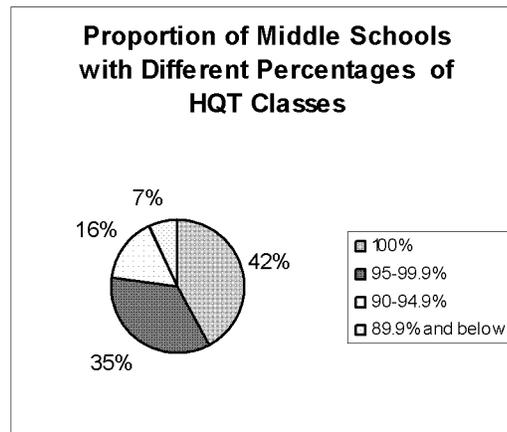
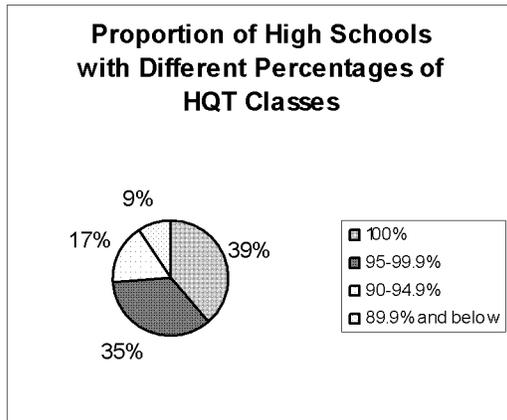
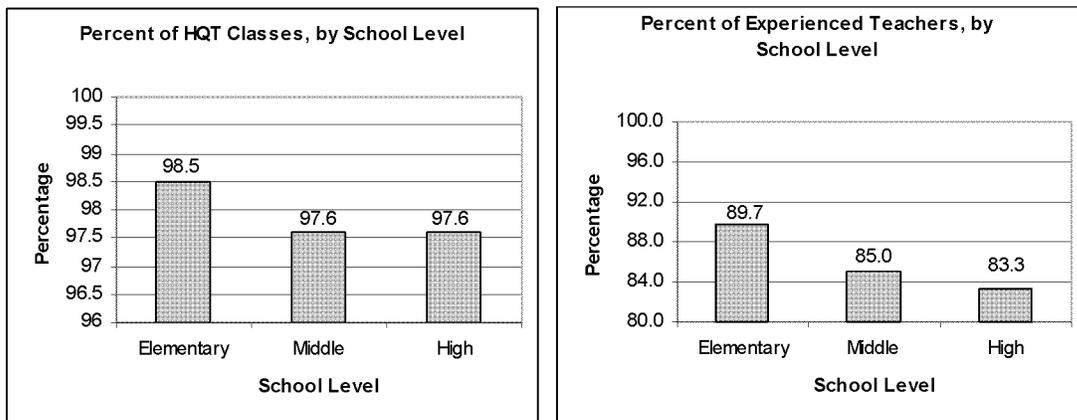


Figure 5.



Figures 3-5 break down what was displayed in Figure 2 (the proportion of schools that have various percentage levels of classes taught by HQTs) into the three school levels – elementary, middle, and high schools. As is evident from the pie graphs, at the elementary school level, there is a much higher percentage of schools with 100% of classes taught by HQTs than at the middle or high school level. In fact, the proportion of middle and high schools that have 95% or higher HQT classes is still lower than that of elementary schools with 100% HQT classes. Moreover, for middle and high schools, the number of schools that have 100% of classes taught by HQTs is similar to the number of schools with 95-99.9% of classes taught by HQTs.

Figure 6 and 7.



Figures 6 and 7 show the percentage of HQT classes and experienced teachers, broken down by elementary, middle and high schools. From Figure 6, it is clear that the percentage of highly qualified classes for elementary, middle, and high schools ranges between 97.6% and 98.5%, with elementary schools showing the highest percentage of HQT classes. As shown in Figure 7, the percent of experienced teachers is 89.7% for

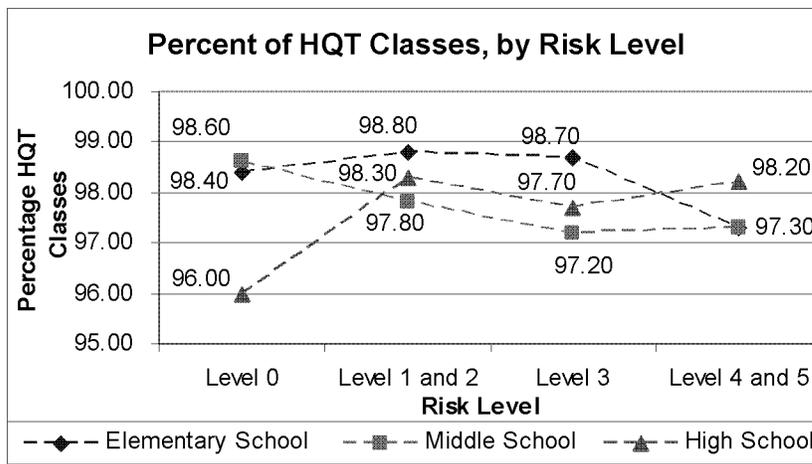
elementary schools, 85.0% for middle schools and 83.3% for high schools. Across the board, schools have higher percentages of HQT classes than experienced teachers.

2a. Is there a relationship between the percentage of classes taught by highly qualified teachers and the risk level of the school?

- At the elementary and middle school level, schools with a risk level of 4 or 5 do have slightly lower percentages of HQT classes than do schools with a risk level of 0, 1 or 2. However, there does not appear to be a linear relationship between the percentage of classes taught by HQTs and the risk level of the school.

There are several different ways to portray this data graphically. The following graphs look at the percent of HQT classes by risk level (Figure 8), and the average risk by percentage of HQT classes (Figure 9).

Figure 8.



Typically a line graph, such as the one displayed in Figure 8, is used to show trends in continuous data across years. Because the analyses in this brief do not involve longitudinal or continuous data, it is important to be clear about what information the line graph is providing and why this type of graph is being used. Specifically, the dotted-line graph presented here allows the reader to see how the percentage of HQT classes changes for schools with different risk levels, and whether in fact there is a linear relationship between risk level and HQT classes (indicated by a straight line from risk level 0 to risk level 4 and 5). It will become evident that in many cases, two variables do not have a linear relationship, therefore this type of graph allows the reader to see the *extent* to which two variables are correlated. For the purposes of this analysis, when a variable is said to be increasing or decreasing, it does not mean continuously between levels, but rather from one level to the next (e.g., at the high school level, there is an increase in the

percentage of HQT classes for schools that have a risk level of 1 or 2, compared to schools that have a risk level of 0).

As shown in Figure 8, each type of school has a slightly different trend line. At the elementary school level, there is little difference across risk level in the percentages of classes taught by HQTs, with a slightly lower percentage at the highest risk level. On the contrary, the lowest percentage of HQT classes at the high school level occurs when schools have the lowest risk level. Note that over all the risk levels, the range of percentages of HQT classes is very small (from 96% to 98.8%), signifying that there is little variation within the data. In addition, the relationship between the two variables doesn't appear to be strictly linear. Statistical analysis is therefore needed to determine the magnitude and significance of the relationship between risk level and percent of HQ classes. However, without additional data, particularly over time, the direction of causality cannot be determined; therefore it is still unclear whether lower percentages of HQ classes cause the risk level to increase (i.e., less qualified teachers are the reason that schools are not making AYP) or if higher risk levels lead to lower numbers of HQ classes (i.e., schools that aren't making AYP have a harder time attracting highly qualified teachers).

Figure 9.

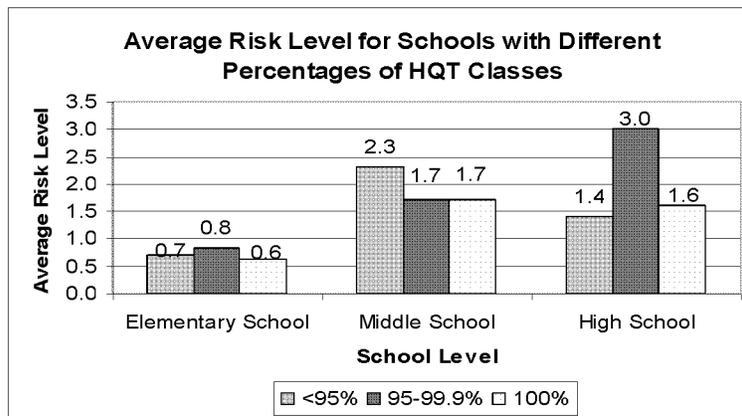


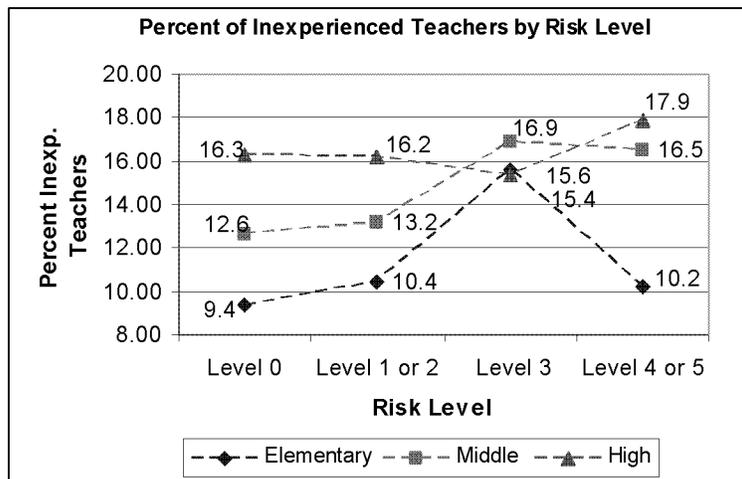
Figure 9 provides an alternative approach for evaluating the relationship between risk level and percent of highly qualified teachers. In this bar chart, average risk levels are displayed for schools that have different percentages of HQT classes. For example, looking at just elementary schools, the average risk level (measured on a scale of 0-5) for schools with less than 95% of highly qualified classes is 0.7, the average risk level for schools with 95-99.9% highly qualified classes is 0.8, and the average risk level for schools with 100% highly qualified classes is 0.6. It is clear from Figure 9 that there are no distinct patterns at any level, and it is evident that there is more variation in average risk *between* school levels than *within* the school levels.

The relationship between risk level and HQ classes that emerged in Figure 8 (i.e., lower average risk levels associated with higher percentages of HQT classes at the elementary and middle school level) is not evident in Figure 9. The primary reason for this is because all of the variation in the number of HQ classes within a school lies between 96% and 98.8%. The bar graph in Figure 9, however, only provides one column for schools with 95-99% of HQ classes, thereby masking the variation that was seen in Figure 8. This example shows how relationships that might be evident from one view of the data may disappear with a different view.

2b. Is there a relationship between the percentage of inexperienced teachers in a school and the risk level of that school?

- For elementary and middle schools, as the risk level increases from 0 to 3, the percent of inexperienced teachers increases as well; however the percent of inexperienced teachers decreases slightly for schools with a risk level of 4 or 5. The opposite occurs for high schools: As the risk level increases from 0 to 3, the percent of inexperienced teachers decreases; however the highest percentage of inexperienced teachers occurs for schools with the highest risk level.

Figure 10.



A dotted-line graph is again used in Figure 10 to display the percentage of inexperienced teachers for schools that fall at different risk levels. For both elementary and middle schools, the pattern looks somewhat similar; schools that have the lowest risk level of zero also have the lowest number of inexperienced teachers. Interestingly, the percent of inexperienced teachers peaks for elementary and middle schools with a risk level of 3, and then falls again for those schools with a risk level of 4 and 5. At the high school level, the trend is nearly the inverse of the elementary and middle school level trend: The percent of inexperience teachers decreases for schools as the risk level increases, except for schools with the highest risk level, where the highest percentage of inexperienced

teachers occurs. Knowledge of state policies targeted to schools with different risk levels may help to explain this trend. Without further statistical analysis, it's difficult to say whether there is a significant relationship between the level of experience of a teacher and the risk level of school.

3. Is there an association between the number of experienced teachers and classes taught by highly qualified teachers at a school?

- Since most schools contain high percentages of highly qualified classes and high percentages of experienced teachers, it is difficult from a basic scatter plot to discern whether there is a linear relationship between the two variables.

In order to avoid grouping the data of one variable into percentage ranges, the most effective type of chart that can address this question would be a scatter plot. A scatter plot allows the reader to determine if the data points of one variable (e.g., highly qualified teachers) are correlated with the datapoints of another variable (e.g., experienced teachers). Since this analysis contains school-level data, this brief can only evaluate whether schools are likely to have high percentages of both variables or a low percentage of one variable and high percentage of the other. It cannot be determined at the individual level whether teachers in NH tend to be highly qualified and experienced, highly qualified and inexperienced, or experienced and not highly qualified.

Typically, teachers that are inexperienced are highly qualified, since it is now mandated by NCLB; however, those same teachers are generally new to the job market, and therefore have little experience. The inverse may be true too: teachers with more experience might not be highly qualified since they were hired before NCLB requirements went into effect and have a longer amount of time to become highly qualified (and also have more flexibility in what “highly qualified” entails). Therefore, if there is a correlation between experience and HQ classes, one might expect that as the number of experienced teachers rises, the number of HQ classes drops, and as the number of experienced teachers declines, the number of HQ classes rises.

Figure 11.

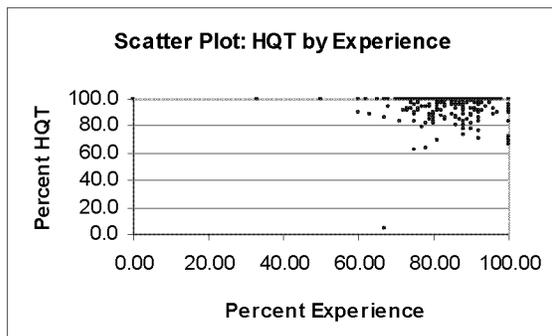
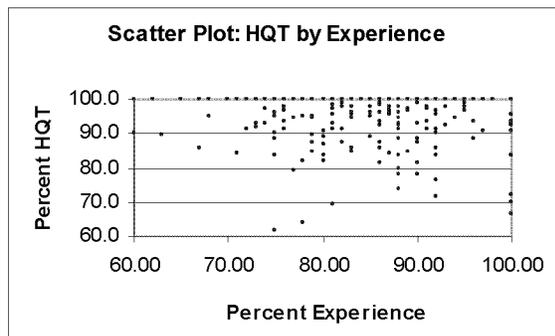


Figure 12.



It appears from the scatter plot in Figure 11 that schools with high percentages of classes taught by highly qualified teachers also tend to have high percentages of experienced teachers. However, this data may be misleading since most schools have higher percentages of both variables. Therefore, it is difficult to determine if the pattern continues for schools with lower values of both variables, which would indicate a linear relationship. The scatter plot in Figure 12 shows a magnified view of the data (with the scale for both axes beginning at 60 rather than 0), and from this view, it appears that there is not a linear relationship between percent of highly qualified teachers and percent of experienced teachers. Correlation analysis, in the following section will provide the reader with further insight into this relationship, particularly for data disaggregated at the elementary, middle and high school level.

4. Does the percent of HQ classes, experienced teachers and average risk level differ for REAP schools versus non-REAP schools?

- There does appear to be differences between REAP and non-REAP schools on the percentage of HQT classes, the percentage of experienced teachers, and risk level. REAP schools have lower percentages of HQT classes yet lower risk averages than non-REAP schools at all levels. REAP schools have higher percentages of experienced teachers at the middle and high school level.

Figure 13.

HQT/Experience Percentages, and Risk Averages, by REAP Status and School Level

	Yes			No		
	Elem	Mid	High	Elem	Mid	High
% HQT CLASSES	98.4%	87.7%	90.3%	98.6%	97.8%	97.8%
% EXP TEACHERS	88.8%	90.6%	87.6%	89.9%	84.9%	83.2%
AVERAGE RISK	0.34	0.40	0.38	0.72	2.05	2.00

Figure 14.

HQT/Experience Percentages, and Risk Averages, by REAP Status and School Level

	Elementary School		Middle School		High School	
	Yes	No	Yes	No	Yes	No
% HQT CLASSES	98.4%	98.6%	87.7%	97.8%	90.3%	97.8%
% EXP TEACHERS	88.8%	89.9%	90.6%	84.9%	87.6%	83.2%
AVERAGE RISK	0.34	0.72	0.40	2.05	0.38	2.00

Figures 13-14 show the same information, although ordered differently to allow for ease of different types of comparison. Figures 15 and 16, which display the data in graph

form, provide an alternate way of viewing the data and the possible relationships among the data.

Figures 15.

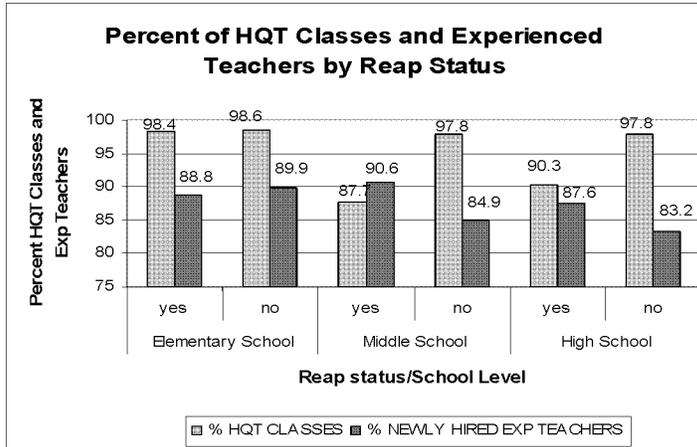
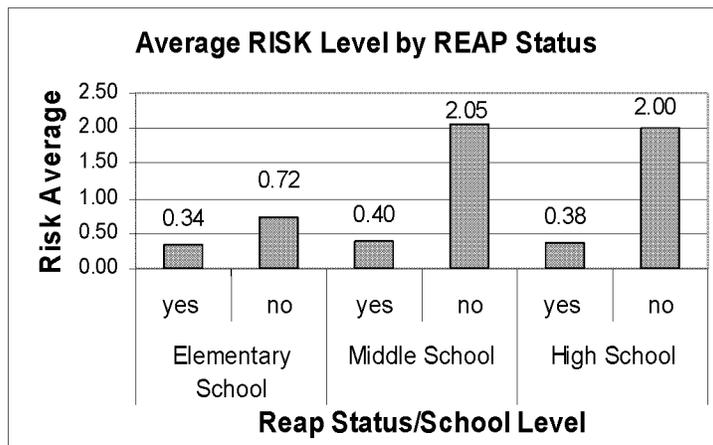


Figure 16.



The main question regarding REAP designation is whether there is a difference in percent of experienced teachers, percent of highly qualified classes, and average risk between REAP schools and non-REAP schools. As shown in Figure 15, REAP schools have lower overall percentages of highly qualified classes than non-REAP schools at all levels.⁴ However, REAP schools have higher percentages of experienced teachers at the middle and high school level. REAP schools also have lower risk averages at all levels (please see Figure 16). Because HQT, experience and risk does vary by REAP designation, there appears to be a possible association between REAP designation and the variables of interest.

⁴ While there is a difference for the percentage of HQT classes between REAP schools and non-REAP schools at the elementary school level, it is only 0.2%, a trivial difference.

5. Do schools with different levels of student poverty differ in the number of highly qualified classes, experienced teachers and risk level?

- At the elementary school level, there is an increase in the percent of HQTs and HQT classes from the first to the third poverty quartile; however at the highest poverty level, both variables decline slightly. At the middle school level, there does not appear to be a straightforward relationship between HQT and poverty level: The percent of HQTs and HQT classes is highest for schools at the first and third quartile. And at the high school level, as the poverty quartile increases from 2 to 4, there is a decrease in the percentage of HQTs and HQT classes.
- At the elementary and high school level, as the poverty quartile increases from 1 to 3, the percent of experienced teachers increases; it then peaks at the third quartile and drops for the fourth quartile. At the middle school level, the percent of experienced teachers is highest for schools at the first and third quartile.
- For elementary and middle schools, as the poverty level increases, the average risk level increases (with one exception at the elementary school level).

These questions address the issue of equity; that is, whether the distribution of highly qualified and experienced teachers, along with the average risk level, differs for schools with higher percentages of poor students. For the purposes of this analysis, schools are further broken into quartiles based upon their percentage of free and reduced lunch students. The percent of students at a school that receive free and reduced lunch is used as a proxy measure for a school's poverty level.⁵ Schools with the highest percentage of free and reduced lunch students fall under the 4th poverty quartile, while schools with the lowest percentage of free and reduced lunch students fall under the 1st poverty quartile.

The equity data can be evaluated several ways. The first involves a chart which lays out the percentages of the independent variables by school level and then by poverty level (Figure 17). The second involves a line graph for each school level, which displays the percentage of qualified and experienced teachers that fall at different poverty levels (Figures 18-20). Lastly, a scatter plot can be used to see if there is a linear relationship between the percentage of poor students and the percentage of qualified or experienced teachers (Figures 22-23).

⁵ It should be noted that operationalizing the poverty level of a school based upon the percentage of free and reduced lunch students is an imperfect measure, as not all students who qualify for the federal program may receive it and some schools allow all students, regardless of poverty level, to receive it (Viadero, Debra. 2001. Scholars Test Out New Yardsticks of School Poverty. *Education Week*. Retrieved on March 6, 2007 from <http://www.edweek.org/ew/articles/2006/11/08/11poverty.h26.html>).

Figure 17.

