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## Project Narrative

### 1) Need for project

#### *(1a) Extent the project will provide services to students at risk of educational failure...*

Jersey City, the second largest city in the state, is a densely populated urban community in Hudson County, NJ with a population of 241,114 (US Census Bureau, 06-08 American Community Survey). Approximately 52,000 children under the age of 18 live in Jersey City (US Census Bureau, 06-08 American Community Survey). The city is a melting pot of people, cultures, ideas, business and opportunities. Residents are 34.6% White, 27.9% African American, 20.1% Asian, 15.4% other races and 2.1% two or more races. A total of 27.3% of any race describe themselves as Hispanic. Residents of Jersey City suffer from numerous long-standing cultural problems such as poverty, racism, substance abuse, crime, a failed school system, and breakdown of the family. Youth who grow up in this distressed environment are increasingly at risk of succumbing to the influence of drugs and alcohol, crime and violence, teen pregnancy and other harmful behaviors.

A significant number of Jersey City children and families live in poverty: *15.1% of families and 16.8% of individuals*. Economically, the per capita income in Jersey City is below state and county averages. Census data revealed the per capita income for Jersey City in 2008 was 29,950. It is anticipated that the number of families and individuals living in poverty has increased since the 2008 Census data was collected due to the current economic crisis. The unemployment rate for Jersey City was 11.5% in December 2009, higher than the state rate of 10.1%.

The Jersey City school district has been designated by the state as at-risk based on a variety of factors including poor academic performance, inadequate school facilities, and lower than state average per pupil spending. Jersey City Public Schools (JCPS) have been state-run since 1989,

the longest running takeover of a failing system in the nation. High truancy and high drop-out rates characterize Jersey City's public schools. The district qualifies as a low income district and is approved to run a district-wide Title I program. The average free and reduced lunch rate for the Jersey City elementary schools targeted through this grant is 80%.

Jersey City Public Schools (JCPS) serves a diverse multi-racial and multi-ethnic population of 27,646 students. JCPS is distinguishable as the most diverse district in the state of New Jersey as exemplified by the more than 30 languages, other than English, that are spoken by the district students. Within the district's 38 Pre-K to 12 schools, 38% of the students are Latino, 37% are of African descent, 14% are Asian-American, 10% Caucasian and 1% Native American. The school district serves 8.96% limited English proficient students. The insufficient knowledge of the English language hampers some of these students from fulfilling state standards and excelling in school. The wide range of diversity and large number of bilingual language groups represented pose significant challenges for teachers and administrators.

The city's young people score among the lowest on NJ standardized tests of language arts literacy at all grade levels and a large number of students are in need of remedial help. Student assessment data clearly shows that many of Jersey City's students lack the basic skills necessary to become proficient readers and writers. The 2008-2009 4<sup>th</sup> grade Assessment of Skills and Knowledge (NJASK4) revealed that only 37.6% of 4<sup>th</sup> grade Jersey City students were proficient or above in language arts literacy compared to 63.2% for the State. The district's 8<sup>th</sup> graders performed below state standards in 2008-09 as well, as measured by the Grade Eight Proficiency Assessment (GEPA): only 61.9% of students were proficient or above in language arts literacy compared to 82.5% for the State. At the high school level, only 64.2% of 11<sup>th</sup> graders were proficient in language arts literacy compared to 84.5% for the State.

Among the targeted schools and grade levels, standardized scores for language arts literacy are among the lowest in the district. During 08-09, students at the 3 pilot schools tested proficient in the NJASK Grade 3 in language arts at the following rates: School #8 – 48.4%; School #24 – 17.1%; School #33 – 42%. The percent of students scoring proficient at the targeted schools (from which randomly selected treatment and control schools will be selected) was: School #3 – 40%; School #6 – 42.3%; School #11 – 50%; School #12 – 23.1%; School #20 – 48.7%; School #22 – 37.3%; School #23- 45%; School #25 – 45.8%; School #28 -26.1%; School #29 – 46.4%; School #30 – 26.6%; and School #34 -26.1%. Three targeted schools (11, 22, and 30) are identified by the State of New Jersey Department of Education Title I as in “Corrective Action” status; and three of the others (23, 24, and 34) are in the “Restructuring” status.

In 2008-2009, the percentage of students in grades 9-12 who dropped out during the school year was 6.2% compared to the State rate of 1.7%. The graduation rate in 08-09 was 78% for the district compared to 93% for New Jersey. Only 41.9% of Jersey City students in 2009 planned to attend a four year college after graduation and 26.4% planned to attend a 2 year college.

In addition, Jersey City's population tends to be highly transient. The school district reports a high student mobility rate—the average mobility rate is 13.63%. The transience of this population compounds other risk factors, such as low socioeconomic status and language barriers, and is an indicator of the disruption to teaching and learning caused by students entering and exiting the classroom during the school year.

***(1b)The extent to which specific gaps or weaknesses in services have been identified ...***

The alarmingly low student performance on standardized tests in the area of language arts literacy as outlined above has compelled the JCPS district to identify reading comprehension and oral/written language skills as a priority. As a result, the district has been open to integrating

innovative, research based models in their schools in order to improve student and school performance. Since 2005, the district has received funding through the Arts in Education Model Development and Dissemination Program in partnership with the Educational Arts Team (EAT) to enhance literacy skills while also addressing the NJ Visual and Performing Arts Core Curriculum Content Standards for 4th and 5<sup>th</sup> graders in 7 schools (2005-2008 Theater Arts Infusion grant) and 6<sup>th</sup> and 7<sup>th</sup> graders in 8 schools (2008-2011 Theater Arts Strategies grant). Independent evaluators found that the Theater Infusion project made a difference in how well students developed in the academic, pro-cognitive and pro-social domains (Finkelstein, and Walker, 2008). Evaluators noted that 90% of treatment students participating for two years passed the New Jersey language arts standardized tests as opposed to 70% of the control group. Additionally 17% of the treatment group scored advanced proficient to only 2% of the control group. Further analysis showed positive effects on special needs, bilingual and the lowest socioeconomic status students (Bosworth, 2008). Students in classes taught by a group of action research teachers in this project were proficient on NJASK language arts tests at a rate of 76% vs. 49.6% for control classes (Elder, 2008). Additionally, results on NJ ASK language arts tests from the first year (2008/09) of a Theater Strategies grant for 6<sup>th</sup> and 7<sup>th</sup> graders show a significant difference between treatment and control students. Among the treatment students a total of 56.6% passed the NJ ASK language arts tests (of these 3.1% were advanced proficient), relative to 43.1% of control students (of these 2.3% were advanced proficient).

Based on the success of the two previous AEMDD grants, the district is interested in expanding the program to address the literacy and visual and performing arts needs of 2nd and 3rd grade students in all 25 of the elementary schools in the district.

