

1. NEED FOR THE PROJECT (15 points)

ABSOLUTE PRIORITY: Integrating standards-based arts education into the core elementary curriculum, strengthening standards-based arts instruction in the elementary grades, and improving the academic performance of students in elementary grades, including their skills in creating, performing, and responding to the arts.

A. Addressing Needs of Students at Risk of Educational Failure

The Newark Public Schools, the largest school district in New Jersey, proposes a *Newark Arts Integrated into Literacy* project designed to serve early learners who are at risk of educational failure. The 39,440 students enrolled in the district in SY 2009-2010 reside in a city where per capita income is less than 60 percent than that for the state; 79.5 percent of the children and youth enrolled in district schools are from families with incomes that qualify them for federal free or reduced-price lunches; and economic distress, high crime rates, high incidence of drug abuse, and relatively poor health and educational outcomes prevail. All of these conditions are strongly associated with low student achievement and risk of academic failure.

The district identified **literacy** as the core academic area and primary **Grades 2 and 3** as the focal point for this model arts integration and dissemination project because the data reveal a critical need to improve student outcomes.

The Newark school district uses two measures to assess elementary student performance in reading/language arts/literacy. In the early elementary grades (K-Grade 2), the district employs the Developmental Reading Assessment (DRA). This text level reading measure provides the teacher with a discrete institutional reading level for each child, spanning a range of text difficulty from emergent through Grade 5. All students are expected to achieve a Scaled Score of 8/DRA Level 24-28. Students who do not reach this benchmark are not meeting grade

level expectations. *Seventy-six percent of the district's second grade classes failed to meet the 80 percent passing benchmark in the spring 2009 administration of this instrument.*

The other major assessment instrument used by the district is the New Jersey Assessment of Skills and Knowledge (NJASK), the state-mandated standardized testing program for Grades 3 through 5. The NJ Department of Education expects at least 75 percent of students in each school to pass this assessment in each core subject and grade level. *Only 40.4 percent of Newark third grade students performed at a proficient level in language arts literacy (LAL) in the spring 2009 administration of the NJASK3.* Moreover, barely 2.2 percent of third grade students performed at a level of advanced proficiency on this test.

The unacceptably low level of student performance in language arts literacy on the two assessments is district-wide. Of the district's 50 schools that enroll students in Grades 2 and 3, only 17 schools met the assessment standard for the DRA and only one school met the standard on the NJASK3. A total of 26 of Newark's 50 elementary schools have been deemed in need of improvement according to the *No Child Left Behind* requirements. The percentage of students eligible for free or reduced-price lunch in these 26 poor performing schools exceeds 35 percent, as required by this grant.

**Table 1. 2008-2009 Student Performance Data
for Elementary Schools in Need of Improvement**

Newark Arts Integration into Literacy Project

School	Eligibility for Free or Reduced- price Lunch	Developmental Reading Assessment Percent above Benchmark (Grade 2 Enrollment)	NJASK3 State Assessment in Language Arts/Literacy	
			Proficient (Grade 3 Enrollment)	Advanced Proficient
Abington Avenue	89.97%	72% (of 72)	70.2% (of 104)	0.1%
Avon Avenue	84.47%	54 % (of 56)	20.0% (of 65)	0.0%
Bragaw Avenue	78.01%	71% (of 38)	33.3% (of 44)	3.7%
Chancellor Avenue/Annex	91.67%	82% (of 83)	28.0% (of 54)	2.0%
Dayton Street	90.78%	65% (of 26)	12.0% (of 22)	N/A%
Dr. E. Alma Flagg	93.08%	68% (of 44)	29.2% (of 57)	0.0%
Dr. Martin L. King, Jr.	91.06%	70% (of 42)	25.0% (of 50)	0.0%
Dr. William Horton	82.81%	67% (of 90)	30.4% (of 94)	0.9%
Fifteenth Avenue	88.67%	41% (of 30)	12.9% (of 33)	0.0%
First Avenue	86.03%	76 % (of 117)	45.7% (of 141)	0.8%
Franklin	94.63%	57% (of 114)	63.6% (of 98)	0.1%

George W. Carver	67.51%	53% (of 65)	17.3% (of 61)	0.0%
Hawkins Street	48.99%	71% (of 57)	39.6% (of 67)	0.0%
Louise A. Spencer	83.64%	83 % (of 55)	21.3% (of 50)	0.0%
Madison Avenue	87.26%	67% (of 76)	27.8% (of 59)	0.0%
McKinley	89.50%	75% (of 52)	32.4% (of 57)	0.0%
Miller Street	97.31%	60% (of 52)	32.3% (of 60)	0.0%
Newton Street	83.75%	88% (of 32)	34.0% (of 38)	0.0%
Oliver Street	77.51%	90% (of 89)	73.1% (of 85)	1.3%
Peshine Avenue	90.98%	73% (of 64)	21.4% (of 48)	1.4%
Quitman Street	82.91%	69% (of 58)	18.6 (of 55)	0.0%
Rafael Hernandez	91.52%	63% (of 36)	47.2% (of 37)	0.0%
Roberto Clemente	92.52%	77 % (of 112)	67.7%(of 109)	2.0%
South 17 th Street	83.44%	73% (of 48)	24.5%(of 58)	0.0%
Sussex Avenue	91.42	72 % (of 57)	33.3%(of 57)	0.0%
Thirteenth Avenue	88.73%	46% (of 51)	17.0%(of 59)	0.0%

B. Addressing Identified Gaps and Weaknesses

The Newark Public Schools have experienced stagnant student achievement for decades, although there have been limited bright spots (for example, students at the district's selective small magnet high schools exceed state standards). The district's first new Superintendent in nine years has challenged the Newark community to raise the bar for all students and staff. The priorities, strategies, and actions that the district must take are laid out in *Great Expectations:2009-2013 Strategic Plan* (www.nps.k12.nj.us). The plan was carefully crafted, guided by public discussion, and informed by data. The goals for 2013 are challenging, with student achievement goals spanning the entire Pre-K to college pipeline, as follows:

- Ready to learn by kindergarten. 80 percent of our students ready by 2013, up from 64 percent in 2008-09.
- **Reading and writing at grade level by the end of Grade 3.** 80 percent ready by 2013, up from 40 percent in 2008-09.
- Ready for the middle grades. 80 percent of Grade 5 students proficient or above in LAL and 85 percent proficient or above in math, up from 40 and 59 percent, respectively, in 2008-09.
- Ready for high school. 80 percent will be “on track for graduation,” an increase from 38 percent of 2009-10 freshmen.
- Ready for college or work. 80 percent will graduate, and 80 percent of graduates will enroll in college, respective increases from 54 percent and 38 percent in 2008-09.

We believe that an integrated arts approach will support reading and writing so that students are indeed on or exceed grade-level expectations by the end of Grade 3.

Comprehensive data analyses of the DRA and NJASK assessments show that the specific skills that are in need of improvement for Grade 2 and 3 students are: sequencing,

comprehension, making inferences, making predictions, making connections, responding to open-ended questions, writing narrative pieces using descriptive language and grade-level vocabulary. **Each of these skill areas will be addressed through a targeted, integrated visual arts education approach where classroom LAL teachers and the arts educator collaborate in lesson planning and implementation.**

Newark is fortunate in that a full-time arts educator is assigned to each elementary school. Moreover, the *New Jersey Core Curriculum Content Standards* include standards for arts education that are aligned with national standards, and that support arts instruction. Yet, arts educators and LAL educators in the district do not work collaboratively in a systematic way. To be sure, collaboration occurs in some schools, most often in the higher-performing schools, but in low-performing schools where students are most at risk, such collaboration is inconsistent, not necessarily tied to the district's curriculum, and lacking the standards of practice and documentation of success that could result in replication and dissemination.