HQT, HQ Classes and Experience Percentages by Poverty Quartile and School Level												
	ELEMENTARY SCHOOL				MIDDLE SCHOOL				HIGH SCHOOL			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
% HQT Classes	98.14	98.74	98.97	98.38	98.40	95.58	98.74	96.97	98.15	97.57	97.66	96.09
% HQTs	97.25	98.60	98.69	98.61	97.02	92.37	97.81	92.40	95.54	95.92	94.82	93.63
% Exp Teachers	89.81	90.47	90.65	87.81	85.22	83.16	87.64	83.53	83.09	83.62	85.02	81.12

Figure 17 allows the reader to look across rows within each school level (elementary, middle and high school) to ascertain whether the percentage of a given variable increases or decreases as the poverty quartile (1st, 2nd, 3rd, 4th) increases. For instance, when the “% HQTs” variable for high schools is examined, one can see that as the poverty level of the school increases from the 2nd to the 4th poverty quartile, the percent of HQTs decreases; indicating that there may in fact be a relationship between the percent of highly qualified teachers and the poverty level of the school.

The percentage of a given variable for the same quartile at different school levels can also be evaluated. For instance, when trying to determine which school level has the highest percentage of HQT classes within schools with the highest poverty level (the fourth quartile), a quick skim of the chart reveals that elementary schools have the highest percentage of HQT classes compared to middle and high schools.

Because there is so much data in Figure 17 and the range of data for the variables is so small, it may be difficult to observe any significant patterns; therefore, Figures 18-20 contain line graphs of the data. These line graphs display the percentage of HQT teachers, classes and experienced teachers, by poverty quartile, for each school level. It is important to note once again that the line graphs do not display data over time, as they are typically meant to portray; however this type of graph is helpful when looking for trends of one variable (e.g., HQTs) across another variable (e.g., poverty quartile).

Figures 18.

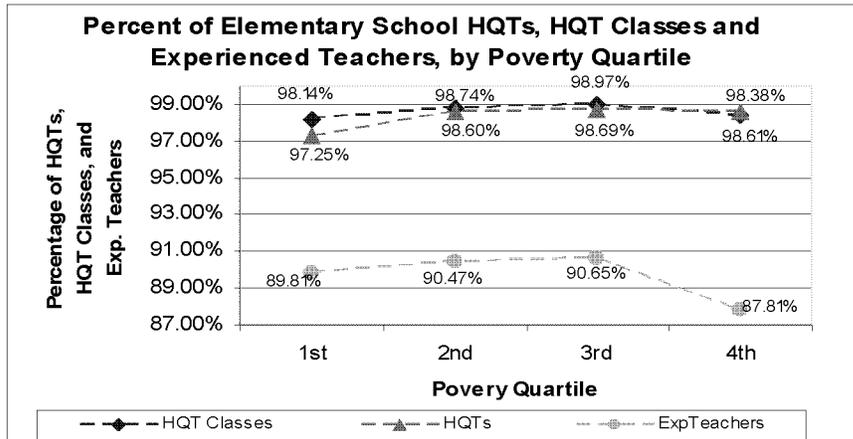


Figure 19.

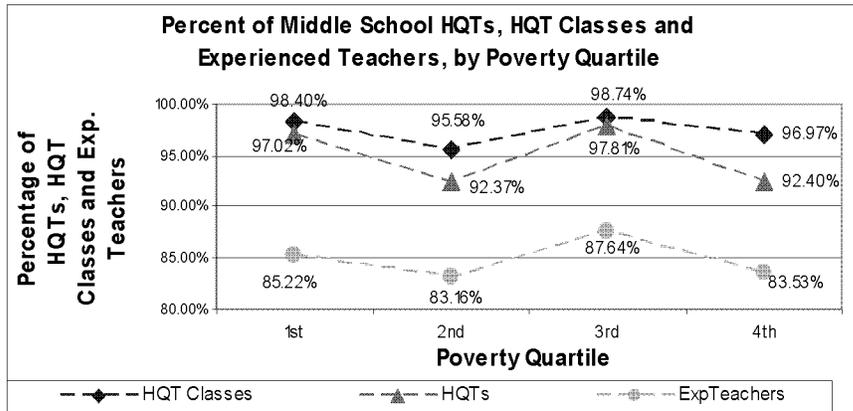
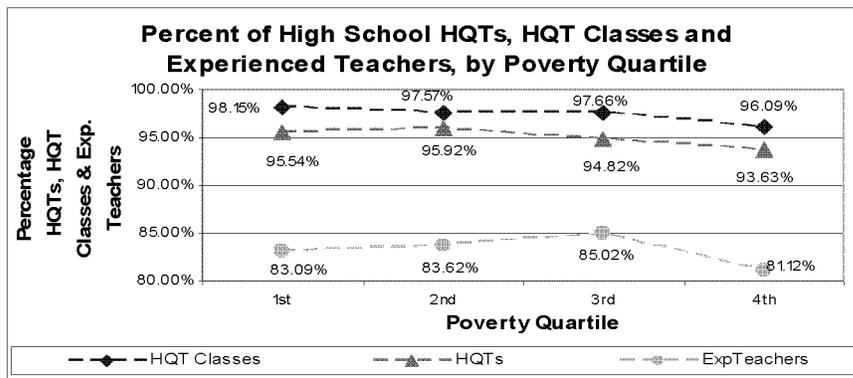


Figure 20.



In Figure 18, which contains just elementary school data, the percent of HQTs, HQT classes, and experienced teachers increases as the poverty level of the school increases,

except for schools at the highest poverty level, where the percentage of all three variables drops slightly. In Figure 19, which contains data on just middle schools, the first and third poverty quartiles have the highest percentage of all these variables; however, there is no discernable pattern in the data. And in Figure 20, which contains high school data only, the percent of HQTs and HQT classes is the lowest for the schools with the highest percentage of free and reduced lunch students. The percent of experienced teachers is higher for schools with higher poverty levels; until one looks at schools in the fourth poverty quartile, where the percent of experienced teachers drops.

Overall, these patterns suggest that for elementary and high schools, higher percentages of HQTs, HQT classes, and experienced teachers are found in schools with moderate versus little poverty; however lower percentages of highly qualified and experienced teachers are found in schools with high levels of poverty. It is important to remember that the difference in percentages of HQTs, HQT classes, and experienced teachers across poverty levels are trivial, and may not be significantly different from each other. On the other hand, because the data for poverty level is grouped into quartiles, significant patterns may have gotten lost. For these reasons, statistical analyses can help determine whether relationships actually exist, are substantial in size, and are significant.

Figure 21.

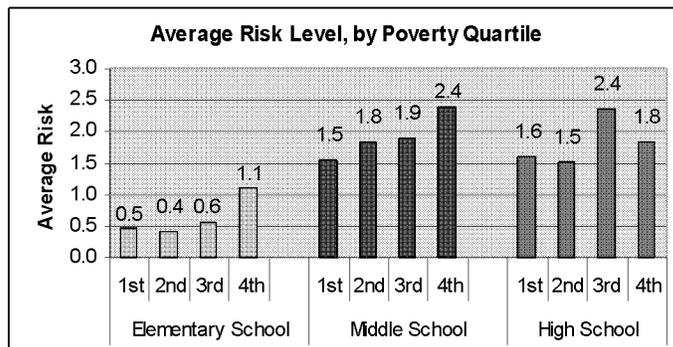


Figure 21 shows that the average risk level for schools in the highest poverty quartile is larger than the average risk level of schools in the lowest quartile (at all levels, although substantially so for elementary and middle schools). Moreover, as the poverty level increases for elementary and middle schools, the average risk level increases, indicating that schools with higher percentages of poor students have higher risk averages.⁶ From this graph, there does appear to be a linear pattern for elementary and middle schools. Statistical analysis will be used to determine whether there is in fact a relationship between risk level and percent of poor students at a school.

⁶ It should be noted that this is not a perfectly linear relationship for elementary schools as the average risk level for the 2nd poverty quartile does not follow the pattern.

Figures 22.

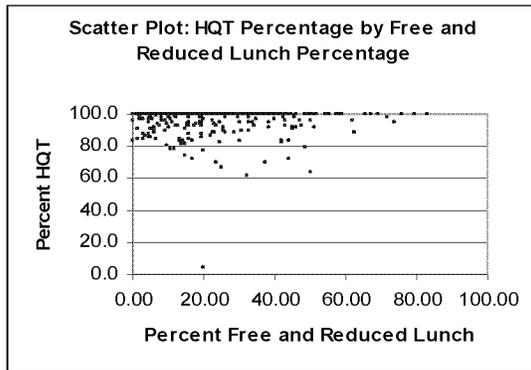
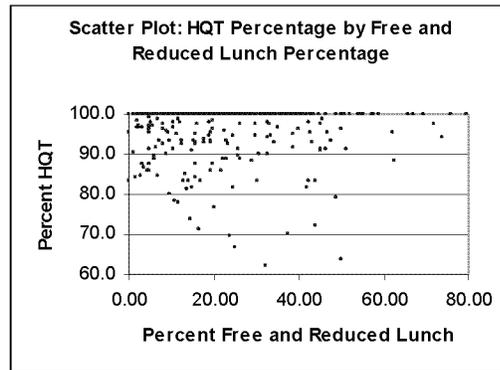


Figure 23.



A scatter plot of poverty and HQT data (see Figure 22 and 23) is useful to determine visually if a linear relationship exists between the two variables before statistically analyzing the data. While it appears from Figure 22 that lower percentages of free and reduced lunch students are associated with higher percentages of highly qualified teachers, a magnified view of the data in Figure 23 (the axis scales have been adjusted thereby removing any outliers) suggests that a linear relationship between the two variables does not exist. Correlation analysis will be used to delve deeper into this relationship.

Section 2: Preliminary Statistical Analysis

1. Is there a relationship between the percentage of classes taught by highly qualified teachers and the risk level of the school?

There is no overall relationship between the percentage of *classes taught by HQTs and the risk level of the school*. The results of a correlation analysis for the two variables, risk level⁷ and percentage of highly qualified classes, show that this relationship is not significant at the 95% level ($r=-0.012$ $p=0.797$).⁸

When the data is broken down by school level (elementary, middle and high school), the lack of association between the two variables remains. Therefore, for all schools and disaggregated by all school levels, the risk level of a school is not associated with the percentage of classes taught by HQTs.

There does appear to be a relationship, however, between *risk level and percentage of HQTs*. Results from a correlation analysis demonstrate that this relationship is significant at the 95% level, with an r of -0.103 , suggesting higher percentages of highly qualified teachers are associated with lower risk levels. This could alternately be stated in the following way: As the percent of highly qualified teachers at a school increases, the risk level decreases. However, a small correlation coefficient indicates that the two variables vary together only slightly, (i.e., only some of the variation in risk level is explained by the variation in highly qualified teachers). This relationship is not evident when the data is disaggregated by school level.

There are three reasons to be cautious of the results of the analysis of HQT and risk level data. The first is because the Pearson's Correlation Coefficient is very small, indicating a trivial association between HQTs and risk level. Secondly, the relationship disappears when the data is disaggregated by school level. And thirdly, there is very little difference in the percentage of HQTs and the percentage of classes taught by HQTs (the two variables are highly correlated with an r of 0.912); yet one relationship is significant while the other is not. These results should therefore be interpreted with caution.

⁷ Generally, correlation analyses using Pearson's Correlation Coefficients are used with two continuous variables. However, in this analysis, risk variable is discrete (it is on a scale of 0 to 5) and not normally distributed (a majority of schools have a risk level of 0 or 1). Nonetheless, correlation analyses are used in an exploratory capacity to get a sense of the level of association between the two variables.

⁸ A Pearson's Correlation Coefficient (also known as " r ") is measured on a scale from -1 to $+1$, with -1 indicating a strong negative relationship, 0 indicating no relationship and $+1$ indicating a strong positive relationship. The level of significance is used to determine if one can actually differentiate the Pearson's Correlation Coefficient statistic (or whichever statistic is being used) from zero. Researchers look for a significance of 95% or greater, which is equivalent to a p level of $.05$ or smaller.

2. Is there a relationship between the percentage of experienced teachers and the risk level of that school?

Results from a correlation analysis of the “risk level” variable and “percentage of experienced teachers” variable suggests that there is, in fact, a correlation between the two variables ($r=-0.214$, $p<0.001$), albeit a small one. When the data is disaggregated by school level, this relationship remains for elementary schools only ($r=-0.140$, $p=0.014$). An r of 0.140 suggests that for elementary schools, only a small portion of the variation in the “risk level” variable is explained by the variation in the “experienced teachers” variable, and vice versa. Moreover, the results suggest that as the percent of experienced teachers decreases, the risk level of a school increases, and conversely, as the percent of experienced teachers increases, the risk level decreases. However, because this is a test of correlation, not causation, this type of analysis cannot determine whether an increase in the number of experienced teachers is the reason for a decrease in the risk level of a school.

3. Is there a correlation between the percentage of experienced teachers and highly qualified classes at a school?

Results from a correlation analysis confirm that there is a relationship between these two variables. Specifically, a Pearson’s Correlation Coefficient of 0.098, which is significant at the 95% level, suggests that experienced teachers and highly qualified classes are positively correlated. Therefore, with higher percentages of experienced teachers in schools, there are higher percentages of classes with highly qualified classes.

When the data is disaggregated by school level, an even stronger relationship between the two variables emerges for elementary schools. This relationship is significant at the 99% level ($r=0.189$, $p=0.001$), indicating that higher percentages of highly qualified classes in elementary schools are associated with higher percentages of experienced teachers. A relationship exists at the middle school level as well; however, it is a negative ($r=-0.269$, $p=0.026$). These results suggest that for middle schools, higher percentages of experienced teachers are associated with *lower* percentages of highly qualified classes. No relationship between the two variables is found at the high school level. Without additional information, one can’t really be sure what exactly is occurring at either level and why there is a difference in the direction of the relationship between elementary and middle schools.

4. Is there a statistically significant difference between the percentage of HQT classes for REAP schools versus non-REAP schools?

When the mean of the percentage of HQT classes in REAP schools is compared to the mean of the percentage HQT classes in non-REAP schools through an independent samples t-test, REAP schools are found to have an average percentage of HQT classes that is 1.44% lower than that of non-REAP schools. However, the results just miss being significant at the 95% level ($t=1.934$, $df=456$, $p=0.054$). Therefore, this difference is not statistically significant.

When the data is disaggregated by the school level, there is a statistically significant difference between the means of REAP HQT classes and non-REAP HQT classes for middle schools ($t= 3.054$, $df=67$, $p=0.003$) and high schools ($t= 3.890$, $df=75$, $p<0.001$). In particular, non-REAP middle schools have 7.3% more classes taught by highly qualified teachers, and non-REAP high schools have 5.9% more classes taught by highly qualified teachers. However, it should be noted that the number of REAP schools included in the analysis is very small for both middle schools ($n=5$) and high schools ($n=8$), therefore one must be cautious of drawing any firm conclusions from the analysis.

5. Is there a statistically significant difference between the percentage of experienced teachers for REAP schools versus non-REAP schools?

An analysis of whether the percentage of experienced teachers differs for REAP schools compared to non-REAP schools reveals a significant difference at the high school level only ($t= -2.156$, $df=75$, $p=0.034$). Non-REAP high schools have a lower percentage of experienced teachers (82.3%) than REAP high schools (88.5%).

6. Is there a statistically significant difference between the average risk level for REAP schools versus non-REAP schools?

REAP schools have a lower average risk level than non-REAP schools by .84 points. This is statistically significant at the 99% level ($t=5.149$ $df=456$ $p<0.001$). This relationship remains when the data is broken down by school level, although at the elementary school level, the difference in means is much smaller (0.38) than at the middle (1.65) or high school level (1.62). This suggests that overall, schools located in rural areas are more likely to make AYP than schools located in non-rural areas.

7. Is there a correlation between the number of poor students at a school and the number of highly qualified teachers at a school?

The only significant correlation between the percentage of poor students and the percentage of highly qualified classes occurs at the high school level ($r = -0.242$, $p=0.034$). These results from a correlation analysis suggest that higher percentages of poverty students are correlated with lower percentage of highly qualified classes. Again, a correlation analysis does not show causality, so it is not possible to determine whether a school's higher poverty status causes less highly qualified teachers to teach at that school, nor why this relationship occurs only at the high school level.

8. Is there a correlation between the number of poor students at a school and the number of experienced teachers at that school?

The results from a correlation analysis demonstrate that overall, and disaggregated by school level, the two variables for poor students and experienced teachers are *not* correlated. Again, it is impossible to determine if this is because a relationship between

the two variables fails to exist, or if it is a result of the fact that the variable for experienced teachers measures more than just experience.

9. Is there a correlation between the number of poor students at a school and the risk level of the school?

Results from a correlation analysis indicate that the risk level of a school and the percent of free and reduced lunch students is positively correlated ($r = 0.146$, $p=0.002$). In other words, as the percent of free and reduced lunch students increases at a school, so does the risk level, and as the percent of free and reduced lunch students decreases, the risk level decreases as well. When the data is disaggregated by school level, this relationship remains for elementary schools only ($r = 0.283$, $p=0.000$). It fits that schools with higher percentages of free and reduced lunch students have higher risk levels, since it is well documented that poverty has a negative effect on student achievement.

One final question can be asked of the data:

10. What is the overall effect of the percentage of highly qualified teachers, percentage of experienced teachers, and percent of free and reduced lunch students on risk level?

Another way to look at the data is to regress the HQT, experience and poverty variables on the risk level variable, which is the closest measure to student achievement that exists in the dataset. In a preliminary regression analysis, each of the independent variables are highly significant, indicating that the percentage of HQTs, percentage of experienced teachers, and percentage of poverty students at a school has an effect on the risk level of a school. Specifically, schools with higher percentages of free and reduced lunch students and lower percentages of experienced and highly qualified teachers also tend to have higher risk levels. However, while the regression coefficients are all significant, they are very small, indicating that the relationships between the dependent and independent variables are not very strong. An adjusted R-squared of 0.078 further reinforces this conclusion, indicating that the variation in the independent variables only explain a small portion (7.8%) of the variance of the dependent variable. Therefore, additional data or better constructed variables may be able to account further for the variation in our dependent variable.

Section 3: Suggested Variables and Questions for Future Analyses

Suggested Variables to Collect at School Level

1. HQT data across several years (e.g., 2001, 2002, 2003, 2004, 2005)
2. Percent of HQ special education teachers
 - Instead of calculating the percentage of HQ special education teachers by dividing the number by the total number of all teachers (special education and general education), it might be more useful to divide HQ special education teachers by the total number of special education teachers only.
3. HQT by school subject (e.g., math, English), student population (e.g., ELL/LEP), school locale (e.g., urban, suburban, rural)
4. Teacher-student ratio
5. Median teacher salary
6. Annual teacher turnover rates
7. Percent of teachers teaching out of certification area
8. Percent with a masters or doctorate degree
9. Median years teaching experience
10. Geographic locale of school (whether a school is in an urban, suburban or rural area)
11. School finance data
12. Student achievement data
13. Information on state policies enacted to increase the number of highly qualified and experienced teachers for rural, high poverty and high risk schools

Suggested Additional Questions to Analyze

1. Using the above variables, one could determine whether basic associations existed among them. The following is a list of examples of variables to correlate:
 - a. HQT percentage and student achievement data;
 - b. Student-teacher ratio and student achievement data
 - c. Percentage of HQ classes for ELL students and student performance of ELL students
2. If data on HQTs existed across several years, one could investigate whether there is significant growth in the percentage of highly qualified teachers and classes from one year to the next.

3. If geographic locale data existed, one could determine if there was a significant difference in the distribution of highly qualified teachers and experienced teachers across urban, suburban and rural schools.
4. An interesting analysis would be to determine whether having a highly qualified and/or experienced teacher mitigates the effect of poverty on a student's academic performance. This type of analysis would require, at a minimum, individual level data on student performance, poverty status, and teacher experience/qualifications.
5. With more knowledge about state policies that are enacted to encourage a greater number of highly qualified and experienced teachers to work at high risk and high poverty schools, one could evaluate the effectiveness of the policies.

Conclusion

Sections 1 and 2 involve descriptive and statistical analyses as a means to determine how the number of HQTs, HQT classes and experienced teachers are distributed in the state of New Hampshire, and how those variables relate to other variables that measure the risk, rural status and poverty level of a school. Charts and graphs were employed in order to allow for visual representation of the data, and the statistical analysis section was provided as a way to statistically enforce (or negate) some of the relationships that appeared within the graphs. However, statistical analysis was performed in an exploratory capacity, and often times, relationships emerged that were significant but trivial in size. Therefore, while results from the statistical analysis section showed that poverty, rural status and risk level were related, in some capacity, to the number of HQTs, HQT classes and experienced teachers, these results should be interpreted cautiously and with the understanding that additional and more thorough data, as presented in the third section, may help to provide more meaningful analyses in future years. As evident by the descriptive analysis section, there was ultimately very little variation in the percentage of HQTs and experienced teachers, for elementary, middle and high schools. With more comprehensive data, advanced statistical analysis could be performed in order to delve more deeply into how these variables relate to each other, the extent to which the risk level is associated with the other variables, and what the distribution of highly qualified and experienced teachers looks like for poor and rural students.

Appendix D-3-12: Department of Corrections Data

Butler, Patricia

From: MCGONAGLE, WILLIAM G. [william.g.mcgonagle@nhdoc.state.nh.us]

Sent: Thursday, January 07, 2010 3:35 PM

To: Barry, Virginia; ThistleElliott, Lynda

Subject: FW: Data Request

Good afternoon Commissioner,

Below is a table that sorts males and females by age and race/ethnicity. The text provides the data available on the question "state of birth". The number of inmates having a GED and/or HS Diploma prior to incarceration comes from a separate database and I hope to have that for you tomorrow. Please let me know if this information meets your needs for completion of the Race to the Top application.

Regards,
Bill McG

William G. McGonagle

Assistant Commissioner
NH Department of Corrections
Phone: (603) 271-5601

This e-mail and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. This communication may contain material protected by law. If you are not the intended recipient or the person responsible for delivering the e-mail to the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing, or copying of this e-mail is strictly prohibited and may be subject to criminal prosecution. If you have received this e-mail in error, please immediately notify me by telephone at 271-5601.

From: CORMIER, RONALD J

Sent: Thursday, January 07, 2010 3:24 PM

To: MCGONAGLE, WILLIAM G.