The NJ Department of Education *NJ Core Curriculum Content Standards* (2009) state that every student will be involved in experiences addressing all of the expectations set forth in each of nine NJ Core Curriculum Content Areas. One of the nine content standards, Visual and Performing Arts, is clearly not fully being addressed in JCPS, particularly at the elementary school level. The intent and spirit of the New Jersey Visual and Performing Arts Standards builds upon the philosophy and goals of the National Standards for Arts Education. Equitable access to arts instruction is achieved when the four arts disciplines (dance, music, theatre, and visual art) are offered throughout the P-12 spectrum. Thus, the goal of the standards is that all students have regular, sequential arts instruction throughout their P-12 education. By the end of 5th grade, the expectation of the NJ arts standards is that all students communicate *at a basic level* in each of the four arts disciplines, using the vocabularies, materials, tools, techniques, and intellectual methods of each arts discipline in a developmentally appropriate manner. At the K-6 level, it is the expectation that students are given broad-based exposure through instruction as well as opportunities for participation in each of the four arts forms. In grades 7-8, students should gain greater depth of understanding in at least one of those disciplines. In grades 9-12, students should demonstrate competency in at least one arts discipline. The goal is that by graduation all students will be able to communicate at a basic level in the arts.

Presently, with the exception of the above mentioned grants and other district funding that targeted 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> grade students and teachers, Jersey City Public Schools is not able to provide the programming necessary to meet the standards for theater arts. Only five of the twenty five elementary schools in the JCPSs have drama teachers. The schools without drama teachers have occasional visits from visiting artists but no consistent and substantial approach to addressing the visual and performing arts standards, or including them in the rest of the

curriculum.

The only professional development that has been provided on theater arts standards was through the AEMDD Theater Arts Infusion (Grades 4 and 5) and a two year follow-up funded by the district for every 4<sup>th</sup> and 5<sup>th</sup> grade teacher; and the AEMDD Theater Strategies (Grades 6 and 7) grants. No opportunities exist for district-wide professional development related to arts integration at the 2<sup>nd</sup> and 3<sup>rd</sup> grade elementary level.

For many of Jersey City's at-risk youth, limited access to the arts continues beyond the school day. The combination of low income families in the district, high incidence of immigrant populations, low literacy levels, limited English proficiency, and family mobility and disintegration, operate to further impede access to the arts. Research has shown that children from high poverty populations are much more likely to experience low levels of participation in any arts outside of the school day. Affluent youngsters are much more likely to have higher engagement in art experiences (Catterall, Chapleau, & Iwanga, 1999).

These combined factors, along with the very successful evaluation findings from the previously funded AEMDD grants, present a compelling need for innovative strategies to engage Grade 2 and 3 at risk youth in stimulating arts based learning opportunities. Theater and arts activities infused into the language arts will immerse students within the rich verbal environment of process drama and puppetry with the opportunity for speaking in clear, concise, organized language in a variety of forms and content to different audiences and purposes (language arts literacy standard 3.3). The proposed Theater and Language Arts Integration project plans to expand upon previous grants to bring the program to additional schools, grade levels, teachers, and students in the district to address the theater arts standards and alleviate the deficit of theater arts teachers in the elementary grades. Second and third grade treatment teachers at targeted

schools will be trained to utilize Theater and Language Arts Integration methods into the regular classroom curriculum with future classes. During the final year of the project training will also be offered to all 2nd and 3rd grade teachers in the district and the district will explore the possibility of funding teacher development in arts integration beyond the final year of the grant. Replication materials (Handbook, DVD and Training Manual) will also be developed for district use and dissemination purposes.

## 2) **Significance**

### *(2a) The likely utility of the products that will result from the proposed project ...*

The Jersey City Public Schools (JCPS) will partner with the Educational Arts Team (EAT) and Seton Hall University (SHU) to develop several products based on the results of this project with the primary intention of district-wide implementation as well as state and national replication including: *A Theater and Language Arts Integration Handbook*; *A Training Guide*; *A Training DVD*; *Model Implementation Design and Evaluation Findings Report from the Project*; *A Journal Article*; *Conference Presentations*; and *Web Site Postings*.

➤ *A Theater and Language Arts Integration Handbook* to provide teachers with concrete activities and standards based lesson plans with specific objectives easily integrated into the curriculum. The handbook will be designed to reduce teacher preparation time in order to increase the likelihood they utilize the handbook on a regular basis and include a list of materials and handouts, the standard(s) that the activity will address, learning objective(s), a suggested duration time of lesson, and a background knowledge section to prepare students for the activity. The handbook will also explain how the activities can be connected to the reading program used in the district. The handbook could also be used in after school program settings for remedial and enrichment work.

➤ ***A Training Guide*** with suggested training topics and strategies will also be developed to enable trainers to provide training in house for new teachers in Jersey City and teachers from other parts of the state and nation. The guide will be designed for utilization by district visual and performing arts supervisors, as well as curriculum and training specialists or related disciplines. It will be based on the pilot and treatment teacher trainings taking place in years one, two and three of the project.

➤ ***A Training DVD*** to provide an overview of the methods in the handbook. The DVD can be used by trainers to help teachers visualize the methods and complement the training guide for the implementation of lesson plan preparation and coaching/mentoring purposes.

➤ ***Model Implementation Design and Evaluation Findings report from the Project*** including an overview of the implementation process will be developed into a report which will be disseminated to educators nationwide to guide the future development of research studies and arts in education programming.

➤ A **Journal Article** will be published in a national journal documenting the model implementation and evaluation findings. JCPS and the EAT in coordination with the researchers will seek to publish findings in professional journals (i.e. Youth Theatre Journal) and present the findings at the American Educational Research Association.

➤ **Conference Presentations** The availability of the materials and training modules from this project will also be made available to other school districts in NJ through conference presentations such as the statewide NJ Educational Association Teachers Convention, Arts Educators of NJ, the annual Superintendents Conference and School Boards Conference. The handbook, trainer's guide and DVD along with the research findings report will also be presented at other state and national education conferences, such as the International

NETWORK of Schools for the Advancement of Arts Education, Southeast Center for Education in the Arts, the American Alliance for Theater in Education, and the National Council of Teachers of English Conference.

➤ **Web Site Posting** Findings from the implementation and evaluation of the project, as well as information on professional development training; handbook strategies and lesson plans; videos, and other related project materials, will be posted on the JCPS and the EAT websites. In addition, links to this information will also be made available with other resources such as the NJ DOE and the US DOE.

As stated above, several products will be developed as a result of this project, designed specifically to increase the potential replicability of this project beyond Jersey City, NJ. During year 4 of the project, these products will be made available to educators interested in implementing this program. The program will be designed to be implemented in educational settings including private, charter or public schools serving students from a variety of communities including urban, suburban and rural, as well as university forums.

### **3) Quality of the project design**

#### ***(3a) Design reflects up-to-date knowledge from research and effective practices.....***

Scientifically based principles from a variety of recent studies as described below will be applied to all of the proposed grant activities, including sound pedagogical research linking drama use to academic success; effective instructional strategies and materials; successful professional development practices, and arts integration classroom-based instructional assessments. The proposed goals and objectives will also be aligned to both NJ and National Core Curriculum Content Standards for the Visual and Performing Arts and Language Arts.