The *Newark Arts Integrated into Literacy* project intends to integrate arts education into reading/language arts/literacy instruction in order to extend and enhance the school curriculum in both reading/language arts/literacy and the visual arts, resulting in higher student achievement.

This will be accomplished through the:

- Development of model integrated lesson plans of visual arts in the LAL curriculum, beginning in Grade 2;
- Sustained supported professional development, including in-class support, to promote team planning and team teaching; and

- Collaborative network of community partners, most notably museum educators from The Newark Museum, as well as visiting artists who will support the professional development of the teams of classroom LAL teachers and arts educators in arts integration.

As a result of these efforts, Newark's highly-qualified professional educators will lead Newark students to meet *New Jersey's Core Curriculum Content Standards* in reading/language arts/literacy and the visual arts, and demonstrate a process that can be replicated across the district and shared with educators nationally.

Need for Authentic, Sustained Collaboration: As often happens in large school districts, the Offices of Visual and Performing Arts and Language Arts Literacy have no history of collaboration around a shared vision. Collaborations at the school level are typically dependent on administrative support and personal relationships among teachers. Central office mandates promote collaboration, but are project-centered and do not address LAL or arts educator teacher practice and student learning on a sustained basis. For example, the district launched a literacy campaign during the 2008-09 school year to encourage independent reading. Art teachers in each school designed and created “reading dragons” to capture the number of books students read. Dragons wrapped around the school hallways and each scale on the dragon noted the name of the book, student, and classroom. When visitors entered a building, the visual effect was immediate, and students were proud to point to their scales on the dragon’s tail that was near their classroom. Art teachers also supported the development of culminating projects illustrative of the 2009 summer reading initiative (the first summer that the district provided reading lists to all students in each grade). These recent projects are evidence that literacy and art can work well together, but fall short of the type of collaboration that research demonstrates can contribute to higher student outcomes.

Mary Alice White, the late professor of psychology and education at Columbia University, investigated ways in which technology -- including computers and television -- changes the way children learn. As early as 1980, Dr. White recognized the significance of technology-based learning and the growing need for visual literacy among children. She said, "Young people learn more than half of what they know from visual information, but few schools have an explicit curriculum to show students how to think critically about visual data." Visual art provides an excellent opportunity to build on children's interest in the visual world and to connect their developing visual literacy to reading and writing.

In summary, according to the most recent reading/language arts/literacy assessment data, nearly 60 percent of Newark's third grade students are at risk of education failure. The district must use *all* available resources, in new and challenging ways, if 80 percent of third grade students are to be reading on grade level by 2013, as specified in the district's 2009-2013 strategic plan. Most importantly, the district will bring to bear upon this endeavor, the heretofore largely untapped talents of the district's arts educators, to work in collaboration with second and third grade classroom teachers in addressing specific reading/language arts/literacy deficits. The *Newark Arts Integration into Literacy* project will provide the attention and resources to enable the development of skill-linked arts-integrated instructional activities and related high-quality professional development, to incorporate the talents of museum educators and visiting artists and works of art, and to result in model classrooms of arts integration that can be replicated in other Newark schools, adapted to other grades, and shared with other districts in New Jersey and across the nation.

2. SIGNIFICANCE (10 points)

INVITATIONAL PRIORITY 2 is addressed.

The *Newark Arts Integrated into Literacy (NAIL)* project takes advantage of existing human resources: classroom LAL teachers, arts educators, and cultural institutions committed to the arts. Even in challenging economic times, these resources still exist in many school communities across the country, and are being fought for in others. Their working together in collaboration, on a consistent basis, to turn around the academic performance of at-risk students and providing documentary evidence of success, however, has not been demonstrated. The *NAIL* project proposes to develop such a model and evaluate its effectiveness. Instructional lessons and activities developed by the project will be designed to be replicable in other schools across the nation.

The project will develop a complete curriculum set, including: a team teaching guide for the collaborating professionals; visual resources; recommended age-appropriate children's books; lesson plans and related extension resources. The curriculum set will include recommendations for establishing a model classroom where the visual arts are integrated into reading and writing instruction. The district will produce the curriculum set and make it available on-line and through mass-produced CD-Roms.

The anticipated success of the *NAIL* collaboration builds on the **assets of our partners**.

- **Visual and Performing Arts educators** bring to the collaboration specific knowledge of their content area and pedagogy; knowledge of the NJ Core Curriculum Content Standards and alignment with national arts education standards; experience in working with students of diverse learning styles, and adjusting art instruction to support those styles; ongoing knowledge of the Newark arts community; and experience as both producers of art and

facilitators of art connections to the real world. Art educators note that limiting their role to specific projects or special pull-out instruction does not maximize the benefits of their skills and knowledge. Serving the “visual learner” or “tactile learner” was part of their training as art educators. As one arts educator who assisted in developing the project design described in the next section noted, “We know more about student engagement and learning styles than our colleagues realize. [Unfortunately] It’s like pulling teeth to get an administrator to see that and use us to change what goes on in the classroom.”

- **Language Arts Literacy educators** bring detailed knowledge of student reading and writing achievement based on formative and statewide assessments, and can address specific areas in need of improvement; possess deep understanding of the LAL curriculum; and know their students and classroom learning styles. The Newark district Office of LAL adopted the Harcourt Trophies curriculum for early literacy four years ago. Teachers have participated in professional development in this curriculum during contractual staff development days. The district, for example, has identified six unifying Grade 2 themes for the LAL curriculum – *Being Me, Helping Hands, Our World, Imagine That!, Neighborhood News, and Travel Time*. Teachers have experienced multiple cycles of this curriculum and know where students fall short in demonstrating knowledge and skills.
- **The Newark Museum, the lead community partner**, brings extensive knowledge of its own collections and knowledge of other collections around the county; has experience in providing and supporting professional development for public school educators; has access to working artists who can work effectively in school settings; and has extensive experience in disseminating products to regional and national audiences.

During the development of this proposal, Newark Museum educators distributed a query through the Education Committee's list-serve of the American Association of Museums. The query sought information about projects that use museum art collections to connect with language arts in early childhood in order to determine if any projects studied the impact of this connection on student achievement and teaching practice. They learned there are a few special projects that have been disseminated and some important studies that have been completed, but a need for additional projects and deeper research was indicated. Two exemplary special programs that include curriculum materials for the early childhood level were reviewed at the following museums:

- The Portland Museum of Art, Portland, Maine, developed a series of lessons and activities for grades K-2 that use their art collection to advance literacy education in Maine's elementary schools. A team of elementary school teachers from across the state participated in the project's design. The project development included teacher workshops, pilot activities, student visits to the Museum, hours of art-making, and reading great children's books. *Look at ME: Reading Art and Stories with the Portland Museum of Art*, was published in 2006. The publication presents the models that were developed with recommended visual art images and children's books. Stacy Rodenberger, Coordinator of School Programs at the Portland Museum of Art, reported that an in-depth evaluation that sought to relate this special program to student achievement in language arts has not been completed at this time.
- The Cincinnati Art Museum, Cincinnati, Ohio, developed a series of lessons and activities for early childhood (ages 3-8 years) in partnership with the Arlitt Child and Family Research & Education Center at the University of Cincinnati and the Cincinnati

Public Schools. Preschool and elementary teachers worked closely with the Museum's educators to create a set of lessons and resources that can be used in any community. Three hundred sets were produced and distributed to schools throughout the greater Cincinnati region in 2006. Each set included poster-sized reproductions, children's books, and a teaching guide. The set of lessons was also posted on the website and is available to schools anywhere in the United States (<http://www.art-throughachildseye.org/>). Emily Holtrop, Curator of Education at the Cincinnati Art Museum, said that the project resulted in a new early childhood initiative at the Museum, but that an in-depth evaluation of student achievement was not conducted.

