

INNOVATIVE APPROACHES TO LITERACY– CFDA 84.215G  
Cottonwood Public School  
Narrative

**(a) Significance (10 points).**

*(i) Extent to which project is likely to build capacity to provide, improve, or expand services that address needs of target population. (5 points)*

*Under this criterion, the LEA requests credit for Competitive Priority 4: Serving rural LEAs.*

Cottonwood Public School is seeking Innovative Approaches To Literacy grant funds in order to address the specific needs and limitations of a burgeoning target population.

Cottonwood is a rural K3 (or EC3) through 8<sup>th</sup> grade school in the most impoverished quadrant of Oklahoma. A few affluent families distort the census poverty rate, and since more than 80% of the students here have transferred from surrounding districts, county statistics more accurately describe the district than do community ones. The county ranks in the lowest of the state's five literacy tiers, with the Literacy Resource Office reporting 31% of the adults age 25 or older are drop-outs.<sup>1</sup> The 2011 *OK Kids Count Factbook* showed Coal had the highest rate of child abuse/neglect among the state's 77 counties. At school, students represent undue numbers of disadvantaged (55% free/reduced), minority (51% Native American), and students with disabilities (40%). Many, if not most, grow up in homes where books and reading materials simply do not exist. Against this backdrop, literacy efforts are at the forefront of education.

About a dozen years ago, Cottonwood had an enrollment of 56 students and was on the state's list of *schools needing improvement*. Following massive reform, the district became known for its dedication to students struggling with disabilities and other life hurdles. As result, enrollment last year was 251, and the district's Academic Performance Index and aggregate test scores, while not stellar, were above state average.<sup>2</sup> But despite successes, gaps are evident. At the early childhood level, for example, LAP-D and Peabody assessment shows that about 90% of the children entering pre-kindergarten (K3 and K4) are deficient in age-appropriate literacy

skills. Three-year-olds are often language delayed, with little awareness of books and print. Four-year-olds struggle to transition to kindergarten. To move them toward school readiness—as well as to address the state’s new early childhood standards that are due out this summer—the LEA proposes revising programming, adding multiple and varied supports, and implementing parental outreach and incentives. Additional personnel are needed temporarily to enable all those efforts.

In its push toward readiness, Cottonwood was one of the first districts in the state to implement a K3 program. Head Start provides half the teacher’s salary for both K3 and K4 students *who qualify*, but only about half do. The state provides funds for grades as low as K4, but there is no funding for K3, so the district must pay for most of the three-year-old program itself. Sadly, as enrollment soars, the budget does not, so resources are especially meager at K3.

At other levels, new state legislation now requires that any student who fails to pass third grade *must be retained*, and, despite improved performance overall, latest state achievement test results show a third of the Cottonwood students in grades 3-8 scored below average in reading and language arts, with 19% scoring *unsatisfactory* (2011, as 2012 scores are not yet released). Scores are particularly low among disadvantaged students and those on IEPs.

The school must find the funds to provide adequate literacy services for struggling students by expanding services to preschoolers, who are deficient in age-appropriate literacy skills and closing gaps in student performance at all grade levels, but the growing enrollment is straining an already strapped budget. For the youngest learners, the project will provide temporary personnel and proven literacy programming. At all levels, it will provide the needed resources and professional development vital to implementing science-based literacy intervention. Improved literacy skills, along with greater access to engaging books and the latest technology, e.g., iPads, will motivate the older children to read not only better, but more.

Innovation and increased capacity lie in the combination of the many features of the project.

*(ii) Extent project involves development or demonstration of new strategies that build on, or are alternatives to, existing ones. (5 points)*

In its simplest summary, this project combines new strategies that boost the district's capacity for serving the target population through science-based curriculum, supporting resources, and intervention. Supports include temporary personnel, revised early childhood practices, large numbers of books, and cutting edge technology. The project will also engage parents and help train teachers in proven age-appropriate literacy instruction and intervention techniques. The project will expand, *but in no way supplant*, any existing program or resources.

Each component of the project is scientifically research-based or is based on scientific research and recognized by the scientific community as promising practice. (Research for all components has been endnoted.)

School-wide RtI: The district implemented a science-based literacy curriculum during earlier reform, but to address the needs of the students who still are not meeting expectations, the district is beginning a science-based three-tier response to literacy intervention (RtI). A wide body of research proves the Three-Tier RtI approach effective, particularly in populations like Cottonwood's.<sup>3</sup> While there is no need to *purchase* an RtI program, there is great need for books, technology, and teacher training necessary to implementation. This project addresses the need.

Preschool change:

The Center for Public Education reports that the core requirements for the success of pre-K programs include highly trained teachers with expertise in early childhood education, learning goals tied to K–12 standards, low child/staff ratios, and small class sizes. This project will enable the staff to meet those requirements in terms of literacy. Staff will begin this fall to revamp early literacy programming to meet the coming EC Common Core Standards, as well as the standards articulated by the National Association of the Education of the Young Child (NAEYC). Teachers

will collaborate with each other, with Head Start, and with the State Department of Education (SEA) to research and adopt science-based, e.g., *valid* and *reliable*, PreK literacy curriculum for K3 and K4 that correlate to K-12 standards. Currently, the group is considering adopting *Literacy Express*, curriculum for three to five-year-olds that meets evidence standards of the What Works Clearinghouse (WWC). WWC cites three studies<sup>4</sup> including 1,004 preschool children 3-5 years of age from 70 preschools. Based on these studies, the curriculum was found to have positive effects with both regular and special needs children. (It is noted that, while plans of the project reflect this curriculum, the search is on-going, and should a more *appropriate*, *proven*, *standards aligned*, and SEA approved program be found in the interim, other science-based curriculum may be requested.