Many recent research studies point to arts-in-education practices that have demonstrated improved academic success, especially for students from low income families. Stevenson and Deasy (2005) studied 10 schools where students from economically disadvantaged circumstances were succeeding. These 10 schools identified the arts as a key reason for that success. Moreover, teachers in the case study schools said they derived delight, professional renewal and satisfaction from incorporating arts into their teaching. Another example is the study of the Chicago Arts Partnerships in Education (CAPE) program that partnered artists and art agencies with teachers at all grade levels in low socioeconomic urban public schools. Findings demonstrated that CAPE schools clearly outperformed the control schools in a wide variety of outcomes, such as: positive changes in school climate and improved reading and math scores (Catterall and Waldorf, 1999). A growing body of research (Adomat, 2009; Catterall, 2002; Furman, 2000; Moore and Caldwell, 1993, Popovich, 2006) points to consistent positive associations between dramatic enactment and reading comprehension, oral story understanding, and written story understanding. Grumet (2004) writes on the importance of integrating arts into the literature curriculum, "When children understand literature as something meaningful and complex, they sense its capacity to inform their lives. This is the kind of literacy that influences reading scores in middle school and high school, when we often see the gains of intensive reading instruction diminish in national assessments" (p. 67). A successful Theater Infusion AEMDD project (2005 to 2008) in the JCPS for 4<sup>th</sup> and 5<sup>th</sup> graders directed by co-author of this proposal Nancy Healy, resulted in 90% of the treatment students participating for two years passing the New Jersey language arts standardized tests as opposed to 70% of the control group and 17% of the treatment group scoring advanced proficient to only 2% of the control group (Walker, Finkelstein & Bosworth, 2008). In the third year of the project an action research component for seven

teachers yielded significant results. On standardized language arts state tests, students in the classes taught by these teachers outperformed students of the control group teachers by 26%. In Action Research classrooms 76% of the students were proficient in language arts, in contrast to 49.6% in control classrooms (Elder, 2008).

A key part of this proposed project will be to build on and adapt the use of integrative arts strategies from previous projects; and research the most recently developed and effective drama strategies for younger students. The project will use learning approaches such as process drama (O'Neill, 1995), the creation of a make-believe world through improvised encounters; puppet making, the integration, construction and projection of characters into art and role (Tabone, 2004) and drama inquiry, exploring issues and themes through role (Edmiston, 2010). These approaches demonstrate tremendous potential for improving elementary school students' reading comprehension, writing skills and social learning by empowering students to question, think, reflect and problem solve by working in and out of role on the issues, themes and characters of stories and books being used in the classroom curriculum. (Edmiston and Enciso, 2002; Edmiston and Wilhelm, 1998; Toye and Prendiville, 2007).

These ways of working will immerse 2<sup>nd</sup> and 3<sup>rd</sup> grade students in a rich verbal environment through playing in role and grappling with problems that arise from story texts (Toye and Prendiville, 2000). In a series of vigorously designed neuro-scientific studies researchers looked at the brain's response to early training in the arts (Hardiman and others, 2009). One of the key findings suggests that early theater work appears to lead to memory improvement through the learning of general skills for manipulating general semantic information. Catterall (2005) believes that arts learning and experiences, to varying degrees, reorganize neural pathways, or the way the brain functions. Extended and or deep learning in the arts reinforces these

developments. The development and reorganization of brain function by learning in the arts may impact how and how well the brain processes tasks (p 7).

Our project plan is to use integrated arts strategies with a drama inquiry/projects-based learning approach, exploring topics and story books found in the Making Meaning Framework currently in use in the JCPS curricula. (The Making Meaning® Framework uses nonfiction and fiction read-aloud books to teach students nine different comprehension strategies while also developing their social values.) This approach is very much in-line with research that shows a curricular focus on any "big idea" or "shared concept" and represents a more unified and complex means to curriculum design (Burnaford, 2007). The "big idea concept" guards against a superficial integration of topics and creates a pathway for deeper thinking (Beane, 1997).

The potential for puppet use in literacy development is considerable. EAT worked in partnership with the JCPS for 3 years with all the 3<sup>rd</sup> graders in the district. Tabone, Executive Director of EAT and co-author of this application, studied over 6,000 Jersey City 3<sup>rd</sup> graders from September 1999 to June 2002 that participated in a 20 lesson puppet drama project. Over a two-year period, standardized language arts test scores for third graders in the district improved by 36.6% (Tabone, 2004).

To build capacity and insure sound educational practice, the district will include an early childhood literacy specialist; language arts supervisors; 2nd and 3rd grade classroom pilot and treatment teachers; and EAT teaching artists in the development and refinement of the lesson plans during the planning year and subsequent years. Lesson plans will include classroom-based instructional assessments: arts portfolios and student and teacher developed rubrics.

The professional development for this project will be focused on providing various ways for teachers to understand the efficacy of drama integration, build upon and extend existing

knowledge and provide opportunities for practice and ongoing support. It will employ hands-on methods, reflection, lesson planning, a review of the evaluation literature, student demonstrations and mentor coaching to achieve success. Cawthon and Dawson (2009) note that for professional development to be effective it must include: active engagement within a constructivist framework, an agreed upon partnership, treating teachers as adult learners; and authentic learning practices for their students, all methodologies we plan to incorporate into this project.

***(3b) Proposed project is part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students...***

The proposed project will be part of a comprehensive effort to improve teaching and learning and support rigorous academic standards for students. Unacceptably low student performance on standardized tests, particularly in language arts, has compelled the JCPS district to identify literacy as a priority. In the past five years the JCPS has created many literacy initiatives to improve student achievement including a K-4 Reading First program at the four lowest achieving elementary schools; a Reading Recovery program; district-wide early grade literacy blocks; and the Study Island test prep program.

While the JCPS is known for its strong visual arts and music program, it has been unable to fully implement the theater arts standards and does not at this time have a systematic approach to integrating visual and performing arts into the language arts curriculum. If awarded, this project will be coordinated with the above mentioned district efforts to both improve literacy scores and strengthen the existing performing arts curriculum at the elementary school level.

The proposed *Theater and Language Arts Integration* project is grounded in state and national core curriculum content standards and is designed to improve student and school performance. Through this project, a series of standards-based theater arts workshops and professional

development workshops, based on innovative methods and current research, will be developed and implemented with select 2nd and 3rd grade students and teachers. Theater arts strategies and lesson plans will be infused into the language arts curriculum resulting in a *Handbook* and training materials to be used for replication and dissemination district-wide, statewide and nationally.

Year One of the four year project will be utilized as a planning year. During the planning year, 12 classes at 3 pilot schools will receive 30 theater and language arts integration lessons focused on the Making Meaning literacy framework (as described previously) used by the district for a total of 360 lessons reaching 300 students and 12 teachers. The 12 pilot teachers will assist in the development of the lesson plans and receive a pilot of the 12 hours of professional development from EAT. Evaluators will research existing instruments as well as develop pilot assessment and rubric instruments with pilot students and teachers. They will also collect baseline data for treatment and control group students in preparation for Year Two.

In Years Two and Three, 24 classes at 6 randomly selected intervention schools (from among 12 of the lowest scoring schools in the district) will receive 30 lessons focused on the Making Meaning literacy framework for a total of 720 lessons reaching 600 students. Their 24 teachers will receive 12 hours of professional training per year in both year 2 and 3. Teachers will co-lead lessons in year 3 with EAT teaching artists. Evaluators will assess and evaluate treatment and control students in years 2, 3 and 4.

