

DIGITAL DELLTA PROJECT NARRATIVE

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(1)(a) ArtsConnection seeks AEMDD support for *Digital DELLTA (Developing English Language Literacy Through the Arts)*, a new project that targets middle school English Learner (EL) students in four New York City Public Schools (NYCPS). *Digital DELLTA* will integrate standards-based arts education in theater and dance into the core middle school ESL/ELA curriculum to improve EL students' academic performance, including acquisition of English language vocabulary, discourse practices and skills in creating, connecting, performing and responding to the arts. Students will achieve this by studying directly with experienced theater or dance teaching artists working in collaboration with ESL/ELA teachers in four Title I middle schools in Queens and the Bronx. (See statistics attached.) Students will create and perform original material they have written or choreographed based on themes from the Social Studies and/or ELA curriculum; they will attend and respond to performances by professional artists to provide a broader context for their work in class. Students who participate in project years 2, 3 and 4 will also learn to document their learning process in the arts using digital technologies, and prepare a digital portfolio of their learning to share with the school community. This project, therefore, addresses *Competitive Preference Priority 2* as well as the *Absolute Priority* for the AEMDD program. *CPP 2*: ESL/ELA teachers will collaborate with an ArtsConnection theater or dance artist and an Educational Technology Manager to help students who participate in learn to use digital technologies to document their learning process in the arts and develop a digital portfolio of their work that can be shared with the school community. (See Management Plan (5)(a).)

According to a 2012 report from the Annenberg Institute for School Reform (Fruchter et al), demography is still destiny for students in New York City's public schools: "In spite of the city's efforts to increase equity by expanding high school choice and creating five hundred new

small schools and one hundred charter schools [during the past decade], college readiness rates are still largely predicted by the demographics of a student's home neighborhood (p. 1)...the higher the percentage of Black and Latino residents in specific neighborhoods, the lower the college readiness scores of the high school graduates in those neighborhoods (in 2011)." (p. 4)

The authors of the Annenberg report also cite an earlier study that showed sizable middle school effects on high school choices: "students tended to prefer high schools that matched their own academic, racial and socioeconomic background" rather than reaching beyond those factors. (p. 8) Reports by the New York City Coalition for Educational Justice (2007, 2008) also "demonstrated that patterns of inequity in middle school curricula, as well as disparities in resources such as teacher quality and student support, are associated with low student achievement in the city's middle schools." (p. 8) In addition, numerous studies have shown that the main reason students drop out of school boils down to two key risk factors: academic performance and educational engagement. Students themselves consistently report that the reason they drop out of school is lack of motivation: "76 percent said school was boring and 42 percent said they were not learning enough—responses that once again beat out a long list of other possibilities by a substantial margin." (Achieve, Inc., 2006) There is, therefore, a direct line in the trajectory of a student's success post-graduation—and even getting to graduation—based on that student's middle school experience, which, in turn, is primarily determined by the racial and cultural composition of the neighborhood where she lives.

A report by the New York Immigration Coalition (NYIC) highlights the challenge for EL students in the NYCDOE: of the 34% of NYC EL students who graduated in four years in 2013 "only 7% of this cohort were rated 'college and career' ready on State metrics." (p. 8) Current approaches in use nationwide have not helped EL students acquire the academic skills necessary

to close educational achievement gaps: in 2008, 34% of EL students in New York State (NYS) graduated within four years of entering high school, vs. 74% of non-EL students. (NYIC p. 8) One reason for this poor showing is EL students enter high school unprepared to meet the academic demands they find there: on the 2010-2011 NAEP, 79% of EL students in NYS scored *Below Basic* on the 8th grade Reading exam. (NYIC p. 7) The issue is acute in NYC where more than 41% of the 1.1 million students speak 160 languages other than English at home and 160,000 students were designated EL in 2013. Although EL students represented 18.6% of NYC middle school population in 2010, only 4% achieved proficiency on 8th Grade ELA tests (NYC Department of Education - NYCDOE), placing them firmly within the drop-out risk factor of poor academic performance.

In addition, the majority of EL students in the NYCPS (69.2%) qualify for free lunch, and nearly 90% of middle school EL students in NYC also fit into one or more categories that further complicate the challenges they face. They are: 1. Newcomers, persons entering the country within the last two years; 2. Students with Interrupted Formal Education (SIFE); 3. Students with disabilities; and/or, 4. Long-term ELs, who have completed six years of English language support services yet continue to require them. While the NYCDOE considers middle school EL students in these categories are “not best-served by current approaches” (NYCDOE, 2011), the NYIC report states it more explicitly: “...education for English language learners is in crisis.” (p. 8)

Digital DELTA is designed to address the core risk factors for middle school students—lack of educational engagement and low academic performance—as well as helping EL students develop the language practices and 21st century skills they will need to be constructive and creative participants in college and careers. Our theory of change is *when English Learner middle school students learn to work and think like artists by engaging in authentic arts*

experiences under the direction of teaching artists working in collaboration with ESL/ELA classroom teachers, and document and share their learning process through digital media portfolios, they will improve acquisition of contextualized academic, socio-linguistic, strategic and discourse levels of language needed to be college and career ready. This model builds on ArtsConnection's previous DELLTA work with middle-school ELs (AEMDD, 2006) and demonstrates evidence of promise: among previous middle school EL students in DELLTA who participated in 12-session residencies in both dance and theater, 66% improved ELA scores vs. a comparison group (scores above 50% indicate superior student progress when compared to the matched group); 78% demonstrated knowledge and skills in dance and theater; 73% showed growth in English, expressivity, focus and elaboration; and, 70% improved their problem-solving strategies and capacity for sustained effort (including ownership of learning process, self-confidence, cooperative learning and motivation), as measured by teacher assessments. Further, evaluators found that participating EL students developed key non-cognitive skills, including: motivation; perseverance /task persistence; ability to focus; ownership of learning; and self-confidence (Horowitz, 2010). These precise skills have the potential to reverse the core risk factors that fuel dropout rates and address the learning habits and skills that EL students especially need for academic readiness.

Digital DELLTA will build on this work by addressing three levels of middle school effects on future student choices and academic outcomes: rigorous school curricula; access to technical resources and knowledge; and, teacher quality. First, it helps students learn to work and think like artists through a rigorous curriculum aligned simultaneously with the National Core Arts Standards (NCAS) in Dance and Theater in the artistic processes of Create, Connect, Perform and Respond and, the Common Core State Standards (CCSS) in ELA/Anchor Standards for

Speaking and Listening (CCSS S/L) 1-6 (Comprehension and Collaboration; Presentation of Knowledge and Ideas). Second, it provides expanded learning opportunities for EL students by including the use of digital technology as a learning tool that will deepen their understanding of the artistic process and build meta-cognitive skills by documenting, assessing and sharing their learning with the school community. Third, it adapts effective professional development and teaching practices previously validated at the elementary school level (PDAE, 2010) for teams of English as a Second Language (ESL) and ELA or Social Studies teachers from four Title I NYC public middle schools, along with dance and theater artists, to engage in practitioner inquiry to: 1. collaboratively deliver interdisciplinary arts and ELA/Social Studies instruction and facilitate formative assessment practices that support second language acquisition (SLA) and build understanding of the learning process in the arts; and, 2. help students develop digital documentation of their learning process in theater or dance, and use digital documentation as a way to assess and present their learning to an audience of their peers.

(1)(b) A recent report released by the NYC Comptroller’s office found that arts instruction in the NYCPS “has been weakened by a decade of disinvestment and disincentives and a school accountability system...that fails to fully recognize the value of comprehensive arts education.”

(p. 1) The report concluded that “reductions in arts education have fallen disproportionately on the city’s lower income neighborhoods,” again showing that a student’s zip code is a determining factor in his or her access to arts education. In fact, the neighborhoods cited as the least likely to offer arts learning experiences to their students are also areas with high concentrations of ELs.

An additional structural problem in middle schools includes the fact that EL students who receive mandated ESL support services are often scheduled for those classes when others are in art classes provided by the school. Simply because they have not tested proficient in English,

therefore, EL students miss the opportunity to participate in expanded and enriched learning opportunities available to other students in and through the arts. *Digital DELTA* will directly address this problem by delivering 25 hours of instruction in dance or theater per year to EL students in four NYC public middle schools, and provide opportunities for them to attend performances by professional dance and theater companies that will help contextualize what they are learning in the arts classroom.