Pre-school staff: In order to make program changes, preschool teachers must have additional staff. Currently, each classroom has one certified teacher and an aide at a child to teacher/aide ratio of 17:1, but there simply is not enough staff to meet the individual needs of the growing population and add still even more duties. Adding at least one more temporary certified teacher/aide duo will facilitate the staff's plans and permit sufficient one-to one attention for the children, most of whom suffer from inattention at home. New personnel will float, reducing the burden on both K3 and K4 teachers as the plans are implemented in two phases over two years.

Resources/supports: The proposed resources and supports for the project include:

1. Books, etc: The school employs proven reading curriculum and Accelerated Reader (AR) for grades K-8, with minimum reading requirements at all grade levels. The state suggestion of \$9 dollars per student for book purchases has been waived the past two years due to budget cuts, and, despite a small grant several years ago, the expanding enrollment brings rising need for reading materials at all levels. Early readers need Big Books, picture books,

books for letters, etc, and books to read together with teachers, parents and other caring adults. Lower elementary students need classroom sets for shared reading. Students in 2<sup>nd</sup> grade are required to read one chapter book per week; they need a sufficient supply to fully accomplish goals. At the upper elementary, students need nonfiction for curriculum support, as well as engaging fiction. Struggling students need easy books for intervention. And it is extremely important to add more books to support curriculum for older children, along with books that appeal to contemporary tastes, and are thus *appealing enough to entice older students to read*.

The Reading is Fundamental (RIF) website reports that there is only one book for every 300 kids in poverty. Through this project, we propose to give at least three to each child or family, and add to at least 60 books per grade level to classrooms and the library. Books will be given as incentives for students to meet assigned AR points, and will be given during events to motivate families to read together. Parents of the preschool children are required to attend one parent meeting per month; these meetings will be used in part to teach parents to read with their children, and books will be given as rewards. To insure that students have time to read, and to host special literacy events, the library media specialist has agreed to keep the library open one night per month. *Books in digital format (re technology below) will also be used for motivation.*

Materials, resources: At lower levels, especially K3, there is great need for materials that develop early language skills. The project proposes an investment in LEGO Education's products, which provide endless opportunities for oral expression and motor skills development through manipulatives and high-interest story building lessons. The LEA has applied to be part of an early childhood longitudinal study that LEGO Education is beginning to scientifically study the impact of LEGO Education on performance. Participants will receive professional development and manipulatives *specific to the study*. The reader should be aware that LEGO

Education is part of the Pitsco group of companies (best known as a national innovator in STEM education). Pitsco's founder/CEO is a long-time friend of the Cottonwood district and has often been a benefactor toward many of the district's reform efforts. He recently donated beginning LEGO curriculum and professional development for math—a value of about [REDACTED]

2) Technology: *(Under this feature, the LEA requests credit for Competitive Priority 2: Technology.)* The project proposes, first, basic presentation technologies (computer, screen, whiteboard) for the four teachers in K3 and K4, who now have no electronic teaching aids.

In addition, the program proposes implementing a modest number of iPad tablets each year of the project. Students need the portability of tablets to use both with intervention strategies and with beginning literacy skills (letter recognition, sound feedback, etc). Technologies have played a major role in literacy efforts to date, in part because of the district philosophy regarding digital fluency. The school has a substantial installation of stationary technology, along with some laptops in classes, and a limited number of mobile digital devices available through check-out. Such devices, i.e., iPads, iPods, e-readers, etc. have brought in new opportunities for teaching and learning as they are already embedded in the culture, although children in this area are victims of the digital divide. Further rationale for these technologies is in (C)(ii).

3. Professional Development: To implement the project with fidelity, a variety of professional development will be necessary for all teachers. It will include, but not be limited to: training specific to new curriculum/supports, strategies for Response to Intervention at all levels and for using new technologies in intervention, plus specific training for parental involvement. *The project's professional development will supplement, not supplant, regular district plans.*

**(b) Project design (20 points).**

*(i) Extent to which the goals, objectives, and outcomes to be achieved by the proposed project are clearly specified and measurable. (5 points)*

The LEA's overall GOAL is to implement an innovative program that will improve

literacy skills among all Cottonwood clients and, subsequently, encourage children to read.

Program designers have established two process objectives for the LEA and one performance objective for students. They mirror the intended outcomes of the statute, and will provide the data for GPRA performance measures as well as the data needed for local decision-making.

**(Process) Objective 1: The LEA will promote early literacy for young children**

Expected outcomes:

1.1. Two additional preschool teaching staff will increase one-to-one and small group instruction for the children and enable staff to develop EC plans aligned with new state standards.

*Measures: Personnel records, program documentation, focus group interview*

1.2. Students will use state-of-the art curriculum, materials, e.g., books & manipulatives, and technology, to stimulate earliest literacy skills, e.g., oral language, letter recognition, etc.

*Measures: Observation, focus group, project records*

1.3. Teachers will employ three-tier response to intervention (RtI) at all levels.

*Measures: Observation, interview, project records*

1.4. All teachers will participate in professional development at least quarterly, emphasizing strategies for teaching literacy and literacy intervention as it pertains to their grade level.