In year 4, the project will provide 6 hours of professional development training on integrating theater arts strategies to all 2nd and 3rd grade teachers (for their approximately 200 classes and 5,000 students) in the 25 district elementary schools to enable them to implement the 30 lesson plans in their language arts classes. Treatment teachers will participate in the trainings as

mentors, sharing their experiences in the project and their action research narratives. The proposed Goals and Objectives for the *Theater and Language Arts Integration Project* are as follows:

***Goal 1: Improve teaching methods and increase academic performance for elementary school students by infusing theater arts standards into the language arts curriculum.***

**OBJECTIVE 1.1 a:** By April 30, 2011, a series of 30 drama and language arts lessons and rubric assessments, based on National and New Jersey Core Curriculum Content Standards (NJCCCS) and integrated into the language arts and performing arts curriculum, will be developed and piloted by JCPS and EAT with six 2nd and six 3rd grade classes from three low-achieving JCPS schools (PS 8, PS24, PS33) in which more than 60% of the students live below the poverty level for a total of 360 lessons.

**OBJECTIVE 1.1 b:** By April 30, 2011, 12 hours of training and 30 hours of coaching will be developed and piloted by JCPS and EAT with twelve 2nd and 3rd grade JCPS teachers from three low-achieving JCPS schools (PS 8, 24, 33).

**OBJECTIVE 1.2 a:** By April 30, 2012 and 2013, implement the 30 drama and language arts lessons that had been developed in Year One with twelve 2nd and twelve 3rd grade classes (approximately 600 students) from six low-achieving JCPS schools randomly-selected from twelve schools (PS 3, 6, 11, 12, 20, 22, 23, 25, 28, 29, 30, 34) in which more than 60% of the students live below the poverty level for a total of 360 lessons.

**OBJECTIVE 1.2 b:** By April 30, 2012 and 2013, 12 hours of training and 30 hours of coaching will be carried out by JCPS and EAT each year with the twenty-four 2nd and 3rd grade JCPS teachers of the randomly-selected treatment classes enabling them to implement the 30 lesson

plans with their future classes for a total of 24 hours of training and 60 hours of coaching over two years.

**OBJECTIVE 1.3:** By April 30, 2013, develop and publish an Applied Lessons and Integrated Drama Arts Techniques Handbook of theater and literacy integration strategies and 2 training materials (training manual and a DVD of strategies) for program replication among 2nd and 3rd grade JCPS teachers and elsewhere.

**OBJECTIVE 1.4 a:** By April 30, 2014, all 2nd and 3rd grade JCPS teachers (approximately 200) will have received 6 hours of professional development training on integrating visual and performing arts strategies to enable them to implement the 30 AEMDD developed lesson plans with their future classes.

**OBJECTIVE 1.4 b:** By April 30, 2014, all 2nd and 3rd grade JCPS teachers (approximately 200) will have received 4 hours of classroom demonstrations with their classes (5,000 students) on integrating visual and performing arts strategies to enable them to implement the 30 AEMDD developed lesson plans with their future classes for a total of 800 demonstration lessons.

**OBJECTIVE 1.5:** By April 30, 2013 and 2014, JCPS and EAT will send out 150 e-mails and dissemination packages to school districts in the State of NJ with information about this implementation model including the evaluation results, training opportunities, and instructions on how to access the training module, DVD and lesson plans on the JCPS and EAT websites.

***Goal 2: Conduct a rigorous evaluation utilizing scientific methods and document and publish findings to demonstrate the efficacy of the arts to improve academic performance.***

**OBJECTIVE 2.1:** By April 30, 2011, research, develop and pilot instruments to evaluate treatment teachers' attitudes toward the use of integrated arts and their knowledge; rubric forms to measure student improvement in the arts standards based on student portfolios; student

improvement in their pro-cognitive and pro-social growth; and student attitudes towards the arts.

**OBJECTIVE 2.2:** In years two and three, increase the average effect on treatment teachers' attitudes and knowledge toward the use of integrated arts by 10% more than control teachers from the test instrument survey's initial administration in September to its second administration in April of each project year.

**OBJECTIVE 2.3 a:** In years two and three, the average score for treatment 2<sup>nd</sup> and 3<sup>rd</sup> grade students (approximately 600) receiving passing scores will be 10% higher than the average score for control students (approximately 600) on Terranova and NJASK language arts standardized tests.

**OBJECTIVE 2.3 b:** In years two and three, increase by 10% the number of treatment 2<sup>nd</sup> and 3<sup>rd</sup> grade students who show an improvement in the arts standards based on a December and April analysis of student portfolios in the arts.

**OBJECTIVE 2.3 c:** In years two and three, increase by 10% the number of treatment 2<sup>nd</sup> and 3<sup>rd</sup> grade students who show an improvement in their pro-cognitive and pro-social growth based on a September and April analysis of the Teacher Classroom ratings form.

**OBJECTIVE 2.3 d:** In years two and three increase by 10% the number of treatment 2<sup>nd</sup> and 3<sup>rd</sup> grade students whose attitudes towards the arts improve between the September and April administration of the Arts Integration Student Survey.

***(3c) The extent to which the proposed project is designed to build capacity and yield results that will extend beyond the period of Federal financial assistance.***

A comprehensive, sequential program of theater arts infusion addressing student needs will build the capacity of JCPS to continue development and achievement of strategies that will positively impact teaching and learning. Through the joint collaboration of teaching artists and

teachers, the *Theater and Language Arts Integration and Immersion* project will develop useful standards-based lesson plans that can be applied in the trained teachers' classrooms beyond the grant funding at no cost to the district, as has been the case in the two previously funded AEMDD grants. Ongoing research from the 2008 Theater Arts Infusion grant found: In a follow-up survey assessment with 4<sup>th</sup> and 5<sup>th</sup> grade teachers district-wide conducted in 2009, the number of classroom demonstrations and training sessions corresponded to the likelihood of teachers using drama in the classroom. 30.7% of teachers with no training and no classroom visits used drama, while 90.2% of teachers with twelve hours or more of training and eight hours or more of student classroom demonstrations were using drama strategies with their students. The more training and classroom demonstrations a teacher received the more likely they were to do the strategies with their students. 87% of the teachers who attended the 2009 training session planned to use the drama strategies they learned that school year.

The district will also be able to use the *Applied Lessons and Integrated Theater Arts Techniques Handbook* and companion training materials to train new teachers after the grant period ends. In the previous AEMDD grant all new 4<sup>th</sup> and 5<sup>th</sup> grade teachers attended 12 hours of training sessions and received copies of the Handbook in the 2 years after the grant ended (2008 and 2009).

The *Theater and Language Arts Integration and Immersion* project will include a professional development component consisting of four different types of training activities: skill training, curriculum integration, coaching and mentoring. During the four year grant period, targeted teachers will be provided with training to understand the theory and rationale for the infusion of drama in the curriculum; the opportunity to see the model in action to conceptualize the process; time to develop, incorporate and practice the arts integration strategies through

meetings and trainings with their colleagues and the teaching artists; the opportunity to practice implementing their own integrated arts lessons with their students and receive information on other educational opportunities for learning more on this topic. This process will allow participating teachers to make changes to classroom instruction and reflect on their work with their colleagues as they put these ideas into practice. Sustained coaching and mentoring throughout the school year by the teaching artists and the District Supervisor for the Visual and Performing Arts will allow the teachers to further develop their skills and customize the lesson plans and strategies used based upon their students' needs and growth and classroom dynamics.