In addition, the traditional structure of middle schools into silos of subjects poses an infrastructure problem that isolates teachers from each other across disciplines. One of the recommendations of the NYIC report to address the objective of improving teacher recruitment and performance is to promote and support greater collaboration among educators. (p. 12) The recent introduction of the rubric being used to evaluate NYCDOE teachers, based on Charlotte Danielson's Framework for Teaching (2013), also reflects this value, including it as one of the six areas of professional responsibilities of teachers. In spite of this fact, few NYC public schools have the resources to provide time for teachers to engage in collaborative, professional inquiry. It has long been our observation that although collaboration is one of the widely held 21st century competencies today's students will need in life and work, teachers cannot effectively teach students to collaborate if they do not themselves have the opportunity to collaborate with colleagues in a variety of professional learning communities. *Digital DELTA* will address this challenge by bringing together ArtsConnection teaching artists and 20 ESL/ELA teachers in sustained, facilitated collaboration and practitioner inquiry over the life of the project in order to help students achieve the goal and objectives of *Digital DELTA*.

To date, the NYCDOE also has not provided adequate support to help teachers integrate digital technologies into their classrooms. This is not simply a local problem: nationally, 22%

of teachers say they lack the right level of technology in their classrooms; only 31% of new teachers say they feel prepared to use technology effectively when they start teaching; and, nearly half of all teachers say they lack the professional development they need in order to use technology to teach. (ConnectEDucators, 2014) *Digital DELTA* will address this problem by focusing the practitioner inquiry described in Section 5.a on the question: *What knowledge and support are necessary to help middle school ELs as they learn to make artistic choices, and use digital technologies to reflect on their learning process and represent it to an audience?* The project will also provide appropriate support for the use and integration of these technologies.

The introduction of the Common Core State Standards (CCSS) continues to redefine academic achievement in a manner that poses even more challenges for EL students. As noted in the *Framework for English Language Proficiency Development Standards Corresponding to the CCSS and the Next-Generation Science Standards* (CCSSO, 2012), “Given the sophisticated use of language required by the standards, these changes also entail a reconceptualization of the way English language learners (ELLs) ‘apprentice’ into these demanding disciplinary practices by simultaneously acquiring and developing language as well as acquiring disciplinary knowledge and skills.” (Emphasis added) (p. 1)

Arts learning works from an apprenticeship model by its very nature. In our current work, we are using innovative, research-based methodologies to integrate standards-based arts instruction with core academic content to help ELs in grades 4 and 5 achieve local and national standards in the arts and English Language Arts (ELA). We are building the capacity of 90 arts educators, classroom and ESL teachers to collaborate across disciplines to construct and teach interdisciplinary units of study addressing NYC Blueprints in the Arts and Common Core standards in ELA. At the end of the first year of this project, we asked the educators—including

the dance and theater artists with whom teachers collaborate in the classroom—to help us understand what kind of learning they were seeing among their EL students. Specifically, we asked them, *What kinds of language practices do students need to learn to work and think like artists?* Their responses brought us to four essentials. Students need to use language to: 1. Understand *the structures, principles, concepts, and vocabulary of the art form*, and understand *criteria* used to assess work within the art form in order to improve their work, i.e., language to help them work like artists. Much of this language crosses disciplines. 2. Brainstorm ideas and *make artistic choices*, incorporating both personal invention and desire along with their understanding of the structures and criteria demanded by the art form. 3. *Explain their choices* to others; discuss ideas, negotiate, and compromise in collaboration with others. Work with others to experiment, adapt, and refine original choices; and, give feedback to peers. 4. *Describe* what a work of art communicates to them. ***Digital DELTA*** will build on this work and apply it to middle school ELs.

While the NYIC report addresses a number of recommendations to build a framework to more effectively educate New York’s EL students and suggests that the Governor’s Commission “should not merely solve for the problems of yesterday,” (p. 9) it does little to address the fact that students of today are going to need to be able to practice *multiple literacies*, including the use of technology and digital media. As Tyler Cowen puts it in his book *Average Is Over* (2013), “If you and your skills are a complement to the computer, your wage and labor market prospects are likely to be cheery. If your skills do not complement the computer, you may want to address that mismatch.”

This is an area where educational institutions in general—and NYCPS middle schools in particular—lack the infrastructure to support the kind of *participatory learning* made possible by

digital technologies (MacArthur, 2006, p. 12) and *digital literacies* that will be essential for all students in the future. And yet again, this is an area where most EL students are left behind their peers due to multiple factors including poverty, and a lack of family connections to schools and other community resources. So long as schools maintain their emphasis on EL students simply learning English rather than re-conceptualizing teaching and learning as an *apprenticeship approach* in which EL students are immersed in demanding practices of a discipline and simultaneously acquire the language practices necessary to participate in that discipline, they are failing to adequately prepare them to be college and career ready.

Many arts organizations similarly lack the infrastructure and knowledge base to support the participatory learning made possible by digital technologies. Beginning in 2008, ArtsConnection expanded the organization to focus on out-of-school-time programs for teens from across NYC. We also began to integrate the use of digital technologies in and through the arts in order to help students move from being digital *consumers* to becoming digital *citizens* who are active and creative participants in a digital culture. Soon after, we initiated an organizational inquiry into how artists are using digital technologies in the creation of their art work and what the implications might be for artists working in the NYCPS. *Digital DELTA* will build on this organizational knowledge to engage EL middle school students in learning to work and think like artists and document their process through digital media portfolios, in order to support the multiple literacy practices needed to be college and career ready and active participants in the digital culture of the 21st century workplace

Finally, in addition to the specific academic standards enumerated in the CCSS and the sophisticated use of language they require, the NYCDOE has defined “the learning habits and skills that support academic readiness,” i.e., to be college and career ready, as: Persistence;

Engagement; Work Habits/Organizational Skills; Communication/Collaboration Skills; and, Self-Regulation.” These are the exact skills our previous DELTA research indicated that students learn in the arts: motivation; perseverance/task persistence; ability to focus; ownership of learning; spatial awareness; self-confidence; and collaborative learning skills. The research strongly suggests these variables are the mechanism for connecting arts learning to acquisition and application of ELA skills. Qualitative analysis also indicates that students acquire ELA skills in the arts by using language in an authentic context that holds personal meaning, and through a sense of ownership of the learning process. (Horowitz, 2010) Importantly, these variables closely mirror the habits of mind enumerated by the NYC DOE as essential to being college and career ready.

Given approximately 2% of EL students who graduated from NYC public high schools in 2013 were deemed by the state to be “college and career ready,” (NYIC, p. 8) this means that 98% of EL graduates—as well as the 66% of EL students who dropped out of school and/or required 5 or more years to graduate—still lacked “the learning habits and skills” necessary to succeed in life and work. We can only concur: the education of English Learners is in crisis. The magnitude of the gaps is enormous and pervasive, including access to rigorous arts education. *Digital DELTA* is designed to address these issues, create a replicable model, and widely disseminate the practices and processes for others to learn from and adapt.

(2) ArtsConnection has an established history of successful completion of research grants from US ED and sharing the information, materials and lessons learned from our work through symposia and publications. The information and materials from these projects have been used in a variety of other settings. For example, following the successful completion of our first

AEMDD grant (2001-2004), the lessons we learned from that project informed a series of projects by the NYCDOE focused on improving the teaching practice of art specialists in the schools (PDAE 2005, 2008, 2011), and a first-round i3 grant (2009) in which ArtsConnection is the theater partner. In two succeeding AEMDD grants (2005, 2006) we built an understanding of ways to address the educational needs of EL students which was then adopted by District 25 in Queens, NY (PDAE, 2011) in which we are adapting lessons learned in our earlier DELTA program for teachers in 11 elementary schools.