The *Newark Arts Integrated into Literacy* proposes to develop a model demonstrating the feasibility of district internal partners and community-based external partners collaboration; how that collaboration affects direct instruction in the classroom; and how the results of that collaboration affect teacher practice and student outcomes. With little current evidence that shows the impact of this type of collaboration, the benefits of the project will extend beyond the Newark Public Schools and the City of Newark.

3. QUALITY OF THE PROJECT DESIGN (35 points)

The three goals of the *Newark Arts Integrated into Literacy* project are consistent with the goals outlined in the district's five-year strategic plan, the district's curriculum objectives, which are aligned with the curriculum content standards set by the NJ Department of Education.

GOAL 1: Develop curriculum to integrate visual arts into the second and third grade reading/language arts/literacy program.

GOAL 2: Develop capacity of Grade 2 and Grade 3 classroom and art teachers to collaborate in integrating visual arts to improve reading/language arts/literacy instruction.

GOAL 3: Measure the impact of arts integration on student performance in Grades 2 and 3 in reading/language arts/literacy through an experimental research design.

Visual arts educators and language arts literacy teachers in treatment schools will spend a minimum of 60-70 hours in collaboration, per year over the four-year grant period, in designing model arts and literacy integrated lessons.

A. Knowledge from Research and Effective Practices

The design of the proposed *Newark Arts Integrated into Literacy* project is based on the following key organizing principles: standards-based and strategy based; integrating visual arts into literacy education; professional collaboration; practice-based professional development; and phased-in implementation.

Standards-Based and Strategy Based. The *Newark Arts Integrated into Literacy* project supports attainment of state content area standards, supports the local curricula, and advances the improvement agenda as specified in the district's strategic plan. The project is aligned with the district's language arts/literacy curriculum for the second and third grades, which has been designed to meet the NJ Core Curriculum Content Standards for language arts/literacy, and with the district's art curriculum, which is also aligned with the NJ Core Curriculum Content Standards for visual arts.

The *Newark Arts Integrated into Literacy* project targets second and third grade classrooms in support of the district's major goal of significantly improving the number of students reading and writing at grade level by the end of third grade from 40 percent in 2008-2009 to 80 percent in 2013 (*Great Expectations 2009-2013 Strategic Plan.*) The district's ambitious preschool program for three- and four-year-old students has contributed to improved

student performance in kindergarten through third grade, but not sufficiently. We cannot wait until students enter the third grade to make a critical difference in students' literacy skills.

Action Steps: Newark teachers will align the curriculum of literacy and arts to develop focal points for collaboration. Summer institutes (or weekend institutes) are convened for collaborative teams from targeted schools. The teams will outline the standards and skills to be addressed, using Grade 2 and 3 themes and books, to be aligned with Newark Museum resources, visual artists, and culminating projects.

Integrating Visual Arts into Literacy Education. The *Newark Arts Integrated into Literacy* project will begin work with the six themes of the second grade reading/language arts/literacy curriculum: Being Me, Helping Hands, Our World, Imagine That, Neighborhood News, and Travel Time. The district's curriculum specifies the learning objectives to be addressed in teachers' lessons plans, shows the related NJ Core Curriculum Content Standards, and identifies five books the students will read for each theme. Working in collaboration, the arts teachers and classroom teachers will implement integrated arts activities that support specific skill development and enhance learning from the informational book, realistic fiction, story, folktale, photo essay, play, fiction, personal narrative, atlas, and biography books they read. The project's Development Team will be able to select works of art from the Newark Museum's rich collections that lend themselves to extending and enhancing the second and third grade reading/language arts/literacy curricula.

The Guggenheim Art Museum's three year study, *Teaching Literacy through Art*, confirmed that fundamental literacy skills can be developed through participation in inquiry into texts and visual documents. Participating third grade students used more words to express themselves and demonstrated higher achievement in six categories of literacy and critical

thinking skills, but did not score better than their control-group peers on written standardized tests. (Published in 2006, the study was conducted by Randi Korn & Associates and funded by the US Department of Education.)

The Isabella Stewart Gardner Museum *Thinking through Art Study* examined the value of multiple visits to the museum and the impact of object-based arts education on creative and critical thinking skills. The students' communication and language development improved. (The study was published in 2005, conducted by Institute for Learning Innovation, with consultation from Visual Understanding through Education, and funded by the US Department of Education.)

A ten-year overview of *Jersey's City Schools' Educational Arts Team Integrated Arts Projects* (1999-2009) found improved performance on state literacy assessments: Grade 4 students participating in a puppetry arts infusion program saw a 20 percent increase over three years; and 90 percent of Grade 5 students involved in a theater arts program experienced a significant increase in their test scores, as compared to 70 percent of the control group.

In his research guide, *Critical Links: Learning in the Arts and Student Academic and Social Development* (2002), author James S. Catteral reports that the arts affect improvement in basic reading skills, language development, and writing skills, as well as improved concentration, focus, and social skills. "Learning in and through the Arts: Curriculum Implications," one of the seven studies included in *Champions of Change: The Impact of Arts on Learning* (1999), concluded that students with high involvement in visual arts were more likely to see themselves as competent academically, particularly in reading.

Action Steps: During the school year, Newark teachers and external partners will use district scheduled collaborative planning time to work on their instructional activities. The use of student

data will focus the discussion about the “how” of arts integration and the basis of each school’s skill-focused integration activities.

Professional Collaboration. The *Newark Arts Integrated into Literacy* project features professional collaboration that crosses traditional classroom lines and connects the school to a major cultural institution in the community. Classroom teachers responsible for teaching reading/language arts/literacy will work with art teachers in planning how they will implement the new curriculum in the second and third grades. Museum educators and visiting artists will work with Grades 2 and 3 classroom and art teachers in mapping how they will incorporate works of art and artistic processes to extend and enhance literacy learning. New instructional activities will be planned collaboratively by a team that includes classroom and art teachers, literacy coaches, art and literacy supervisors, and museum educators. The Newark school district sees the collaboration aspect of this project as fairly untested and undocumented territory. Directly and fully involving the art teachers will bring new and additional resources to bear on the all-important area of reading/language arts/literacy, an endeavor with enormous potential for Newark and schools elsewhere.

Action Steps: A district-wide Project Development Team will provide each school-based collaborative team with tools for integration. These tools will address such issues as using disaggregated test data to inform practice, instructional focus based on formative assessments of students, time line (objective for the month, lessons for team teaching), curriculum mapping and so on. The school Teams will be supported by the grant Project Manager during common planning time and in the classrooms.

Practice-Based Professional Development. The *Newark Arts Integrated into Literacy* professional development will take place when teachers are available -- during the summer and

during the school day. Three-day Summer Institutes will provide a unifying immersion into extending literacy through arts integration and introduction into the activities developed to support themes from the second and third grade language arts curriculum. The majority of the professional development, however, will take place in the schools, during common planning time and in classrooms. The most effective professional development is grounded in the curriculum that the students learn (Cohen, David K., and Hill, Hill (1998). *Instructional Policy and Classroom Performance: The Mathematics Reform in California*. Philadelphia, PA: CPRE Research Report.) On-site modeling, practice, feedback, and discussion will support teachers as they integrate the visual arts to enhance literacy instruction. The professional development component of the project will be as fully documented, for dissemination purposes, as the instructional materials developed by the project.