Subject: Data Request

This table should cover the age, race and gender requests you asked for. For the NH born question I got 1032 born in NH and 1827 not born in NH and 73 with blanks in the place of birth field.

Ron

Facility Race Summary for 1/7/2010											
Race Description	Gender	Total Count	Total Females	Total Males	Total Under 17	Total 17-21	Total 22-25	Total 26-30	Total 31-40	Total 41-50	Total 51-60
American Indian or Alaska Native	Female	1.00	1	0	0	0	0	0	1	0	0
American Indian or Alaska Native	Male	15.00	0	15	0	0	2	0	5	3	2
American Indian or Alaska Native-	Male	1.00	0	1	0	0	0	0	0	1	0

Appendix D-3-12: Department of Corrections Data

Hispanic													
Asian	Male	11.00	0	11	0	0	0	0	6	3	1	1	0
Black or African American	Female	12.00	12	0	0	0	2	2	4	4	0	0	0
Black or African American	Male	170.00	0	170	0	8	30	36	39	41	13	3	0
Black or African American-Hispanic	Male	6.00	0	6	0	0	1	2	2	1	0	0	0
Other	Female	3.00	3	0	0	0	1	1	1	0	0	0	0
Other	Male	12.00	0	12	0	0	2	3	5	2	0	0	0
Other-Hispanic	Female	1.00	1	0	0	0	0	1	0	0	0	0	0
Other-Hispanic	Male	55.00	0	55	0	5	7	13	11	17	2	0	0
Unknown	Female	4.00	4	0	0	0	0	2	1	1	0	0	0
Unknown	Male	107.00	0	107	0	2	7	27	33	27	8	3	0
Unknown-Hispanic	Male	45.00	0	45	0	2	2	8	19	12	2	0	0
White	Female	167.00	167	0	0	4	19	31	50	46	9	8	0
White	Male	2,271.00	0	2271	0	45	220	370	575	580	300	181	0
White-Hispanic	Female	1.00	1	0	0	0	1	0	0	0	0	0	0
White-Hispanic	Male	50	0	50	0	2	3	11	15	15	3	1	0
TOTALS=		2932	189	2743	0	68	297	507	767	753	340	200	0
**Detail information can be obtained on the Active Population Listing for the same date/time frame													

SB 503 – AS AMENDED BY THE HOUSE

03/17/10 1014s

13May2010... 1824h

2010 SESSION

10-2948

04/09

SENATE BILL **503**

AN ACT relative to unique pupil identification.

SPONSORS: Sen. Kelly, Dist 10; Sen. Odell, Dist 8

COMMITTEE: Education

ANALYSIS

This bill:

I. Requires early childhood programs and postsecondary institutions to submit a report to the department of education containing information on certain pupil indicators and requires the department of education to collect and integrate such information into the data warehouse.

II. Requires early childhood programs and postsecondary institutions to participate in the unique pupil identification system.

Explanation: Matter added to current law appears in ***bold italics***.

Matter removed from current law appears [~~in brackets and struck through.~~]

Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

03/17/10 1014s

13May2010... 1824h

10-2948

04/09

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Ten

AN ACT relative to unique pupil identification.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 Delivery of an Adequate Education. Amend RSA 193-E:3 to read as follows:

193-E:3 Delivery of an Adequate Education.

I. Annually, beginning with the 2002-2003 school year, each school district shall report data to the department of education at the school and district levels on the indicators set forth in this paragraph. The department of education shall develop a reasonable schedule to phase-in the reporting of new data required by federal law. The requirements for data keeping and the form of the report shall be established in accordance with rules adopted by the state board of education. Indicators shall include the following areas:

- (a) Attendance rates.
- (b) Annual and cumulative drop-out rates of high school pupils and annual drop-out rates for pupils in grades 7 and 8.
- (c) School environment indicators, such as safe-schools data.
- (d) Number and percentage of graduating pupils going on to post-secondary education, military service, and advanced placement participation.
- (e) Performance on state tests administered pursuant to RSA 193-C and other standardized tests administered at local option.
- (f) Expulsion and suspension rates, including in-school and out-of-school suspensions, which shall be reported for each school year.
- (g) Number and percentage of classes taught by highly qualified teachers.
- (h) Teacher and administrative turnover rates at the school and district levels.

(i) Pupil course information.

II.(a) The department of education, with the approval of the legislative oversight committee established in RSA 193-C:7, may implement and report data on any additional indicators deemed relevant to the purposes of this section.

(b) The department of education shall enter into an agreement with the board of trustees of the university system of New Hampshire or the community college system of New Hampshire, or both, if necessary, to determine additional indicators applicable to postsecondary institutions within their respective jurisdictions which are not required under paragraph VI.

III.(a) Not later than December 1, 2003, and annually thereafter, the department of education shall issue a public report on the condition of education statewide and on a district-by-district and school-by-school basis. This report shall be entitled "New Hampshire School District Profiles" and shall be made available at every school administrative unit for public review. It shall include demographic and pupil performance data reported in paragraph I and other relevant statistics as determined by the department of education. Comparisons with state averages shall be provided for all data reported. Comparisons of each district and school to itself based on its own statewide improvement and assessment performance for the prior school year and its most recent 3-year rolling averages shall be provided. Statewide rankings of each district and school shall be provided, including a statewide ranking of each school and school district based on the percentage increase of improvement as compared with the same school district's performance in the previous year. The report shall be organized and presented in a manner that is easily understood by the public and that assists each school district with the identification of trends, strengths, and weaknesses and the development of its local school education improvement plan.

(b) Beginning with the annual report issued in 2013, the department of education shall include data provided by early childhood programs, districts, and postsecondary institutions.

IV. Data reported in paragraph I shall be disaggregated as required by federal law and shall include numbers and percentages of pupils with disabilities, limited English proficient pupils, pupils in advanced placement programs, economically disadvantaged pupils, and pupils of major *ethnic*, racial, and multi-racial groups.

V. In order to reduce school districts' administrative time and costs, the department of education shall develop and utilize user-friendly, computer

forms and programs to collect the data set forth in ~~[paragraph]~~ *paragraphs I, VI, and VII* ~~[and all enrollment and cost data related to determining the cost of an adequate education].~~

VI.(a) Annually, beginning with the 2011-2012 school year, each postsecondary institution as defined in RSA 193-E:4 shall submit a report, which shall not include any personally identifiable information such as, but not limited to, name, gender, or social security number, to the department of education containing information on indicators in the following areas:

- (1) Remedial education courses.*
- (2) Entry, withdrawal, and transfers.*
- (3) Degrees and certificates granted.*

(b) The department of education shall integrate all data collected into the data warehouse. The department of education shall have access to data solely to conduct studies, track and report annual and longitudinal pupil outcomes, and improve postsecondary readiness, retention, and articulation between educational institutions.

(c) The state board of education, in consultation with the university system of New Hampshire board of trustees and the community college system of New Hampshire board of trustees shall adopt rules, pursuant to RSA 541-A, for developing a form to be used for the report and to establish requirements for data maintenance.

VII.(a) Annually, beginning with the 2011-2012 school year, each early childhood program as defined in RSA 193-E:4 shall submit a report, which shall not include any personally identifiable information such as, but not limited to, name, gender, or social security number, to the department of education containing information on indicators in the following areas:

- (1) Program participation.*
- (2) Entry, exit, and type of program.*
- (3) Participant demographics as identified in RSA 193-E:3, IV.*

(b) The department of education shall integrate all data collected into the data warehouse. The department of education shall have

access to data solely to conduct studies, track and report annual and longitudinal pupil outcomes, and improve education programs.

(c) The state board of education, in consultation with the department of health and human services, shall adopt rules, pursuant to RSA 541-A, for developing a form to be used for the report and to establish requirements for data maintenance.

2 Unique Pupil Identification; Definitions. RSA 193-E:4 is repealed and reenacted to read as follows:

193-E:4 Definitions. In this subdivision:

I. “Commissioner” means the commissioner of the department of education.

II. “Data warehouse” means the electronic system operated by the department of education that maintains the information about pupils as set forth in RSA 193-E:3, I, VI, and VII. The data warehouse shall not contain the name, address, telephone number, e-mail address, social security number, or any other personally identifiable information about any pupil.

III. “District” means a New Hampshire public school district.

IV. “District of origin” means the district in which the pupil resides at the point at which the pupil first enters the New Hampshire educational system, whether in an early childhood program, district, or postsecondary education level.

V. “Early childhood program” means a preschool or childcare program receiving Head Start or child care scholarship funds, whether licensed or exempt from licensing, or a preschool program operated by a district. Early childhood programs not operated by a district shall report data only for pupils for which Head Start or child care scholarship funds are received.

VI. “Postsecondary institution” means the university system of New Hampshire or the community college system of New Hampshire.

VII. “Random number generator” means the electronic system that creates unique pupil identification numbers and assigns a unique pupil identification number to a pupil when an early childhood program, a district, or a postsecondary institution enters a pupil’s name, date of birth, town of birth, and gender. The system shall maintain that information and the name of the district of origin, and no other information. This system shall not retain the unique pupil identification number.

VIII. “Unique pupil identifier” means a randomly generated number assigned to an early childhood program pupil, a district pupil, or postsecondary institution pupil in order to gather pupil level data.

IX. “Unique pupil identification system” means an electronic system comprised of the data warehouse and the random number generator.

3 Unique Pupil Identification. Amend RSA 193-E:5 to read as follows:

193-E:5 Unique Pupil Identification.

I. The department of education shall, using federal funds only, implement and maintain a unique pupil identification system on a statewide basis that complies with the following requirements:

(a) No personally identifiable information about a pupil including ~~[but not limited to]~~ name~~[-, date of birth, gender, or]~~ **and** social security number, shall be collected or maintained by the state in such a manner as to allow such information to be connected with the unique pupil identifier. Under no circumstances shall the department of education ~~[obtain or use]~~ **include** a social security number ~~[as an identifier for any pupil, or use unique pupil identifiers except in connection with the data warehouse and such use shall not be accessible to the public]~~ **in the data warehouse.**

(b) ~~[The random number generator shall make available to each school district a unique pupil identifier for each pupil enrolled in a New Hampshire public school.]~~ The unique pupil identifier itself shall not permit pupil identification within a sub-category including, but not limited to, **early childhood program**, ~~[school]~~ district, **postsecondary institution**, sex, age, grade, or county of residence.

(c) The unique pupil identifier shall be requested **from the pupil or the random number generator** and maintained by the **early childhood program**, ~~[local school]~~ district, **or postsecondary institution**. The unique pupil identifier shall remain in the pupil’s file throughout his or her ~~[elementary and secondary]~~ academic career in New Hampshire.

(d) Access to the random number generator shall be limited to **an early childhood program director**, a **district** superintendent or designee, **or a postsecondary institution registrar or designee**, and only for pupils enrolled in that **early childhood program**, ~~[school administrative unit]~~, **district, or postsecondary institution**. Any person who knowingly violates this provision is guilty of a class B felony and may be subject to involuntary termination of employment.

(e) The random number generator shall create and maintain a comprehensive audit trail for all users accessing the ~~[system]~~ *random number generator*.

(f) The data warehouse shall create and maintain an audit trail for all users accessing secure information.

(g) No person, including an individual, business, government, or governmental entity, shall require an individual to provide a unique pupil identifier as a condition of doing business, providing a service, or receiving a benefit of any kind, *except as provided in RSA 193-E:5, I(c)*. Any person or entity ~~[violating]~~ *who knowingly violates* the provisions of this ~~[paragraph]~~ *subparagraph* shall be liable for actual damages or \$25,000, whichever is greater, for each violation. Each denial of services or benefits shall constitute a separate offense under this ~~[paragraph]~~ *subparagraph*.

(h) If a pupil's records become part of an administrative action outside of the pupil's ~~[school]~~ *early childhood program, district, or postsecondary institution*, or a part of any judicial or quasi-judicial proceeding, the part of the record containing the pupil's unique pupil identifier shall be redacted by the ~~[school]~~ *early childhood program, district, or postsecondary institution* prior to release.

(i) The information maintained in the data warehouse~~[, except for the unique pupil identifier,]~~ shall be available to the department of education and to the public using the ~~[same database]~~ *data* maintained by the department of education. No personally identifiable information shall be required as a condition of access or usage under this subparagraph, nor shall such access or usage be tracked. Under no circumstances shall the unique pupil identifier be made available to ~~[the department of education or to]~~ the public.

(j) Information maintained in the random number generator shall be exempt from the provisions of RSA 91-A.

(k) Authorized personnel at the department of education shall administer and maintain the unique pupil identification system.

(l) *The department of education shall provide* no personally identifiable information *collected pursuant to this chapter*, including but not limited to name, date of birth, *or* gender~~[, or social security number, shall be provided]~~ to any person or entity, *other than an early childhood program, district, or postsecondary institution authorized to access this data*, absent a court order~~[, and]~~. Under no circumstances shall personally identifiable information be provided to any person or entity outside of New Hampshire *without permission from the pupil or the pupil's legal guardian*. Any person who knowingly violates this provision

is guilty of a class B felony and may be subject to involuntary termination of employment.

(m) Early childhood programs not receiving Head Start or Child Care scholarship funds, private schools comprised of kindergarten through grade 12, and all private postsecondary institutions may participate in the data warehouse and random number generator. Participating early childhood programs may volunteer to include data for pupils for which Head Start or Child Care scholarship funds are not received. Permission of a parent or legal guardian of a pupil enrolled in an early childhood program shall be obtained before a pupil may participate in the data warehouse and random number generator. For the purposes of this section, such voluntary participating early childhood programs shall be included in the definition set forth in RSA 193-E:4.

(n) Notwithstanding subparagraphs (a)-(m), to enable the department of education to ensure the accuracy of the data, the commissioner of the department of education may, in writing, grant individuals access to the data warehouse, including but not limited to, access to the unique pupil identifier for the purpose of connecting information in the warehouse with the random number generator.

(o) At the request of the district, the department of education shall provide pupil data from the data warehouse to a district for pupils educated in that district. The department shall not provide any pupil-level data to a school district not directly involved with the pupil's education.

(p) At the request of the pupil, the department of education shall provide pupil data from the data warehouse to a postsecondary institution.

(q) At the request of the parent or legal guardian, the department of education shall provide pupil data from the data warehouse to an early childhood program.

(r) Nothing in this chapter shall prohibit institutions in the university system of New Hampshire and the community college system of New Hampshire from exchanging data between themselves without the consent or involvement of the department of education.

II. Notwithstanding RSA 193-E:3, II, the legislative oversight committee established in RSA 193-C:7 shall perform any revisions to this section through legislation filed for that purpose.

III. Any contracts or agreements necessary to implement the provisions of this section shall be approved by the governor with the consent of the executive council, and the fiscal committee established in RSA 14:30-a.

4 Effective Date. This act shall take effect 60 days after its passage.

Appendix D-3-14: New Certifications Through Alternative Pathways

New Hampshire
 Department of Education
 Division of Program Support
 Bureau of Credentialing

Oct 7, 2009

New Certificates Issued

Sept 1 - Aug 31	1999 -2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005-2006	2006-2007	2007-2008	2008-2009
Type of Certificate										
Intern Alt 4				203	191	182	192	166	200	162
Intern Alt 5				74	84	62	57	55	62	49
total	57	204	244	277	275	244	249	221	262	211
BEC or EEC Alt 1	754	689	718	856	932	921	958	826	885	827
BEC or EEC Alt 2	470	464	558	883	869	741	682	682	693	691
BEC or EEC Alt 3	38	24	17	18	19	24	24	34	45	20
BEC or EEC Alt 4	49	44	88	51	56	71	64	55	53	45
BEC or EEC Alt 5	36	41	59	67	52	59	44	37	47	28
Unknown/Invalid	0	0	12	3	0	0	0	1	2	0
total	1,347	1,262	1,452	1,878	1,928	1,816	1,772	1,635	1,725	1,611
Grand Totals	1,404	1,466	1,696	2,155	2,203	2,060	2,021	1,856	1,987	1,822

General Notes:

1. All certificates were issued between Sept 1 and the following Aug 31.
2. Only BEC, EEC and INT licenses included.
3. Only original issues. Individuals receiving an endorsement (INT, BEC, EEC or PRO) prior to Sept 1 are not included.

pg 1066

Revised

1/15/10

Gauthier, Michelle

From: Ford, Mary [mary.ford@granite.edu]
Sent: Friday, January 15, 2010 1:39 PM
To: Gauthier, Michelle
Subject: Fw: Granite State College RTTT Proposal

Sent using BlackBerry

----- Original Message -----

From: Ford, Mary
To: 'michelle.gauthier@ed.state.nh.us' <michelle.gauthier@ed.state.nh.us>; Ford, Mary
Sent: Fri Jan 15 12:57:37 2010
Subject: Granite State College RTTT Proposal

Granite State College will:

1. Prepare highly quality certified teachers who are accountable for the achievement of their K-12 students
2. Operationalize RtI model, PLCs and data driven making across the curriculum and making the K-12 student achievement data the primary evidence of successful completion of teacher preparation program.
3. Implement a 3 tiered comprehensive higher education mentoring program for teacher candidates: (a) Ask the Expert; (b) E-Mentoring; (c) F2F mentoring.
4. Develop a PLC for college faculty to support their professional development and expertise in the use of K-12 student achievement data to evaluation of their teacher candidates.
5. Share with other IHEs in NH how to use K-12 student achievement to evaluate their teacher candidates and their teacher preparation programs. This sharing May include face-to-face PLCs and web-based PLCs.
6. Budget: \$370,000 (salary of coordinator of \$65,000 per year + \$27,300 fringe per year for 4 years)

Sent using BlackBerry

12/19/09

Race to the Top Participating Organization Proposal

Organization in Consortia

Organization	Contact/Title	Email	Phone Number
Granite State College	Mary J. Ford, Ed.D. Associate Dean of Education Programs	Mary.ford@granite.edu	603-513-1371

Preliminary Scope of Work

We will focus on the following criterion(a) in education reform area(s) of the state plan (please check appropriate boxes in front of criterion your effort will address):

Standards and Assessments

- Supporting the transition to enhanced standards and high-quality assessments

Data Systems to Support Instruction

Using data to improve instruction:

- Use of local instructional improvement systems
- Professional development on use of data
- Availability and accessibility of data to researchers

Great Teachers and Leaders

Improving teacher and leader effectiveness based on performance:

- Measure student growth
- Design and implement evaluation systems
- Conduct annual evaluations
- Use evaluations to inform professional development
- Use evaluations to inform compensation, promotion and retention
- Use evaluations to inform tenure and/or full certification
- Use evaluations to inform removal

Ensuring equitable distribution of effective teachers and leaders:

- High-poverty and/or high-minority schools
- Hard-to-staff subjects and specialty areas

Providing effective support to teachers and leaders:

- Quality professional development
- Measure effectiveness of professional development

Appendix D-4-15: Description of Proposed Residency Models

Granite State College will:

WHAT

- Prepare highly qualified certified personnel who are accountable for the achievement of their K-12 students;
- Operationalize RtI model, PLCs and data-driven decision making across professional development opportunities, making the K-12 student achievement data the primary evidence of successful completion.

HOW

- Formative and summative assessment data will be embedded throughout the professional development activities
- The participants are expected to examine K-12 student achievement data and focus on:
 - How the K-12 students performed overall on the identified power standard domains across all participants
 - How the K-12 students performed for each participant
 - Analyze K-12 student achievement data in the context of the professional development activities
 - Analyze K-12 student achievement data in the context of the Professional Learning Communities meeting notes.
- Coordinate biweekly data collection efforts with NHDOE's Performance Pathways Tracker System, which would then be aligned with individual teacher candidates and teacher's electronic professional portfolio system to track K-12 student progress, teaching effectiveness, relevance of professional development activities and professional learning community strategies.

STATEWIDE IMPLEMENTATION

- GSC will provide state-wide forum to
 - Develop identified power standard domains
 - Identify barriers for state-wide implementation
 - Develop plans to implement state-wide effort
- The Collegiate Professional Learning Communities will include:
 - Face-to-Face Training
 - Web-based professional learning communities
 - Analysis of K-12 student achievement data
-

Appendix D-4-15: Description of Proposed Residency Models

	formative and summative assessments anchor the work
The core cycle of curriculum, instruction and assessment is strong for the teacher candidate.	Teacher candidates demonstrate their ability to create a well integrated system of instruction/intervention guided by student outcome data and have the capacity to clearly communicate this with colleagues
Focuses on special education programs	Focuses on research based resources and instructional approaches that have a high probability of success for most students
Leadership is addressed through the special education process	Teacher candidates perceive themselves as change agents on behalf of all students to create one proactive educational system. Teachers are leaders who critically think and solve problems

This overall approach deepens the teacher candidate’s knowledge base of content and how to effectively teach it to students; enables teachers to acquire the knowledge they need, apply it to the practice in the classroom immediately, and reflect with supportive colleagues the effect on student achievement. This approach links the higher education accountability efforts directly to student achievement.

Brief Description of Proposed Project, including stakeholders involved, potential artifacts to share with LEAs, e.g., products, practices, tools, policies:

Granite State College with sister USNH institutions hope to expand the above model to a Professional Development School model within targeted struggling schools across New Hampshire. Granite State College has been in contact with Keene State College, Plymouth State University and University of New Hampshire to discuss collaborative efforts, and all are in agreement that collegial partnerships are needed to meet the needs of struggling schools, and all are willing to develop these partnerships. GSC and KSC are willing to work with schools in the south west region of the state, GSC and PSU are willing to work in the lakes regions and north, and GSC and UNH are very interested in working together in the Manchester School District. Ideally, a Consortia of Experts, comprised of collegiate faculty from the USNH, expert consultants and local school district would develop PDS partnerships to:

- address the RTTT goals specific to each school
- co-teach, co-mentor and co-facilitate professional development activities, teacher retention support and professional learning communities
- coordinate the collection and analysis of formative assessment data of K-12 students, teacher candidates, participating teachers, professional development activities, and professional learning communities to track K-12 student progress and teaching effectiveness.