All of this work has been built around practitioner inquiries into the nature of teaching and learning in the arts, and their relationship to teaching and learning in other subjects, especially ELA. Our methodologies engage teachers, artists and administrators in communities of practice within and across schools to co-construct knowledge about the nature of student learning in the arts and support its integration across the curriculum. (Rich, 2006) The strength of this work is also key to its portability and ability to be replicated or adapted. While rooted in educational research, the implementation of our methodologies relies on the collective knowledge that teachers and artists develop through classroom practice to progressively build a shared knowledge base. These methods are grounded in easily understood and familiar processes of observation and description. They also incorporate documentation as a key part of reviewing and understanding outcomes, resulting in built-in materials for sharing. The project therefore addresses the fundamental gap between traditional education research and teachers' practice in ways highlighted in a 2002 article: "the kinds of knowledge practitioners generate through active participation and reflection on their own practice" can be the basis for building a professional knowledge base for the profession. (Hiebert et al, 2002) *Digital DELTA* will follow in this tradition and build on the capacities we are currently developing to share our work via the

ArtsConnection website. The products that will result from *Digital DELTA* will emerge from the two tracks of the project.

First, we will provide 25 class hours of instruction in dance or theater per year to EL students in four NYC public middle schools, and opportunities for them to attend performances by professional dance and theater companies that will help contextualize what they are learning in the arts classroom. In Years 3 and 4 of the project, students will develop digital portfolios of their learning process in the art form to share with the school community. Selected portfolios will be posted on the ArtsConnection website in order to represent the student's voice. Partly because most of our previous work has focused on elementary schools, student analysis of their work has been limited in the materials we have shared publicly. With the emphasis of the proposed project on middle-school EL students and the commitment of significant resources to building their capacities to integrate digital technologies into the arts learning experience, we believe students in *Digital DELTA* will produce some groundbreaking work that can be disseminated broadly. These examples will represent students' ability to think meta-cognitively about their own work and present it to a broad audience as makers of media. Educators can benefit from examining these student portfolios to both find exemplars of what students are capable of achieving and models to implement in their own classrooms.

Second, this work will be documented by ArtsConnection artists and staff, and by ESL/ELA teachers using digital technologies. (See Section 5a.) Our practitioner inquiries will focus around two questions: *What knowledge and support structures are necessary to help middle school ELs learn to make artistic choices, and use digital technologies to reflect on their learning process and represent it to an audience? What kinds of **analytic tasks and language practices** do ELs need to learn to work and think like artists in theater and dance?* These

inquiries will be supported by up to 50 hours per year of collaboration among ArtsConnection staff and artists, and 20 ESL/ELA teachers from four NYC public middle schools, including four full-day workshops per year when teachers are released from their teaching responsibilities. Teachers and artists will collaboratively develop digital reports on strategies used with students, lessons learned, and tips for other educators who might want to replicate these strategies in their classrooms. We have found that the format of short videos (approximately 3 minutes each), focused on specific strategies to be the most useful to educators seeking resources on the Internet; hearing the voice of the teacher helps to make the material even more accessible.

Educators will learn how to: provide a clear structure for students to use digital technology to document their learning process; include opportunities to gather and organize digital materials in the learning process; and facilitate a protocol for reflection on and presentation of learning.

ArtsConnection staff will document the processes we develop to facilitate the collaboration among artists and teachers and their responses to the practitioner inquiry questions. We will also document the processes we use to introduce students to digital technologies and how artists and teachers help students develop digital portfolios in the arts classroom. In our own searches, we have found a dearth of materials addressing this question and we plan to further contribute to the field by articulating the how-to that colleagues can access on the web.

(3)(a) *Digital DELTA* builds on research and effective practices in the areas of language learning for English Learner (EL) students; education in the arts, specifically theater and dance; and the education of youth in a digital age. This research supports our project design and shows why we harness the support of theater and dance as “fertile contexts for cognitive and linguistic development not available elsewhere” (Heath & Roach, 2001).

How learning in the arts supports learning language: In the development of the DELTA model (2005–2010), our inquiry question was: *What is the nature of teaching and learning in dance and theater, and in what ways do they influence second language acquisition (SLA) in English Learner (EL) students?* As we worked through our inquiry with over 50 ESL and classroom teachers we found that when students engage in authentic arts-learning experiences in dance and theater, it is significant for ELs because it offers opportunities to combine cognitive, kinesthetic, and affective experiences. The results of our research and practitioner inquiry led us to the following conclusions. **Learning in the arts is:**

1. *Inquiry-based.* The artistic process is one of exploration and making choices that requires using imagination and higher order thinking skills (NCAS, 2014). Such learning opportunities are not always offered to EL students in more traditional classrooms where they typically learn to respond to the curriculum in the *expected* way, striving for the *correct* use of language rather than generating their own purpose for language use.

2. *Experiential and kinesthetic.* Students learn to communicate through body, facial, and vocal expression, and can express more complex ideas and understanding than their limited English capacities allow. Cognition begins in the body; vocabulary and knowledge build from the immediacy of experience (Sylwester, 1995).

3. *Lowers the affective filter* (Krashen, 2003). In the arts classroom, students engage in the creative process and develop a personal stake in the outcome, which helps them take greater risks. Because working in these art forms is intrinsically collaborative and does not privilege language over other ways of knowing, it can take pressure off the individual, which decreases anxiety and levels the field of participation.

4. Provides opportunities for authentic use of English. DELTA participants noted the value of learning language in an authentic context, and this is elaborated on in research as well. It has several components. *First*, learning in the arts connects language and action: most of the language that students are exposed to in the classroom is decontextualized: in order to comprehend it, the learner must rely on language alone (Walqui, 2002). When explaining classroom tasks, teachers often explain difficult language to ELs by using more language; this forces ELs to rely only on linguistic input. In dance and theater learning, however, language and action closely correspond, which helps students acquire vocabulary in an integrated way (Blaydes-Madigan, 2009).

Second, the arts provide opportunities for self-generated conversations that are not facilitated by an adult and hold personal meaning for students collaborating in the creation of a work of art (Little, 2003; Horowitz, 2010). *Collaboration* is an essential element in the performing arts, particularly dance and theater. Working collaboratively to create a dance or theater piece provides a context for meaningful non-verbal language support. These collaborative spaces allow for rich, authentic, and contextualized language exchange; in addition, true language learning is evidenced when learners can create novel phrases and manipulations of the language. Language use becomes increasingly nuanced as students have a stake in getting a specific creative idea across.

Collaborative interaction is at the heart of language development. According to a socio-cultural perspective of SLA, meaning is negotiated by the learner through interaction. Learners create a collaborative dialogue and co-construct linguistic knowledge while involved in meaningful tasks (Swain & Lapkin, 2002). Sir Ken Robinson (2011) defines creativity as the process of holding original ideas that have value. More often than not, this creativity is a result of

the interaction of seeing things across disciplines. As a creative endeavor, the art-making process opens the door for novel language use at every turn. In this process, learners build on one another's language through collaborative experiences, creating the optimum language-learning environment by allowing for an exchange of both comprehensible input and output. The impact on and opportunities for language learning that collaborative artistic experiences offer are so powerful that our current practitioner research focuses on CCSS S/L1—Collaborative Discussions in the arts residency, and how they can inform teaching in the classroom.

These findings mirror research by the independent evaluator on ArtsConnection's programs. Qualitative analysis of the ArtsConnection data indicates that students acquire ELA skills in the arts by using language in an *authentic context* that holds personal meaning, and through a sense of ownership of the learning process. (Horowitz, 2010) The Classroom Assessment of Learning and Teaching (CALT), a system developed for DELLTA (Horowitz, 2008) that rates 20 dimensions of student learning and 11 characteristics of effective teaching and partnership, found that student achievement in DELLTA was strongest in motivation; perseverance/task persistence; ability to focus; ownership of learning; spatial awareness; self-confidence; and, collaborative learning skills. The research strongly suggests these variables are the mechanism for connecting arts learning to acquisition and application of ELA skills. Importantly, these variables closely mirror the habits of mind enumerated by the NYC DOE as essential to being college and career ready. (NYC DOE, 2013)

Another framework for understanding this authentic language context is the *apprenticeship model* (Lave & Wenger, 1991) of learning. As noted in the *Framework for English Language Proficiency Development Standards Corresponding to the CCSS and the Next-Generation Science Standards* (CCSSO, 2012) cited earlier, “. . . the sophisticated use of language required

by the [CCSS] . . . entails a reconceptualization of the way English language learners (ELLs) ‘apprentice’ into . . . demanding disciplinary practices by simultaneously acquiring and developing language as well as acquiring disciplinary knowledge and skills.” To understand the kind of language students are learning while engaging in authentic arts learning experiences we asked, *What kinds of language do students need to learn to work and think like artists?* The response of over 90 educators—including the dance and theater artists with whom teachers collaborate in the classroom—about what language EL students were being apprenticed into while acquiring arts knowledge and skills brought us to four essentials. **Students need to use language to:**

1. Understand *the structures, principles, concepts, and vocabulary of the art form*, and understand *criteria* used to assess work within the art form in order to improve their work, i.e., language to help them work like artists. Much of this is academic language that crosses disciplines.
2. Brainstorm ideas and *make artistic choices*, incorporating both personal invention and desire along with their understanding of the structures and criteria demanded by the art form.
3. *Explain their choices* to others. Discuss ideas, negotiate, and compromise in collaboration with others. Work with others to experiment, adapt, and refine original choices. Give feedback to peers on their own artistic choices.
4. *Describe* what a work of art communicates to them.