Action Steps: The district will conduct three-day Summer Institutes, support school-based collaboration and lesson development, and create a schedule of visiting artists, museum educators, and district resources during the planning year, to address access and equity in the distribution of resources.

Phased-in Implementation. Based on their combined institutional experience and prior collaboration, the Newark Public Schools and the Newark Museum agree that deliberately paced implementation will contribute to the success of the *Newark Arts Integrated into Literacy* project. Taking the time to develop the instructional activities will allow participants to develop new working relationships and to acquire the knowledge and skills needed to implement the new instructional activities effectively with their students. Paced implementation also recognizes the reality that classroom and art teachers already carry a full schedule of instructional

responsibilities. Incorporating a new instructional approach cannot succeed if it ignores or competes with required learning activities.

B. Part of Comprehensive Improvement Effort

The *Newark Arts Integrated into Literacy* project will support and enhance the district's efforts to meet established goals in leading students to achieving New Jersey's strengthened core curriculum content standards in visual arts *and* language arts/literacy, and in keeping with the district's new strategic plan. A project that is inconsistent or unaligned with the established curriculum and instructional goals is all but guaranteed to fail. To the contrary, the *Newark Arts Integrated into Literacy* project complements the Newark goals and curriculum; it extends and enhances priority instruction in ways that will reinforce and strengthen learning.

In addition to being consistent with district goals and state standards, the project will phase-in implementation over the planning year and the next three years in order to improve the likelihood of success. The district wants to avoid overwhelming or competing with related or parallel improvement initiatives; wants to avoid overburdening classroom teachers responsible for teaching the core curriculum; and wants to provide time for classroom and art teachers to develop collaborative working relationships, for museum educators and visiting artists to work with the art teachers (many of whom are working artists as well) to get-to-know each other and respect one another's talents and experience. Similarly, phased-in implementation will provide the opportunity for museum educators and visiting artists to become familiar with the challenges of and comfortable working in Newark's multi-ethnic and, on average, academically underperforming student body.

C. **Build Capacity and Sustain Results**

Consistency with district goals and state and national arts standards. Because the proposed project builds upon the existing framework of standards, curriculum, and instruction, it is far more likely to produce results and attain sustainability at the end of the grant. The *Newark Arts Integrated into Literacy* project has been purposely designed to build capacity within participating schools and in the school district to preserve the project experience so that it can be replicated across second and third grade classrooms throughout the district, extended to additional grades within the district, and disseminated to schools and districts in New Jersey and nationally.

Phased implementation may be the most critical feature in assuring successful collaboration among district staff and cultural partners, in developing their capacity, and making lasting change in instructional practice. Implementing the *Newark Arts Integrated into Literacy* project over four years will allow time:

- To introduce participants to the purpose and process of arts integration;
- To develop arts integration activities that support skills and knowledge taught in the Grade 2 and Grade 3 reading/language arts/literacy curriculum, related to state content standards, unifying themes and selected books;
- For art and classroom teachers to develop collaborative working relationships;
- To provide opportunities for museum educators and visiting artists to meet and work collaboratively with art and classroom teachers;
- To collect data and feedback from project participants to apply in making indicated modifications to project operation and arts integration activities;
- To develop project-based instructional and training materials.

Development of instructional materials and training products. During its fourth year, the *Newark Arts Integrated into Literacy* will finalize the instructional activities and related training in order to preserve and disseminate the methods and lessons of the project. These products will include: instructional overview; lesson plans for each of the second and third grade reading/language arts/literacy themes; written and video record of the three Summer Institutes and in-school professional development (during common planning time and in the classroom); and video essays on model classrooms that succeeded in adopting the *Newark Arts Integrated into Literacy* approach. **THIS PROJECT COMPONENT RESPONDS TO INVITATIONAL PRIORITY 5.**

The *Newark Arts Integrated into Literacy* project will produce results that will be of interest to many schools and school districts. Nearly all schools want to improve their students' reading/language arts/literacy achievement. Most schools want to extend and enhance the school curriculum in ways that strengthen student skills while increasing their cultural exposure and broadening their horizons. Not all schools have a cultural institution of national reputation located within or in a neighboring community, but most could establish an online relationship with a museum willing to collaborate on such a project. This project could still be implemented even in small schools that may not have full-time art teachers to collaborate with classroom teachers.

Consistency with district goals and state and national arts standards, phased-in implementation, and development of instructional materials and training products are the features of the *Newark Arts Integrated into Literacy* project that will build district capacity and deliver results that last beyond the life of the grant.

4. QUALITY OF PROJECT PERSONNEL (10 points)

A. Qualifications of District Personnel

It is the policy of the Newark Public Schools to assign oversight responsibility for grant-funded initiatives to full-time, tenured staff. In this way, policy and sustainability implications that emanate from the initiative do not become marginalized and merely associated with “the grant.” Because the successful implementation of the *Newark Arts Integration into Literacy* project will have direct implications for the district and participating schools, the district will appoint two Supervisors – one each from the Office of Visual and Performing Arts and Office of Language Arts Literacy—to serve as **Co-Project Directors**. The resumes of these individuals, **Jacqueline Rocker-Brown and Nicole T. Johnson** are included in the Appendix.

Jacqueline Rocker-Brown has been Supervisor of Visual Arts for the Newark Public Schools since 2006. In this position, she is responsible for the management of the visual arts program and provision of clinical supervision and professional development of art teachers. Previously, she was an elementary visual arts instructor and high school art instructor, senior advisor and peer coordinator in the Newark Public Schools. She has served as a family day care director and director of the Newark Preschool Council. She received her BA, majoring in art education, from Spelman College, and her MA in Art History from Howard University.

Nicole T. Johnson is Supervisor of Language Arts Literacy with the Newark Public Schools. Since 2006 she has been responsible for: supervising Resource Teacher Coordinators; providing professional development in developing instructional programs; evaluating teaching techniques, instructional methods, and resources; guiding interpretation of the school district’s literacy programs; and analysis of all district literacy data. Previously she worked as a Special

Education Literacy Coach and Educator of the Deaf. She received her BS, with a major in Education of the Hearing, and her MA in Educational Leadership at The College of New Jersey. All core curriculum content areas are under the auspices of the district's Chief Academic Officer (CAO). Supervisors meet bi-monthly with the CAO to coordinate district-wide activities in support of the strategic plan. Indeed, coordinating and connecting activities in such a way that course corrections can be made in a timely fashion will be the key to the success of the initiative.

District Infrastructure that Supports Project Implementation. The Newark Public Schools district is divided organizationally into four PreK-12 regions, each headed by a Regional Superintendent to whom the principals within the geographical region report. The CAO and Regional Superintendents, along with other key staff members such as the Director of Instructional Staff Development, serve on the Superintendent's Instructional Cabinet, which meets twice a month. Thus, regular project updates can be scheduled with these key senior staff in order to address project outcomes and impacts.

Typical of urban districts, slightly more than 85 percent of Newark's annual budget is derived from state aid. Because staff hiring is directly tied to teaching and other direct services to students, requests for additional central office personnel is limited. A grant-funded **Project Manager** will assist the Co-Project Directors in coordinating and supporting project activities. Upon notification of the grant award, the district will post notice and job description to solicit interested candidates. Interviews will be conducted by the Co-Project Directors and other district staff, including representatives from Human Resources and the Office of Grants.