- Create a web-based PDS community for educators to build their professional knowledge and skills in a collaborative networked learning community. This web-based PDS community will use a blend of online and face-to-face collaboration to improve educator preparation, induction and on-going professional development. This will enable teacher candidates and professional educators to reflect on effective teaching practices and strategies in varied settings and receive timely feedback
- Coordinate a three tiered comprehensive mentoring program that engages college faculty and local school districts to collaboratively support teacher candidates and teachers in relevant and meaningful professional learning communities, using K-12 student achievement data to guide instructional decisions.
- Coordinate biweekly data collection efforts with NHDOE's Performance Pathways Tracker System, which would then be aligned with individual teacher candidates and teacher's electronic professional portfolio system to track K-12 student progress, teaching effectiveness, relevance of professional development activities and professional learning community strategies.
- Embed and layer technology across IHEs and school districts by:
 1. Training college faculty and K-12 teachers to use instructional software and other instructional technologies to collect, manage, and analyze data to inform and enhance teaching and school improvement efforts.
 2. Training college faculty and K-12 teachers to use instructional technology to actively engage students in the learning process.
 3. Developing or using already developed online formative assessment systems to provide teachers and college faculty with data that can inform instruction on an ongoing basis as well as drive decisions related to curriculum development, instruction, and professional development.

Data to be Collected to Assess Effectiveness of Reform:

1. **Biweekly K-12 student achievement data to monitor K-12 student progress, teaching effectiveness, relevance of professional development activities and professional learning community strategies.**

Estimated Total Budget for Three Years:

Personnel: \$1,776,000 (Coordinator of Project, 4 faculty, Data Specialist and Administrative Assistant)

Equipment: \$45,000

Supplies: \$30,000

Travel: \$60,000 - Travel for 6 individuals to 4 regions of the state to build and sustain the Professional Development Schools

We are interested in participating in the following networks:

- x STEM
- x Secondary Transformation Network (with NE Secondary School Consortium)
- Board Examination System Consortium (work with Marc Tucker)
- Leadership Academy
- x Educator Residency Network: Pilot of 3-year beginning educator mentorship

**Race to the Top
Conceptual Proposal for Southwestern, NH**

The concept:

We will create an innovative, immersive elementary school (K-6) learning environment where teachers, collegiate faculty, and teacher candidates engage in research, curricular design, and instructional and assessment activities that will demonstrate enhanced student learning and teacher quality in Science, Technology, Engineering, Mathematics and world language disciplines. This proposal will infuse literacy, arts, technology and wellness within core disciplines to strengthen instructional and to support the development of well-rounded, engaged, and healthy youth.

This collaborative partnership will engage Marlborough School, Keene State College, and S.A.U. #29 and is intended to create a sustainable, transferrable model for the 21st Century classroom.

Relevance and Continuity with National Dialogue:

- Addresses high quality teacher preparation
- Focuses on critical instructional areas
- Creates a partnership between a high needs school district and a teacher preparation institution
- Uses data to improve teaching and targets student learning gaps
- Incorporates a teacher residency model
- Enhances the amount of hands-on practical teacher training

Why Marlborough?

The Marlborough School, a k-8 school, serves the town of Marlborough, NH. The student population of approximately 180 students (96% Caucasian, 2% African American, 2% Hispanic) is instructed by 40 full- and part-time staff. Thirteen percent of the student population receives special education services, and it is this subgroup that did not make annual yearly progress (AYP) in mathematics during the 2007-08 and 2008-09 academic years.

Though Marlborough is a property poor district voters have recently approved the building of a new school, which is scheduled to open for the 2010-11 school year. Situated near ponds, rivers, and forests, the new facility will support a wide array of outdoor learning opportunities and inquiry-based learning. Each classroom will be equipped with an interactive whiteboard, a projector, and an amplified sound system. These tools will be used to enhance instruction and further promote integration in the areas of the arts and technology.

As a District in Need of Improvement, we need to increase student achievement. This proposal will provide our staff with the job imbedded professional development necessary to enable Marlborough to achieve its goals of creating and monitoring personal learning plans for all students, developing professional learning communities among the staff, and using data to improve instruction and increase student achievement.

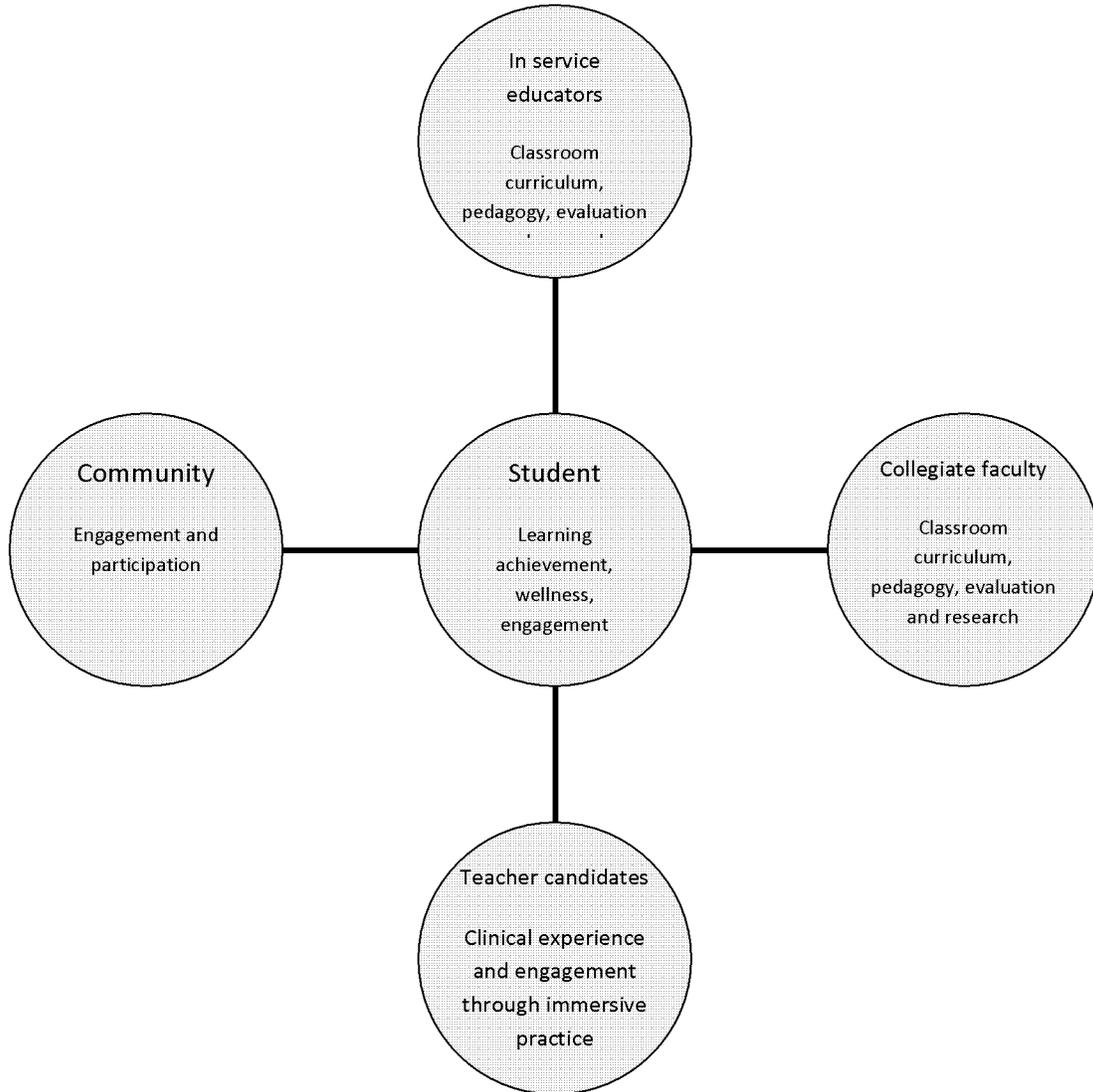
Why Keene State College?

Our college is accredited by the New England Association of Schools and Colleges (NEASC) and several of our academic programs enjoy national recognition by accrediting bodies. Of relevance to this proposal is the accreditation of our teacher candidate preparation program by the National Council for Accreditation of Teacher Education (NCATE). Keene State has also been designated by the American Association of Colleges and Universities as a Liberal Education and America’s Promise Exemplar campus given our work to create an outcomes based curriculum that ensures that our students are prepared with the requisite skills to succeed in the world they inherit upon graduation. These distinctions compel our campus to demonstrate student learning effectiveness across our curriculum and to engage in reflective practice and systematic evaluation of an outcomes based curriculum. To support this work, Keene State has supported faculty development activities and has committed resources to enhancing classroom technology and blended learning models; it is striving to leverage Web 2.0 resources to enhance dialogue and knowledge regarding the work and reflection underway. Our new partnership with the Southwestern New Hampshire Educational Support Center (SWnhESC) complements our work in the KSC community of learners and educators to enhance skills and learning outcomes achievement and supports our reach across the P-16 spectrum. The KSC / SWnhESC collaboration will support the development of engaging learning environments and the development of highly qualified educators across the P-16 educational spectrum. Our collective commitment to academic transformation that is grounded in research, reflection, and evaluation uniquely positions us to be successful in our proposed endeavor.

Other Partners:

- Community health curriculum and partnership with Cheshire Medical Center and its Healthy 2020 campaign
- Fitness curriculum with our Physical Education Program---Healthy 5210 group
- Healthy diet choices for our youth --- Health region program in nutrition and dietetics—including our Early Sprouts Program

Appendix D-4-15: Description of Proposed Residency Models



Project Expectations and Timeline:

- Ultimately, we aim to create exceptional curriculum and an innovative learning support model for K-6 learners. Although our focus will be to instill a passion for learning and solid learning foundations in science, mathematics, and technology; this curriculum will also engage young students in creative endeavor, wellness, and broad learning across the early childhood and elementary developmental spectrum.
- We will provide a collaborative environment where teachers, collegiate faculty and students engage to ensure development and exceptional practices for mathematics and science instruction. Partnerships with the college and local businesses will expose students to learning in technology and engineering including: precision manufacturing, alternative fuels production, sustainable building design and architecture.
- This project investment over four years will support the development of transferrable, cost effective instructional models and assessment practices (or components of models) that enhance skills mastery, outcomes demonstration and effective education of the whole person.
- The project will leverage existing data systems and will develop additional authentic assessment practices and evidence to provide comprehensive longitudinal data systems for tracking skills mastery, outcomes demonstration- and effectiveness of educational practices to support the whole person.
- Common assessments and Personal (individual) Learning Plans that focus on skills and outcomes transparency, goal setting, and personal learning commitments that are shared by a community will be integral to this project.
- Evaluation instruments and action research conducted onsite through this collaboration will demonstrate teaching effectiveness, student progression, teacher candidate effectiveness, and the benefit of an immersion apprenticeship model for teaching / learning effectiveness and professional development practices for students, teacher candidates, in service educators and collegiate faculty alike.

Year 1	Year 2	Year 3 and 4
<i>Planning year</i>	<i>Program Launch</i>	<i>Program Continuance</i>
<ul style="list-style-type: none"> • Marlborough School occupancy of new facility • Teacher training for KSC and Marlborough teachers, faculty, staff and administrators • Create professional learning communities that engage teachers, KSC faculty, and student teacher candidates in disciplines proposed • Outreach to parents and other critical stakeholders • Development of personal learning plans for students and KSC teacher candidate 	<ul style="list-style-type: none"> • Launch curriculum and begin assessment activities • Creation of residential living / learning community for KSC teacher candidates • Ongoing professional learning community development and support • Implementing personal learning plans for students and KSC teacher candidates • KSC teacher candidates 	<ul style="list-style-type: none"> • Reflection and evaluation of year 2 work • Evaluation and publication of project milestones, successes and challenges • Consideration of authentic assessment options for programs • Development of transferrable models

Appendix D-4-15: Description of Proposed Residency Models

<p>participants</p> <ul style="list-style-type: none"> • Identification of developmental goals and milestones for grades K-4 and 5&6 • Developmentally appropriate curriculum design and common assessments for target disciplines • Development of longitudinal assessment plan for students, teachers, and teacher candidates • Consideration of authentic assessment measures and tools for this developmental group • Selection of KSC student teaching candidate cohort by end of first semester, engagement second semester and beyond • Participant selection and academic planning to begin first semester of academic year 	<p>will serve as active members of grade-level teams</p> <ul style="list-style-type: none"> • Collaborative planning, teaching and assessment activities will occur • Action research (led by KSC faculty and engaging Marlborough teachers and KSC teacher candidates) to support continued curriculum development and to support job-embedded professional development • Infuse literacy, arts, and wellness across all work 	
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Our Vision

The School of Education is committed to developing in its students a depth of academic knowledge that weaves theory into practice and embraces the concept of educating the whole child. Through a collegial culture of teaching and learning, faculty, staff, and students work collaboratively to embrace learning as their fundamental purpose, in a school that prepares its undergraduate and graduate students to become educators who will, through reflective practice, be prepared to:

- hold high expectations for all students;
- understand the subject matter taught in relation to the children they teach;
- understand that it is the responsibility of everyone working within the school community to promote continuous improvement and student learning;
- integrate innovative resources and technology with reliable researched approaches;
- embrace a commitment to reflective practice, social responsibility, and civic-mindedness;
- create and sustain relevant inquiry-oriented learning environments that link theory to practice;
- know how to design, frame, guide, and revise tasks in order to identify the levels of understanding of their students, including students with diverse backgrounds and needs, and those at high risk of failure;
- vary assessment methodology to clarify the learner's attainment of knowledge;
- consistently provide methodical feedback to the learner, based on the desired learning outcomes;
- be someone who makes a difference; and
- understand that good leadership strives to foster collegiality and community, knowing that collected knowledge and experience will reach beyond what one person alone can accomplish.

The SNHU School of Education aims to develop the capacity of its teacher candidates to become teacher leaders who share a set of core values that include a commitment to society's compelling needs. Understanding of the strengths and needs of a diverse student population, and dedication to equity and excellence for all students, are critical. The overall program takes an approach to teaching and learning that is sensitive to the family and community and is focused on the needs and development of learners. Programming is grounded in the study of content matter that enables inquiry, critical thinking, and problem solving.

Desired outcomes for graduates include:

1. A commitment and passion for teaching.
2. Understanding and modeling of teaching as an intellectual, reflective and caring profession;
3. A depth of content knowledge and a repertoire of powerful pedagogical practices;
4. A view of the importance of the role of education in society within the socio-cultural contexts of education.
5. An understanding of multicultural competence necessary for working in a variety of settings with diverse learners.
6. An understanding of how to help special-needs students and effectively address differences and disabilities.
7. An understanding of and commitment to inquiry in the classroom and to collaboration between and among individuals, institutions and communities; and
8. The ability to use technology effectively as a teaching and learning tool.

SNHU's teacher preparation program features faculty members who are versed and practiced educators who have demonstrated their ability to be effective teachers. Students are introduced to the art of teaching in their introductory EDU 200 course, and throughout their teacher preparation program they are given opportunities to interact with teachers in the profession and with children in classrooms.

At SNHU, we know that recruiting, preparing, and retaining good teachers is the central strategy for improving our schools. We know that true school reform cannot succeed unless it focuses on creating the conditions under which teachers can teach, and teach well. What teachers know and do is the most important influence on what students learn. The bottom line is that there is simply no way to create good schools without good teachers. Knowing this, SNHU constructs optimal conditions that prompt the integration of theoretical and practical learning, providing a compelling context for developing skilled and thoughtful teachers.

We focus intently on building strong clinical training opportunities, including supporting our cooperating teachers so that they become excellent teachers of teachers and true partners in the teacher education process.

School of Education Goal 2:

Establish professional development schools, within which candidates will engage in collegial dialogue and practice, and wherein educators 1) are committed to students and their learning; 2) know their content; 3) are responsible for managing and monitoring student learning; 4) reflect on practice and learn from experience; and 5) work collaboratively with other professionals, community partners, and parents.

Rationale

Teacher candidates learn just as other students do by studying, practicing, and reflecting. That learning is deepened by collaborating with others, by looking closely at students and their work, and by talking with practicing educators about what they observed. This kind of learning cannot occur in university classrooms. Most teacher education programs teach theory separately from practice and are not able to apply what they had learned by reading in isolation from practice. Changing this process requires educating teachers in partnerships with schools that become exemplars of what is possible rather than what exists. SNHU has an opportunity to test theory in practice in January at the Auburn Village School and to work hand in hand with practicing professionals.

Statements from NCATE's June 2009 white paper on teacher preparation programs:

- I. **Focus on Clinical Experience:** *The new approaches are designed to ensure that teacher education is relevant to classrooms of the 21st century. They push teacher education programs to close the gap between theory and practice, coursework and classroom, preparation and induction. In the past, accreditation wrapped clinical experience around coursework. The new approach will reverse the priority, encouraging institutions to place teacher candidates in more robust clinical experiences, and wrap coursework around clinical practice. The focus on clinical experience is in line with the Obama Administration's focus on teacher quality. The Higher Education Opportunity Act will set aside more than \$100 million for Teacher Quality Development grants which involve year-long residency programs.*

- II. **Addressing Crucial Needs of Schools:**

Schools face tremendous challenges, and effective teacher education must step into the breach to work side-by-side with P-12 educators to address a broad range of issues, from school organization and teacher development to strengthening pathways into teaching to bring new talent into the field. Specifically, transformation initiatives will help establish:

- a) *Partnerships with P-12 schools and school districts to address the transformation of student learning and the conditions that support learning, such*

as school organization, learning environments, community and family engagement, and other district/school/ and student specific issues of major magnitude.

b) Partnerships with P-12 schools to address the challenge of improving student readiness for postsecondary education.

c) Partnership with P-12 schools to improve the retention of educators in schools.

d) Effective recruitment efforts to ensure that schools have a diverse, highly qualified group of candidates to become teachers.

Source: *NCATE the Standard of Excellence in Teacher of Preparation Meeting Urgent National Needs in P-12 Education: Improving Relevance, Evidence, and Performance in Teacher Preparation, released for June 23, 2009.*

Professional Development Schools (PDS) exhibit state of the art practice. PDS serve as sites for student teaching and internships for preservice teachers where practice can be linked to coursework. These relationships create long-term conditions that allow university and school faculties to work out common programs for teacher preparation and ongoing professional development. PDS have the potential to reinvent teacher education programs, much like education in the medical profession and the creation of teaching hospitals. Currently, only a few teacher preparation programs have restructured training programs. This step would make SNHU a leader in New England.

Objective 2.1

Through partnerships with P-12 schools and school districts, to align theory with relevant practice in order to effect the transformation of student learning and promote the conditions that support learning, such as organization, learning environments, community and family engagement.

Key Performance Indicators:

1. By January 2010, initiate signed partnership agreements with three school districts.
2. By January 2010, pilot methods courses within the school environment that will connect theory with practice and provide relevant practices within classrooms.

3. By September 2010, assign an SNHU faculty member to work directly in a school preparing pre-service teachers.
4. By September 2010, establish the first cohort of student teachers who will receive all of their methods courses within the school setting.
5. By September 2011, teacher preparation will feature a range of program offerings that utilize various personalized opportunities for candidates.
6. September 2012, schools are asking to partner with SNHU School of Education.

Redefining Teacher Preparation for Digital Age Learners

The University of Texas-Austin Austin, Texas
December 9 – 14, 2009

Agenda

Arrival Night	Sunday, December 6, 2009
7:00 p.m. – Welcome	Classroom 301
9:00 p.m. Dinner	AT&T Conference Center
	<i>Global Context of Teacher Education for Digital Age Learners</i> <u>Ms. Mariana Patru</u> , Senior Program Officer, UNESCO
Day One	Monday, December 7, 2009
7:00 a.m. – Full Breakfast	AT&T Conference Center
8:00 a.m.	Tejas Dining Room
8:00 a.m. – General Session	Classroom 106
9:25 a.m.	AT&T Conference Center
	<i>Overview of Summit</i> Dr. Paul Resta, Ruth Knight Millikan Professorship in Instructional Technology and Director, Learning Technology Center, The University of Texas at Austin
8:00 a.m. – 8:20 a.m.	
	<i>Pathways to 21st Century Teaching</i> <u>Dr. Tom Carroll</u> , President, National Commission on Teaching and America’s Future
8:25 a.m. – 9:55 a.m.	
	<i>Addressing the Needs of Digital Age Learners</i> <u>Dr. Gerald Knezek</u> , Professor of Learning Technologies, University of North Texas and President of the Society for Information Technology in Teacher Education; Dr. Rhonda Christensen, Professor, University of North Texas; and Dr. Tandra Tyler-Wood, Professor, University of North Texas
9:55 a.m. – 9:25 a.m.	
9:25 a.m. – Break	Conferee Hall
9:45 a.m.	AT&T Conference Center
9:50 a.m. – Small Group Session	Classrooms 103 and 107
11:20 a.m.	AT&T Conference Center
	Effective Teacher Attributes Discussion Participants will work in small groups to enumerate the attributes and abilities of effective 21st century classroom teachers.
11:20 a.m. – 12:20 p.m.	Conference Room 301
	Lunch AT&T Conference Center

		<i>The Future of Technology in Education</i> <u>Mr. Stephen Jury</u> , Vice Chairman Education Strategy, Promethean
12:25 a.m. – 1:15 a.m.	General Session	Classroom 106 AT&T Conference Center
		Effective Teacher Characteristics Feedback Moderator: Ms. Kristen McLaughlin, Director, Global Educator Strategy and Programs, Microsoft Corporation
1:20 p.m. – 1:50 p.m.	General Session	Classroom 106 AT&T Conference Center
12:45 p.m. – 1:15 p.m.		<i>Trends in Online Learning: Implications for Teacher Education</i> <u>Ms. Susan Patrick</u> , President and CEO, International Association for K-12 Online Learning
1:55 p.m. – 2:25 p.m.		<i>NCATE's Redesign to Support New Models of Educator Preparation for Improved P-12 Student Learning</i> <u>Dr. Jim Cibulka</u> , President, National Council for Accreditation of Teacher Education (NCATE).
2:25 p.m. – 2:35 p.m.		<i>Greetings from Dean Manuel J. Jústiz, College of Education, The University of Texas</i>
2:35 p.m. – 2:50 p.m.	Break	Conferee Hall AT&T Conference Center
2:50 p.m. – 4:20 p.m.	Small Group Session	Classrooms 103 and 107 AT&T Conference Center
		New Models of Teacher Education Discussion Participants will work in small groups to identify key elements for new models of teacher education to address the prioritized needs and issues.
4:20 p.m. – 4:40 p.m.	Break	Conferee Hall AT&T Conference Center
4:40 p.m. – 5:30 p.m.	General Session	Classroom 106 AT&T Conference Center
		New Models of Teacher Education Report Moderator: Dr. Don Knezek, Chief Executive Officer, International Society for Technology in Education
5:30 p.m. – 6:00 p.m.	21st Century Classroom Tour	SZB 518C The University of Texas Chad Fulton, Coordinator, Learning Technology Center, College of Education
7:00 p.m. – 9:00 p.m.	Dinner	Conference Room 301 AT&T Conference Center

Teachers-Plus: A Steppingstone towards an Expanded Educational Model

Dr. Chris Dede, Timothy E. Wirth Professor in Learning Technologies, Harvard University

Day Two Tuesday, December 8, 2009

7:00 a.m. – Full Breakfast Tejas Dining Room
8:00 a.m. AT&T Conference Center

8:00 a.m. – General Classroom 106
8:15 a.m. Session AT&T Conference Center

Synthesis of Day 1 Vision Elements

Dr. Paul Resta, Ruth Knight Millikan Professorship in Instructional Technology and Director, Learning technology Center, The University of Texas at Austin

8:15 a.m. – Small Group Classrooms 103 and 107
9:45 a.m. Session AT&T Conference Center

Challenges Discussion

Participants will work in small groups to identify the opportunities to affect educational success and challenges that must be addressed to move toward a redefinition of teacher education for the 21st Century.