These specific uses of language reveal concretely how disciplinary practices and language are interdependent and must be learned together. This apprenticeship model is at the heart of teaching and learning in the arts, and a basic premise of language learning in DELTA.

The specific research and effective practices cited above are part of a large body of research, synthesized in various meta-studies, which supports the value of theater and dance for young people as learners and citizens. This includes recent studies which establish the relationship between participation in the arts and academic and civic outcomes for teenagers and young adults, particularly low SES (socioeconomic status) students (Catterall et al, 2012; Cawthon et al, 2011; Imms et al, 2011). In addition, an international publication by the OECD (Winner, et al, 2013) “assesses the impact of arts education on a variety of skills by critically reviewing all the existing research on these questions,” (p. 3) updating the REAP Study by Hetland and Winner (2000). Finding that theater education continues to emerge as beneficial to verbal outcomes among students at all ages, “there is clear causal evidence that training in classroom drama improves verbal abilities...An additional post-REAP study conducted in several European countries found a positive impact of theatre and drama education on verbal skills...” (p. 160) A meta-analysis by the same authors found that dance education enhances visual-spatial skills and that, given the nature of teaching and learning in dance, “a dance class with an explicit focus on problem-based learning...[would] improve students’ skills in posing, finding and solving problems.” (pp 179-180)

The Education of youth in the digital age. In our previous work, we saw the singular way videotape empowered students to independently and quickly self-assess, reflect and revise their work by allowing them to observe their dance and theater work as an audience. In addition, we saw the power of video for teachers in looking back at student work samples to analyze student learning processes in a depth that is not possible while teaching. It is clear that digital documentation for students was the next step towards giving EL students a voice through arts learning, as an important tool for self-assessment and communication.

Viewing this in a wider context, digital technologies are an essential part of the 21st century landscape at all levels, personal as well as professional. Participatory learning includes “the many ways...learners...use new technologies to participate in virtual communities where they share ideas, comment on one another’s projects, and plan, design, implement, advance, or simply discuss their practices goals, and ideas together.” (Davidson & Goldberg, 2009, p. 12) In his opening remarks at the 2013 DML (Digital Media Learning) conference sponsored by the MacArthur Foundation, Ethan Zuckerman addressed the “crisis in agency” among youth who feel powerless to influence change in their communities, including their schools. Increased agency is a result, Zuckerman says, of deeper knowledge and increased level of engagement in the issues that affect them and their communities. (<http://ypp.dmlcentral.net/content/ethan-zuckerman-dml-2013-keynote-crisis-civics-0>)

This crisis in agency is even more pronounced among EL youth and relates to the many challenges they face, described in Section 1. While nearly all young people, including ELs, carry smart phones or have access to other electronic devices connected to the Internet, most ELs are *takers*, (consumers of digital information or users of social media) rather than *makers* who are creative participants in the digital culture. (Connected Learning, 2013, p. 15) “Preparing youth for democracy in the digital age requires a new approach... digital media literacy has become an essential civic competency...we need models of civic education that build on youth enthusiasm for digital tools and networked life, and support them to use these tools effectively and for civic purposes...all youth need to be provided with civic learning environments that are connected and participatory, and all youth need to participate in practices that offer a range of civic learning opportunities enabled by new media.” (<http://ypp.dmlcentral.net/projects/educating-participatory-politics>)

Finally, many colleges, both community and senior, are looking to digital portfolios as a platform to assess student work and build professional preparedness. The proposed project will integrate knowledge from all three of these domains (the arts; teaching and learning for EL students; digital media learning) to engage EL youth in their learning process in the arts in a way that will also help prepare them to be active and creative participants in the multi-literacies of the 21st century. This practice begins by helping students learn to “share ideas, comment on one another’s projects, and plan, design, implement, advance or simply discuss their practices, goals and ideas together.” (Davidson & Goldberg, 2009, p. 12) The arts classroom is particularly well suited for this level of collaboration, building formative assessment practices and flexibility of thought that will help EL students to acquire the skills of a digital citizen who uses digital media creatively to express their voice and engage in the democratic institutions of tomorrow.

(3)(b) The goal of *Digital DELTA* is to engage EL middle school students in learning to work and think like artists in dance or theater, and document their process through digital media portfolios, in order to support improved acquisition of contextualized academic language and multiple literacy practices needed to be college and career ready and active participants in the digital culture of the 21st century workplace.

Learning to work and think like artists: Our colleagues Jessica Nicoll and Barry Oreck, PhD (2013) describe behaving like artists as “learning to pose meaningful questions, discover interests and pursue provocative problems, and work collaboratively in the unknown territory of artistic creation. Goals and learning objectives become fluid and developmental rather than fixed, predetermined and outcome oriented.” (p. 94) When 60 of our artists participated in a values clarification exercise in September 2013 as part of our annual institute aimed at helping them articulate their teaching practice, many of the same ideas emerged: discovery; connection; take

imaginative risks; give voice to aesthetic ideas; envision other possibilities; persevere; collaborate; create. In order to learn to work and think like artists in all art forms, students need to know how to make artistic choices—e.g., they need to be able to use the tools and language of the art form in order to master the skills of the art form, and achieve an artistic purpose to explore or communicate an idea, concept, or feeling.

Academic language: “Some argue that ‘achievement gap’...is largely an academic language gap.” (O’Hara et al, p. 24) While there are many definitions of *academic language*, we are using the following: “the language used by teachers and students for the purpose of acquiring new knowledge and skills...imparting new information, describing abstract ideas, and developing students’ conceptual understanding.” (Maxwell, 2013) Most of the academic language that students are exposed to in the classroom is decontextualized: in order to comprehend it, the learner must rely on language alone (Walqui, 2002). Working collaboratively to create in the arts, however, provides a context for rich, authentic, and contextualized language exchange. It provides a context to try out new language, for the negotiation of meaning, and builds confidence. Such experiences can help make more abstract content accessible to ELs and they gain confidence because they can express their thinking with their bodies and their language. Finally, while the input learners receive is often random and loosely defined, the arts create an *authentic context for learning* that is both tangible and student-centered as they apprentice into the discipline. The rules of language are not the emphasis of the experience; instead, they develop from the student’s desire to participate. When language learners have opportunities to experience this sort of agency and success, the affective filter is lowered (Krashen, 2003) and students make strides in language development.

Multiple literacy practices: While textual literacy (the ability to read and write) remains a central skill for all students, 21st century literacies (communicating through visual, digital or audiovisual media) are also essential. (Kalantzis & Cope, 2008, p. 197) Contemporary employers value portfolios as much as other evidence of the knowledge prospective employees bring to the table because portfolios also represent thinking processes rather than static knowledge. As Lazlo Bock who is in charge of all hiring at Google said, “the first thing Google looks for ‘is general cognitive ability — the ability to learn things and solve problems...a knowledge set that will be invaluable is the ability to understand and apply information... you have to be able to think in a formal and logical and structured way...[very few people] have this kind of structured thought process *and* creativity.” (Friedman, 2014)

Traditional schools, however, including those in NYC, generally block access for both students and teachers to social networking sites and many other sources of information and knowledge that are generally accessible on private networks by middle class youth. As a result, “...many youth who have had no exposure to...new kinds of participatory cultures outside school find themselves struggling to keep up with their peers.” (MacArthur, 2006, p. 13) The *digital divide* is quickly becoming a *learning divide*: “...it is generally educationally privileged youth with effective learning supports at home who are able to take full advantage of the new learning opportunities that the online world has to offer and to translate these opportunities to their academic and career success.” (Connected Learning, 2013, p. 16) The ladder of opportunities quickly becomes a ladder of participation and success.