The Project Manager will have day-to-day responsibility for all program components, including: overseeing the design of and dissemination to target schools the resources and tools to be used in developing the integrated lesson plans; design and dissemination to target school the

resources and tools to be used by arts teachers and literacy teachers in their collaborative meetings during common planning time; scheduling and coordinating project-wide professional development activities; facilitating regular Project Development Team meetings; interfacing with community partners and independent evaluator; monitoring budget expenditures; and serving as spokesperson in various networking and community-based activities. The Co-Project Directors and Project Manager will attend the USDOE required grantee meetings.

The district will also involve literacy coaches in the *Newark Arts Integration into Literacy* project. Every elementary school in Newark has a Literacy Coach to assist teachers in implementation of the language arts curriculum. The coaches are integral parts of the district plan to improve student achievement. Because literacy coaches serve the whole school, they cannot be dedicated solely to the this grant initiative. However, they will participate in professional development offered by the project and thus become an additional school-based resource during the operation of the grant and beyond.

Finally, the instructional leadership of the each elementary school rests with the building principal and they too will be a valuable resource for program implementation. The principal must ensure that common planning time for collaborative teaming is scheduled, respected, and supported. Regional Superintendents will support principals in setting and keeping this goal. Moreover, as feedback is provided through the on-going program evaluation, principals will come to understand the importance of program fidelity in the conduct of a research study. The payoff for principals is enormous because their schools are deemed in need of improvement and must improve student achievement. Successful implementation of research-based strategies presents a win-win proposition for these administrators.

B. Qualifications of Museum Personnel

Ted Lind, Deputy Director for Education, has 28 years experience in museum education. Prior to coming to Newark in 2007, he worked at the Philadelphia Museum of Art, the Albany Institute of History & Art, and the Cincinnati Art Museum. Lind was recently awarded the Art Museum Educator of the Year (2010) by the National Art Education Association. He has developed, implemented, and evaluated numerous in-depth school/museum partnerships and served as a member of the ASSETS Committee, developing the new assessment tools in the visual arts for the New York State Board of Regents. Lind currently serves on the Steering Committee for the New Jersey Arts Education Partnership, the Professional Development Committee of the New Jersey Arts Education Collective, the Visual Arts Advisory Committee for Arts High School (Newark Public Schools), the Steering Committee of the Newark Arts Council Arts in Education Roundtable, and the Museum Educators of New Jersey. Prior to museum education, he taught art history and studio at the college level and continues to be practicing painter. Lind earned a BA (Albion College) and an MFA in painting (Rochester Institute of Technology).

Kevin Heller, Assistant Director of Education for Instructional Programs, has worked in education at the Museum since 1987. He has designed art classes for children, managed family programming, and is currently responsible for school and teacher programs. This includes the development of tours, curriculum materials, distance learning, professional development for teachers, evaluation strategies, and project management. Heller is a certified art teacher and taught for several years in regional schools. He is an experienced potter and continues to create unique examples of clay art. Heller earned a BA and MA (Kean University).

The Museum will hire a part-time Project Manager to manage the various details of this project, including scheduling meetings, interfacing with the project team on a consistent basis, preparing status reports, and, generally, insuring that the project is addressing its goals and objectives. The person sought for this part-time position will be required to have experience in arts education management and school/museum partnerships. BA (MA preferred) and three years experience in art education will be required.

Teaching artists: **Bruce Mansa Terry**, is a visual and performing artist, arts educator, and arts consultant. A native of Paterson, New Jersey, he has been using the camera to document concert dance for the past 28 years. He is also a dancer, musician, writer, and fabric artist. Mussa has traveled extensively in the United States, Cuba, Ghana, and South Africa, documenting the unfolding of human events in the African Diaspora. Since 1980 he has taught dance to children, teenagers and adults in public and private schools, and organizations as varied as the Alvin Ailey Arts in Education Program, the Dance Theatre of Harlem's Summer Dance Intensive, the Newark Museum, Jersey City State College, and Arts Horizons. He currently teaches photography for the Boys' and Girls' Clubs of Newark, the Artist-in-Residence Program of the Newark Museum and the Newark Public Schools, and PS 27 in Paterson, New Jersey. In May of 2005 he was awarded the National Service to Youth Award from the Boys' and Girls' Clubs of America. He earned his BA (Media Arts) from New Jersey City University.

Grace Marquinhos is an artist who has been teaching part-time at the Newark Museum as a Teaching Artist since 2006. She conducts tours and related studio activities for visiting school groups (preK-12). Marquinhos has assisted in after school programs for the Museum and has a strong ability to relate the needs and interests of children in challenging urban environments. Prior to her involvement with the Newark Museum, she was arts education

coordinator for the Paul Robeson Gallery at Rutgers University (Newark campus). She is a practicing sculptor and has exhibited widely. Marquinhos earned her BFA, with teaching certification in art education, from Rutgers University.

It should be noted that while the Newark Museum is the lead community partner, other organizations might also wish to participate in this initiative. For example, the Newark Arts Council interacted with Ms. Rocker-Brown during the grant's development and provided a letter of support, included in the Appendix, along with the letter of support from the Newark Museum. Given that the independent evaluator (described in Section 6) might raise concerns about the use of multiple partners in a research study, we will consider additional partners beyond the Newark Museum during year one, and in consultation with the evaluator.

5. QUALITY OF THE MANAGEMENT PLAN (20 points)

A. Objectives, Responsibilities, Timelines, and Milestones

The deliberate phased implementation of the *Newark Arts Integration into Literacy* project will allow participating classroom literacy and visual arts teachers to actively participate in the development of instructional activities and shaping the professional development that will support skill-specific instruction. The following table presents project activities, responsibilities, timelines, and milestones, with the understanding that this implementation plan may be modified to adjust timing, maximize collaboration, and assure high-quality product development.

Table 2. Year 1 Implementation Plan

Goals, Objectives, and Activities	Responsibility	Timelines and Milestones
GOAL 1: Develop curriculum to integrate visual arts into the second and third grade reading/language arts/literacy program.		
1.1 Advertise position, interview candidates, and appoint <i>Newark Arts Integrated into Literacy</i> Project Manager.	NPS Chief Academic Officer	By end of Month 2
1.2 Appoint members of the <i>NAIL</i> Project Development Team.	Project Manager with Directors of Language Arts/Literacy and Art Education	By end of Month 2
1.3 Develop skill-specific arts integration instructional activities for three (of six) Grade 2 reading/language arts/literacy themes.	Project Manager and Project Development Team	By end of Month 3
1.4 Initiate and facilitate collaboration of Grade 2 classroom and art teachers as they plan to conduct arts integration into literacy activities, with time to practice and reflect on how this will change	Project Manager with Grade 2 Arts/Literacy Teams at each treatment school	Starting Month 4 and continuing through Month 9, during common planning times and

instruction.		in classrooms
1.5 Initiate and facilitate collaboration between Art Teachers and Visiting Artists in how they will support literacy instruction with activities related to works of art and process of creating art.	Museum Educator, with Visiting Artists and Art Teachers	Starting Month 6 and continuing through 10
1.6 Implement skill-specific arts integration activities for first three Grade 2 reading/language arts/literacy themes.	Grade 2 Teams in each school, including classroom literacy and art teachers	Starting Month 5 and continuing through Month 11
GOAL 2: Develop capacity of Grade 2 and Grade 3 classroom and art teachers to collaborate in integrating visual arts to improve reading/language arts/literacy instruction.		
2.1 Develop draft agenda and activities for Year 1 three-day Summer Institute.	Project Manager with Directors of Language Arts/Literacy and Art Education	Start of Month 3
2.2 Revise agenda and activities for Year 1 Summer Institute.	Project Manager and Project Development Team	Middle of Month 3
2.3 Conduct Year 1 Summer Institute.	Project Manager, Language Arts/Literacy	End of Month 3

	and Art Education Supervisors, Museum Educators.	
2.4 Establish calendar for initial and continuing visits to treatment schools.	Project Manager	Beginning Month 3, and at least twice a month through Month 11
2.5 Provide feedback to individual teachers and as a school Grade 2 Team.	Project Manager with Language Arts/Literacy and Art Education Supervisors	Beginning Month 3, at least every other month through Month 12
GOAL 3: Improve student performance in reading/language arts/literacy so they are grade-level on standardized tests in Grades 2 and 3.		
3.1 Develop schedule and procedures for collecting data on student performance and participant feedback for project analysis, improvement, and evaluation.	Project Manager in consultation with Independent Evaluator	By end of Month 3
3.2 Review and analyze performance and participant feedback data; make recommendations for appropriate project modifications.	Independent Evaluator	Months 3, 5, 7, 9 and 11
3.3 Draft Year 1 Evaluation Report	Independent Evaluator	Month 12