9:45 a.m. – Break Conferee Hall
10:05 a.m. AT&T Conference Center

10:05 a.m. – 10:35 General Classroom 106
a.m. Session AT&T Conference Center

Challenges Report

Moderator: Dr. Robert McLaughlin, Professional Educator Preparation Program Approval, Bureau of Credentialing, New Hampshire Department of Education

10:35 a.m. – 12:10 Small Group Classrooms 103 and 107
p.m. Session AT&T Conference Center

Recommendations Discussion

Participants will work in small groups to formulate recommendations for action and/or policy to address the challenges and opportunities identified in the previous sessions.

12:10 p.m. – 1:10 p.m. Lunch Salons A and B
AT&T Conference Center

Progress Report—The National Technology Plan

Dr. Barbara Means, Co-director, SRI International Center for Technology in Learning

1:15 p.m. – General
1:45 p.m. Session

Classroom 106
AT&T Conference Center

Recommendations Report

Moderator: Dr. Tom Carroll, President, National Commission on Teaching and America's Future

1:45 p.m. – Break
2:00 p.m.

Conferee Hall
AT&T Conference Center

2:00 p.m. – General
3:00 p.m. Session

Classroom 106
AT&T Conference Center

Strategies and Next Steps

Chair: Ms. Karen Bruett, Senior Director of Marketing and Strategic Alliances, Council of Chief State School Officers (CCSSO)

Panelists:

- Mr. Jim Haley, Assistant Superintendent, Sweeny Independent School District
- Dr. Richard Howell, Dean, College of Education, University of New Mexico
- Mr. Ken Kay, President, P21
- Mr. Doug Levin, Executive Director, SETDA
- Mr. Peter McWalters, Strategic Initiative Director, Education Workforce Development, CCSSO
- Ms. Autumnne Streeval, Teacher, Global Studies and Geography, Columbus East High School

The panel will discuss the recommendations for action and policy and the strategies for enacting them.

Summit Close

Convening Organizations

American Federation of Teachers, AFL-CIO (AFT)

Association of Teacher Educators (ATE)

Consortium for School Networking (CoSN)

Council of Chief State School Officers (CCSSO)

International Association for K-12 Online Learning (iNACOL)

International Society for Technology in Education (ISTE)

Learning Technology Center, College of Education, The University of Texas at Austin

National Commission on Teaching and America's Future (NCTAF)

National Council for Accreditation of Teacher Education (NCATE)

Partnership for 21st Century Skills (P21)

Society for Information Technology in Teacher Education (SITE)
State Educational Technology Directors Association (SETDA)

Summit Agenda

Wednesday, May 26th

- 5:00 PM Visit the ActivClassroom in Motion by Promethean Registration and Reception
- 6:30 PM Dinner
- 7:15 PM Welcoming remarks by **Commissioner Barry**
- 7:30 PM Keynote address by **Tom Carroll**, president of the National Commission on Teaching and America's Future, on the *National Imperative to Transform Educator Development, Schooling and the Role of Teachers*.

<--- [View live video of this session](#)

Thursday May 27th

- 7:00 AM ActivClassroom in Motion is open to summit participants
- 7:30 AM Breakfast
- 8:15 AM Keynote address by **Stephen Jury**, vice-chairman for the Promethean Corporation Board of Directors, on the *Global Imperative to Transform Teaching, Learning and Educator Development*
- 9:15 AM Presentation by **Milton Chen**, senior fellow at the George Lucas Education Foundation, on *Inspiring Examples of 21st century schooling and educator development*
Note: Break refreshments will be available from 9:30 - 11 AM during sessions.
- 10:15 AM **P-20 Teams** meet to identify barriers to transforming schooling and educator development
- 11:15 AM **P-20 Teams** report out and identify most significant barriers using ActivExpressions
- 11:45 AM Buffet lunch
 ActivClassroom in Motion is open to summit participants
- 12:30 PM Panel on New Hampshire policies and policy development initiatives that make transformation feasible (e.g., ELOs, 300s, current revision of the 600s, redefining beginning vs. experienced educator credentials, etc.)
Panel Moderator: Karen Soule (Superintendent, SAU56 and Chair, Professional Standards Board)
Fred Bramante, Member NH State Board of Education
Judith Fillion, Director, Division of Program Support, NH Department of Education
Mary Heath, Dean of Education, Southern New Hampshire University
Cathy Higgins, State Education Technology Director, New Hampshire Department of Education

<--- [View live video of this session](#)

<--- [View live video of this session](#)

Appendix D-4-17: NH Summit Agenda

1:15 PM	Role alike groups comprised of P-12 educators, postsecondary educators, and state policy makers identify strategies to overcome barriers to transformation (<i>Prepare to report on most important strategies in 15 words or less.</i>)	
2:15 PM	Break with refreshments ActivClassroom in Motion is open to summit participants	
2:35 PM	Role-alike teams report out in plenary session and use Promethean ActivExpressions to rate most promising strategies P-20 teams meet to begin developing their action plans for transformation (<i>Prepare to report on the most transformative action / result you expect in 6 months, 12 months, and 24 months</i>)	
3:15 PM		
4:45 PM	Keynote address (via Skype) by Paul Resta , co-chair of UNESCO's global task force on information and communication technologies in teacher education, on Strategies to Enhance Educator Development for Digital Age Learners	<--- <u>View live video of this session</u>
5:30 PM	Reception. The ActivClassroom in Motion by Promethean is open to summit participants.	
6:30 PM	Dinner	
7:30 PM	Panel of leaders of NH educational administration association leaders exploring "In what ways do schools most need to change to equip children with 21st century skills?" Panel Moderator: Kim Carter , Executive Director, QED Foundation	
Friday May 28th		
7:00 AM	ActivClassroom in Motion is open to summit participants	
7:30 AM	Breakfast	
8:30 AM	Keynote address by Chris Dede , Harvard University, on <i>research about ways in which technology can transform teaching, learning and educator development</i>	<--- <u>View live video of this session</u>
9:30 AM	P-20 teams post about what K-12 students, our teachers, and teachers in training will see from our team efforts in 6 months, 12 months, 24 months	
9:45 AM	All participants read every team's posts to learn about one another's ideas and plans	
10:00 AM	Panel of School Administrators: How do we transform educator development in tough times?	
10:45 AM	All participants use ActivExpressions to select: <ul style="list-style-type: none">• Which of the planned actions / results do you most want your team to consider?	

most want your team to consider?

11:15 **Steering Committee** shares insights from the National Invitational Summit on Redefining Teacher Education (held in Austin, TX)

11:35 AM Closing remarks by **Nicholas C. Donohue**, President & CEO, Nellie Mae Education Foundation

<--- [View live video of this session](#)

12 Noon Summit adjourns

12:00 - 2:00 PM ActivClassroom in Motion by Promethean is available for interested participants

After the Summit and before Fall 2010 Friday afternoon is NOT the end of the pathway to a transformed educational system in New Hampshire. This site will continue to expand with resources and ways to connect.

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Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

PART Ed 512 PROFESSIONAL DEVELOPMENT MASTER PLAN AND RECERTIFICATION

Ed 512.01 Basic Requirement. Each school administrative unit, local school district, or participating nonpublic school shall prepare a 5-year master plan in accordance with requirements of this part.

Source. #2055, eff 6-16-82; ss by #2714, eff 5-16-84; ss by #4851, eff 6-25-90; EXPIRED 6-25-96

New. #6349, eff 10-5-96; ss by #7045, eff 7-1-01; ss by #8335, eff 4-23-05

Ed 512.02 Criteria for State Approval of Local Professional Development Master Plan. The following criteria shall apply to the approval of the master plan:

(a) Each school administrative unit, local school district, or participating nonpublic school shall file with the department the 5-year master plan required by Ed 512.01.

(b) A local professional development committee, established by the local superintendent shall:

- (1) Include representation of educators, administrators, local school board members, and parents, or community lay persons, or both; and
- (2) Develop and monitor the master plan according to Ed 512.02 (c) through (e) under the direction of the local superintendent in accordance with local school board policies, state statutes and state board rules.

(c) The professional development master plan shall include the following:

- (1) A statement describing the purpose of the master plan;
- (2) Procedures for collecting and interpreting data and information which shall provide evidence of each educator's growth in knowledge of:
 - a. Subject or field of specialization; and
 - b. Learners and learning as they relate to school and district goals in order to increase student achievement;

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

- (3) A description of the data collection system, including the collection and interpretation of a variety of relevant data sources such as but not limited to:
- a. The New Hampshire education improvement and assessment program;
 - b. Portfolios;
 - c. Standardized tests; and
 - d. Other local assessment instruments;
- (4) Procedures for using the data collection system described in (c)(3) above for:
- a. Identifying student learning needs;
 - b. Determining individual educator goals;
 - c. Determining district or school goals;
 - d. Evaluating student learning;
 - e. Measuring the effectiveness of an individual professional development plan; and
 - f. Evaluating the effectiveness of the master professional development plan on an on-going basis;
- (5) Evidence that the plan is consistent with RSA 193-C:3, III;
- (6) A statement describing how the master plan shall require each educator to demonstrate continuous improvement in the exercise of professional judgment and in regard to the knowledge, skills, and dispositions referenced in Ed 505.07, Ed 506.01, Ed 506.03, Ed 506.04, Ed 506.06, and Ed 506.07;
- (7) A statement describing a variety of professional development activities focusing on content and pedagogy including, but not limited to:

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

a. Job-embedded professional development, including, but not limited to:

1. Observations;
2. Independent study;
3. Study groups;
4. Action research;
5. Educational peer coaching;
6. Mentoring; and
7. Curriculum, instruction, and assessment development; and

b. Formal professional development, including, but not limited to:

1. Collegiate or graduate course work;
2. Workshops and professional conferences;
3. Seminars; and
4. Institutes; and

(8) A process to address the recertification needs of all certified employees, including paraeducators.

(d) The professional development master plan shall comply with state certification rules and with federal, state and local laws and regulations, including the local education improvement plan required in federal grant applications.

(e) The professional development master plan shall include the following processes for developing comprehensive 3-year individual professional development plans:

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

- (1) The development of a body of evidence that documents job-embedded or formal professional development addressing the school or district improvement goal(s) and content areas;
 - (2) An accumulation of a minimum of 75 continuing education units documenting job-embedded or formal professional development addressing school or district improvement goal(s) and content areas; or
 - (3) A combination of less than 75 continuing education units and evidence that together document job-embedded or formal professional development addressing the school or district improvement goal(s) and content areas.
- (f) The administrator or designee shall review each professional development master plan and:
- (1) Approve such plan in writing if it meets the requirements of this section; or
 - (2) Confirm in writing that the plan needs modification.
- (g) If the professional development master plan is amended, the amendments shall be made in accordance with this section, as confirmed by the administrator.
- (h) Representatives of the department shall make an on-site visitation, on an as-needed basis as determined by the department, in order to observe whether the local administration of the master plan adheres to the criteria set forth in this section.

Source. #6349, eff 10-5-96; ss by #7045, eff 7-1-01; ss by #8335, eff 4-23-05

Ed 512.03 Individual Professional Development Plan.

- (a) Each certified educator, including an educator with a professional certificate, shall develop, in collaboration with a supervisor or the supervisor's designee, an individual plan as follows:
- (1) An educator shall file the individual professional development plan with the school administrative unit, local school district, or participating nonpublic school for review and approval according to the criteria in (3) below;
 - (2) The individual professional development plan shall be developed for a 3-year period consistent with the educator's certification(s) and incorporate one of the 3 options referenced in Ed 512.02(e);

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

(3) The individual professional development plan shall include one or more goals for improving student learning and be developed from:

- a. The educator's self assessment or reflection on competencies referenced in Ed 512.02(c)(6) and the content area standards referenced in Ed 506.01, Ed 506.03, Ed 506.04, Ed 506.06, Ed 506.07, and Ed 507;
- b. Analysis of student work; and
- c. A review of school or district goals, or both;

(4) The individual professional development plan shall include components such as the following:

- a. Activities or efforts to reinforce school or district improvement goals, or both;
- b. Activities or efforts focused on increasing student achievement;
- c. Knowledge of all subject and content areas taught and field(s) of specialization for which recertification is sought;
- d. Knowledge of learners and learning;
- e. Knowledge of effective, developmentally-appropriate teaching strategies and best practices for the subject and content areas taught and for which recertification is sought; and
- f. Activities that promote continuous improvement in exercising professional responsibilities and obligations; and

(5) The plan shall meet the requirements of the master plan as specified in Ed 512.02(e).

(b) Each certified educator whose credentials expire in a given year shall accrue total continuing education units of approved professional development activities prior to being renominated or reelected pursuant to RSA 189:14-a. Professional development completed after nomination or election shall be counted toward the next 3-year recertification cycle which shall commence on July 1 of that same calendar year.

(c) A certified educator who is employed under a master plan and who holds a professional certificate that supports his or her current assignment shall develop an individual professional development plan that supports the educator's current assignment.

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

Source. #6349, eff 10-5-96; ss by #7045, eff 7-1-01; ss by #8335, eff 4-23-05

Ed 512.04 Criteria for Recertification of Educators under the Professional Development Master Plan. The following criteria shall apply for recertification of educators under the professional development master plan:

(a) The professional development master plan shall require that every educator applying for renewal of his/her credential has the approval of the local superintendent or designee for the successful completion of the educator's individual professional development plan, based on one of the options referenced in Ed 512.02(e).

(b) The individual professional development plan shall address the elements described in Ed 512.03(a)(4).

Source. #7045, eff 7-1-01; ss by #8335, eff 4-23-05

Ed 512.05 Criteria For Recertification of Educators Not Under the Local Professional Development Master Plan. Certified educators seeking recertification who are not employed by a school administrative unit, a local school district, or a participating nonpublic school shall:

(a) Comply with a professional development master plan prepared by the department that is in accordance with the criteria listed in Ed 512.02(c); and

(b) Submit an individual professional development plan developed for a 3-year period, consistent with the educator's certification(s), to the bureau for review, which shall be approved by the bureau if it meets the following requirements:

(1) The plan is prepared according to the following breakdown of a minimum of 75 required continuing education units:

a. At least 30 of the required 75 continuing education units in an approved professional development activity in each subject area or field of specialization, or both, including an understanding of the theory and content related to the educator's primary teaching or special service assignment; and

b. At least 45 of the remaining credits aligned with Ed 505.07;

(2) The plan includes one or more goals for improving student learning, as developed from the educator's self assessment or reflection on competencies referenced in Ed 512.02(c)(6) and the content area standards referenced in Ed 507; and

(3) The plan includes components, such as, but not limited to, the following:

Appendix D-4-18: Ed 512 Professional Development Master Plan and Recertification

- a. Knowledge of all subject or content areas taught and field(s) of specialization for which recertification is sought;
- b. Knowledge of learners and learning; and
- c. Knowledge of effective, developmentally appropriate teaching strategies and best practices for the subject or content areas taught and for which recertification is sought.

Source. #7045, eff 7-1-01; ss by #8335, eff 4-23-05

Ed 512.06 Certified Paraeducators II.L. Requirements for paraeducators certified under Ed 504.05 shall be as follows:

(a) For those certified paraeducators who are employed by an agency listed in Ed 512.01, a minimum of 50 continuing education units shall be required in areas determined by the professional development master plan required by this part; and

(b) For those certified paraeducators who are not employed by an agency listed in Ed 512.01, a minimum of 50 continuing education units of paraeducator growth shall be required.

Source. #7045, eff 7-1-01; ss by #8335, eff 4-23-05; amd by #8667, eff 7-1-06

Summary of Evaluation Data

New Hampshire RTI: Cohort 1 November 13, 2009

Please indicate your agreement/disagreement with the following:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
1. Content						
a. workshop description was accurate	67 (47%)	56 (38%)	12 (8%)	4 (3%)	1 (1%)	4 (3%)
b. acquired new knowledge/skills	45 (31%)	66 (46%)	26 (18%)	6 (4%)	0	1 (1%)
c. teaching format/length was suitable for content	46 (32%)	67 (47%)	16 (11%)	8 (6%)	2 (1%)	5 (3%)
d. teaching level was appropriate for me	52 (36%)	69 (48%)	11 (8%)	9 (6%)	0	3 (2%)
e. participant/instructor interaction was sufficient	68 (47%)	56 (39%)	14 (10%)	4 (3%)	0	2 (1%)
f. audiovisual aids were legible and helpful	86 (60%)	49 (34%)	6 (4%)	2 (1%)	0	1 (1%)
g. handouts were current and useful	85 (59%)	46 (33%)	5 (3%)	2 (1%)	0	6 (4%)
h. learning objectives were met as stated:						
*Review Key RTI Components	71 (49%)	59 (42%)	6 (4%)	2 (1%)	0	6 (4%)
*Practice Trouble Shooting at the building level using problem-solving model	50 (35%)	48 (33%)	18 (12%)	4 (3%)	1 (1%)	23 (16%)
2. Instruction/Presenter(s)						
a. was well prepared	118 (82%)	24 (17%)	2 (1%)	0	0	0
b. explained concepts clearly	109 (76%)	29 (20%)	3 (2%)	1 (1%)	0	1 (1%)
c. was responsive to questions	95 (66%)	36 (25%)	10 (7%)	0	1 (1%)	2 (1%)
d. used no prejudicial or stereotyping language	119 (83%)	19 (13%)	5 (3%)	0	0	1 (1%)
3. Overall Rating						
a. workshop met or exceeded my expectations	58 (40%)	52 (36%)	24 (17%)	9 (6%)	1 (1%)	0
4. Logistics						
a. registration was smooth and efficient	98 (68%)	39 (27%)	6 (4%)	1 (1%)	0	0
b. staff was responsive and helpful	92 (64%)	49 (34%)	3 (2%)	0	0	0
c. quality of the facilities was adequate	99 (69%)	44 (31%)	0	0	0	1 (1%)
d. luncheon buffet was adequate	110 (76%)	20 (21%)	2 (1%)	1 (1%)	0	1 (1%)
e. mid-day breaks were adequate	97 (67%)	43 (30%)	3 (2%)	0	0	1 (1%)
f. seating arrangements were adequate	81 (56%)	51 (35%)	10 (7%)	1 (1%)	0	1 (1%)

Total number of respondents: **144**

1. How did you learn about this workshop?

- Attended the July workshop in Nashua; received a follow-up email (47 responses)
- Received an e-mail [does not specify from whom] (19 responses)
- From principal (14 responses)
- From district (10 responses)
- From school administration (7 responses)
- From a colleague/staff member at school (6 responses)
- From RTI Team at school (2 responses)
- From superintendent (2 responses)

2. Comments on the cohort, suggestions for future RTI workshops

The following patterns emerged from the responses:

2. 1. Content

Teaching level vs. level of participants' knowledge

From the responses it seems that there are two distinctive groups evolving. On one hand, there are participants who had attended previous workshops and now would like to move forward. They would rather spend their time on planning next steps than on reviewing the material already learnt (7 comments). On the other hand, first time participants felt the level of the cohort was too advanced for them. Lacking the background knowledge other participants gained at previous sessions, they felt a bit confused and left behind (4 comments). To address the different needs of participants with different levels of knowledge, some suggested that separate workshops be offered on "beginner and intermediate RTI" (2 comments).

- "I felt this workshop was a review since I'd been at the summer institute."
- "A lot of this was review from the summer seminar."
- "Not sure I learned anything new. Review was helpful, but not sure I needed 9-4:00."
- "This felt like a lot of info we already have. Would have liked more time to see how to move forward."
- "Possibly have an intermediate/ beginner RTI training. Lots of review today."

vs.

- "This workshop did not cover enough of the basics, so it should not have been encouraged for people who did not attend the summer workshop."
- "For people new to this process the bingo was confusing. This was my first RTI workshop. There were a lot of people in this situation. I still don't know what I'm supposed to do or what is RTI supposed to look like."
- "Our school was not part of the training this summer. It would be nice to have additional training."