The activities, outputs, and short, medium and long-term outcomes articulated in the **Logic Model** for *Digital DELTA* (attached) are designed to address these various aspects of the project goal articulated above in order to implement our theory of change: *When EL middle*

school students learn to work and think like artists by engaging in authentic arts experiences under the direction of teaching artists working in collaboration with ESL/ELA classroom teachers, and document and share their learning process through digital media portfolios, they will improve acquisition of contextualized academic, socio-linguistic, strategic and discourse levels of language needed to be college and career ready.

(3)(c) ArtsConnection’s research shows that outcomes for students are highest where collaboration between teachers and artists is strongest. (Horowitz, 2006) In order to improve teaching and learning and support rigorous academic standards for students, therefore, ArtsConnection dance and theater artists and staff in **Digital DELTA** will collaborate with 20 ESL and ELA middle school teachers to: 1. teach formative assessment strategies that help EL students understand and articulate their own learning process; 2. help students expand that formative assessment process to develop digital documentation of their learning process in the arts; 3. use digital documentation as a way to assess and present their learning to an audience of their peers. These are skills that can transfer to other subject areas and that can be adapted for teaching and learning in other subject areas in addition to the arts.

Our **Logic Model for student outcomes** (attached) identifies four areas of activity which address the National Core Art Standards in Theater and Dance in the domains of Create, Connect, Perform and Respond; and, the six standards for Comprehension and Collaboration (1-3), and Presentation of Knowledge and Ideas (4-6) of the CCSS ELA Anchor Standards for Speaking and Listening. Learning in the art form is sequential over the four years of the project and, in the second year, students begin to develop the skills necessary to create digital portfolios as documentation of their learning process. Throughout the four years of the project, participating students will have the opportunity to: create theater or dance pieces; connect artistic

ideas to personal, cultural or historical contexts; perform for a school audience; and, respond to the work of peers through a formative assessment process and to the work of professional artists after attending their performances.

Digital DELTA Objectives & Milestones for Students: *1. EL middle school students who participate in Digital DELTA for 3 years will meet the 8th grade benchmarks in the NCAS in Theater or Dance for Create, Connect, Perform and Respond.* In creating **theater** pieces, students will explore characterization, setting and narrative; develop a collaborative theater piece, and refine artistic choices through peer assessment and rehearsal. **Year 1/Theater.** Students will spend the first 3 sessions of a 15-session residency building ensemble through a series of theater exercises; and, focusing on physical expression through tableau. By the fourth session, students will begin to build story through improvisation, adding vocal expression, and adapting a story based on a theme or historical context throughout the middle of the residency to begin to build toward performance. In creating theater pieces, students learn the skills of physical awareness, physical expression, vocal expression, observation, focus, collaboration, and problem solving. Theater students will connect their artistic ideas to personal, cultural and/or historical contexts, identifying artifacts and ideas from contemporary or historical time and place to build performance and design choices. They will analyze and integrate information from diverse sources and evaluate source's point of view and appropriateness to the task and purpose of creating a theater piece for an audience of their peers. In preparing for performance, theater students will analyze and select artistic work for presentation, and convey meaning through verbal and physical performance for the school community. **Years 2, 3, 4/Theater.** The residencies will expand to 25 sessions as students begin to integrate the use of iPads or other devices to document their work. In addition to the learning process in Year 1, students will learn

the roles and responsibilities of Director, Assistant Director, Tech/Camera person, Actor and Playwright as they rotate through these roles in small groups, document their work, and develop digital portfolios.

Year 1/Dance. Students will likewise spend the early part of the 15-session residency learning the basics of how to take a dance class through warm-up, criteria for and practice making artistic choices in dance, and the importance of a cool down at the end of each class. They will learn the elements of dance technique, spatial composition, improvisation, rhythm and musicality, and dynamics. Throughout the middle of the residency, they will create a short dance study using an expressive movement vocabulary that communicates an artistic intent, based on a main idea connected to a theme or context being studied in another subject area, and begin to build toward performance. Students will learn to think about and discern the underlying concepts and inspiration for a variety of dances, including their own work, the work of their peers, and the work of professional choreographers. In preparing for performance, dance students will analyze and select artistic work that conveys meaning for presentation to the school community.

Years 2, 3, 4/Dance: Residencies expand to 25 sessions as students work collaboratively to apply aesthetic criteria to choreograph a dance. Students will produce creative work based on physical and cognitive knowledge of the elements of dance and choreography. They will learn to embody kinesthetic awareness, and basic technical dance skills (alignment, coordination, balance, core support, kinetic awareness, movement qualities) to accurately execute changes of direction, levels, facings, pathways, elevations and landings, extensions of limbs, and movement transitions. They will develop skills in spatial awareness, observation, improvisation, focus, collaboration and problem solving. Students will connect artistic ideas to personal, cultural

and/or historical contexts and collaborate with peers through the rehearsal process to make artistic choices that communicate personal or cultural meaning.

The final sessions of the residency in both art forms will help students revise and refine their artistic choices through the rehearsal process as they prepare to share their work with the school community through performance. By performing for the school community, theater students will adapt speech to context and character and help audience follow line of reasoning appropriate to the narrative through their performance. Dance students will express and communicate artistic intent through appropriate and dynamic movement quality choices. They will replicate, recall and retain dance movement sequences and musical or rhythmic phrases, and spatial design, and apply technical dance skills to perform the dance technique they have learned. Performances also help students build skills of risk taking, perseverance, the ability to focus, commitment, task persistence, collaboration and, ownership of learning.

2. EL middle school students who participate in the project for 3 years will achieve the appropriate grade level Common Core ELA Anchor Standards for Speaking & Listening. As part of the **NCAS/Respond**, all students will participate in ArtsConnection's adaptation of the formative assessment process called the **Creative Learning Loop (CLL)**, which is intrinsic to the creative process and creates the space for EL students to build language practices. Artistic creation in all art forms is an iterative process: collaboration, critique and revision are essential, especially in the performing arts. There are three stages of the CLL: establish clear criteria; facilitate peer feedback; allow time for revision. (<http://artsconnection.org/creative-learning-loop/>) All of ArtsConnection's teaching artists include the CLL in their teaching practice. Key to student participation in the CLL is small-group work in which students have the opportunity to

practice the kind of thinking they need be able to participate in the artistic choice-making and learning process, and the language and discourse of the art form.

Year 1: Students will be introduced to and begin the process of learning to work like an artist in the art form. They will be introduced to the stages of the CLL and to a protocol for giving peer feedback based on Harvard's Project Zero's Ladder of Feedback: appreciations/ what the student did well; challenges/areas where the student could improve; specific suggestions for how to make the work even better. **Year 1, 2, 3, 4:** Students will attend a professional theater or dance performance, either in-school or in a theater, and respond to the performance using the same criteria as they used in the CLL in the classroom.

Throughout the four years of the project, students will participate in a range of conversations and collaborations with diverse partners, learning to build on others' ideas and express their own clearly and persuasively. They will learn to understand each other's perspectives and integrate ideas from everyone in the group when making collaborative artistic choices to present to an audience. Students will learn to think about and discern underlying concepts and inspiration for a variety of theater or dance pieces—their own work, the work of their peers, the work of professional theater or dance companies—and engage in peer feedback and rich conversations.