Major Year 2 Activities. Design, revision, and conduct of Year 2 Summer Institute; Development Team develops skill-specific instructional activities for three more Grade 2 reading/language arts/literacy themes; Grade 2 classroom teachers and art teachers collaborate in planning and conducting new arts integration activities; Art teachers and visiting artists collaborate in activities about works of art and creating art that support Grade 2 literacy skills; collect and analyze performance and feedback data; prepare Year 2 evaluation report.

Major Year 3 Activities. Design, revision, and conduct of Year 3 Summer Institute; Development Team develops skill-specific instructional activities for three Grade 3 reading/language arts/literacy themes; Grade 3 classroom teachers and art teachers collaborate in planning and conducting new arts integration activities; Grade 2 and art teachers conduct arts integration into literacy activities to support skill development and books related to all six themes; art teachers and visiting artists collaborate in activities about works of art and creating art that support Grade 2 and Grade 3 literacy skills; collect and analyze performance and feedback data; prepare Year 3 evaluation report.

Major Year 4 Activities. All Year 2 and 3 activities are conducted in Year 4 in order to complete the collaborative development and implementation of instructional activities for Grades 2 and 3. In addition, the Project Manager and Development Team will determine the purpose and format of instructional activities and related training materials (such as: instructional overview; lesson plans for each of the Grade 2 and Grade 3 reading/language arts/literacy themes; written and video record of the three Summer Institutes and in-school professional development (during common planning time and in the classroom); and video essays on several model classrooms that successfully adopt the *Newark Arts Integrated into Literacy* approach. The Project Manager oversees production of instructional and training materials. The Independent Evaluator analyzes

student performance and participant feedback and prepares the Year 4 and final evaluation report.

A Note about Evaluation: The independent evaluator and the evaluation are described in Section 6. Newark’s experience with independent evaluation of research grants is that such evaluations are costly. Inasmuch as the district will have to bid for such services, detailed work plan for the evaluation will be negotiated, based on actual costs. A revised management plan will be submitted to the USDOE program office before the end of the first grant year that takes into account the evaluation plan.

B. Time Commitments of Key Project Personnel

The primary mechanism for ensuring the proper and efficient internal administration of the *Newark Arts Integrated into Literacy* project will be the bi-weekly staff meetings. These meetings will involve the school-based collaborative team supported by the Project Manager and other staff, and will serve to assess the implementation of grant-funded activities as well as coordination of efforts with initiatives in the district. In order to facilitate the integration of different components of the project, the focus of these meetings will be based on the tools for collaboration developed by the Project Development Team. The Project Manager will be the keeper of information from across the sites, and will use the information for the mid-year conference of all of the teams. Thus, discussions of programmatic issues with relevance across activities and sites will occur.

The Office of the Chief Academic Officer maintains a district-wide staff development calendar, reflecting initiatives of the four Regional Superintendents (K-12 clusters) and their principals and schools, as well as central office staff development. This centralized calendar will

help schedule various activities related to *Newark Arts Integrated into Literacy* project, minimizing response burdens on school staff. In other words, if the Office of Mathematics has already scheduled staff development for Grade 2 teachers, then this grant-funded project cannot pull out the same teachers for training in arts and literacy integration. Bi-weekly staff meetings will facilitate coordination of the critical professional development component of the grant.

C. Feedback and Continuous Improvement Procedures

Formative evaluation of the overall grant initiative, to be carried out by the independent evaluator, will provide critical support for project management, and allow for ongoing assessment of project implementation to identify situations that need immediate attention and to general recommendations that may be useful in making necessary changes for program improvement.

The **Year 1 Implementation Plan** outlined in Table 2 (2.5 and 3.2 specifically) and summarized under **Major Year 3, 4, and 5 Activities** above illustrate how the *Newark Arts Integrated into Literacy* project will establish regular feedback, review, and modification procedures to make needed adjustments in project operations.

6.0 QUALITY OF PROJECT EVALUATION (20 Points)

COMPETITIVE PREFERENCE PRIORITY for scientifically based evaluation is addressed in this section.

The Newark Public Schools will follow district and state local and procurement rules and laws regarding identifying an independent evaluator for the arts integration grant initiative. These rules require formal bidding for contracts in amounts greater than \$29,000. Thus, a Request for Proposals

(RFP) process must be followed after an award has been made to the district by USDOE. The substance of the RFP will be designed to solicit bids that will have the following components.

6.1 Randomized Design for Targeted Intervention

The Arts in Education Model Development and Dissemination Program desires to use an experimental design to determine if various strategies for arts integration result in higher student achievement. As noted earlier, there is a lack of scientifically based research in this area.

Newark will therefore create a scientifically rigorous evaluation methodology to assess the effectiveness of its strategy for arts integration in support of early literacy for students in Grades 2 and 3. There are three primary research questions for the evaluation:

1. How do art and literacy teachers implement an integrated arts curriculum?
2. What impact does the professional development have on teaching practice?
3. How do changes in teaching practice affect student achievement?

In an ideal world (with significantly more dollars), the unit of measurement to be studied would be individual student outcomes. Longitudinal studies of students who would have received the “treatment” could be done, and sophisticated analyses would be conducted. Unfortunately, the USDOE did not allocate enough dollars to conduct this type of evaluation. Nonetheless, a rigorous evaluation of the targeted intervention via random assignment of eligible Newark elementary schools to either a treatment group (to receive the integrated arts curriculum) or to a control group (to continue providing their existing services “as is”) can be conducted. The advantage of this experimental design is that students receiving the treatment will not differ in any systematic or unmeasured way from students in the control schools. Under this design, a comparison of outcomes for the two groups yields an unbiased estimate of the treatment effect

on the reading skills of Grade 2 and 3 students. Furthermore, students in schools assigned to the control condition will continue to have access to services that are not part of the intervention being studied. However, the evaluation team will collect data about the services that control group members receive so that we can better interpret the evaluation findings. The evaluation approach described in the following pages will not only determine the effectiveness of the treatment curricula, it will also allow us to provide guidance on possible replication in other settings.

The remainder of this section describes the type of evaluation for which an RFP will be offered. It is divided into a series of tasks which are in approximate chronological order, although there is considerable overlap. The tasks are: 1. School, Student and Teacher Eligibility and Recruitment; 2. Random Assignment; 3. Data Collection; 4. Data Analysis; 5. Evaluation Report.

Task 1: School and Student Eligibility and Recruitment

All eligible schools will be required to participate in the evaluation by the Newark school district. To be eligible, schools must: be Title I eligible; serve a minimum of two grades (from grades 2 and 3); not already have an integrated arts curriculum in literacy; be categorized as ‘in need of improvement’ under *NCLB*; and serve a minimum of 25 eligible students.