Types of activities

The majority of the responses related to the *troubleshooting activity*. Attendees reported that they found the first part of the activity great, which was teamwork in randomly created groups. However, they found the second part of the activity unnecessarily lengthy and repetitive; therefore less meaningful (12 comments). Instead of listening to other participants, 6 reported they would have preferred more content from the presenter and 8 reported they would have preferred spending more time with their breakout groups. Some (5) specifically mentioned that they would have preferred working with their own team from their building.

- “Make the sharing of scenarios shorter. It lost a lot of people.”
- “Too much reporting back. ADHD kicked in for some!”
- “Too much info from audience. Info from presenter would have been better.”
- “Too much time spent on presentations. I would have been fine with more time to work on our school’s plan and more content from the presenter.”
- “Too much time sharing groups’ responses to scenarios. I would have liked more specifics from Shannon.”
- “Overview from Shannon would have served the purpose.”
- “More time for breakout. Not so much time listening to people talk about fake scenarios”
- “I think time would have been better spent working with our teams.’
- “Practice trouble shooting with own school personnel.”

Content suggestions for future workshops:

- “Would like to see more RTI for math.” (2 comments)
- “Intervention ideas and possibilities for implementing them.” (2 comment)
- “We now need good demonstrations from the field; demonstrations of the practice of RTI by skilled classroom teachers.” (2 comments)
- “Other schools presenting their RTI models.” (2 comments)
- “It would be interesting to share master schedules.”

2. 2. Instruction & teaching format

Presenter

Participants love Shannon for her energy and powerful presence throughout the day (7 comments). However, a comment was made about her leaving early.

- “Excellent presenter and presentation.”
- “Please, have Shannon return for follow up. She is a great presenter; clear, conscience, and keeps it simple but meaningful.”
- “Shannon is a dynamic presenter.”
- “Inspiring!”
- “Once again, invigorating!”
- “She was, as last summer, great!”

vs.

- “Very disappointed that the instructor cut out on us! Our time is valuable, too!”

Presentation/ slides/ music

A number of comments were made about the music and the volume of the sound system; some people like it (3 comments), others find it slightly distracting (3 comments).

- “Shannon and her “show”, her music makes the subject really easy to enjoy and learn.”
- “Loved up and down format! Loved bingo and prizes! Loved music. Loved your energy!”
- “YouTube videos were great.
- “Volume too loud. Bingo too long. Did not like music review of tools.”
- “Audio too loud, music distracting. At times, moved too fast.”
- “While very professional in many ways, I found the music/ Power Point and sound system way too over-stimulating. Please, no more music snippets!”
- PowerPoint slide handouts would have been beneficial.”

Other comments:

- “Little time for questions.”
- “There was not enough time to ask the presenter questions.”

2. 3. Logistics

Time management & date and time of next workshop

Attendees are looking forward to the next workshop and would like to hear about it as soon as possible. They would like to receive a detailed agenda and would like the presenter/facilitator to stick to it.

- “Please, start at 9:00 as announced and do not spend 45 minutes on introduction.”
- “We don’t need to introduce each school.”
- “More detailed agenda.”
- “This was a little too short, needed more time.”
- “More breakouts, but not on a Friday.”
- “Get the spring date out to folks ASAP so they can plan.”
- “Can we get together in April?”

Location & Facility

People liked the facility (3 comments), but they would prefer a more central location in the future (5 comments).

- “Waterville Valley was a little out of the way.”
- “The location was difficult for me to attend due to the amount of travel involved.”
- “Meet in central NH. Concord?”
- “Lovely facilities but a more central location would work better for us.”
- “Facilities were exceptional.”
- “A room with windows, please!”

Food & Beverages (4 comments)

- “The food was truly amazing.” (3 comments)
- “Need soda and something else to drink besides tea, coffee, and water.”

Other suggestions:

- “Better advance publicity.”

2. 4. Overall rating

General impression is truly positive; attendants appreciate the great learning opportunity and are enthusiastic about next steps, future workshops (11 comments).

- “Thank you, it was perfect!”
- “Great format covered the basics of folks’ concerns and questions.”
- “This was excellent! Very active and meaningful!”
- “Wonderful program! Very informative, enjoyable, and useful. I can’t wait to tell my colleagues about it and begin our school’s work on this.”
- “Would like to have these continue to keep the continuum going. Thank you!”
- “Great. Keep the e-mails coming!”
- “It was a great day.”

July 2009 NH RTI Summer Institute

Quantitative Evaluation Responses

1. The content presented was relevant to my needs					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	124	59.9	66.7	66.7	
Strongly Agree		62	30.0	33.3	100.0
Agree					
Total		186	89.9	100.0	
Missing	System	21	10.1		
Total		207	100.0		

2. The content presented was relevant to our district needs					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	153	73.9	74.6	74.6	
Strongly Agree		51	24.6	24.9	99.5
Agree					
Strongly Disagree		1	.5	.5	100.0
Total		205	99.0	100.0	
Missing	System	2	1.0		
Total		207	100.0		

3. The content presented was sufficient for me to effectively learn					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	125	60.4	60.7	60.7	
Strongly Agree		79	38.2	38.3	99.0
Agree					
Disagree		1	.5	.5	99.5
Strongly Disagree		1	.5	.5	100.0
Total		206	99.5	100.0	
Missing	System	1	.5		
Total		207	100.0		

Appendix D-5-19: Rtl Evaluation Data

4. The content referenced a solid evidence/research base					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	138	66.7	67.3	67.3	
Strongly Agree		64	30.9	31.2	98.5
Agree		3	1.4	1.5	100.0
Disagree					
Total		205	99.0	100.0	
Missing	System	2	1.0		
Total		207	100.0		

5. The meeting format provided ample opportunity for me to engage with the content					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	126	60.9	61.2	61.2	
Strongly Agree		73	35.3	35.4	96.6
Agree		7	3.4	3.4	100.0
Disagree					
Total		206	99.5	100.0	
Missing	System	1	.5		
Total		207	100.0		

6. Materials provided were useful					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	148	71.5	71.8	71.8	
Strongly Agree		56	27.1	27.2	99.0
Agree		1	.5	.5	99.5
Disagree		1	.5	.5	100.0
Strongly Disagree					
Total		206	99.5	100.0	
Missing	System	1	.5		
Total		207	100.0		

Appendix D-5-19: RTI Evaluation Data

7. I learned about how to develop an RTI Building Leadership Team					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		118	57.0	58.4	58.4
Strongly	Agree		84	40.6	41.6
Agree					100.0
	Total	202	97.6	100.0	
Missing	System	5	2.4		
Total		207	100.0		

8. I gained awareness of consensus building tools and their potential uses					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		115	55.6	57.2	57.2
Strongly	Agree		84	40.6	41.8
Agree					99.0
	Disagree	2	1.0	1.0	100.0
	Total	201	97.1	100.0	
Missing	System	6	2.9		
Total		207	100.0		

9. I learned about options within an RTI Framework					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		105	50.7	52.8	52.8
Strongly	Agree		91	44.0	45.7
Agree					98.5
	Disagree	3	1.4	1.5	100.0
	Total	199	96.1	100.0	
Missing	System	8	3.9		
Total		207	100.0		

Appendix D-5-19: RTI Evaluation Data

10. I learned about the components of a system that is required to support RTI implementation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	119	57.5	58.3	58.3	
Strongly Agree		83	40.1	40.7	99.0
Agree					
Disagree		2	1.0	1.0	100.0
Total		204	98.6	100.0	
Missing	System	3	1.4		
Total		207	100.0		

11. I worked with my district team to identify action steps for future professional development					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	112	54.1	55.7	55.7	
Strongly Agree		77	37.2	38.3	94.0
Agree					
Disagree		10	4.8	5.0	99.0
Strongly Disagree		2	1.0	1.0	100.0
Total		201	97.1	100.0	
Missing	System	6	2.9		
Total		207	100.0		

12. I worked with my district team to consider actions for developing the infrastructure needed to implement RTI					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	108	52.2	54.5	54.5	
Strongly Agree		79	38.2	39.9	94.4
Agree					
Disagree		9	4.3	4.5	99.0
Strongly Disagree		2	1.0	1.0	100.0
Total		198	95.7	100.0	
Missing	System	9	4.3		
Total		207	100.0		

Appendix D-5-19: Rtl Evaluation Data

13. The instructor/presenter was well prepared					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		194	93.7	93.7	93.7
Strongly Agree	Agree		13	6.3	6.3
	Total	207	100.0	100.0	100.0

14. The instructor/presenter was responsive to the needs of participants					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		173	83.6	83.6	83.6
Strongly Agree	Agree		32	15.5	15.5
Agree	Disagree		2	1.0	1.0
	Total	207	100.0	100.0	100.0

15. I had sufficient opportunity to interact with the presenter					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		89	43.0	43.6	43.6
Strongly Agree	Agree		93	44.9	45.6
Agree	Disagree		20	9.7	9.8
	Strongly Disagree		2	1.0	100.0
	Total	204	98.6	100.0	
Missing	System		3	1.4	
	Total	207	100.0		

Appendix D-5-19: Rtl Evaluation Data

16. I had sufficient opportunity to interact with my peers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	163	78.7	79.9	79.9	
Strongly Agree		37	17.9	18.1	98.0
Agree					
Disagree		4	1.9	2.0	100.0
Total		204	98.6	100.0	
Missing	System	3	1.4		
Total		207	100.0		
	Total				
	System				
	Total				

17. Pacing of activities worked well to support participant engagement					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	114	55.1	55.1	55.1	
Strongly Agree		79	38.2	38.2	93.2
Agree					
Disagree		14	6.8	6.8	100.0
Total		207	100.0	100.0	

18. Facilities were adequate					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	126	60.9	61.2	61.2	
Strongly Agree		66	31.9	32.0	93.2
Agree					
Disagree		9	4.3	4.4	97.6
Strongly Disagree		5	2.4	2.4	100.0
Total		206	99.5	100.0	
Missing	System	1	.5		

Appendix D-5-19: RTI Evaluation Data

Total					
	207	100.0			
19. The Institute met my expectations					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		145	70.0	71.1	71.1
Strongly Agree		58	28.0	28.4	99.5
Agree		1	.5	.5	100.0
Disagree					
Total		204	98.6	100.0	
Missing	System	3	1.4		
Total		207	100.0		

20. The Institute helped my district team to develop shared knowledge and understanding					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		143	69.1	71.9	71.9
Strongly Agree		51	24.6	25.6	97.5
Agree		4	1.9	2.0	99.5
Disagree					
Strongly Disagree		1	.5	.5	100.0
Total		199	96.1	100.0	
Missing	System	8	3.9		
Total		207	100.0		

21. Please check the term that best describes your district's state of RTI involvement					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	4	1.9	2.0	2.0
	information and awareness	89	43.0	45.4	47.4
	consensus building	37	17.9	18.9	66.3
	infrastructure development	49	23.7	25.0	91.3
	implementation	10	4.8	5.1	96.4

Appendix D-5-19: Rtl Evaluation Data

refinement		7	3.4	3.6	100.0
Total		196	94.7	100.0	
Missing	System	11	5.3		
Total		207	100.0		

NHASP

SCHOOL LEADERS

MENTOR PROGRAM



*A PROFESSIONAL
DEVELOPMENT
APPROACH*

FOR MORE INFO CONTACT:
NHASP @ 603-225-3431
nhasp@aol.com

PRIMARY GOAL

Support leaders, strengthen their leadership capacity, and ultimately, to improve teaching and learning in their schools.

GOALS OF THE PROGRAM

- acquaint leaders with job expectations, responsibilities and district culture
- identify strengths of leaders and build upon those strengths
- facilitate a vision generated by the community
- listen to the concerns of leaders and coach them to extend reflective thinking
- support and strengthen the capacity of the leaders to provide effective leadership

PROFESSIONAL DEVELOPMENT OUTCOMES FOR MENTEES

- ✓ **Strengthens leadership skills**
- ✓ **Builds competence & confidence**
- ✓ **Reduces isolation**
- ✓ **Encourages reflection**
- ✓ **Improves student achievement**
- ✓ **Speeds professional actualization**

FUNDING STANDARD PROGRAM COST

\$3,750 PER YEAR



Funding Possibilities:

**Local District
Salary Differential
(former vs. new leader)**

Grants

Entitlement Funds

Professional Development Funds

District Appropriations

**Discounts available for more than
one participant per district**

Realities that exist.....

- ◇ More than 50% of principals close to, or at, retirement age
- ◇ Shrinking pool of candidates - rapidly increasing turnover creating less trust and stability
- ◇ Increasing number of positions unfilled increases the number of interim positions

Background.....

The program was designed specifically to meet the needs of New Hampshire leaders. NHASP has worked collaboratively with:

NHASA NHSBA
NHDOE PSU

NHASP has developed this program to assist school leaders in carrying out their responsibilities and in meeting the expectations for their positions.

MENTOR TRAINING

A three-day training program is designed to provide intensive, individualized support to new and veteran principals, followed by continuous support and periodic trainings.

Who is served.....?

- ◆ Principals
- ◆ Assistant Principals
- ◆ Transportation Directors
- ◆ Curriculum Leaders
- ◆ Athletic Directors
- ◆ Food Service Directors
- ◆ Facilities Managers
- ◆ Other School Leaders

Given the need for competent leaders, it is no longer enough for the leader to have a “buddy” who occasionally assists them. Leaders need clear and consistent input regarding the myriad of demands they face on a daily basis. High quality trained mentors can provide the necessary support and rapidly strengthen leadership capacity.

Recently, mentors, mentees and superintendents were asked for their impressions of the first few months of the NHASP School Leaders Mentor Program.

Here are some of their responses:

Mentees:

“Incredibly helpful emotionally because I feel I can say anything to him. He’s given some helpful hints on practical things. When I started last year I thought it was the loneliest job I’d ever had in my life.”

“I appreciate being able to tell him everything and just have him listen.”

“It was in September and the night before I was going to meet my mentor and I had just had it....I was up half the night. And I was going to be okay because he was coming the next day. He reassured me....”

Superintendents:

“It’s very organized (the mentor program). We had hired at the last minute and I’m very glad we reopened the search for the third time and waited. This program was very available, organized, and happened fast which was good with all of us being new. I appreciated that something was in place and a great match was made.”

“The word is “reassuring” in that you can’t get to all their (the new leaders) needs and it’s nice to know they have someone...”

“That outside piece is important. We can’t evaluate and mentor and guide. She is able to share with a mentor who can walk her through the pitfalls before she jumps into it with the supervisor.”

Mentors:

“You have to tailor it to their individual desires and needs. It’s up to the individuals to structure and identify what those needs are. They will change drastically throughout the year. There is no template. Examine all and be ready to change. The panic days and calls are very important. Be there to listen.”

“It’s exciting to watch someone create their own style and to help support them, take the leadership role and blossom within it.”

Appendix D-5-21: NH Mentoring Toolkit

QuickTime™ and a
TIFF (Uncompressed) decoder are
needed to see this picture.

Terry Tibbetts, Education Consultant, NH Dept. of Education
Kathleen Totten, Director, Eastern Region Partnership
Susan Villani, Senior Program/Research Associate, Learning Innovations at WestEd
Cheri White, Education Consultant, NH Dept. of Education

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Appendix D-5-21: NH Mentoring Toolkit

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

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Appendix D-5-21: NH Mentoring Toolkit

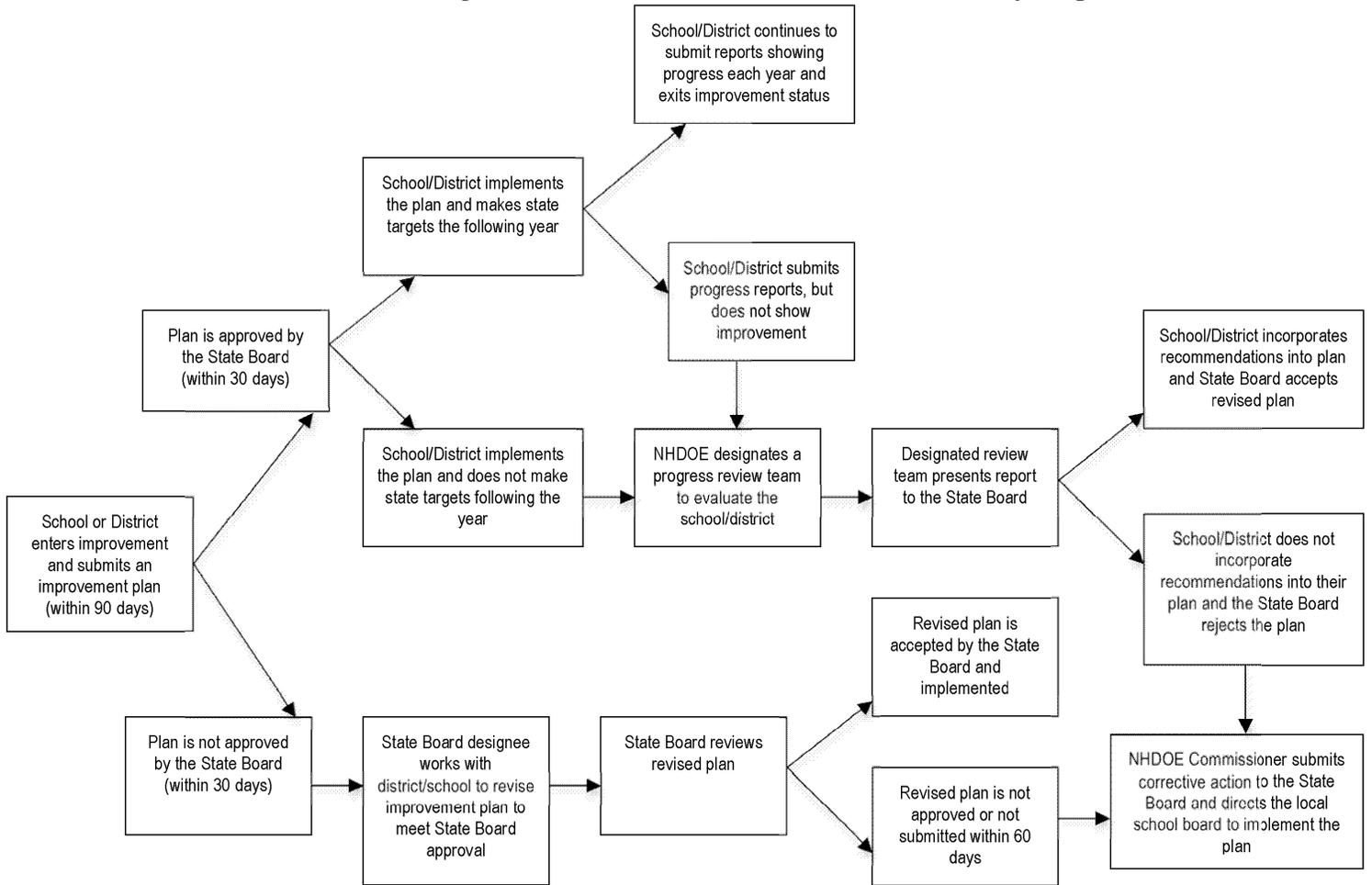
QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

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NH Statute Chapter 193-H: School Performance & Accountability Diagram



At a minimum, the Corrective Action school or LEA plan filed by the commissioner to be implemented in the corrective action school or LEA includes details in response to the following:

- Identify the area in which the school/LEA failed to meet the annual statewide performance targets established under RSA 193-H:2.
- Identify and describe the strategy the school/LEA intends to implement to improve its performance.
- Establish and explain a strategy designed to promote family and community involvement.
- Detail how the school district budget reflects the goals of the school/LEA improvement plan.

In addition, each plan filed by the commissioner may include the following elements:

- The school's/LEA's curriculum including curricular priorities and instructional materials.
- Instructional models that incorporate research-based practices that have been proven to be effective in improving student achievement.
- Formal and informal (summative and formative) opportunities to assess and monitor each child's progress.
- Evidence of data-based decisions.
- Structural reform strategies that may include schedule, organization, support mechanisms, and resources.
- Shared leadership structure to support school/LEA improvement.
- Professional development that is aligned with school/LEA improvement goals.
- External support and resources based on their effectiveness and alignment with the school/LEA improvement plan.
- Extended learning activities for students.

In addition to the above, the state's authority is reinforced under federal accountability

School and District Turnaround Plans

At a minimum, the turnaround school or LEA plan filed by the commissioner to be implemented in the turnaround school or LEA includes details in response to the following:

- Identify the area in which the school/LEA failed to meet the annual statewide performance targets established under RSA 193-H:2.
- Identify and describe the strategy the school/LEA intends to implement to improve its performance, including the identification of an external partner to assist with intensive support of turnaround efforts.
- Establish and explain a strategy designed to promote family and community involvement.
- Detail how the school district budget reflects the goals of the school/LEA turnaround plan.

In addition, each plan filed by the commissioner may include the following elements:

- The school's/LEA's curriculum including curricular priorities and instructional materials.
- Instructional models that incorporate research-based practices that have been proven to be effective in improving student achievement.
- Formal and informal (summative and formative) opportunities to assess and monitor each child's progress.
- Evidence of data-based decisions.
- Structural reform strategies that may include schedule, organization, support mechanisms, and resources.
- Shared leadership structure to support school/LEA improvement.
- Professional development that is aligned with school/LEA improvement goals.
- External partner, support, and resources based on their effectiveness and alignment with the school/LEA improvement plan.
- Extended learning activities for students.