*Measures: District professional development feedback/evaluation forms.*

1.5. Parental outreach employing personal contact, books, technology, and special events will teach/encourage parents to read with the children.

*Measures: Contact records, participant surveys, attendance logs*

**(Process Objective 2. The LEA will motivate older children to read.**

Expected Outcomes:

2.1. By the end of the project, surveys of older students (6th-8<sup>th</sup>) will show that the project (books, technologies, RtI) has increased their desire to read.

*Measures: Student survey, interview, anecdotal records*

2.2. Program staff will host quarterly literacy events for students and parents that will include, but not be limited to, book give-aways, digitally delivered books, family reading nights.

*Measures: Attendance logs, interview*

2.3. The LEA will adjust schedules as necessary to provide free reading blocks for students both during the school day and during the afterschool program (21<sup>st</sup> CCLC), as well as at night.

*Measures: Daily and afterschool schedules, night attendance logs.*

(Performance) Objective 3. Students will increase their academic achievement

Expected outcomes:

3.1. By the end of each project year, 70% of the children in K3 will be “on track,” 15% will be “emerging,” and no more than 15% will be “struggling” as indicated by assessment of oral language skills.

*Measures: Grade records, district assessment tools, teacher evaluation rubric*

3.2. By the end of each project year, 80% of the 4-year-olds (K4) will be “on track,” 10% will be “emerging,” and no more than 10% will be “struggling,” as indicated by assessment of oral language skills.

*Measures: Grade records, district assessment tools, teacher evaluation rubric*

3.3. Using 2012 as baseline, the percentage of 3<sup>rd</sup> - 8<sup>th</sup> grade students who score above average on the annual achievement tests (reading/language arts) will increase by 15% each project year.

*Measures: State, district achievement tests with previous year baseline, DIBELS, grade reports*

3.4. By the end of the project period, all Cottonwood children will read on level by the end of third grade (NCLB standard).

*Measures: DIBELS benchmark assessment, State and/or district achievement test results with each previous year as baseline.*

*(ii) Extent to which project will be coordinated with similar/related efforts, and other appropriate community/state/federal resources. (5 points)*

In this district, no resource is ever wasted, so it is school policy to maximize resources and avoid duplication. This project will be coordinated similarly. For example, K3 and K4 programs are coordinated with Head Start already, so resources and activities from the grant will be joined with those. Administrators will see that grant funds are coordinated as appropriate with federal programs such as Title I, Title II, and REAP, as well as any other suitable program.

Project activities are correlated to the district's other reform efforts, too, specifically reading instruction. The LEA already has an enormous investment in research-based curriculum, so funds are requested only for support of the intervention aspect of literacy and the development and alignment of early childhood literacy with K-12 and Common Core Standards. To make the most of all acquisitions, the books and technologies requested for the project will be coordinated with those of the district's library program and managed by the library media specialist (LMS). Book give-aways will be channeled through special library events, as teachers and the LMS already collaborate regularly on ways to boost literacy in all classes. It is important to note that the library has invested in Kurzweil, a science-based adaptive technology for hearing and visually-impaired students, and for the ELL or learning disabled. Kurzweil will also be used with the project's technologies. Literacy project activities will be coordinated with after-school program activities, and, in order to better accommodate working parents, special events of the project will also be hosted during after-school. Professional development activities of the project will be joined with but not supplant, the district's regular professional development, especially since implementing intervention will occupy a great deal of regular professional development.

Finally, the LEA pledges all office supplies and equipment needed by the project and assures any room reassignment as needed to provide facilities conducive to project efforts.

*(iii) Extent to which project is part of comprehensive effort to improve teaching/learning and support rigorous academic standards (5 points)*

In some ways, Cottonwood is a Cinderella story. Because of on-going massive reform efforts, student performance has improved dramatically, enrollment has grown almost five-fold, and the district is often used as a model by school leaders statewide. Increased literacy skills via science-based reading curriculum, technology, and on-going teacher training have been the primary reasons for the successes. The funding from this project is needed to advance these long-term efforts, because as more students have enrolled, resources have become inadequate.

For children here, the push for literacy must start early, and proven intervention is a must. But comprehensive efforts are weakened by the absence of books, materials, new technologies, and highly-trained teachers. The LEA continues to pour as many resources as possible into efforts to close the gap between the district's high performers and those who struggle, but sometimes those resources are simply insufficient. Teachers must have high-quality instructional supports and proven professional development if they are to help all students become proficient.

Comprehensive efforts to improve teaching/learning and support rigorous academic standards are priorities, not only for the district, but also for the state. In its efforts to be proactive, the state has issued three mandates which affect this project: 1) a new pass-fail law says every child must pass third grade or be retained, 2) all districts are required to implement a science-based evaluation model for teacher effectiveness this year, and 3) all students are expected to meet rigorous Common Core Standards by 2015 (EC Standards are due out any day now). So, this project will not only help children close the gaps cited earlier, it is comprehensive in scope such that it will help the district meet standards and comply with state and federal law.

*(iv) Extent to which performance feedback and continuous improvement are integral to the design of the proposed project. (5 points)*

Performance feedback and continuous improvement are fundamental to the project, in that the project is part of the district's on-going efforts. Frequent progress monitoring is a

common strategy of existing literacy curriculum because Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment is built into the K-8<sup>th</sup> grade reading program. DIBELS allows teachers to regularly monitor not only performance levels, but also to address any *specific* weakness in progress, i.e., phonics, vocabulary, etc. At the PK level, students are assessed by a variety of age-appropriate tools, both by the teachers and by the school counselor and psychologist. In its alignment with K-8, the new preschool programming teachers will be expected to develop their own early literacy assessment rubric, which can be used to quickly monitor the development of the beginning learners. Also, the state administers the annual student performance evaluation of core curriculum, and the LEA administers the Stanford 10 to all grade levels each spring. Sufficient data will be available for astute decisions regarding student progress and any need for change to ensure continuing improvement.