Eligible students are Grade 2 and 3 students. Eligible schools are those that did not meet the DRA benchmark of 80 percent. All Grade 2 and 3 students in schools randomly assigned to the treatment group will receive the integrated curriculum. Conversely, all students in schools assigned to the control condition will receive reading instruction as they normally would. The

eligible schools were provided in Table 1 in Section 1 - Need, based on Spring 2009 DRA administration.

Recruitment of schools to participate in the evaluation is not expected to pose a challenge because all eligible schools will be required by the district to participate in the study. Based on past experience in conducting randomized experiments, we recognize that the use of random assignment may raise concerns on the part of participating schools, due to a common misconception that the methodology results in denial of services to students. An advantage to the evaluation design is that students enrolled in control schools will still receive the services that they are entitled to receive. Nevertheless, it remains important to ensure that the school administration and staff have a thorough understanding of the evaluation goals and methods and a strong commitment to ensuring the fidelity of the methodology. In all cases, the independent evaluator will work closely with school district officials, schools, teachers, students, and parents to ensure that everyone has a sound understanding of the importance of the study and the study procedures.

Task 2: Random Assignment

Because schools are assigned to one condition or the other wholly at random, the only difference between the treatment and control groups is the type of reading instruction they receive. This "one-difference-only" feature is the main advantage of using random assignment in an impact study because it means that if the reading skills of the students in the treatment schools improve more than the reading skills of the students in the control schools, we can be almost completely certain that the improvement occurs because of the treatment, not because of student ability or motivation or other factors that might influence their achievement.

Random assignment will be conducted using a list of eligible schools supplied by district staff. To ensure that treatment and control groups are comparable on certain key variables, these eligible schools will then be stratified on a series of key variables. Strata will be defined by percent of ELL students, and percent of students eligible to receive the treatment. Schools will then be randomly assigned to conditions. District staff will then be notified of the results and asked to notify all schools of their treatment status.

Once random assignment has been carried out, we will need to ensure that the integrity of the control group is upheld over the course of the study. Specifically, there are two main challenges: one is the threat of control group contamination, and the other is the possibility of nonrandom attrition. Both of these are discussed in more detail below.

Preventing control-group contamination Because randomization is being conducted at the school, rather than the student level, the threat of control group contamination is minimal. At the school level, control schools will be forbidden by the district from implementing an integrated arts into literacy initiative until after the evaluation is complete. At the student level, the threat of control group contamination is far less than if randomization were to be conducted at the individual level. We anticipate a very small number of students crossing over from control schools to treatment schools. However, the independent evaluator team will conduct exhaustive checks for control group contamination using unique student IDs provided by district staff.

Minimizing school and teacher attrition. Attrition is much more of a problem for group randomized design than for individual randomized design. It reduces the effectiveness of the intervention and erodes the connection between intervention and outcome. Attrition compromises the internal validity of the experimental design *if* the attrition is nonrandom. At both the student and school level, we have to make sure there is no differential attrition between

control and treatment groups. However, school attrition should be minimal to nonexistent because participation in the evaluation will be required by the district.

To determine if the percentage of students lost to attrition is approximately the same for the treatment and control groups, the evaluation team will test for differential attrition. Student attrition will be comprised of (a) students who transfer to another elementary school within the district, (b) students that move out of the district, and (c) students who drop out of school altogether.

Students in the first category will be kept in the main “intent to treat” impact study sample, unless they are control group students who transfer to another school that uses the treatment curriculum. The second group consists of students who are lost to the data collection because they move out of the area, require important consideration, since their disappearance will have a negative effect on the analysis. The final group is students who drop out of school or who are chronically truant. We also expect the number of Grade 2 and 3 students in this group to be very small. The RFP will ask respondents to address these issues.

Task 3: Data Collection

The independent evaluator team will collect and process information from both arts educators and literacy teachers over multiple years to obtain the information needed to evaluate the impact of the arts integration curriculum. The evaluator must be able to administer and collect teacher data regarding professional development, fidelity data from classrooms, and school, classroom and student data from the Newark school district. All of these data, their purpose in the evaluation, and the timing of their collection must be submitted in an evaluation plan. The plan must address the stratification variables, when they will be collected, what

evaluation instrument will be used. A plan such as the following (albeit, with more specificity) would be expected of the successful respondents.

	Variable	When	Instrument	Responsible partner
Stratification Variables	Percent ELL students	Baseline only	School records	District
	Percent eligible students	Baseline only	School records	District
Outcomes	Reading achievement	Yearly - Spring only*	DRA	Evaluator
	Arts Curriculum achievement	Yearly - Spring only	DRA	Evaluator

We are also interested in the extent to which the targeted intervention will have sustained effects through Grade 3. This is important because many educational interventions effects diminish substantially within 2 to 3 years after the intervention ends. Therefore, all eligible students in eligible schools in the first year of arts integration must be followed for two additional years. Thus, the independent evaluation must address this level of follow up.

Cohort Sequential Design

YEAR	GR. 2	GR. 3
2010-2011	Evaluation Plan Developed	
2011-2012	X	
2012-2013	X	X
2013-2014	X	X

Regulations and Confidentiality The evaluation will be conducted in accordance with all relevant regulations and requirements, including the Privacy Act of 1974 (5 USC 552 a), the Family Educational Rights and Privacy Act of 1974 (20 USC 1232 g), the Freedom of Information Act (5 USC 522), the Protection of Pupil Rights Act (20 USC 1232 h), the confidentiality provisions of the Education Sciences Reform Act (20 USC 9573), related regulations (41 CFR Part 1-1 and 45 CFR Part 5b), and, as appropriate, other federal or ED regulations on the protection of human subjects. However, because the research activities of this evaluation involve administering academic assessments to students, these activities are exempt from human subjects regulations according to ED 424 (Definitions Form Section I.B.2).

To protect subjects' identity, identification numbers will be assigned to each student by the district. As a result, student names will never be associated with the collected data. The educational assessments will only be used to evaluate the performance of the integrated arts curriculum and will not be used to make any decisions regarding the students themselves. In addition, according to district regulations, parental consent is not necessary to assess students, when the assessment is related to the curriculum, for either the control or experimental groups. Furthermore, the independent evaluator must develop and implement procedures to ensure that all evaluation staff who might be assigned will be trained in confidentiality issues and will provide documented agreement to nondisclosure of confidential information requirements.

Task 4: Data Analysis.

In order to answer the research questions posed earlier, the independent evaluator must address how the group of eligible students will be analyzed to estimate the overall impact of the treatment curriculum. This is what is commonly referred to as an intent to treat analysis because it estimates the impact of the *opportunity* to receive the treatment rather than the actual use of the

curriculum. The evaluator will be required to address short-term outcomes and long-term outcomes of teacher practices as well as student achievement (illustrative only).

	Outcome Variable	Data Source
<i>Short Term Outcomes</i>	Reading achievement	Direct student assessment
	Classroom behavior	School records
<i>Long Term Outcomes</i>	Reading achievement	Direct student assessment
	Attendance	School records
	Art Curriculum achievement	Direct student assessment
	Disciplinary incidents	School records

The independent evaluator must also address missing data, and the power analysis. Statistical power is a measure of how likely it is that we can detect meaningful differences between treatment and control groups with a statistical test. Targeted intervention power analysis will tell us whether a reasonable chance of finding a meaningful difference exists for a variety of outcomes and subgroups. The power is based on certain assumptions and is only about .50. If we had a larger sample of schools, the power would be .72. With less clustering of outcomes (i.e. an intraclass correlation of .05), with 21 schools the power would be .74, closer to the usual rule of thumb optimal power of .80. Although the estimated power level is modest, if there are large treatment effects, if there is little clustering of outcomes, and if there are good covariates at the student and school levels a true treatment effect could be detected.