3. EL middle school students who participate in the project for 3 years will learn to use digital documentation of their work in theater or dance to reflect on, assess and share their learning process with others. Given learning in both theater and dance is experiential and happens in real time, adding digital documentation to the learning process allows students to see their own work in progress and helps the intangible aspects of artistic choices become tangible. Both theater and dance students will build on the CLL/formative assessment process and learn to use digital media to document their artistic work and communicate their understanding of their

learning process with others. Skills will build sequentially over **Years 2, 3 and 4** of the project. In **Project Year 2**, the process will expand on the previously-established CLL/peer assessment that is part of the art-making process. Small, working groups of up to five students will identify pre-production tasks, roles and responsibilities and plan how they will capture and assemble digital content on iPads or other digital devices. At this point in the learning process, students will simply watch what they have filmed and use the digital data for reference in the formative assessment process: based on clear criteria established with the whole class, students will use a feedback protocol (what I liked..., what I wish... suggestions of specific changes others could make) to discuss the work in progress and make revisions. Expansion on this process might be to also film their own feedback-giving process to cement the protocol into practice and/or to share their footage across groups. In **Project Years 3 and 4**, students in small groups will expand on this process by putting together a sequence of video clips and responding to the prompts: this is what we did; this is why we did it; this is how we did it. The final part of the process for students who participate in the project for three years will be post-production, when they will organize and explicate their digital content to convey learning; i.e. in addition to responding to the previous prompts, they will also be able to describe what they learned in theater or dance through the digital portfolio process. Students who participate in the digital portfolio process for three years will learn strategic use of digital media and visual displays of data to describe the learning process and explain their understanding of it to others.

Educators will engage in substantial and sustained PD (up to 50 hours per year), including large-group and small-group formats and classroom collaborations. (See Timeline for Management Structure, attached.) **Year 1** will introduce ESL teachers to: the use of strategies to observe and describe student learning in the arts, including video; incorporating explicit

language objectives into art classes; and embedding formative assessment into the arts learning experiences for students. Throughout the **Years 2, 3 and 4**, PD will enable educators to integrate digital media into the arts curriculum to help students deepen their understanding of the artistic process and gain meta-cognitive skills and ownership of their artistic work by using digital media to create and share it. All school-based team members will engage in collaborative practitioner research and build professional learning networks to help improve teaching and learning in their classrooms.

Teachers who participate in the project for 3 years learn how to: Identify how language is used in the arts classroom (see Section 3.a) and *incorporate language objectives* into their lessons to help students acquire academic language across disciplines; *Observe and document student learning* and document student work using digital media; *Collaborate with artists to incorporate peer assessment strategies* into arts and ELA lessons; *Help students learn to use strategies across disciplines*; *Document strategies* using video and written materials to *share across schools* and on the ArtsConnection's and other OER websites. This program of PD improves teaching practice and addresses the Danielson Framework that is currently being used by the NYCDOE to assess teacher effectiveness in all subject areas. There are four domains in the Framework (the subcategories cited in parentheses are the specific ones the project will address): Planning and Preparation (designing coherent instruction and formative assessments); The Classroom Environment (creating an environment of respect and rapport, and establishing a culture for learning); Professional Responsibilities (participating in professional communities engaged in professional inquiry, and contributing knowledge and resources to the profession); and, Instruction (engaging students in learning, using questioning and discussion techniques and assessment in instruction).

(3)(d) *Digital DELTA* is designed to ensure the lessons learned and benefits of participating in the project will be incorporated into the teaching and learning practices of stakeholders at all levels. As described above and in our Logic Model, students will learn to transfer the skills they are acquiring through the arts and the digital portfolio process into other subjects, which will help them build the skills they need to become college and career ready. By working in collaboration with their ESL/ELA teachers, it helps to ensure that students integrate these learning practices on a deeper level, build agency and ownership of learning.

Educators—including ArtsConnection staff and artists and ESL/ELA teachers—who participate in the project for multiple years will gain enhanced capacity in several areas. First, they will learn to collaboratively design and deliver rigorous and coherent inter-disciplinary curricula aligned with the NCAS and CCSS ELA S/L standards and to embed formative assessment strategies across arts and ELA instruction. Second, by participating in four full-day workshops each year of the project, educators will gain a practice of gathering and analyzing formative assessment data to strategically adjust classroom-level curricular and instructional decisions. Third, educators will learn to use video to evaluate the capacity-building strategies of the project as reflected in student learning. They will use video to: document student learning; reflect on student learning with students; and, assess student learning with colleagues. Finally, educators will learn to support student use of digital portfolios as a self-assessment tool. They will learn how to: provide a clear structure for students to use digital technology to document their learning process; include opportunities to gather and organize digital materials in the learning process; and facilitate a protocol for reflection on and presentation of learning. At the educator level, therefore, there is significant potential that those who participate for multiple

years will be able to incorporate the project purposes, activities and benefits into their ongoing teaching practice.

Because all of ArtsConnection's PD is centered on practitioner inquiry rather than turn-key information, it engages staff and artists in a learning process that is iterative: what we learn from each inquiry is incorporated into the work of the entire organization and into the next inquiry process. Over the last 25 years, we have included a significant number of artists and staff who have had the opportunity to build their own knowledge base which is shared with colleagues and through their work in other schools and with other students. This practice has become part of the organizational culture, influencing generations of educators, artists and staff who work with students, teachers and schools across NYC, as well as helping to inform practices within the NYCDOE such as the professional development of art specialists facilitated by the Office of Arts and Special Projects.

In addition to the 20 teachers in the four middle schools participating in the proposed project, ArtsConnection has two additional partners who have the potential to influence even more educators in the NYCPS. First, the Office of English Language Learners (OELL) in the NYCDOE has become interested in ArtsConnection's DELTA work due to its effectiveness helping EL students acquire English. (See letter of support attached.) Representatives from OELL will attend the PD days for educators and become part of the dissemination process. The new Chancellor of the NYCPS, Carmen Fariña, knows ArtsConnection's work very well, having worked with the organization both as the principal of a partner school for 10 years and in her work as an administrator in District 15 before that. In a recent speech celebrating the first 100 days of the new administration, she reiterated her focus on EL students and the challenges of middle schools, thus assuring that the proposed project is completely aligned with her priorities.

In another speech to the arts in education community in NYC, she specifically noted the work of ArtsConnection with ELs in the NYCPS.

Second, our consultant from the Department of Linguistics and Communication Disorders Department of Queens College, Jennifer Stengel-Mohr, prepares teachers in TESOL methods and supervises pre-service candidates in the field. Originally an ESL teacher and professional developer for the NYCDOE, she has worked with ArtsConnection since 2005 and throughout the development of the DELTA model since then. She has incorporated activities in the arts into her teaching practice and encouraged all of her college students to do the same with their students. In addition, she co-authored an article with Project Director Carol Morgan, originator of ArtsConnection's DELTA program, in the inaugural issue of the NYS TESOL Association's online journal (Morgan & Mohr, 2014), which has disseminated the work to a broad audience. Ms. Morgan and Ms. Mohr have been invited to offer a webinar based on this article by the NEA Taskforce on Human Development, which will take place in late summer/early fall 2014.

(4)(a) ArtsConnection does not discriminate in its employment practices on the basis of race, color, national origin, gender, age or disability. Its goal is to represent, to the best of its abilities, the population of the NYC public schools in its administration, artist roster and Board. In order to achieve that goal and ensure applications for open positions from traditionally underrepresented groups, ArtsConnection maintains membership in several arts and education coalitions and consortiums, such as the Alliance for Resident Theatres/New York, which represents the full spectrum of non-profit theater companies in the city (including ethnicity-based orgs) and the Arts in Special Education Consortium, to ensure it is reaching a wide array of candidates. The diversity of its own 158 teaching artists and staff—59% White, 21% Black, 15%

Hispanic, 6% Asian/Pacific Islander—creates a welcoming atmosphere for new hires from different backgrounds and provides outreach into diverse communities

(4)(b) Carol Morgan, Project Director, is ArtsConnection’s Deputy Director for Education. She has been the Project Director for 3 previous AEMDD grants (S351D010100, U351D050103-07, U351D060164) and is currently Project Director for Common Core and the Arts: Making the Learning Visible through Formative Assessment (U351D100099). She began her career as a classroom teacher and has worked in the field of arts education for the last 25 years, including her work with ArtsConnection since 1998. She is the co-author with Jennifer Stengel-Mohr (see below) of a recent article published in the inaugural issue of the on-line, peer reviewed journal published by the NYS TESOL Association, “Language at the Core: Developing Meaningful Connections between the Arts and Classroom Instruction.”