Monitoring of the project itself: The proposal requests funding for a half-time director to see that all aspects of the project are operating as intended. In addition, an internal data collection team will be appointed to make sure sufficient data are available to the evaluators of the project, who will provide periodic feedback to project leaders. Since the professional development component will be coordinated with the regular professional development schedule, and an evaluation of each activity is a matter of policy, feedback is assured for that feature.

And significantly, every Friday afternoon, the entire teaching staff meets for Roll Up-Roll Back, a process adapted from the highly-acclaimed reform model Success for All. During Roll Up-Roll Back, the staff makes decisions as to whether to move individual students forward or backward in placement and/or lesson assignment, helping assure improvement for every student. They also discuss the success or weakness of instruction during these meetings. The meetings will guarantee continuous monitoring of both student and project progress.

**(c) Quality of the project services (25 points).**

*(i) Quality and sufficiency of strategies for ensuring equal access and treatment for eligible project participants who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability. (10 points)*

Equity is especially important here as, in essence, Cottonwood is made up of members of groups that are often discounted or disenfranchised. Part of the district's mission is *to see that no one is underrepresented* due to race, ethnicity, disability, gender, social status, or any condition which often results in discrimination. The district's diverse population includes inordinately high numbers of minority students, students with disabilities, and students who are socio-economically disadvantaged. About a fourth of the staff and support personnel are minority, and one teacher is wheelchair-bound.

Students and families affected by disabilities and less than enviable family conditions often are without books, technologies, and other literacy resources within the home. The LEA pledges that all services and resources of this program will be easily accessible to all these children and their parents, including not only equitable book distribution, but also access to all education materials, technology, interventions, and digitally-delivered literacy efforts.

Because the parents of so many of our children are often not amenable to participating in school activities, project staff will conduct outreach activities, such as personal contact and home visits. They will host family literacy events during extended school hours and evenings. They will provide or facilitate *training programs in a respectful environment* to help parents learn to read with, and to, their children and to encourage their participation.

The LEA is particularly attuned to fairness in administering all services, including this project; all clients are eligible and will be included. A full GEPA statement has been attached.

*(ii) Extent to which services to be provided by project are appropriate to needs of intended recipients or beneficiaries of services. (10 points)*

Services of the project are age and developmentally appropriate to all intended recipients.

They have been drafted to meet the assessed needs of each group of beneficiaries:

Early childhood: District assessment tools show that only about 10% of the K3 and new K4 students enter school developmentally on level, so there is great need for one-to-one and small group interaction. While it meets minimum state requirements, the teacher-pupil ratio is far from optimal, given the diverse nature of the children being served. Only four certified early childhood teachers are available to teach 65-75 children per year. Aides are not qualified to conduct assessment and evaluation, craft curriculum, and determine interventions. Additionally, with the state looking to release new early childhood standards for core curriculum, teachers will have even less time to provide the individual attention that this age group so critically needs. Additional teaching staff is needed to give teachers time to collaborate on procedures for meeting standards, develop and align additional curriculum and still meet student needs.

All grades: Latest available data indicated 66% of Cottonwood's students scored proficient or better in reading/language arts (only 14% were advanced), but at least an additional *14% need limited intervention* to reach proficiency, and another *19% need intense proven literacy intervention* to avoid failure. The resources of this grant will support implementation of a science-based intervention (RtI), which is proven effective in populations like Cottonwood's.

Materials and technologies proposed for the project have been carefully chosen to meet the needs of the specific groups of children. While to the untrained eye, LEGO literacy materials appear to be simple toys, they are actually sophisticated story building materials that teach verbal and pre-reading skills along with motor skills for the very young. The request for iPads is based on the multi-functionality of tablet technology. iPads are cost effective in that they are both e-reader and computer. They are portable and lightweight, and they lend themselves to developmentally appropriate learning practices for students of all ages. Hundreds of apps and

electronic books are available that address literacy struggles and interests of all learners.

iPads are motivational for beginning reader and older user alike, inspiring each to read more, better, and together. The benefits of iPads in early childhood include “easy manipulation of the touchscreen, breadth of available content that far exceeds that of any textbook, digital storytelling, plentiful apps for phonics, building words, letter recognition, letter formation, photos, stories and storytelling.”<sup>5</sup> The benefit for older users, especially those who struggle with disabilities, is, among other things, that they can “control the font size and page orientation to suit their individual needs and preferences, highlight text to mark key passages, insert notes in response to the text, access a built-in dictionary to develop vocabulary and word consciousness, and use a text-to-speech feature to practice reading fluency. By recording and reviewing the students’ use of these tools and features, teachers can learn much about students’ skills and progress.”<sup>6</sup> And the “cool factor” of course, is a prime motivator for older students to read more.