The proposed project will build capacity and yield results that will extend beyond the period of Federal financial assistance in a number of ways. Several products will be developed as a result of this project with the primary intention of district-wide implementation as well as state and national replication including: *Theater and Language Arts Integration Strategies Handbook*; A Training Guide; A Training DVD; Model Implementation Design and Evaluation Findings Report from the Project; A Journal Article; Conference Presentations; and Web Site Posting. These products will be posted on JCPS and EAT websites and presentations at conferences will continue in the years following the project.

We anticipate that subsequent to the end of the grant period, the JCPS district will include a district wide follow-up project to include professional development workshops for all 2nd and 3<sup>rd</sup> grade teachers and classroom demonstrations for all 2nd and 3<sup>rd</sup> grade students. (It should be noted that the district funded a follow-up project to an AEMDD 2005-2008 grant in which JCPS in partnership with EAT provided 12 hours of professional development for all 250 4<sup>th</sup> and 5<sup>th</sup> grade teachers over a 2 year period. These teachers made use of the handbook, learned additional strategies, planned new lessons, and implemented those lessons in the classroom.

It is expected that the Director of Visual and Performing Arts will continue the mentoring and coaching, and provide on-going in-service training on the use of this model with her staff beyond the grant period. Teachers will be made aware of arts related graduate courses to further their knowledge of the integration of the arts. The EAT will develop and disseminate supplementary curriculum lessons through in-school and professional development training after the end of the grant period.

The effectiveness of the workshops on improving student achievement and classroom teaching will be documented by an independent team of evaluators from Seton Hall University (see evaluation plan). With evidence as to the effectiveness of the approach, it is anticipated that teachers will be more willing to incorporate theater standards into their work.

Presentations of the model, the findings, and strategies will be made at the following educational conferences: the New Jersey Education Association, the Art Educators of New Jersey, the Southeast Center for Education in the Arts, and the American Alliance for Theater and Education. Presentations at state, regional and national conferences and forums will continue after the conclusion of the grant period. It should be noted that presentations for the previous AEMDD grant have taken place during and subsequent to the grant period at the following venues: American Alliance for Theater and Education, the Art Educators of New Jersey, New Jersey Education Association, the Southeast Center for Education in the Arts Forum and Forums at New York University, Indiana State University and The Ohio State University. Dissemination of the handbook, DVD, and student/teacher reports will continue after the final grant year as has been the case for the previous grant. The EAT and JCPS will continue to present at other national conferences and university settings as the opportunities arise after the grant ends.

#### **4) Quality of project personnel**

##### ***(4a) Qualifications, including relevant training and experience, of key project personnel...***

The JCPS will be the lead institution in the partnership and will provide overall program oversight. The JCPS business administrator will manage the legal and financial aspects of the grant. The JCPS District Supervisor for the Visual and Performing Arts (since 1991), Nancy Healy, will act as Project Director and will have full administrative oversight spending 20% of time on project (in-kind) including fiscal oversight, coordinating school principals and teachers, securing and managing subcontracts and ensuring services are provided and evaluated. She has an MA in education with a concentration in art curriculum from NJ City University and has served on the NJ Department of Education panel for NJCCCS in the Arts (1996) and accompanying frameworks, as well as the Assessment Panel in the Arts. In 2002, she served as co-chairperson for the NJDOE revision of the arts standards, and in 2003 she was awarded the NJ Governor's Award in the Arts for Leadership in Arts Education. Currently she is serving on the 2009/10 Revision of the NJCCCS. Throughout her tenure, Ms. Healy has spearheaded the development and implementation of interdisciplinary programs and curriculum for making the arts more accessible to classroom teachers.

The JCPS will partner with the Educational Arts Team to implement the program. The JCPS and the EAT, a Jersey City based arts in education agency, has had a successful relationship for over 30 years. The EAT offers a menu of in-school and after-school workshop programs, operates a summer arts camp for urban children, and provides professional development training for educators. The day-to-day administration of the project will be managed by the Executive Director of the EAT, Carmine Tabone. Tabone will act as Program Manager for the project responsible for: monitoring the subcontract budget, supervision of Teaching Artists and other

consultants, overseeing the development of lesson plans and publishing of project materials, providing the professional development training, coordinating activities with the evaluator, and disseminating information about the project. Tabone will devote 45% of his time to this project. He has served as a board member and vice-president of the American Alliance of Theater and Education and Regional Governor for the Children's Theater Association of America. He has been an adjunct faculty member at NYU in the theater education program and has conducted in-service training workshops at regional, national and international conferences. In addition, he is a co-author of *Drama Activities for K-6 Students: Creating Classroom Spirit* and author of several articles on the subject of arts in education. He successfully implemented the two previously funded AEMDD Theater Infusion grants (2005-present). He holds an M. A. from New York University in Educational Theater and an Ed. S. from Seton Hall University in Education.

The Teaching Artists hired and supervised by the EAT, will be responsible for implementing the workshops, coaching/mentoring classroom teachers, attending professional development training and assisting in the development of the lesson plans, handbook and training materials. Teaching Artists will have an MA in theater education or the equivalent in theater arts classroom experience. Five part-time Teaching Artists will be hired (20 hrs per wk for 40 wks each year). EAT will also hire additional consultants to assist in the design and development of the Handbook and the district will provide a media specialist (in-kind) to develop the DVD.

The JCPS will subcontract with Seton Hall University (SHU) to conduct an independent evaluation of the project. The evaluation team will be led by Dr. Elaine Walker, Associate Professor and Research Fellow Department of Education Leadership, Management and Policy at SHU. Dr. Walker has worked extensively on federal, state and district evaluations including the two previously funded JCPS AEMDD grants. In 2009, Dr. Walker published an article on the

impact of integrated theatre arts on the cognitive development of low socioeconomic students; and her research on the use of process drama in improving student learning in language arts and mathematics is a finalist for the outstanding research award being given by the American Alliance for Theatre and Education (AATE). The article was selected through a peer review process for the methodological approach it adopted in studying the contribution of arts integration to student learning. Currently, Walker is editing a special issue journal in conjunction with the Department of Health and Human Services on evaluation findings culled from school-based randomized studies that have been sponsored nationally by the agency.

#### **5) Quality of the management plan**

*(5a) The adequacy of the management plan to achieve objectives on time and within budget ...*

*(5b) Extent to which the time commitments of staff are appropriate and adequate*

See timeline below for specific activities to be carried out in order to achieve project objectives within budget and on time. Previous grant collaborations have been successfully carried out within time constraints as indicated above and on the following timeline. Please note the Project Director is the JCPS District Supervisor for the Visual and Performing Arts, the Project Manager is the Executive Director of EAT, and the Project Team consists of Project Director, the Project Manager and the Evaluator.