Erin Loughran, DELTA Program Associate, coordinates all aspects of the DELTA programs, collaborates on the design of the professional development and its implementation at the school level, and provides support and training for staff and artists working in the DELTA projects. She has worked at ArtsConnection for 8 years, including 5 years as a Program Manager in middle schools as part of the development of the DELTA model. Ms. Loughran is a visual artist who has developed expertise in video through her work with ArtsConnection, and will coordinate all professional development activities with the ArtsConnection Program Managers at each school and assist teachers with preparation of video documentation. **Maggie Fishman**, Director of Practitioner Research, (Ph.D. Anthropology, New York University) will facilitate the full-day professional development workshops and school-based support around documentation of student learning using the Video Study process that she has developed as part of ArtsConnection’s work with CFN 204 on our current PDAE grant (U351C110029). Four

ArtsConnection **teaching artists** will be chosen for expertise in their art form (two in dance and two in theater), their experience partnering with ESL and classroom teachers and working with students in NYC public middle schools, and their experience working with digital technologies in the classroom. Each artist will collaborate with the cohort of ESL/ELA teachers in one school on all aspects of the project. The school-based, small-group and classroom-level collaborations between artists and teachers will be coordinated and facilitated by a **Digital Program Manager** working with each school. Program Managers have a minimum of three years of experience facilitating partnerships between artists and classroom teachers, and expertise teaching in either theater or dance. They have also worked in ArtsConnection's AEMDD- or PDAE-funded projects over the last 10 years and are well acquainted with our professional development methodologies. The **Educational Technology Manager** will collaboratively plan with ArtsConnection staff, teaching artists, and school-based educators all elements of digital documentation in student workshops, meetings and professional development workshops. He/she will work with ArtsConnection program staff and web manager to develop online educational resources including animated presentations, audio slideshows, photo and video essays and other digital media and with the Systems Manager to purchase, manage and coordinate activities around project equipment.

Jennifer Stengel-Mohr, Professional Development Consultant, will work with all *Digital DELTA* participants in Designing Linguistic and Content Objectives for ELLs across subjects and supporting the development of digital portfolios. Ms. Mohr is a former ESL teacher and has worked closely with ArtsConnection during the development of their DELTA model (2005-2010). She is currently a full-time Instructor of TESOL Methods and Literacy at Queens College,

Department of Linguistics and Communication Disorders, and oversees student placement in fieldwork assignments.

Program evaluation will be directed by **Dr. Rob Horowitz**, Associate Director of the Center for Arts Education Research at Teachers College, Columbia University. Dr. Horowitz has directed over 75 arts-based program evaluations over the last 15 years, as well as basic research on the effects of the arts on human development. He will direct a team of senior graduate and post-doctorate researchers drawn from each of the arts disciplines with broad experience in research, assessment, evaluation and professional development. Evaluation staff committed to the project include Dr. Elizabeth Beaubrun (Ed.D., Columbia University), Dan Chiel (B.A., Harvard University), Amy Kleiman, (M.A., Columbia University), Dr. Rekha Rajan (Ed.D., Columbia University). This evaluation team has worked together with Dr. Horowitz on over 35 research and evaluation projects. The evaluation team co-presented at a special session based upon their work on USED AEMDD grants at the American Evaluation Association (Horowitz, 2013) and continues to publish and present evaluation and research findings. Dr. Horowitz and his team have evaluated ArtsConnection programs for over 13 years, including evaluations of AEMDD and PDAE projects. He and his team have well-established relationships with ArtsConnection staff, administrators, teachers, artists and the New York City Department of Education. They will draw on the support and expertise of the Center for Arts Education Research at Teachers College, Columbia University, which can provide additional staff as needed, and consultation with experts in related arts, education and research fields. Dr. Horowitz will serve on this project as an independent evaluator not involved in program implementation.

(5)(a) In order to help students achieve the goal and objectives of the project described in Section 3.c, ArtsConnection artists and staff will collaborate with 20 ESL and/or ELA teachers

from four NYC public middle schools (henceforth collectively called educators) to accomplish the project tasks. These collaborations will be facilitated by ArtsConnection Program Managers and professional development staff, and supported by a full-time Educational Technology Manager with knowledge of the hardware and software, as well as experience teaching in urban classrooms using digital technologies. The collaboration among educators will be achieved through: four **full-day, cross-school workshops** each year of the project at which ArtsConnection staff and consultants will introduce and support practitioner inquiry and digital technologies in the classroom; **school-based** meetings facilitated by ArtsConnection's Program Managers to provide opportunities to plan for implementation of content, and prepare digital reports on student learning and/or support students who are preparing their own multi-media presentations; and, **classroom-level collaboration** to implement artistic and digital content into classroom practice.

While the teaching artists will be responsible for the theater or dance instruction, the ESL/ELA teachers will be active collaborators throughout all phases of the project. First, educators will collaboratively create and teach the formative assessment strategies of the Creative Learning Loop that help students understand and articulate their own learning process in theater and dance. This will be the foundation upon which the digital portfolios will be built. Beginning in **Year 1**, educators will identify language structures EL students need to engage fully in the arts learning experience, and embed in the lessons clear criteria used to assess work within the art form in order to help students learn to make artistic choices and improve their work. **Milestone Year 1:** At the final cross-school meeting of the year, educators will share with their colleagues the language prompts and formative assessment strategies they have implemented in their classrooms.

Second, educators will use video to: identify and capture evidence of student learning in theater or dance, focusing on CCSS ELA/Speaking and Listening, Standard #1, which looks at students' ability to participate effectively in a range of conversations and collaborations. Using ArtsConnection's Video Study process in **Year 1**, they will describe student learning in the arts and identify what constitutes evidence of student learning in theater or dance and ELA CCSS S/L 1; and, capture video documentation of student learning in the art form by focusing on a small group and their conversations over time. **Milestone Year 1:** At the final cross-school meeting of the year, educators will share evidence of student learning in the art form by putting together a series of clips of a small group of students that demonstrates change over time.

Third, through a practitioner inquiry process in **Years 2, 3 and 4** of the project, educators will help students develop digital documentation of their learning process in theater or dance, and use digital documentation as a way to assess and present their learning to an audience of their peers. **Milestone Year 2:** During the full-day, cross school workshops, educators will define a clear structure for students to use digital technology to document their learning process; include opportunities to gather and organize digital materials in the theater or dance making process. At the final cross-school meeting of the year, educators will share digital artifacts of their process with their colleagues. **Milestones Years 3 and 4:** Educators will facilitate and refine a protocol to help students reflect on and present their digital portfolios to the school community. At the final cross-school meeting of the year, educators will share digital artifacts of their process and lessons learned with their colleagues.

These practices will build from the knowledge base and teaching practices the educators collectively bring to the table; they will simultaneously build the capacity of the educators as well as the students. Educators will learn to design and deliver rigorous and coherent inter-

disciplinary curricula aligned with NCAS in theater and dance, and ELA CCSS S/L 1-6. They will gather and analyze formative assessment data to strategically adjust classroom level curricular and instructional decisions and use video to evaluate the capacity-building strategies of the project as reflected in student learning. They will develop the capacity to support student use of digital portfolios as a self-assessment tool and help students achieve grade-level proficiency at ELA CCSS S/L 4 & 5. Students will present the information and supporting evidence in their portfolios in such a way that an audience of their peers and other educators can follow their line of reasoning, and the organization, development and style are appropriate to the purpose and audience. They will use appropriate vocabulary and syntax based on the language structures and criteria that have been an essential part of their art-learning process from the project's beginning.

ArtsConnection has an established history in the successful completion of research grants from US ED and sharing information, materials and lessons learned from our work through symposia and publications. In 1990, we received the first of two multi-year grants from the Jacob Javits Gifted and Talented Program to expand our instructional programs in the performing arts (dance, music and theater), and develop a model for talent identification in those art forms. We hosted a symposium in 1997 to share this work. ArtsConnection has continued to build a body of institutional knowledge in arts education and cross-disciplinary teaching and learning through four AEMDD grants (2001, 2005, 2006, 2010). In 2005, ArtsConnection hosted a second symposium based on lessons learned from our first AEMDD grant in 2001, which was followed by the publication of a collection of articles by the Dana Foundation, "Partnering Arts Education: A Working Model from ArtsConnection." Our US ED-supported work has recently been featured in several publications, including Dance Teacher Magazine (January, 2014), Art Education Journal (January, 2014), and the inaugural issue of the New York

State TESOL Association Journal (January, 2014) Finally, work from our current PDAE (2011) and AEMDD (2010) projects is being prepared to be shared digitally via ArtsConnection's new website. (<http://artsconnection.org/resources/>)

(5)(b) The **Project Director** will oversee all aspects of project. She will spend 50% of her time managing this project. The **Project Associate** will coordinate all professional development, monitor school based teams & documentation. She will spend 100% of her time on the project each year. The **Director of Practitioner Inquiry** will facilitate the full-day professional development workshops in collaboration with the Project Associate, Project Director and consultants. She will spend 40% of her time on the project each year.