Admittedly, *pure research* on the value of tablet technology in education, especially EC, is virtually non-existent, because it is so new, but there is solid evidence that even young children are digitally connected. Studies from the Joan Cooney Center at Sesame Workshop report that about 80% of 3-5 year olds have hand held electronic media toys, and that at age three about a fourth of the nation’s children go online daily, increasing to two-thirds by age eight.<sup>7</sup> In 2012 the NAEYC altered its earlier position and joined the Fred Rogers Center to issue a joint statement saying, “When used intentionally and appropriately, technology and interactive media are effective tools to support learning and development [for young children].”<sup>8</sup> The position adds that technology can better meet individual needs, support interaction with parents, and provide children opportunity for study and mastery beyond traditional preschool materials.

Services to better prepare teachers re literacy: Gaps in student performance indicate the

need for improved literacy-related teaching skills among teachers. The need is emphasized by recent state legislation requiring every district to adopt and implement a science-based Model of Teacher Evaluation by 2013-14. Cottonwood will be implementing the Marzano Model beginning this year, which reflects parallel gains between the assessment of teacher performance and student performance and examines strategies known to influence achievement. One component of the Marzano Model's research confirms the positive effect of technology on teacher effectiveness. It is relevant that this science-based model for evaluation correlates to the science-based model of the Three Tier Response to Intervention to be implemented concurrently.

*(iii) Extent to which training or professional development services to be provided by the project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of those services. (5 points)*

Training/professional development within the project takes two forms: 1) that to be provided by the project and 2) that which supports the project but will be provided from other sources. The project's professional development covers 1) help to meet the coming Core Curriculum Standards for early childhood, 2) assistance in using new materials and technologies, 3) technology integration, and 4) parental involvement. Relevant supportive training and professional development will include 1) strategies for intervention, 2) implementation of the Marzano model for teacher effectiveness, 3) procedures for addressing standards school-wide, 4) library media services in support of instruction, and 5) compliance with OK law and the NCLB.

The LEA is fortunate to have excellent resources for early childhood and overall professional development as it relates to literacy, as both the superintendent who initiated the K3 program at Cottonwood and a former K4 teacher (the first to use tablet technology with preschoolers) now work for the Division of Early Childhood at the SEA. Part of their jobs is to assist with development and implementation of new standards. The LEA will rely on their familiarity with local issues to plan professional development re programming and compliance.

There will be need for training for ways to put into operation new curriculum and supports for preK. Professional development/training will be part of the purchase contract from product providers of both LEGO and EC curriculum. Also, the LEA will enlist the help of personnel from the State Department of Education to customize professional development for age-appropriate and grade level uses of the requested technology. And the library media specialist and teachers will craft training for involving parents in the literacy activities.

**(d) Adequacy of resources (10 points).**

*(i) Extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project. (5 points)*

The cost of this initiative is realistic, but modest, largely because of the preliminary work toward literacy that has already been done in the district. The project is designed to meet the literacy needs of *all students* at Cottonwood. It is of monumental significance to the clients of this district, most of whom are at risk according to every agency that establishes such criteria. It should be significant to districts with similar demographics, as well.

The greatest share of the project's budget will go toward the educational resources necessary to carry out the project's services to children. The cost for curriculum materials, supplies, and technologies represent just under half the total cost of the project. The cost for teaching personnel represents just less than a third, including stipends for teacher overtime. The cost for administering the project is about [REDACTED], including the project director's salary [REDACTED]), the cost for evaluation ([REDACTED]), professional development [REDACTED], and indirect costs [REDACTED]

*(ii) Extent to which costs are reasonable in relation to the number of persons to be served and to the anticipated results and benefits. (5 points)*

Studies have for decades shown the negative social and financial consequences of an illiterate citizenry. The cost per child involved in this project is negligible, given the promise that 250 children will not become part of the grim statistics.

The cost for each pre-K child to be served by this project is about [REDACTED]; for each child

school-wide, it is about [REDACTED]. The Center for Public Education reports that in 2005, states spent in excess of \$3,500 per child on pre-K services.<sup>9</sup> The Bureau of Labor Statistics reported costs of about \$10,000 per K-12 child. A quick review from accounting shows last year's cost to the district's budget for K3 alone (there are no state funds for K3) was more than [REDACTED] per student.

According to the National Institute for Literacy, as many as 44 million US adults are functionally illiterate, costing society an estimated \$240 billion each year in lost industrial productivity, unrealized tax revenues, welfare, crime, poverty, and related social ills.<sup>10</sup> That represents a cost of almost \$5,500 per illiterate. In Oklahoma, the cost of incarceration of one offender for a year is \$16,539<sup>11</sup> and, according to the US Census, 80% of the prison population is either illiterate or low-level readers. The Center on the Developing Child at Harvard University reports that three of the most rigorous long-term studies found returns of between \$4 and \$9 for every dollar invested in early learning programs for low income children.<sup>12</sup> If the NIL is right, seeing that every child in Cottonwood is literate will save the public about \$1.38 million. If Harvard is correct, society can expect a return of \$1.8 million from the participants.

Given all these facts, literacy has long term advantages and illiteracy has long term tragedy. This project, which builds the capacity of the district to reverse so many potentially negative conditions, seems a sound investment.

**(e) Quality of the management plan (20 points).**

*(i) Adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks. (10 points)*

1) Project administrator: Mr. John Daniel, the superintendent, will have administrative oversight over the project. He has administered large grants from both state and federal agencies without incident, including the Carol White PEP and the 21<sup>st</sup> Century Learning Centers grants.

2) Project director: The current school counselor, who is certified and experienced in early childhood education, special education, and school counseling, will serve as the .50 FTE

project director and another counselor will be hired to replace her. She is a career educator with experience in grants management. She will oversee all aspects of the project, collaborate with and advise early childhood staff, cooperate with the library to ensure the distribution of all acquisitions, and supervise data collection. She will lead efforts to engage parents. She will meet regularly with evaluators, administrators and teachers.