Task 4b: Fidelity and Participation Analysis. Fidelity. Program fidelity is the degree of fit between the developer-defined components of the curriculum and its actual implementation in the classroom. In other words, how closely does the classroom instruction match the specifications of the curriculum? A lack of fidelity can be a serious problem in the conduct and interpretation of education research. When a study fails to show a clear difference between treatment and control classrooms, the question arises as to whether the benefit of the treatment curricula has been diluted, or even dissipated, by a lack of fidelity to the curriculum.

Research confirms that a lack of fidelity can have real consequences for evaluation findings. For instance, Tobler and Stratton (1997), in one of the largest meta-analyses of school-based substance abuse prevention programs, concluded that “the large decreases in effectiveness experienced when delivered on a large scale suggests factors other than statistical leveling of effect sizes....Implementation factors provide a more probable explanation and can be a crucial mediating factor in determining success” (p. 114). These findings are not confined to substance abuse prevention programs. Domitrovich and Greenberg (2000) reviewed the research on children’s mental health, school safety, social-emotional learning, and positive youth development—as well as substance abuse prevention. They concluded: “Surprisingly, many of the highest quality programs fail to take adequate steps to monitor and verify program integrity. This weakens the conclusions that can be drawn regarding the program outcomes and reduces the likelihood that replications will resemble the original program.” (p.2)

The extent to which treatment schools are fully implementing their assigned curricula is therefore being measured. Fidelity data are collected only from schools that have been assigned to the treatment group. Although the control schools may be implementing other formal

curricula, we will not have information about the extent to which they are faithfully implementing those models.

Fidelity will be comprised of two pieces of information. The first will be the extent to which the teachers have received the professional development required by the curriculum developer. These data on professional development will be provided by the district. The other piece of fidelity information will come from observation data collected by trained classroom observers in the spring of each year, using a fidelity checklist. The fidelity checklist will be created by the independent evaluator, with input from the Project Development Team. The overall fidelity score will be rated on a 5 point-Likert scale, where a value of 5 represents full implementation, and a value of 1 represents complete non-compliance with the curriculum.

Task 5: Evaluation Report. We will prepare a report on the findings from the evaluation. This report will contain the following: (a) an executive summary, (b) a description of the participating schools, (c) a description of the treatment interventions, (d) the results of the experimental analyses, and (e) the results of the non-experimental (i.e. the fidelity) analyses.

Descriptive analyses will be used to set the stage for the examination of the intervention impacts. We cannot know much about the treatment's impacts, or at least not know how to interpret them, without first describing the particular schools included in the research sample. Equally essential is a clear understanding of the characteristics of the students involved. The report will also include the evaluation findings and will describe the specific structure of the treatment schools and the flow of students through the treatment program.

The report will include discussion of the study findings in light of current research. In addition, the report will include discussion of successful strategies and recommendations for future directions for schools with similar goals and objectives. We will furthermore report the

size of the difference in outcomes between the treatment and control groups. We will report the results of tests showing the extent to which the difference is statistically significant at the .05 level. Such a finding would mean that there is only a one in twenty probability that the difference could have occurred by chance if the treatment's true effect is zero.

District Infrastructure that Supports Rigorous Evaluation. The district's Office of Planning, Evaluation and Testing (OPET) provides oversight to evaluation of individual grant programs. This is no minor point, inasmuch as the district views program evaluation, not as mere stand-alone reports, but as critical to hoping inform practices. Newark's OPET has experience working with grant programs to assure continuous improvement and enhancement can be carried out. OPET maintains test information on every student in the district, and helps administrators and teachers with data analysis, test score interpretation and evaluation results. OPET will be the central data collection liaison for the district, assisting the Project Development Team and independent evaluator with their data gathering needs. A broad range of data will be collected in order to document the project's progress, fumbles, recoveries, and successes. Objective data, such as state test scores, are available only annually. Other data, such as student grades and course selection choices (once students enter high school) can be collected more than once a year. Surveys of teachers will follow the staff development schedule. While the rigorous evaluation components of the project designed have been spelled out and will be followed, it is our firm belief that the process remain open. Schools "in need of improvement" need to know how they are doing in order to maintain hope. It will be the challenge of the *Newark Arts Integrated into Literacy* project to both meet the requirements of program while informing the larger education community that improvement in student achievement is taking place.

Research Study and Contribution to the Field. As stated above, the independent evaluator will prepare an evaluation report on the findings from the rigorous evaluation of the arts integration project. This report will contain the following: (a) an executive summary, (b) a description of the participating schools, (c) a description of the treatment interventions, (d) the results of the experimental analyses, and (e) the results of the non-experimental (i.e. the fidelity) analyses.

Descriptive analyses will be used to set the stage for the examination of the intervention impacts. The research community cannot be told about the treatment's impacts, or at least not know how to interpret them, without first having descriptive information about the particular schools included in the research sample. Equally essential is a clear understanding of the characteristics of the students involved. Thus, the report will also include the evaluation findings and will describe the specific structure of the treatment schools and the flow of students through the treatment program.

The report will include discussion of the study findings in light of current research. In addition, the report will include discussion of successful strategies and recommendations for future directions for schools with similar goals and objectives. The independent evaluator will furthermore report the size of the difference in outcomes between the treatment and control groups. They will report the results of tests showing the extent to which the difference is statistically significant at the .05 level. Such a finding would mean that there is only a one in twenty probability that the difference could have occurred by chance if the treatment's true effect is zero.

Evaluation Timeline. After receiving the grant award from the USDOE, the Newark Public Schools Grants Development and Implementation office will work with the Co- Project

Directors and the Office of Purchasing to issue a Request for Proposals for evaluation services in support of *Newark Arts Integrated into Literacy*. A review panel will be selected and a rubric developed for reading the responses to the RFP. The district will make its selection based on the evaluation outcome, pricing considerations, and the best interest of the research project. Once identified, and approved by the Newark Public Schools Advisory Board to receive a contract the evaluator will be given a timeline for producing a work plan that will enable a study to be conducted in the 2011-2010 school year and beyond.

The evaluator will have to comply with the district's requirements to submit the research plan for review by the Newark Institutional Research Board. The evaluator will also sign the necessary documents related to confidentiality of data.

Conclusion

The Newark Public Schools is a district in need of improvement with multiple schools who serve economically disadvantaged students not meeting state standards for reading proficiency. The district is committed to identifying the best educational strategies for what works in the classroom and is therefore willing to undertake a rigorous program evaluation of an integrated arts approach in support of literacy in the early elementary grades. The findings from such a study will help inform district policies and practices, while maximizing the human capital investment that reside in schools.

Students must be supported if they are to graduate from high school with the education and workplace readiness skills that will enable them to interact and be successful in a global community. Families in Newark do not have the resources that allow them to build high quality enrichment experience into their children's lives, the type of enrichment that leads to high

academic performance in reading, writing, and speaking. These families are dependent upon community institutions to provide that enrichment, but more than that, have the faith to believe that community institutions are providing both core essentials and enrichment. The public schools thus play a vital role in serving the unmet needs of all students. Parents have sent us their best students; it is up to us to meet them at the point of their needs and to extend their learning. The success of the *Newark Arts Integrated into Literacy* initiative will contribute to an understanding of those components that help early learners succeed in the transition from 2nd grade to 3rd grade **so that they are reading and writing at grade level (or above) by the end of 3rd grade.**