### Theater and Language Arts Integration and Immersion

YEAR 1(10-11): Activity Description	Person(s) Responsible	S	O	N	D	J	F	M	A	M	J	J	A
Sign subcontract letter of agreement	Director, Manager	X											
Meet with budget officer to develop fiscal procedures	Director, Manager	X											
Hire Teaching Artists as needed	Manager	X											
Order Program Materials and Supplies	Manager, Teaching Artists		X	X	X	X	X	X	X	X			
Hold Partner Meetings	Director, Manager, Evaluators	X	X	X	X	X	X	X	X	X	X		X
Hold EAT – Teaching Artist Meetings	Manager, Teaching Artists	X	X	X	X	X	X	X	X	X	X		X
Kick-off meeting with principals and teachers	Director, Manager	X											
Meet with Language Arts and Early Childhood Literacy Supervisors re trainings and integration strategies	Director, Manager, Teaching Artists	X	X			X	X						
Select 12 teachers from 3 schools for pilot	Project Team	X											
Develop and schedule lesson plans	Manager, Teaching Artists	X	X	X	X	X	X	X	X	X	X		
Develop and revise 12 hrs teacher training	Manager, Teaching Artists	X	X			X	X						
Conduct two 6 hour trainings with pilot teachers	Manager		X			X							
Provide workshops in pilot classrooms	Teaching Artists		X	X	X	X	X	X	X	X			

<b>YEAR 1 (10-11): Activity Description (cont.)</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Develop Theater & Language Arts Integration Handbook	Manager, Teaching Artists		X	X	X	X	X	X	X	X			
Disseminate first draft of Handbook to pilot teachers	Manager, Teaching Artists									X			
Select 6 treatment and 6 control schools for year 2 & 3	Project Team		X										
Notify principals and provide project overview	Project Director and Manager			X									
Develop and test teacher and student assessment tools	Evaluation Team	X	X	X	X	X	X	X	X	X			
Review and evaluate student portfolios	Manager, Evaluator, Readers			X	X				X	X	X		
Release Year One report	Project Team								X				
Collect baseline data: treatment/control teachers/students	Evaluation Team								X	X	X		
<b>YEAR 2 (11-12): Activity Description</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Hold Partner Meetings	Project Team	X	X	X	X	X	X	X	X	X	X		X
Hold EAT - Project Team Meetings	Manager, Teaching Artists	X	X	X	X	X	X	X	X	X	X		X
Meet with budget officer	Project Director, Project Manager	X											
Hold Kick-Off Event for targeted principals and teachers	Project Director, Project Manager	X											
Conduct two 6 hour trainings with treatment teachers	Manager, Teaching Artists		X			X							
Revise and conduct 30 lessons in the 24 2 <sup>nd</sup> / 3 <sup>rd</sup> grades	Manager, Teaching Artists		X	X	X	X	X	X	X	X	X		

<b>YEAR 2 (11-12): Activity Description (cont)</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Conduct and coach integrated arts lessons	Teaching Artists		X	X	X	X	X	X	X	X	X		
Collect portfolio assignments	Manager, Teaching Artists		X	X	X	X	X	X	X	X	X		
Revise Handbook based on lesson plans and methods	Manager, Teaching Artists		X	X	X	X	X	X	X	X	X		
Collect pre-test data: treatment/control teachers/students.	Evaluators		X	X									
Collect post-test data.	Evaluators							X	X				
Analyze the data.	Evaluators								X	X			
Prepare Evaluation Report	Evaluators								X	X	X	X	
Review and evaluate portfolios	Evaluators, Readers			X	X				X	X	X		
Project Staff Produces Year 2 Report	Project Team							X	X				
Hold Planning Meetings for Year 3	Project Team									X	X		X
Disseminate 2nd draft of Handbook to treatment teachers						X							
<b>YEAR 3 (12-13): Activity Description</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Hold Kick-Off Event with principals and teachers	Project Director, Project Manager	X											
Meet with budget officer	Project Director	X											
Hold Partner Meetings	Project Team	X	X	X	X	X	X	X	X	X	X		X

<b>YEAR 3 (12-13): Activity Description (cont.)</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Hold EAT - Project Team Meetings	Manager, Teaching Artists	X	X	X	X	X	X	X	X	X	X		X
Conduct two 6 hour trainings with treatment teachers	Manager		X			X							
Conduct integrated arts lessons in 2 <sup>nd</sup> / 3 <sup>rd</sup> grade classes	Teaching Artists, Teachers		X	X	X	X	X	X	X	X	X		
Provide support & coaching in target classrooms	Teaching Artists		X	X	X	X	X	X	X	X	X		
Continue data collection for treatment and control groups	Evaluation Team		X	X				X	X				
Collect portfolio assignments			X	X	X	X	X	X	X	X	X		
Distribute Handbook to treatment teachers	Project Manager		X										
Develop a training manual based on the professional development training from year one, two and three.	Project Manager Teaching Artists		X			X	X	X	X	X			
Develop a DVD for dissemination with the integrated arts strategies handbook	Project Manager, Teaching Artists and JCPS media specialist						X	X	X	X	X		
Analyze evaluation data.	Evaluators								X	X	X		
Prepare and disseminate Year 3 Report	Evaluators, Project Manager								X	X	X		X
Review and evaluate student portfolios	Evaluators, Readers			X	X				X	X	X		
Disseminate information on the project	Project Manager								X	X	X		X

Present model, findings and methods at conferences	Project Manager; Evaluators			X			X					X	
Develop article for publication in research journal.	Project Manager; Evaluators						X	X	X	X			
Hold planning meeting for Year 4	Project Team										X		X
<b>YEAR 4 (13-14): Activity Description</b>	<b>Person(s) Responsible</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>
Hold Partner Meetings	Project Team	X	X	X	X	X	X	X	X	X	X		X
Hold EAT - Project Team Meetings	Manager, Teaching Artists	X	X	X	X	X	X	X	X	X	X		X
Meet with budget officer	Project Director	X											
Hold Kickoff event for principals/teachers	Project Director, Project Manager	X											
Conduct 6 hours of training with 200 teachers	Project Manager		X					X					
Demonstrate 4 lessons for all 2 <sup>nd</sup> / 3 <sup>rd</sup> grade classes	Teaching Artists		X	X	X	X	X	X	X	X	X		
Complete DVD for dissemination with Handbook	Manager, JCPS Media Dept		X										
Evaluators continue to collect final data	Evaluators	X	X	X	X	X	X	X	X	X	X		
Disseminate reports, findings and strategies	Project Team	X	X	X	X	X	X	X	X	X	X		
Present findings and strategies at conferences	Project Team			X					X	X		X	
Evaluation Team to complete final research report	Evaluators								X				X
EAT and JCPS posts findings/Handbook/materials on web	Project Manager	X	X	X									X

***(5c) The adequacy of procedures for ensuring feedback and continuous improvement ...***

As indicated in the above timeframe, the JCPS Supervisor of VPA and the EAT Program Manager will meet monthly during Years 1, 2, 3 and 4 to discuss program status; organize trainings; develop program materials and discuss the evaluation. Other JCPS staff (i.e. language arts supervisors; performing arts teachers), EAT staff/consultants and evaluators may also attend so all can be kept abreast of the program's progress. The District Supervisor and Program Manager will hold an initial meeting with the Principals of targeted schools and meetings throughout the grant to discuss implementation. The Program Manager will hold weekly group meetings with the Teaching Artists and meet individually for supervision. The District Supervisor/Program Manager will meet regularly with the evaluation team and on an as needed basis with the Handbook Editor and Video Producer. A kick-off event and a year end event will be held annually.