3) LMS: The library media specialist, a career educator with both library development and grants management, will be instrumental in the implementation of the project. She will be charged with receiving, cataloging, and maintaining records for all the library media to be used in the project. She will work closely with the director on materials distribution and will collaborate with teachers and the director regarding new early childhood programming.

Resumes for project leaders are attached, along with a job description for the director.

An internal data collection team of the most competent and experienced teachers will be chosen to help the project director gather data and other records for evaluation. The LEA will engage Melton Education Consulting to determine the project's implementation and progress. The contracted firm has years of successful experience in both grants management and evaluation. Project personnel will employ the following timeline for implementation:

<u>TIMELINE</u>			
<b>Time</b>	<b>Activity</b>	<b>Milestones</b>	<b>Respons</b>
Upon school start:	Teachers begin curriculum search, alignment, assessment rubric. Pre-K assessed with concentration on oral language skills. Regular professional development to include three-tier RtI, Marzano Method of teacher eval.	Meeting with EC Standards staff of SEA, Work with Head Start, psychologist on assessment. Meet re RtI and Marzano Method	Teachers, Admin, Project Director, Prof Dev comm
Upon funding	Hire teacher and assistant. Set duty assignment and rotation schedules. Schedule all	Job notice, interviews. Newspaper articles, letters	Supt, Project Director

	professional development; Engage all contractors; appoint data collection team; Advertise program to families, public. Align project with after-school. Order all materials, technologies. PreK chooses curriculum.	home, phone calls. Implement RtI. Consult SEA re EC Standards. First recorded progress monitoring to set baselines.	(PD), LMS, Staff, teachers
Oct 1-31 2012	First professional development; Receive and put into use <u>all</u> project holdings. First parent participation program; Roll out first book give-away promo. Select internal data team. First quarterly eval meeting to set baselines, design data collection tools.	Phone calls, visits. Prelim meet with evaluators. Survey students on reading habits, motivation. Align AR w/project.	PD, LMS, teachers, contract evaluators
Nov 1, 2012	Host first book give-away; Continue to receive, catalog, distribute acquisitions; coach pre-K teacher collaboration	Implement PK curriculum. Implement technologies, manipulative	PD, LMS, teachers
Mnthly	On-going implementation of materials, program. Continue monthly family nights, professional development, data collection; Provide, evaluate professional development/training as needed.	Progress monitoring. Data team meetings. Outreach to parents.	PD, LMS, staff
Qtrly:	Assess data and findings and suggest program adjustments as needed. Student evaluation, grade reports. Host book give-aways at various levels	Meet with evaluators. Reports to parents, data to evaluators. Project modifications employed.	Evaluators, PD, Adm, teachers, LMS
Annual	Administer state, local standardized tests. Submit end of year project reports to appropriate entities.	Surveys, interviews with teachers, students. Data compilation.	State, district PD, Evaluators
On-going	RtI at all levels as needed. Prof dev as needed. PK teacher collaboration/prog adjustment.	Progress monitoring of all students. Prof dev feedback. Fri Roll up-Roll back meets.	K3-8 <sup>th</sup> grade teachers, PD

*(ii) Extent to which time commitments of project director, principal investigator and other key project personnel are appropriate and adequate to meet the objectives of the proposed project. (5 points)*

The LEA has judged the time commitments of all project personnel carefully. A .50 FTE project

director has been chosen to lead implementation of the project, because so many of the project's activities are correlated to other programs with staff already in place and ready to help. Once the project's acquisitions are in place, the director will devote her time to leadership. She will guide collaborative efforts of the PK staff, schedule and facilitate professional development for all staff, and serve as liaison between staff, administration, service providers, vendors, the SEA, and project grantors. She will supervise the data collection team and meet regularly with evaluators. She will unquestionably be busy, but half-time is sufficient.

The temporary teaching staff—one certified EC teacher, one assistant—to be funded by the project will be full-time project employees. They are needed to reduce the burden on teachers as they work to upgrade programming while ensuring adequate individual and small group time for the children in K3 and K4.

In that they are all teachers of literacy, regardless of their subject assignment, the entire staff is key personnel. The training and professional development required by the program will demand of them some commitment beyond the school day, so a minimal amount of funding is requested for stipends. Once the project is in place, it should reduce, not increase their work load.

The principle investigator, or external evaluator, is expected to visit four to five times during the year: once at the outset, twice mid-year, and again at the end of the year. The chosen firm has done work for this district in the past. Their cost is reasonable, and the service is outstanding. Since an internal data collection team will be in charge of gathering information, and most of the work of evaluation is off-site, four to five visits should be reasonable.

*(iii) Adequacy of mechanisms for ensuring high-quality products and services from the proposed project. (5 points)*

High Quality Products: Developers of the project have been careful to ensure only the highest quality of all components of the project. The program will itself produce no products, but those it has chosen to use are all backed by the highest standards of excellence and value.

Curriculum is backed by scientific research and proven effective in student populations such as Cottonwood's. Manipulatives and technologies are all from providers that are recognized and respected in the field of education, as is noted throughout the narrative. Books will be selected by the district library media specialist and the project director, with input from teachers, students, and parents. The expertise of the LMS and the PD guarantees highest quality and safeguards.