DESCRIPTION OF CURRENT NEW HAMPSHIRE STATEWIDE SYSTEM
OF SUPPORT FOR LOW PERFORMING SCHOOLS

New Hampshire’s framework for a Statewide System of Support (SSOS) was originally designed to provide the most support to schools and districts designated with the highest No Child Left Behind (NCLB) sanctions (Schools in Restructuring and LEAs in Corrective Action). New Hampshire’s SSOS has provided comprehensive, targeted assistance and guidance to schools and LEAs, focusing on turning around practices and performance. The NHDOE continues to refine the support structure based on changing needs and model practices. The NH SSOS is organized into three levels of differentiated support, level one providing general support to all schools and level three targeting the persistently lowest-achieving schools (including Title I schools in restructuring and districts in corrective action). The NHDOE is building capacity to provide more robust intervention and support to the persistently lowest-achieving schools and LEAs. The table below represents key elements in the current NH SSOS:

[MOVE TO APPENDIX]

Figure E1. Statewide System of Support Levels

Level	Identification Processes	Differentiated Support From NHDOE
Level 3	Persistently lowest-achieving and/or restructuring schools and corrective action LEAs	<u>Intensive support</u> : Oversight of reform process through intensive support (i.e., roundtables), review of data and development of targeted intervention plans, facilitation of LEA/school improvement teams, NHDOE liaisons, targeted content support, comprehensive needs assessment and monitoring tool, external partner and LEA/support team
Level 2	LEAs/schools in need of improvement and corrective action	<u>Targeted support</u> : Customized technical assistance, program audit tools, leadership development support, data analysis support, regional peer support teams, statewide DINI meetings, content coaching, leadership coaching, and access to Web-based improvement tools
Level 1	All LEAs/schools in good standing (achieving performance targets)	<u>Universal support</u> : Statewide general support by program area

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

NH RtI Strategic Plan - Action Plan 2009-2013						
Goal 1. Operational Infrastructure: By September of 2012 the NH DOE will have an operational infrastructure that aligns the State's Systems of Support (SSOS) including multiple initiatives of school improvement that support the implementation of RtI systems at the local level.						
Strategy: Promote the work of the NH RtI Task Force						
	Action Steps	Resources Needed	Person(s) Responsible for Oversight	Measure of Success	Timeline	Outcome
1.	Establish positions in the Division of Instruction of an RtI Project Manager and RtI Program Assistant to support the implementation of RtI at the local level; oversee alignment of initiatives within the NHDOE; and foster connections between NH schools, school communities and regional and national technical assistance centers.	Funds dedicated to support salary and benefits of new position	NHDOE Commissioner And Director, Division of Instruction	New position will be established and filled.	Begin March 2010 through August 2010	Support for the implementation of RtI to Implementation Teams (local schools/districts) will be available and consistent.
2.	Establish the Professional Learning Community Systems Change Advisory (PLC-SCA) to act as advisors and to review, distill, and disseminate information		NHDOE Director, Division of Instruction, RtI Project Manager, and RtI Task Force Leadership Team	Sustainability of RtI Task Force until transition to NH PLC-SCA in 2011. Evaluation from field/e.g. traffic on website	Begin 2010 and ongoing	Successful transition to the New Hampshire PLC-SCA and ongoing RtI advisory oversight

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

	and make recommendations regarding RtI systems statewide. (This NH PLC- SCA will replace the RtI Task Force).					
3.	Maintain and expand partnerships with NH educational organizations		RtI Task Force Leadership/PLC-SCA	Maintain broad representation of RtI Task Force and PLC-SCA	Begin December 2007 until September 2011	Understanding and endorsement of RtI practices statewide by educational organizations
4.	Maintain and expand operational infrastructure to promote ongoing work of the NH PLC-SCA		RtI Task Force Leadership /PLC-SCA	Documentation of the NH RtI Task Force work and PLC-SCA	Begin 2009 and ongoing	Regional and national resources will conduct surveys to measure the effectiveness of the support to the NH PLC SAC
5.	Develop materials that Implementation Teams can use to design and implement RtI models at the local level		RtI Project Manager and PLC-SCA		2009 to ongoing	Educators and stakeholders will be informed of and able to access and use RtI information.
6.	Develop and disseminate exemplars of effective NH RtI models to NH school districts		RtI Project Manager and PLC-SCA		2009 to ongoing	
7.	Conduct long range planning that aligns NH RtI with other State Systems of Support		RtI Project Manager and PLC-SCA		2009 to ongoing	

NH DOE RtI Strategic Plan – Action Plan

NH RtI Action Plan Strategic Plan- 3-7-10

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

NH RtI Strategic Plan - Action Plan 2009-2013						
Goal 2. Communications: By September of 2010 the NH DOE will establish a mechanism to ensure transparent and reciprocal communication among all relevant stakeholders about its work and outcomes.						
Strategy: Promote the understanding of effective RtI practices and the work of the NH RtI Task Force/PLC SCA to all NH educators and stakeholders						
	Action Steps	Resources Needed	Person Responsible for Oversight	Measure of Success	Timeline	Outcome
1.	Communicate understanding of effective RtI models and practices to state leadership teams (i.e. NH DOE, PLC-SCA, and Implementation Teams)	RtI website and other available communication tools	NHDOE Project Manager for RtI	Evaluation from field/e.g. traffic on website	Begin 2010 and ongoing	Informed educators and stakeholders
2.	Create and use a NH RtI logo	???	NHDOE Project Manager	Establishment of consistent NH RtI logo on all endorsed materials	Begin spring 2010 end July 1, 2010	Educators and stakeholders will recognize all NH RtI endorsed information and activities
3.	Establish regular correspondence that is accessible to all of the field and other key stakeholders utilizing RtI website, newsletters, email updates, NH DOE Key Messages, etc.	RtI website and other available communication tools	RtI Task Force Leadership	Establishment of effective RtI practices at the school and district level statewide	Begin December 2007 until September 2011	Informed stakeholders on an ongoing basis
4.	Maintain and update the RtI Interactive Guide and website	NH DOE Information Technology staff (?)	NH DOE RtI Project Manager and NH DOE administrators	Documentation of the NH RtI Task Force work	Begin 2009 and ongoing	Regional and national resources will conduct surveys to measure the effectiveness of the RtI Interactive Guide

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

5.	Develop and promote RtI related professional development statewide that is high quality, student-focused, data driven, research-based, intensive, sustained and job-embedded.	NH DOE Project Manager	NH DOE RtI PLC-SCA group and NH DOE RtI Project Manager, with collaboration from the PLC-SCA group, NH DOE, IHEs, Professional Development Centers	Statewide development of RtI models at the local level	2009 to ongoing	Improved student outcomes on state assessments
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Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

NH DOE RtI Strategic Plan – Action Plan

NH RtI Strategic Plan - Action Plan 2009-2013						
Goal 3. Teacher and Leader Education: By July 2011, in order to support the development of effective teachers and leaders , a professional development plan will align the state’s multiple State Systems of Support (SSOS) and other improvement initiatives to support the design and implementation of RtI systems at the local level.						
Strategy: Promote the understanding of effective RtI practices to educators, parents and pre-service providers.						
	Action Steps	Resources Needed	Person Responsible for Oversight	Measure of Success	Timeline	Outcome
1.	Collaborate with stakeholders , State Leadership Team and local Implementation Teams to create professional development master plan to support and scale up statewide capacity and implementation of RtI models		NHDOE Project Manager for RtI	Evaluation from field/	Begin 2010 and ongoing	Informed teachers and leaders statewide
2.	Provide differentiated professional development activities for teachers and leaders		NHDOE Project Manager	Demonstration of effective RtI instructional practices at the local level.	Begin spring 2010 end July 1, 2010	Informed teachers and leaders and improved instructional practice
3.	Develop RtI mentoring and coaching efforts for NH educators		RtI Task Force Leadership	Establishment of effective RtI practices at the school and district level statewide	Begin December 2007 until September 2011	Informed teachers and leaders on an ongoing basis
	Promote parent		NH DOE RtI	Increased parent awareness	Begin 2009 and	Regional and national resources

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

4.	/community understanding of RtI		Project Manager and NH DOE administrators	and involvement in support of RtI models at the local level	ongoing	will conduct surveys to measure the effectiveness of the support to the parent and community members
5.	Support RtI pre-service needs of new educators through collaboration with IHEs		NH DOE RtI PLC-SCA group and NH DOE RtI Project Manager,	Statewide development of RtI pre-service models at the state's IHEs	2009 to ongoing	Improved student outcomes statewide

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NH DOE RtI Strategic Plan – Action Plan

NH RtI Action Plan Strategic Plan- 3-7-10

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

NH RtI Strategic Plan - Action Plan 2009-2013						
Goal 4. Curriculum, Instruction and Assessment: By September 2012 the PLC-SCA will act in an advisory capacity to the NH DOE and to Implementation Teams (schools and districts) regarding the efficacy of curriculum, instruction and assessment practices that support effective RtI Implementation.						
Strategy: Promote the understanding of effective RtI practices and the work of the NH RtI Task Force						
	Action Steps	Resources Needed	Person Responsible for Oversight	Measure of Success	Timeline	Outcome
1.	Support alignment of district curricula with Literacy and Numeracy Common Core Standards	Professional development to local level educators in curriculum alignment	NHDOE RtI Project Manager and NH DOE Division Director oversight	Evaluation from field	Begin 2010 and ongoing	Curriculum aligned to Literacy and Numeracy Common Core Standards at the local school district level
2.	Review and recommend professional development and evidence based instructional resources at Tier 1, 2 and 3 levels for Literacy, Numeracy and Behavior	Professional development and research based resources	NHDOE RtI Project Manager and PLC-SCA	Establishment of effective RtI practices at the school and district level statewide	Begin spring 2010 ongoing	
3.	Review and recommend evidence-based assessment practices at the Tier 1, 2 and 3 levels	Access to research-based practices	NH DOE RtI Project Manager and PLC-SCA	Establishment of effective RtI practices at the school and district level statewide	Begin December 2007 until September 2011	Informed teachers, leaders and stakeholders on an ongoing basis
4.	Disseminate via RtI website effective NH RtI models that are informed	RtI website updated on a regular basis	NH DOE RtI Project Manager and NH DOE administrators		Begin 2009 and ongoing	

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

by valid and reliable assessment data					
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NH DOE RtI Strategic Plan – Action Plan

NH RtI Action Plan Strategic Plan- 3-7-10

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

NH RtI Strategic Plan - Action Plan 2009-2013						
Goal 5. Use of Data: By September 2012 the NH DOE PLC-SCA and Implementation Teams (schools and districts) will fully access and use longitudinal student data to advance and support RtI systems.						
Strategy: Promote the understanding of effective RtI practices and the work of the NH RtI Task Force						
	Action Steps	Resources Needed	Person Responsible for Oversight	Measure of Success	Timeline	Outcome
1.	Ensure the NH DOE's longitudinal data system provides districts with student outcome data		NHDOE Division of Instruction and RtI Project Manager		Begin 2010 and ongoing	Access to longitudinal data to inform instruction for educators and stakeholders
2.	Train educators and leaders to become skilled in the effective use of district, school, grade and student data profiles	Professional development plan to support effective use of data by teachers and leaders	NHDOE Division of Instruction, RtI Project Manager and relevant Information Technology (IT) consultants	Teachers and leaders will regularly analyze and use student longitudinal data to inform instructional practice	Begin spring 2010 ongoing	Use of longitudinal data to inform instructional practices at the local level for teachers and leaders
3.	Provide support to teachers and leaders in accessing and effectively utilizing state sponsored data warehouses to inform instructional practices	Ongoing system of high quality, embedded PD support to teachers and leaders statewide	NH DOE staff and IT consultants	Teachers and leaders will access and effectively utilize state sponsored data to inform instructional practice	Begin 2010 and ongoing	Increased use of student outcome data to inform instructional practices statewide
	Conduct analyses of		NH DOE RtI		Begin 2010 and	

Appendix E-2-4: NH Response to Intervention Strategic Plan 2009-2013

4.	outcome data from Implementation Teams (NH districts) with advanced and successful RTI models.		Project Manager and NH DOE administrators		ongoing	
5.	Support the development of data-based instructional decision making at the school and district level and grade level teams	System of professional development focused on data-based instructional decision making that is high quality, embedded and ongoing	NH DOE RtI Project Manager and other relevant consultants			



New Hampshire

PreK-16

Literacy Action Plan For the 21st Century

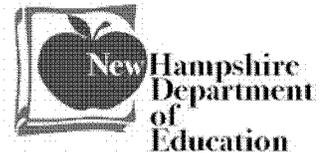
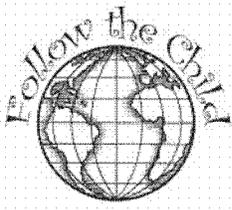
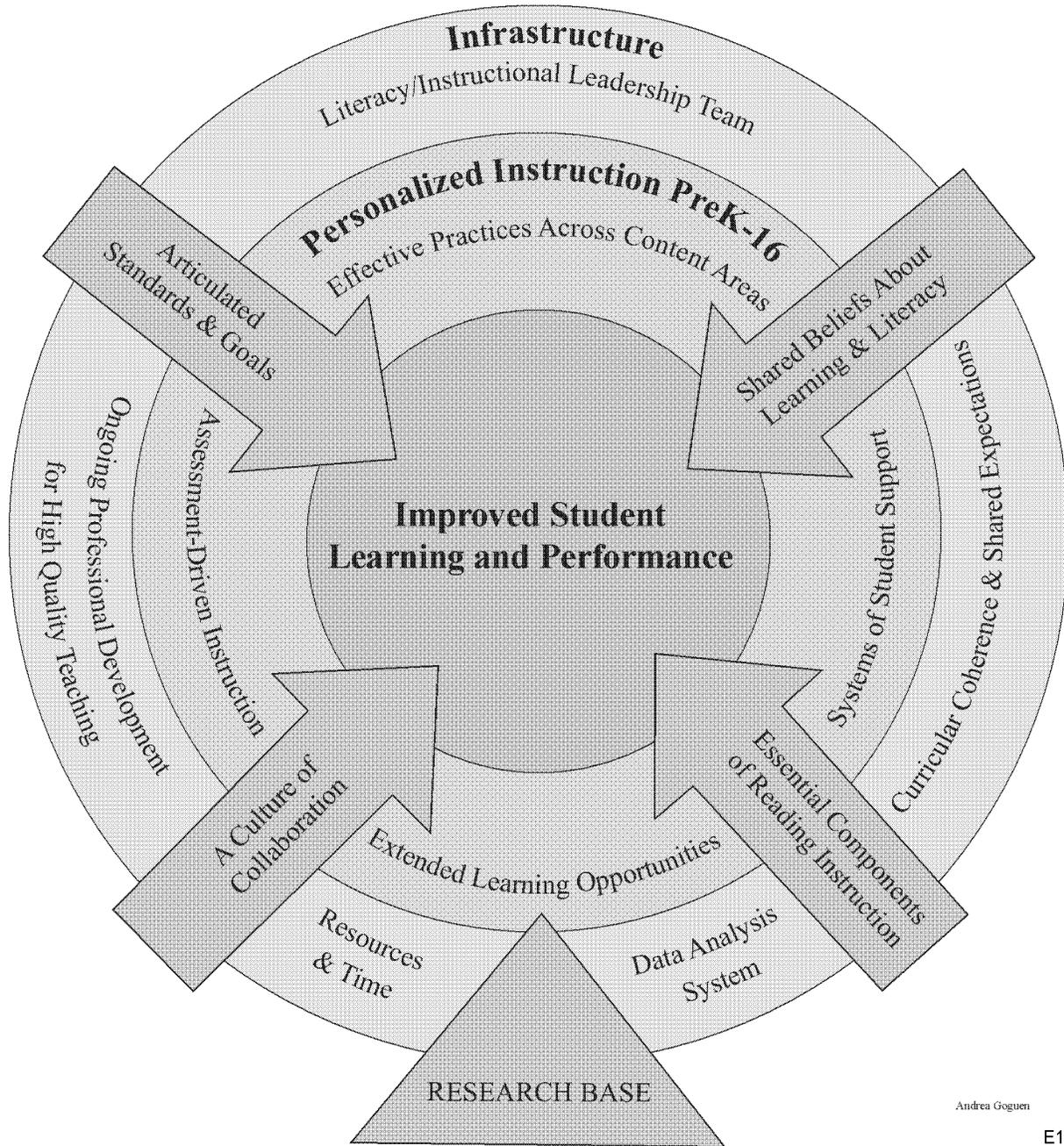


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Andrea Goguen



New Hampshire
PreK-16
Numeracy Action Plan
For the 21st Century

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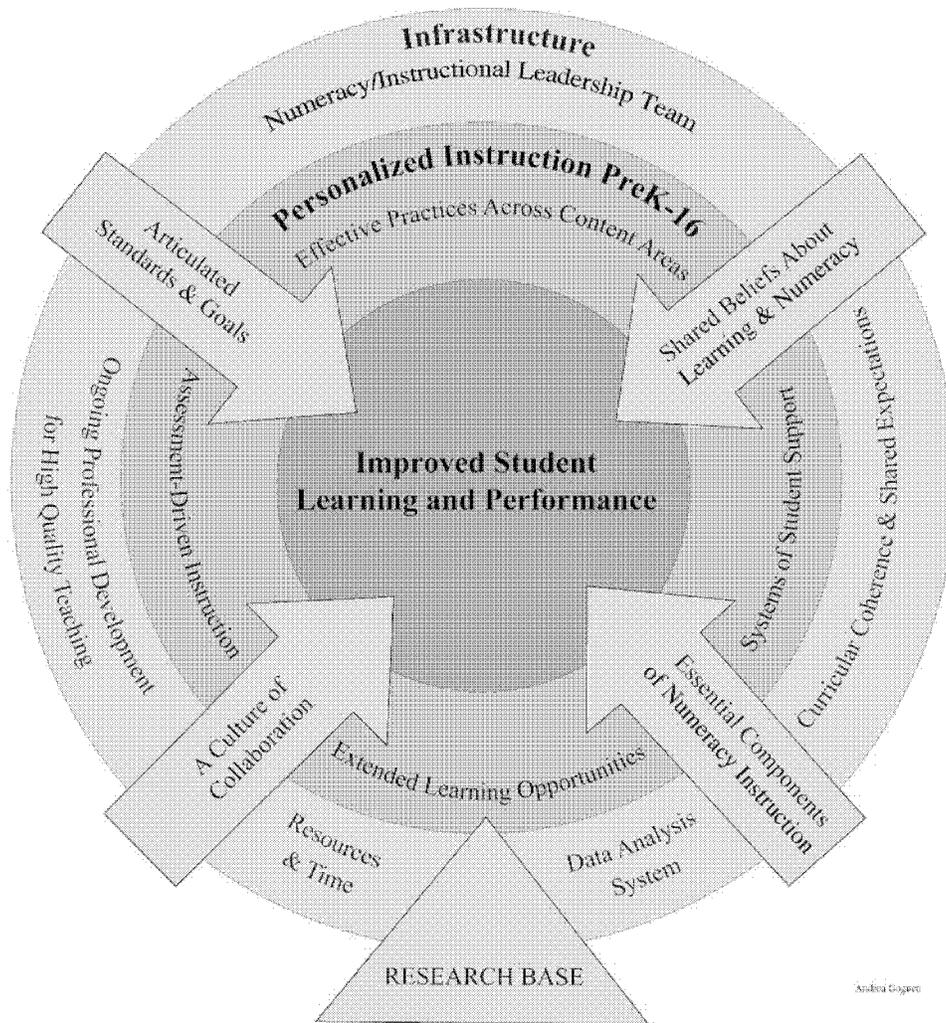
Appendix T: What Administrators Should See Students Doing in the Classroom