**6) Quality of the project evaluation**

***(6a) Extent to which the methods include objective performance measures . . . .***

***(6b) Extent to which evaluation methods will provide performance feedback . . . .***

**Evaluation Hypotheses:** The research hypotheses below are linked to the theory of change underlying the Theatre and Language Arts Integration and Immersion project (Objectives are listed under Section 3c of the proposal). The theory of change posits that an arts integration and immersion project which uses process drama and improvised encounters can lead to improvements in young learners' reading comprehension, writing skills and social learning. Moreover, it is assumed that a professional development experience for teachers of these young students which is founded on a constructivist framework can enhance teachers' sense of efficacy with respect to their ability to implement language arts lessons that integrate the performing arts.

However, a number of mediating factors are identified for both teacher and student outcomes. For students, these mediating variables are such pro-cognitive behaviors such as time on task, completion of assignments and classroom behaviors as well as their attitudes towards the arts. For teachers, we use the Theory of Planned Behavior (Ajzen) to identify a number of factors that mediate their behaviors. These include attitudes toward and knowledge of arts integration techniques; perceived support and encouragement from others (principals, peers and district supervisors) to teach arts integrated lessons and perceived behavioral control that is the extent to which teachers feel competent in their abilities to deliver an arts-integrated language arts lesson.

**Research Hypotheses:**

*Hypothesis 1:* In the pre-intervention assessment of language arts assessment and other relevant outcome measures, no significant difference is expected between students in the intervention schools and control schools.

*Hypothesis 2:* In all subsequent assessments, students in the intervention schools will perform significantly better on language arts assessments than students in the control schools.

*Hypothesis 3:* Students in the intervention school will show significant improvement in mastery of the arts standards from pretest to posttest.

*Hypothesis 4:* Students in the intervention schools will form more significantly positive attitudes towards the arts than student in the control schools.

*Hypothesis 5:* Overall the level of pro-cognitive growth will be higher for students in the treatment as opposed to control schools.

*Hypothesis 6:* Teachers in the Theatre and Language Arts Integration and Immersion project will develop more positive attitudes toward arts integration; have greater understanding of how

to integrate the arts in the teaching of language arts and form greater positive intention to teach an arts integrated lesson than teachers in the control schools.

**Evaluation Design:** The study calls for a cluster randomized design in which schools are randomly allocated to either the treatment or control group. Among the treatment group, there are two distinct groups of students, those who would have participated in the arts integration project for only one year, and those who would have participated for two years as second and third graders. Data collection for the impact or outcome studies is cross-sectional with two waves of instrument administration at baseline and 10 months from the start of school for students in the one year cohort (Group A) in both the treatment and control schools respectively; and longitudinal with four waves of data collection for students belonging to the two year cohort (Group B) in both treatment and control schools respectively. This design allows us to test whether length of exposure to arts integrated instruction is differentially related to outcomes. In addition to the outcome studies there will be a process evaluation that measures the extent to which the intervention's implementation adhere to what was proposed in the logic model.

**Sampling Size/Sampling Strategy:** Sample size estimations are based on power calculations for cluster randomization. We are assuming that intraclass correlation for students within schools will be similar, but that there will be differences across schools. In determining the appropriate parameters, we calculated the minimally detectable effects (MDE) based on our past findings and using the guidelines established by Bloom (1995). Optimum design a software program for determining sample size for cluster design was used. We believe that the study will be properly powered with power at .80 and the probability level at .05 and a total sample size of approximately 600 in the treatment and 600 in the control group respectively across all 12 schools thus yielding about 50 students per grade level per school.

**Randomization:** The proposed randomization entails two stages, First, the random assignment of six schools to treatment and six schools to the control groups respectively. Twelve schools have been recruited for inclusion in the study. Six matched pairs have been formed based on percentage of students eligible for free and reduced lunch; percentage of students passing the New Jersey Assessment of Skills and Knowledge in language arts; percent of student mobility; average attendance and the percentage of students whose first language is one other than English. From each pair of matched schools one school will be randomly selected to be in the treatment group, and the other to the control. The second stage of randomization entails the random selection of two second and two third grade classrooms respectively in each school to constitute the study group. In all there will be 24 randomly selected classrooms that will participate in Theatre and Language Arts Integration and Immersion project (12 second and 12 third grade classrooms) and 24 classrooms that will be in the control.

**Data Analyses:** We propose to use a number of statistical techniques with our data. First, for our SMART objectives (formulated for teachers and students), simple descriptive statistics will be calculated and reported for the Grants Performance Project Reports. Using the Department of Education's benchmark of 10% representing significant results, we will be reporting the extent to which our objectives meet and or exceed this benchmark. Second, for the research hypotheses, multi-level fixed effects models will be the primary statistical technique employed because of the cluster sampling design used in the study in which students are nested within schools. Third, in testing for statistical differences between the treatment and control teachers, an Analysis of Variance Model will be used with knowledge, attitudes and behavior as outcome measures. Fourth, grounded theory will be used to analyze the qualitative data that will be yielded from our interviews with teachers and teaching artists; and finally, critical incident techniques will be used

by teachers who will be engaged in action research projects during year four of the grant to describe their experiences in implementing the integrated lessons within their classrooms.

**Instrumentation:** During Year 1 (Planning Year) we will be working on the development and refinement of all data collection instruments. There are three instruments which we have used in past studies of arts integration projects. These are: An Integrated Theatre Arts Student Questionnaire (baseline and follow-up versions), Teacher Attitudes toward Arts Integration and the classroom teacher student pro-cognitive rating scale. The reliability coefficients for all three questionnaires range from .80 for the teacher questionnaire to .96 for the classroom pro-cognitive rating scale. All three are self-administered instruments. However, while we have used the student questionnaire with fourth through seventh grade students, we have not used the instrument with younger aged pupils. Thus, particularly for the second graders we will be developing and piloting during the planning year, alternative ways of measuring students' attitudes toward the arts, as well as different methodological approaches to gathering their opinions- such as one-on-one or small group administration. These techniques have been used in past attitudinal as well as cognitive studies of younger aged students' development. For the third grade, we will be refining the Integrated Theater Arts Student instrument in order to make it developmentally appropriate for this subgroup. The pro-cognitive rating scale which covers a number of critical dimensions such as attentiveness in class, completing work in a satisfactory manner; getting along with peers in class, turning in homework on time, attendance, volunteering in class, responding to teacher questioning and respect for other students will be revised to reflect the critical pro-cognitive expectations for students in the third and second grades. We will be working with second and third grade teachers in the three pilot schools to assist us in the refinement of this instrument.

## **Process Evaluation: Monitoring of Implementation and Aiding Replication**

The goal of the process evaluation is threefold: first, to collect data on the actual implementation of the intervention with a view to establishing the degree of implementation fidelity achieved by the intervention; second, to provide ongoing monitoring of the intervention and to use the monitoring data to aid in improving implementation; and third to collect systematic data on the intervention that can be used by others who might have an interest in replicating the intervention within their own school districts. The process evaluation will draw on a multiplicity of data sources to include the following: interviews with teachers and teaching artists; collection of dosage information at both the student and teacher level; review of the lesson plans developed; classroom observations of lessons, observations of teacher training and meetings held on the project and document reviews. Standard protocols will be developed for the process evaluation. Table 1 delineates the major evaluation questions to be addressed in the process evaluation.