High Quality Services: The services to be offered by the project are backed by the highest standards of educational practice and pedagogy. Teaching practices such as low student teacher ratios, small classes, one-to-one instruction, parental involvement, and chosen intervention strategies are all scientifically research-based or backed by significant research.

It is no accident that services, acquisitions, and project staff have been chosen from among the highest quality. High-quality reform efforts have moved the entire district from at-risk to exemplary. Multiple mechanisms—personnel, materials, practices—are in place to ensure that this high quality literacy project will fit seamlessly into the overall efforts.

**(f) Quality of the project evaluation (15 points).**

*(i) Extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible. (10 points)*

The matrix below illustrates that, to the extent possible, evaluation measures produce both quantitative and qualitative data. Evaluators will rely on multiple methods of evaluation, from objective achievement tests that will be used to quantify student success to subjective methods that will qualify the extent to which the project has met intended outcomes.

Measuring the impact on learning: Quantitative data to measure academic gains of students in grades 3–8 will come from their annual scores on the state mandated Oklahoma State Core Curriculum Tests, compared to each preceding year. The district-administered Stanford 10 will be the alternate measure for classes not tested at the state level. PreK students will be assessed by usual district practice (PPVT, LAP-D, etc.) as appropriate, and their progress will be

monitored and gains determined via teacher devised skills rubric. DIBELS benchmark assessments (part of Voyager reading curriculum), and quarterly grade reports will allow progress monitoring for K-8. Evaluators will also document student progress qualitatively through observations, focus group interviews, and surveys.

*Measuring the quality of implementation:* Records generated through the process of implementation, e.g., hiring, acquisitions, activities calendars, training feedback, along with observation and interviews, will subjectively verify adherence to project plans and will provide accountability to grantors. Interviews with teachers and students at the end of each semester will examine the extent to which books, manipulatives and technology have been integrated into the curriculum, and the degree to which all have impacted student performance and motivation. Attendance records will determine the use of the library after-hours and the participation of parents. Evaluators will determine through observation and interview whether inequities exist in services, and whether measures to ensure equity are needed.

*Measuring the impact on teaching:* The usual district professional development evaluation tool will be used to determine the perceived quality of professional development and its impact on teaching. The newly adopted Marzano Model of teacher evaluation will provide evidence of teacher effectiveness, tied to student achievement. Additionally, teachers will self and peer evaluate through focus group interviews and Roll up-Roll Back meetings.

The LEA is mindful that accountability is at the forefront of education reform, and has planned its objectives, expected outcomes and evaluation to align with the established GPRA appraisal of overall effectiveness. The LEA concedes its limited evaluation skills, however, so it will contract with a professional evaluation firm to evaluate the project's implementation and results, and to consult systematically with project personnel regarding any need for redirection.

The chosen firm, Melton Education Consulting, has successfully evaluated numerous state and federal grants, including the Improving Literacy through School Libraries grant, the Carol M. White PEP grant, and the Elementary and Secondary School Counseling grant. The project director will appoint an internal data collection team to assist with data collection. The team, project leaders, and evaluator(s) will meet at the beginning of the project to gather baseline data and design collection tools, then quarterly to monitor benchmarks, and again at the end of each year to prepare the necessary reports. The Goals Chart (pp. 7-8) indicates the measures to be used for each of the expected outcomes; they are reiterated in the Evaluation Matrix below.

EVALUATION MATRIX				
Objective	Monitoring	Intended Outcomes (summary)	Measures	Data/analysis
1. Promote early literacy for young children	<ul style="list-style-type: none"> <li>-Completion of all project activities in accordance with timeline.</li> <li>-Review topics curriculum group size &amp; composition</li> <li>-Review of timeline and documents of strategies</li> </ul>	<ul style="list-style-type: none"> <li>1.1. Added preschool staff will increase one-to-one and small group instruction and enable staff to develop EC plans aligned with new state standards.</li> <li>1.2. Students will use state-of-the art curriculum, materials, e.g., <u>books &amp; manipulatives, and technology</u>, to stimulate earliest literacy skills, e.g., oral language, phonemic awareness, letter recognition, etc.</li> <li>1.3 Teachers will employ three-tier response to intervention at all levels.</li> <li>1.4. All teachers will participate in professional development at least quarterly, emphasizing strategies for teaching literacy and literacy intervention as it pertains to their grade</li> <li>1.5. Parental outreach employing personal contact, books, technology, and special</li> </ul>	<ul style="list-style-type: none"> <li>-Personnel records, program documents, focus group interview</li> <li>-Observation, focus group interviews, project records</li> <li>-Observation, interview, records</li> <li>- District PD eval forms.</li> <li>-Contact records, participant</li> </ul>	<ul style="list-style-type: none"> <li>Analyses of variance, measures of effect size, Percentages, Frequency counts</li> <li>-Qualitative Analyses</li> <li>-Frequency counts and percentages</li> <li>-Qualitative</li> </ul>