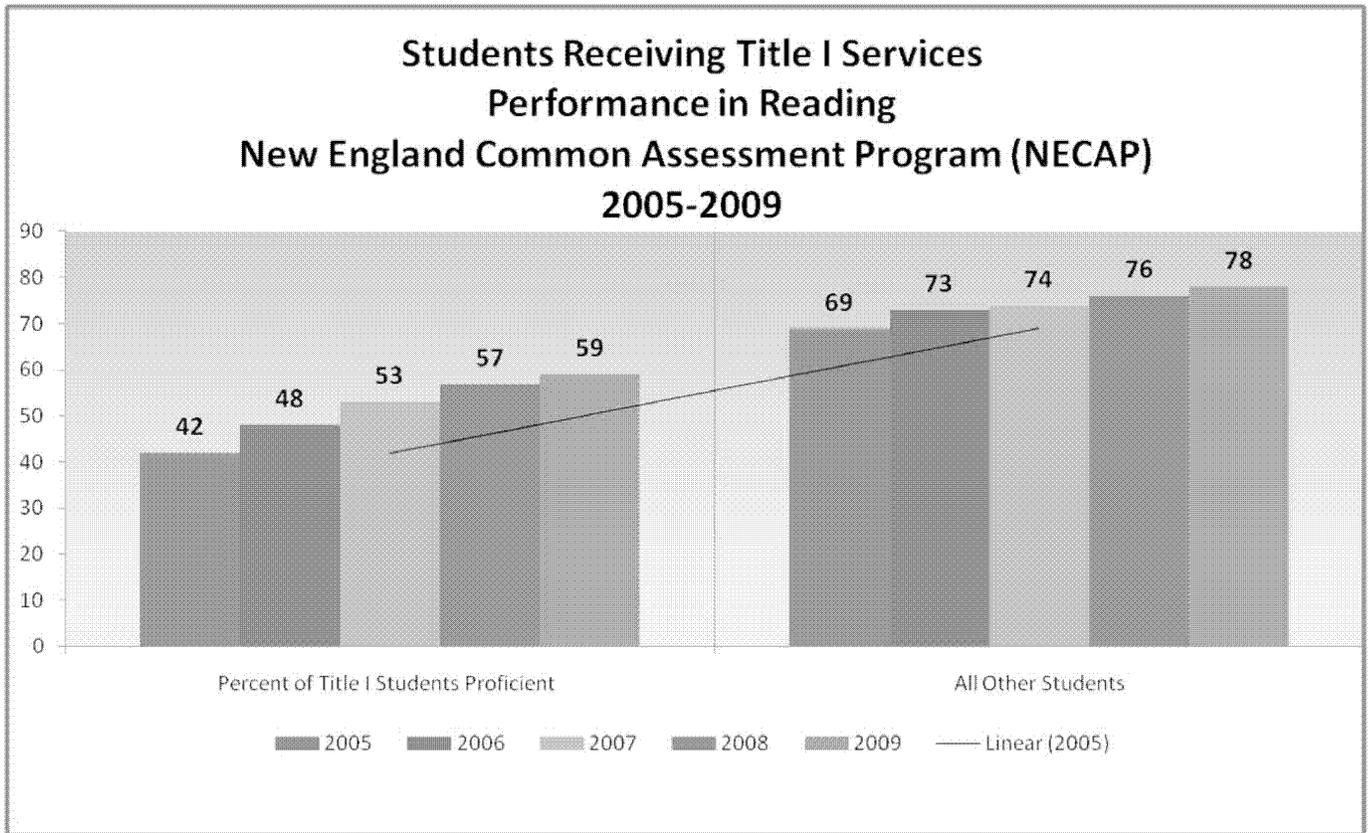
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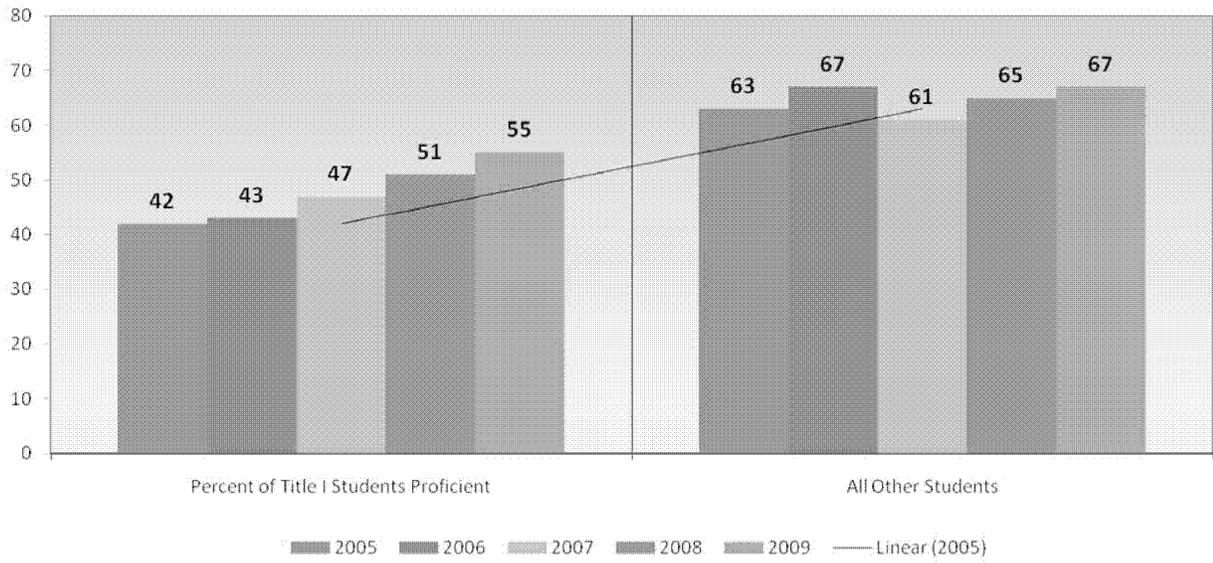
Figure 1: New Hampshire’s Conceptual Framework for 21st Century Numeracy

New Hampshire’s Conceptual Framework for 21st Century Numeracy





Students Receiving Title I Services Performance in Mathematics New England Common Assessment Program (NECAP) 2005-2009



NEW HAMPSHIRE DEPARTMENT OF EDUCATION

NH Focused Monitoring Process

Past Performance and Future Potential

12/28/2009

This summary details the NECAP Reading achievement results of the 16 participating NH Focused Monitoring school districts from 2006-2009, and confirms that this system wide improvement model can support the work in other struggling NH schools to improve student results.

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

The NH DOE's Focused Monitoring Process began in 2006-2007 with a pilot that included three volunteer school districts. The first year of a selection process in 2007-2008 was based on the achievement gap between students with IEPs and All Others, among districts performing in the bottom quartile. The NECAP data is the sole achievement measure available statewide at this point. Therefore, for the purpose of this evaluation, NECAP data results have been examined to determine the effectiveness of the NH DOE Focused Monitoring (FM) Process. An analysis of the NECAP Reading results from the 16 FM Districts that have participated in the FM Process up to this point finds that gains have been made in all areas.

The following data analysis includes three broad points of information with data from 2005-2006 through 2008-2009. They are:

- Percent of students scoring proficient in Reading
- Percent of students making growth targets in Reading
- Index scores in Reading

In addition the percent proficient and percent making growth target data have been disaggregated into sub-groups of:

- Students with Individual Education Plans (IEPs)
- Students without IEPs
- Socioeconomic Status (SES) or Educationally Disadvantaged students
- Non or Limited English Proficient (LEP) students

The following data statements summarize the examination of the NECAP 2005-2006 through 2008-2009 results for the 16 FM school districts:

Percent Proficient for Students Grade 1-8 & 11*

- From 2005 to 2008, all 16 Focused Monitoring school districts showed an increase in Percent Proficient on the NECAP Reading for “**All Students**”.
- From 2005 to 2008, 14 out of 16 Focused Monitoring school districts, showed an increase in Percent Proficient on the NECAP Reading for “**IEP Students**”.
- From 2005 to 2008, 15 out of 16 school districts showed an increase in Percent Proficient on the NECAP Reading for “**All other Students**” (**Students without IEPs**).
- From 2005 to 2008, all 16 school districts showed an increase in Percent Proficient on the NECAP Reading for “**SES Students**”.
- From 2005 to 2008, of the 4 Focused Monitoring school districts with “**LEP Students**”, 3 showed an increase in Percent Proficient on the NECAP Reading.

Percent Making Growth Targets for Students Grades 4-8

- From 2005 to 2008, 12 of the 16 Focused Monitoring school districts showed an increase in percent of “**All Students**” making their growth targets on the NECAP Reading.
- From 2005 to 2008, 12 of the 16 Focused Monitoring school districts showed an increase in “**IEP Students**” making growth targets on the NECAP Reading.
- From 2005 to 2008, 11 of the 16 Focused Monitoring school districts showed an increase in percent of “**SES Students**” making their growth targets on the NECAP Reading.

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

NECAP Reading Index Scores for Students Grade 1-8 & 11*

- Since 2005, Focused Monitoring **Pilot sites** gained an average of 5.5 index points over four years, whereas the state of NH made 4.1 points gain.
- **Focused Monitoring - year 1** districts gained an average of 4.8 index points versus 4.1 points for the state.
- **Focused Monitoring -year 2** districts gained an average of 6.0 index points and the state gained 4.1 point.
- From 2005 to 2008, 11 of the 16 Focused Monitoring school districts exceeded the state index score in Reading.

*Weare, Plymouth, Allenstown and Wakefield do not have high schools

N. B. NECAP results for years 2005-2006 & 2006-2007 do not include grade 11.

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

NH DOE Bureau of Special Education - Focused Monitoring Process Data Chart 2005-2009

N. B. NECAP results for years 2005-2006 & 2006-2007 do not include grade 11.

NH DOE Bureau of Special Education - Focused Monitoring Process Data Chart 2005-2009										
N. B. NECAP results for years 2005-2006 & 2006-2007 do not include grade 11.										
	NECAP Reading Percent Proficient					Making Growth Targets Reading				Reading Index Scores
	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
State of NH										
2005-2006 (Gr. 3-8)	66%	25%	73%	44%	30%	NA	NA	NA	NA	86.3
2006-2007 (Gr. 3-8)	70%	30%	78%	50%	28%	66%	40.7%	52.3%	45.7%	88.3
2007-2008 (Gr. 3-8 and 11)	72%	32%	79%	53%	28%	66.5%	42.6%	53.9%	48.2%	89.4
2008-2009 (Gr. 3-8 & 11)	74%	36%	81%	56%	33%	68.2%	45.7%	56.3%	49.9%	90.4
Change from Oct 2005 to Oct 2008	+8	+11	+8	+12	+3%	+2.2	+5	+4	+4/2	+4.1

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Focused Monitoring Year 2006-2007 Pilot Year										
Moultonborough										
2005-2006	81%	32%	84%	71%	NA					92.9
2006-2007	84%	45%	90%	70%	NA	78.8%	52.8%	63%		93.7
2007-2008	84%	52%	91%	70%	NA	65%	49%	47.6%		95
2008-2009	83%	50%	90%	72%	NA	73.1%	55.4%	65.5%		95.1
Change from Oct 2005 to Oct 2008	+2	+12	+6	+1		-5.7	+2.6	+2.5		+2.2
Plymouth										
2005-2006	64%	11%	76%	34%	NA					85.6
2006-2007	69%	19%	80%	44%	NA	68.3%	37.3%	58.8%		88.5
2007-2008	79%	54%	84%	69%	NA	74.5%	66.7%	63.3%		93.9
2008-2009	82%	77%	88%	77%	NA	72.6%	67.4%	70.1%		94.7
Change from Oct 2005 to Oct 2008	+19	+66	+12	+43	NA	+4.3	+30.1	+11.3		+9.1

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Sanborn Regional										
2005-2006	63%	21%	71%	49%	NA					85.7
2006-2007	69%	24%	80%	50%	NA	61.2%	35.4%	53.55		89.7
2007-2008 Gr. 3-8 & 11)	71%	31%	80%	53%	NA	67.3%	37.7%	52.9%		90.9
2008-2009 Gr.3-8 & 11)	76%	31%	80%	64%	NA	66.5%	39.7%	50%		91.1
Change from Oct 2005 to Oct 2008	+13	+10	+9	+15		+5.3	+4.3	-3.55		+5.4
Focused Monitoring Year 2007-2008										
Allenstown										
2005-2006	53%	4%	62%	44%	NA					80
2006-2007	50%	10%	58%	35%	NA	48.5%	25.5%	43.7%		79.7
2007-2008	58%	19%	67%	45%	NA	62.3%	41.2%	55.4%		83.7
2008-2009	66%	25%	76%	55%	NA	68.6%	39.1%	62.7%		87
Change from Oct 2005 to Oct 2008	+13	+21	+14	+11		+20.1	+13.6	+19		+7

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Barrington										
2005-2006	59%	18%	69%	34%	NA					83
2006-2007	65%	24%	74%	36%	NA	59.7%	33.6%	35.6%		85.5
2007-2008	70%	30%	80%	44%	NA	69.0%	46.75	53.4%		88.8
2008-2009	71%	28%	80%	41%	NA	64.4%	43.9%	51.2%		88.5
Change from Oct 2005 to Oct 2008	+12	+10	+11	+7		+7	+10.3	+15.6		+5.5
Claremont										
2005-2006	52%	10%	62%	40%	40%					79.2
2006-2007	64%	19%	74%	54%	NA	70.2%	39.7%	62%		86.3
2007-2008	61%	15%	73%	51%	NA	57.2%	25.0%	49.7%		85
2008-2009	64%	19%	75%	57%	NA	57.1%	29.5%	51.2%		85.2
Change from Oct 2005 to Oct 2008	+12	+9	+13	+17		-6.9	-10.2	-10.8		+6

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Haverhill										
2005-2006	63%	33%	74%	51%	NA					86.3
2006-2007	58%	22%	67%	56%	NA	52.5%	37.1%	51.1%		86.9
2007-2008	66%	37%	75%	61%	NA	58.6%	47.5%	53.3%		88.3
2008-2009	72%	26%	68%	73%	NA	69.6%	37.7%	66.1%		90.5
Change from Oct 2005 to Oct 2008	+9	-7	-8	+22		+17.1	+6	+15		+4.2
Hudson										
2005-2006	67%	22%	72%	53%	42%	NA	NA	NA	NA	87.5
2006-2007	69%	19%	78%	55%	35%	63.3%	29.2%	50%	50%	88.7
2007-2008	71%	28%	77%	61%	43%	66.8%	42.9%	60.6%	64.3%	89.8
2008-2009	73%	24%	81%	61%	43%	65.8%	34.7%	58.5%	62%	90.6
Change from Oct 2005 to Oct 2008	+6	+2	+9	+8	+1	+2.5	+5.5	+8.5	+12	+3.1

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Manchester										
2005-2006	47%	16%	54%	32%	19%				NA	75.6
2006-2007	48%	18%	55%	38%	13%	50.3%	30.1%	40.4%	40%	77.1
2007-2008	52%	19%	59%	37%	13%	52.5%	35.6%	43.5%	40.4%	78.5
2008-2009	55%	20%	62%	41%	15%	53.5%	35.5%	46.1%	38%	80.2
Change from Oct 2005 to Oct 2008	+8	+4	+8	+9	-4	+3.2	+5.4	+5.7	-2	+4.6
Weare										
2005-2006	65%	27%	70%	46%	NA					86.1
2006-2007	69%	22%	79%	59%	NA	65.9%	35.3%	56%		88.3
2007-2008	69%	25%	78%	57%	NA	62.9%	40.9%	59.3%		89.1
2008-2009	71%	24%	81%	69%	NA	66.1%	35.6%	61.9%		89.6
Change from Oct 2005 to Oct 2008	+6	-3	+11	+23		+2	+3	+5.9		+3.5

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Focused Monitoring Year 2008-2009										
Berlin										
2005-2006	57%	19%	64%	49%	NA					82.6
2006-2007	56%	12%	65%	48%	NA	54.2%	24.1%	47.4%		83.4
2007-2008	61%	23%	70%	54%	NA	58.6%	30.7%	52.1%		83.9
2008-2009	66%	23%	76%	54%	NA	60.2%	35.4%	52.9%		84.7
Change from Oct 2005 to Oct 2008	+9	+4	+12	+5		+6	+11.3	+5.5		+2.1
Dover										
2005-2006	71%	25%	77%	50%	34%				NA	89.6
2006-2007	73%	31%	79%	52%	47%	65.5%	41.3%	51.5%	61%	90.2
2007-2008	72%	19%	79%	51%	28%	63.9%	30.2%	46.0%	36.6%	89.6
2008-2009	73%	26%	80%	56%	42%	69.5%	36%	55.9%	61.8%	90.9
Change from Oct 2005 to Oct 2008	+2	+1	+3	+6	+8	+4	-5.3	+4.4	+8	+1.3

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Laconia										
2005-2006	50%	10%	56%	40%	35%				NA	78.4
2006-2007	65%	23%	73%	56%	15%	70.7%	40.6%	64.5%	70.4%	86.9
2007-2008	67%	27%	76%	61%	46%	68.3%	43.6%	60.5%	52.8%	88.4
2008-2009	66%	19%	75%	58%	52%	61.6%	34.3%	55.3%	60.9%	88.4
Change from Oct 2005 to Oct 2008	+16	+9	+19	+18	+17	-9.1	-6.3	-9.2	-9.5	+10
Littleton										
2005-2006	56%	15%	66%	42%	NA					82.6
2006-2007	65.3%	41.4%	61.2%	65%	NA	71.8%	37.5%	65.5%		87.7
2007-2008	73%	25%	82%	64%	NA	73.4%	46%	65.7%		89.6
2008-2009	69%	22%	78%	60%	NA	65.3%	41.1%	61.2%		89.4
Change from Oct 2005 to Oct 2008	+13	+7	+12	+18		-6.5	+3.6	-4.3		+6.8

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Manchester										
2005-2006	47%	16%	54%	32%						75.6
2006-2007	48%	18%	55%	38%		50.3%	30.1%	40.4%		77.1
2007-2008	52%	19%	59%	37%		52.5%	35.6%	43.5%		78.5
2008-2009	55%	20%	62%	41%		53.5%	35.5%	46.1%		80.2
Change from Oct 2005 to Oct 2008	+8	+4	+8	+9		+3.2	+5.4	+5.7		+4.6
Northumberland										
2005-2006	51%	7%	58%	43%	NA					79.2
2006-2007	58%	15%	66%	55%	NA	51%	7%	58%		84.8
2007-2008	68%	8%	77%	62%	NA	57.6%	25.9%	54.8%		86
2008-2009	73%	39%	78%	68%	NA	65.9%	52%	64.6%		90.3
Change from Oct 2005 to Oct 2008	+22	+32	+20	+25		+14.9	+45	+6.6		+11.1

Appendix E-2-8: New Hampshire Focused Monitoring Process: Past Performance and Future Potential

	% Proficient All Students	% Proficient IEP Students	% Proficient All Others	% Proficient SES Students	% Proficient LEP students	% Making Growth Target District	% Making Growth Target IEP	% Making Growth Target SES	% Making Growth Target LEP	Index Scores All
Wakefield										
2005-2006	59%	22%	64%	51%	NA					83.4
2006-2007	54%	15%	62%	48%	NA	52%	34%	46.7%		82
2007-2008	56%	11%	65%	35%	NA	52.1%	28.1%	33.3%		82
2008-2009	72%	30%	81%	74%	NA	75.6%	66.1%	73.1%		89.8
Change from Oct 2005 to Oct 2008	+13	+8	+17	+23		+23.6	+32.1	+26.4		+6.4

The successful results of the FM Process, now in its 4th year of implementation, show the potential for expanding this systemic school wide school improvement model. The larger description of the Focused Monitoring, as modified for Race to the Top, attributes and research references are included to support the above documentation.

Appendix F-1-1: Status of Charter Schools Approved by the State Board of Education, December 2009

Charter School/Location/Date Opened	Fall 2009 Enrollment	Students/ Grades Served	Focus	Evidence of Effectiveness
North Country Charter School Littleton and Lancaster Opened: July 2004 NH Pilot Charter School Program	58	Grades 7-12; recent dropouts or at-risk of dropping out of school	Plato Education Services curriculum	<ul style="list-style-type: none"> • Significant grade-level growth each year as demonstrated by BASI Assessment Inventory • 153 graduates since 2004, including 27% dropouts; 30% matriculated to post-secondary education • 90% average attendance rate for 5 years • 100% student enrolled in Extended Learning Opportunities
Seacoast Charter School Kingston Opened: July 2004 NH Pilot Charter School Program	63	Grades 1-6	Core academics and the arts with thematic approach to curriculum	<ul style="list-style-type: none"> • Exceeds NECAP results for region by 23 percent; 88 percent of students are at proficiency level in math and English on NECAP
Cocheco Arts and Technology Academy Dover Opened: January 2005 NH Pilot Charter School Program	77	Grades 9-12; underserved students who don't meet standard social norms	Arts and technology; personalized educational plans; community service	<ul style="list-style-type: none"> • Of 34 graduates, 31 are in college and three are working. Many arts awards: NH Theater Festival award, national Maya Angelou award received by student,

Appendix F-1-1: Status of Charter Schools Approved by the State Board of Education, December 2009

Charter School/Location/Date Opened	Fall 2009 Enrollment	Students/ Grades Served	Focus	Evidence of Effectiveness
				and one student commissioned by San Francisco Symphony to compose piece
Great Bay e-Learning Charter School Exeter Opened: January 2005 NH Pilot Charter School Program	144	Grades 8-12; mid-range of students whose needs are not adequately met in traditional programs	Blends on-line learning and video-conferencing technology using project-based curriculum	<ul style="list-style-type: none"> Graduated 61 students in Classes of 2008 and 2009, all of whom were accepted to post-secondary programs
New Hampshire Equestrian Academy Charter School Rochester Opened: September 2006 NH Pilot Charter School Program	28	Grades 9-12	College academic preparation and training in equine industry; apprenticeships in equestrian industry businesses	<ul style="list-style-type: none"> 100 percent of graduates are in college
Surry Village Charter School Opened: September 2006 NH Pilot Charter School Program	64	K-8	Multi-age, multi-grade teaching; science and social studies taught through projects	<ul style="list-style-type: none"> 80 percent of students were proficient in math and English on NECAP assessments
CSI Charter School Penacook Opened: July 2007 NH Pilot Charter School Program	42	Grades 9-12; disenfranchised students and dropouts	Non-traditional, competency-based educational program; individualized educational plans; flexible schedule (three days/week from 9-11 am and 5-7 pm)	<ul style="list-style-type: none"> 39 students, who were disenfranchised, met 92 competencies and graduated. 10 students awarded community Technical scholarships to complete college work while at CSI.

Appendix F-1-1: Status of Charter Schools Approved by the State Board of Education, December 2009

Charter School/Location/Date Opened	Fall 2009 Enrollment	Students/ Grades Served	Focus	Evidence of Effectiveness
Academy for Science and Design Charter School Merrimack Opened: September 2007 NH Pilot Charter School Program	110	Grades 7-12	Science, math, engineering, and design	<ul style="list-style-type: none"> • First in state science and math NECAP scores in 2009; second in state in 2008. • State Champion for Spelling Bee, 2009; Future Problem Solvers First Place Senior and Middle Divisions, 2009; First Lego League First Place in State in Presentation • First graduating class has a National Merit Semi-finalist who is also candidate for US Air Force and Naval Academy.
Strong Foundations Charter School Pembroke Opened: September 2007 NH Pilot Charter School Program	92	Grades K-4; approximately 33 percent students with disabilities	Build early literacy through Orton-Gillingham approach	<ul style="list-style-type: none"> • Strong progress in formative growth assessment. • One student exited special education status.
Virtual Learning Academy Charter School Exeter Opened: January 2008 NH Pilot Charter School Program	560	Grades 9-12	Use of new, emerging distance learning technologies to provide rigorous, personalized education anywhere, anytime for part-time high	<ul style="list-style-type: none"> • No evidence yet, just opened.

Appendix F-1-1: Status of Charter Schools Approved by the State Board of Education, December 2009

Charter School/Location/Date Opened	Fall 2009 Enrollment	Students/ Grades Served	Focus	Evidence of Effectiveness
Ledyard Charter Academy Lebanon Opened: January 2009 NH Pilot Charter School Program	29	Grades 9-12; underperforming and/or disengaged students	school students Strong academic core with service learning in community and internships	<ul style="list-style-type: none"> No evidence yet, just opened.

Status of Charter Schools Authorized by LEAs, December 2009

Charter School/Location	Fall 2009 Enrollment	Students/ Grades Served	Focus	Evidence of Effectiveness
Deerfield Community Charter School Deerfield Will open: Fall 2010	NA	K-6	Interdisciplinary approach to learning	NA