Table 1: Link between Process Evaluation Questions, Data Sources, & Data Collection

### Techniques

<b>Evaluation Questions</b>	<b>Data Sources</b>	<b>Data Collection Techniques</b>
What process was used by (JCPS) and EAT to foster involvement with major stakeholders?	JCPS and EAT staff, school staff,	Focus groups, review of agendas and minutes of meetings.
What was the quality of the planning that was undertaken?	EAT staff, documents	Individual interviews, document reviews, agenda and minutes of meetings.

What is the level of internal resources committed to the project?	EAT staff, organization charts	Individual interviews, review of organizational chart and documents.
What are the mechanisms for communicating with major stakeholders?	EAT, school and JCPS staff	Focus Groups, agendas, minutes of meetings, identification of communication structures.
What training has been provided for teachers and teaching artists?	EAT and JCPS Staff,	Focus group Interview with Project Director Training documents Observation of training systems
What is the degree of participation by teachers in the training?	EAT and Teachers	Attendance records, teachers' workshops evaluations
How involved are students in the arts-integrated classrooms?	Students; teaching artists and teachers	Classroom Observations
What is the quality of the lesson plan development process and the lesson plans themselves?	EAT , teachers	Lesson plan review; interview with project director
How well are co-taught arts integration lessons delivered in the classrooms?	Teachers; teaching artists	Review of reflection logs completed jointly by teachers and teaching artists after each lesson

***Data Collection- Implementation***

During the planning year, data will be collected on the planning process, lesson plan development, classroom piloting of the lessons and organizational infrastructure to support the

intervention. Interviews will be held with the project director and staff and a critical analysis of the lesson plans for their developmental appropriateness, pedagogical soundness and extent of articulation between the language arts standards and arts standards will be done. Extensive interviews (six in total) with the teachers in the pilot schools soliciting their feedback on the extent to implementation of the lesson plans within their classrooms will be conducted.

### ***Students***

During the planning year, baseline data on student academic performance will be collected for all first and second grade students in the twelve schools. These students will be eligible for inclusion in the study during year 2 when full implementation of the project begins. In the fall of 2011, baseline attitudinal and pro-cognitive data will be collected for students in the randomly selected control and intervention schools. In subsequent falls of each ensuing project year, baseline data will be collected only for new students to the study. Posttest data will be collected for all students at the end of each academic year. These data include attitudinal and pro-cognitive information as well as information on student performance on state and district assessments. In 2012, student performance with respect to the national arts standards will be collected via portfolios. These portfolios will be collected at two time points in the fall and spring and on a random sample of students from each classroom involved in the intervention.

### ***Teachers***

#### **All Teachers (Treatment and Control):**

Baseline and follow-up surveys with teachers in the treatment and control group will begin in the fall of 2011 and continue through 2014. For treatment teachers only, feedback on the training received will be garnered after each workshop. All teacher questionnaires will be self-administered. Interviews with teachers will be conducted twice in the Fall and twice in the

Spring to garner their feedback on the project. These data will be particularly beneficial in helping the project to remain sensitive to teacher reactions and to make ongoing adjustments to the implementation process. These interviews will be augmented with the teacher/teaching artist reflective logs which we have used in the past. These logs are completed after each lesson jointly by the teacher and teaching artists. They contain such information as the extent to which the lesson was perceived to have gone over well with student; how engaged students were in the lessons, and the classroom teachers' perception of his or her role in the lesson. In addition, classroom observations will be done in a randomly selected number of classrooms. We will be using similar techniques to the ones which we have previously used, where a leading expert in drama techniques observes the delivery of the lessons and documents the critical meta-cognitive strategies students used in their processing of the techniques and their relating of the arts strategies to language arts skills. All 24 treatment teachers during year 4 will be asked to participate in action research projects in which they will be asked to provide reflective narratives on their experiences in teaching an arts integrated lesson on their own. These will be shared with other teachers at the district wide training sessions in year 4. These narratives will be collected at four time periods twice in the fall and twice in the spring.

### **Confidentiality**

Institutional Review Board approval through Liberty IRB will be secured for the project. Research Assistants and project staff involved with the project will be trained on issues related to confidentiality and will be required to take the human subjects protection training available through [www.citiprogram.org](http://www.citiprogram.org).

## **Dissemination of Findings to Project Staff, Local Stakeholders, Academic Community, School districts and Policy Makers**

Monthly meetings focusing on providing ongoing feedback from the process evaluation will be held between the evaluation team and the project staff. At the end of each project year, an evaluation report capturing the salient findings from the process and outcomes-based evaluation will be developed and shared with the project staff and district personnel. In the fall of each year, similar to what has been previously done a newsletter capturing the progress of the intervention will be created and disseminated to all local stakeholders as well as other educators in the state. The newsletter will also be posted on the Education Arts Team website. Each year, at least one proposal will be submitted to a national peer reviewed conference for presentation and at least one journal article will be submitted for publication. Graduate students with an interest in arts integration will be encouraged to pursue dissertation studies on the topic using the Theatre and Language Arts Integration and Immersion project as their subject of study. To date, we have had three doctoral dissertations that have been written on arts integration from a leadership and policy perspective.

**Logic Model for the *Integrated Theatre and Arts Strategies Program***

<b>Components</b>	<b>Target Population</b>	<b>Intervening Factors</b>	<b>Short-Term Outcomes</b>	<b>Long-Term Outcomes</b>
<p><b><u>Program Components</u></b></p> <ul style="list-style-type: none"> <li>❖ Professional Development</li> <li>❖ Theater Workshops</li> <li>❖ Action Research</li> <li>❖ Lesson Plan Development</li> </ul> <p><b><u>Arts Strategies</u></b></p> <ul style="list-style-type: none"> <li>❖ Process Drama</li> <li>❖ Inquiry-based</li> </ul>	<ul style="list-style-type: none"> <li>❖ 24 randomly selected treatment classrooms (600 students in grades 2 &amp; 3) and their teachers</li> <li>❖ 24 randomly selected control classrooms (600 students in grades 2 &amp; 3) and their teachers</li> </ul>	<ul style="list-style-type: none"> <li>❖ Student demographics</li> <li>❖ Teacher demographics</li> <li>❖ School context</li> </ul> <p><b><u>Program Characteristics</u></b></p> <ul style="list-style-type: none"> <li>❖ # of training sessions</li> <li>❖ Efficacy of teacher training</li> <li>❖ # of in-class workshops conducted by the teaching artists</li> <li>❖ Quality of the Action</li> <li>❖ Quality of the lessons</li> </ul>	<p><b><u>Teacher Outcomes</u></b></p> <ul style="list-style-type: none"> <li>❖ Knowledge, comfort and implementation in integrating the arts</li> </ul> <p><b><u>Student Outcomes</u></b></p> <ul style="list-style-type: none"> <li>❖ Pro-social &amp; Pro-cognitive growth</li> <li>❖ Attitudes and outcomes in the arts</li> <li>❖ Academic outcomes in language arts</li> <li>❖ Mastery of arts standards</li> </ul>	<p><b><u>Long-term Impact</u></b></p> <ul style="list-style-type: none"> <li>❖ Sustained improvement in student academic performance</li> <li>❖ Sustained improvement in student mastery of arts standards</li> <li>❖ Sustained teacher practice with arts integration</li> </ul>