		events will teach/encourage parents to read with their children.	surveys, attendance	-Frequency counts
2. Motivate older children to read	Completion of project activities in accordance with timeline.  Periodic interview and survey	2.1. By the end of the project, surveys of older students (6th-8 <sup>th</sup> ) will show that the project (books, technologies, RtI) has increased their desire to read. 2.2. Program staff will host quarterly literacy events for students & parents that will include <u>book give-aways</u> , digitally delivered books, family reading nights. 2.3. The LEA will adjust schedules as necessary to provide free reading blocks for students both during the school day, during the afterschool program (21 <sup>st</sup> CCLC), and at night.	- Stu surveys, interviews, anecdotal records - Attendance logs, interview logs - Schedules, attendance logs	-Qualitative analyses.  -Frequency counts & percentages  -Qualitative analyses.
3. Increase student achievement	-DIBELS benchmark assessment, -Review topics curriculum group size & composition - Review Outreach Program.	3.1. By the end of each project year, 70% of the children in K3 will be “on track,” 15% will be “emerging,” and no more than 15% will be “struggling” as indicated by assessment of oral language skills. 3.2. By the end of each project year, 80% of the 4-year-olds (K4) will be “on track,” 10% will be “emerging,” and no more than 10% will be “struggling,” as indicated by assessment of oral language. 3.3. Using 2012 as baseline, the percentage of 3 <sup>rd</sup> - 8 <sup>th</sup> grade students who score above average on annual (reading/lang arts) achievement tests will increase by 15% each project year. 3.4. By the end of the project period, all Cottonwood children will read on level by the end of third grade.	-Grade records, district assessment, teacher evaluation rubric  - State, district achievement tests, DIBELS, quarterly grade reports	Quantitative analyses,  -Mean rating  Analysis of variance

*(ii) Extent methods of evaluation provide performance feedback and permit periodic assessment of progress toward outcomes. (5 points)*

Evaluation will be utilization-focused, relying on data regarding starting conditions, procedures, and results. On-going monitoring of activities will assess whether the project is moving ahead as intended and whether student achievement is being influenced. Evaluation meetings will be held quarterly, and feedback will provide periodic information regarding the extent to which objectives are being reached. The loop from outcomes to intents will allow for immediate decisions on whether to continue, modify, or abandon any activity.

On-going analysis of success is guaranteed by sustained monitoring of both student performance through progress monitoring tools of the curriculum, and of program implementation through subjective measures such as interview and observation. Periodic meetings between program staff and the evaluators, along with teacher/LMS collaboration and Roll up-Roll back sessions, re (b)(4)(p 11), will also guarantee periodic assessment of progress.

Summative evaluation:

At the end of the project period, evaluator(s) will conduct a final evaluation and prepare reports to the proper entities at the time and in the format required or requested. The summation presented to the LEA will include the quality and efficiency with which the project was implemented and its impact on teacher competencies and improved student academic performance. Project administrators will then submit the findings to all appropriate entities, including state and federal departments of education, stakeholders and community, as well as to any other district that might want to replicate the program.

## ENDNOTES

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<sup>1</sup> *Adult Literacy in Oklahoma*, Oklahoma Department of Libraries informational brochure, 2009. Statewide, the Literacy Office estimates 19% of the adults over age 25 to have less than a high school diploma.

<sup>2</sup> The state's *Annual Report Card 2010-2011* showed the following students scored limited knowledge or unsatisfactory (bottom two quartiles) in reading: 3<sup>rd</sup> grade: 13%, 4<sup>th</sup> grade: 8%, 5<sup>th</sup> grade: 19%, 6<sup>th</sup> grade: 22%, 7<sup>th</sup> grade: 20%, 8<sup>th</sup> grade: 12%. Other grades are not tested by the state. The Academic Performance Index was 1426; the state average was 1289.

<sup>3</sup> The three-tier approach has been researched in at least three longitudinal studies. The one with demographics most like Cottonwood's was carried out at the University of Texas with students K-3rd over a period of three years. Researchers Vaughn and Linan-Thompson addressed preventing reading difficulties and disabilities.

<sup>4</sup> (Lonigan, 2005, 2006) findings showed statistically significant differences between the *Literacy Express* group and the control group on 5 of 11 outcome measures. Also, research literature (Lonigan, Farver, Clancy-Menchetti, & Phillips, 2005)

<sup>5</sup> *Using iPads in Early Childhood Education*, Debbie Piecka, NASATALK website, <http://www.nasatalk.com/index2>, July 28, 2012.

<sup>6</sup> *Read, Write, Think*. International Reading Association. Larson, L.C. (2010). Digital readers: The next chapter in e-book reading and response. *The Reading Teacher*, 64(1), 15-22.

<sup>7</sup> *Always connected: The new digital media habits of young children*, Gutnick, Robb, Takeuchi, Kotler, with a preface by: Lewis Bernstein & Michael H. Levine © Sesame Workshop and the Joan Ganz Cooney Center,

<sup>8</sup> *Position Statement on Technology and Interactive Media in Early Childhood Programs*, Key Messages of the NAEYC/Fred Rogers Center, copyright 2012. NAEYC website July 28, 2012.

<sup>9</sup> <http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-Kindergarten/Pre-kindergarten-What-the-research-shows.html>. During the 2004–2005 school year, states spent an average of \$3,551 per child on pre-k services.

<sup>10</sup> <http://washingtoncountyliteracycouncil.org/> Resource: National Council on Literacy, August 5, 2012.

<sup>11</sup> OK Dept of Corrections website, 2012

<sup>12</sup> [Http://developingchild.harvard.edu/index.php/resources/multimedia/interactive\\_features/five-numbers/#](http://developingchild.harvard.edu/index.php/resources/multimedia/interactive_features/five-numbers/#). Masse and Barnett, *A Benefit Cost Analysis of the Abecedarian Early Childhood Intervention* (2002); Karoly et al, *Early Childhood Interventions: Proven Results, Future Promise* (2005); Heckman et al, *Effect of the Perry Preschool Program on the Cognitive and Non-Cognitive Skills of its Participants* (2009)