Two **Digital Program Managers**, one with expertise in theater and one with expertise in dance, will facilitate and document all school-based professional development in the four schools. They will spend 100% of their time on this project. They will also help support the use of digital technologies in the arts classrooms and work in collaboration with the **Educational Technology Manager (50-100%)** to prepare all aspects of project digital documentation and videos for posting on website. The EdTech Manager will also collaborate with the **Systems Manager** to purchase, manage and coordinate activities around project equipment.

The **Director of Professional Development** will facilitate the professional development of artists on formative assessment and digital portfolios in the arts classrooms. She will spend 5% of her time on the project each year.

Dr. Rob Horowitz, Associate Director of the Center for Arts Education Research at Teachers College, Columbia University, will serve as the **principal investigator**. Dr. Horowitz will direct a team of senior graduate and post-doctorate researchers drawn from each of the arts disciplines with broad experience in research, assessment, evaluation and professional development. (See

Section (4)(b).) CALT classroom observations will take place throughout each school year, at least 50 classes observed each year, with a researcher observing 2 classes per site visit. (See *Data Collection* in Section 6.c.)

(5)(c) ArtsConnection has successfully managed seven USED grants and has provided support to new USED grantees in the implementation and management of their projects. *Digital DELTA* will be actively managed by a six-person project team consisting of the Project Director, Project Associate, Director of Practitioner Inquiry, two Program Managers and one Educational Technology Manager who will meet monthly to review the progress of the project toward goals and benchmarks, and schedule and plan the professional development activities. They will actively manage the project against the timeline and milestones articulated in the Logic Model and the Timeline for Management Structure attached, and will make adjustments, if needed, as the project progresses. The Project Team will meet five times during the school year with the *Digital DELTA* teaching artists to ensure the quality of the arts learning. Artists will receive support in planning residencies with formative assessment, and in using technology in the classroom.

The Program Managers facilitate the planning and implementation of all activities in the school, providing a built-in feedback loop by gathering key information for the team's decision making and refinement of the project, and taking recommendations back to each school site. They will also collaborate with the Educational Technology Manager to help facilitate and support student use of digital technologies in the arts classroom, and in the development of their digital portfolios, along with the theater or dance artist and the ESL/ELA teacher.

Each school's team of teachers will participate in the four full-day workshops each year along with the ArtsConnection artist and Program Manager assigned to their school. The

Program Manager will facilitate communication among school representatives, artists and the Project Team, and all professional development activities at the school level. The school-based team provides overall guidance for the work in the school; ensures that goals and objectives of the project are being met; and, constructs ways for what is being learned to be shared with the whole school community. School leaders will ensure that the necessary time, space and resources will be available to guarantee the project runs smoothly, and ArtsConnection staff and artists will facilitate all aspects of learning for students in collaboration with the ESL/ELA partner teachers.

The Project Director and Associate will meet quarterly with the Principal Investigator to receive key feedback on the effectiveness of program activities and how the needs of students, teachers and schools are being met to inform their decision making and revision process.

Finally, the Project Team will be responsible for assuring that digital documentation of the project is prepared and shared on ArtsConnection's website in a timely manner. The final two years of the project will focus not only on the development of the model, but on the digital dissemination of the materials and information about the processes used with teachers and students, along with examples of student work through their digital portfolios (see Section 2).

(6)(a) Design and Analysis: The evaluation will employ an Impact Study with a quasi-experimental design (according to What Works Clearinghouse Evidence Standards) and an Implementation Study supplemented by a systematic mixed-method investigation, with quantitative and qualitative approaches to data collection and analysis. All implementation and outcome variables in the evaluation will be matched with the program activities and objectives described in this application narrative and logic model. Results from the Impact Study will

determine if the program has an effect on students' achievement of theater and dance skills (Objective 1), ELA standards for speaking and listening (Objective 2), and application of digital documentation to assess their work (Objective 3). The Implementation Study will measure the fidelity of program implementation and ensure that regular and continuous feedback is provided to ArtsConnection. The mixed-method investigation will determine if educators: (1) learn to design and deliver rigorous and coherent interdisciplinary curricula aligned with theater, dance and ELA standards; and (2) develop their capacity to support student use of digital portfolios as a self-assessment tool, and successfully apply digital assessment strategies in their classroom. Qualitative approaches will be invaluable for interpreting and validating the Impact Study model and ensuring that the program is achieving its objectives.

(6)(b) For the Implementation Study, a hierarchical fidelity measure will be developed based upon the project's logic model. The evaluators will follow the fidelity measure guidelines employed in their current i3 evaluation with US ED technical assistance. All implementation components, such as full-day cross-school professional development (PD) workshops, school-based meetings, classroom-level collaboration, and development and application of interdisciplinary curricula will be assigned a score at three levels: classroom/teacher, school site, and program. Data sources for the fidelity measure will include program records of teaching artist workshops, PD attendance data, and classroom/PD observations. The evaluator has developed a web-based data analysis system that will compile real-time fidelity data. The fidelity scores at the three levels will be reported back to the program on an ongoing basis for monitoring successful program implementation. The scores will also guide evaluator site visits. Additionally, the scores will be used as an independent variable, indicating the degree of effective program implementation (at the 3 levels), in regression analysis of program impact.

Accountability: Through the surveys of participants and observations, the evaluation team will monitor the implementation of each program component described in this proposal. Dr. Horowitz and his team will meet quarterly with ArtsConnection and confer more frequently through phone, email and discussion during site visits. Fidelity measure scores will be provided to the program to ensure that appropriate adjustments can be made to strengthen program effectiveness. All benchmarks included in this narrative and the program’s logic model will be embedded in the fidelity measure. Dr. Horowitz will work closely with the participating schools and ArtsConnection to provide continual and timely formative evaluation data that can ensure the program’s effectiveness.

(6)(c) The evaluation’s Impact Study will determine if the program has an effect on students’ development of theater, dance, and ELA skills. Standardized measures will include NY State ELA scores. Arts skills will be measured by observation rubrics (CALT), with demonstrated validity and reliability, developed through previous US ED grants and the evaluator’s Champions of Change study.

Baseline ELA scores will be obtained at the outset of the project for participating students. A matched comparison group will be constructed from each school’s Peer Group, as determined by the NYC Department of Education. The peer schools are matched according to a Peer Index using a “nearest neighbor” matching methodology. This methodology examines the mathematical difference between a school and all potential peers on a given set of characteristics. Schools with the smallest difference across all characteristics are peered together. Characteristics include average English proficiency, economic need index, percent of students with disabilities, and percent overage. The equivalence of means will be tested (*t*-test) for the overall groups and various subgroups (schools, grades and classrooms) to ensure that the treatment and comparison

groups maintain similar characteristics. The same individual students will be tracked over the course of the project.

Variables within three broad groups will be measured: 1) program implementation variables, measuring the degree and quality of teacher/artist participation, the success of collaboration and implementation, the effectiveness of teacher professional development, and the quality and effectiveness of curriculum materials; 2) teachers' professional development variables, measuring the capacity of teachers to develop interdisciplinary curriculum and support student assessment through digital media; and 3) student development variables, including achievement of theater, dance, ELA and self-assessment skills. Analysis will seek to determine if, and how, the first two variable groups described above affect changes in student development. Several analyses will investigate causal relationships among implementation, professional development, and student variables: 1) ELA and arts proficiency scores will be compared between the matched treatment and non-treatment groups; 2) participants (sites and teachers) will be ranked according to their degree of effective participation (fidelity measure scores) and assigned to high and low groups for additional comparison; 3) regression analysis will determine the best predictors (among implementation and teachers' professional development variables) for changes in theater, dance, and ELA skills, and other areas of student development; and 4) systematic qualitative analysis using NVIVO software will seek to triangulate data from different types of participants and sites, identifying common or contradictory patterns, to help refine and validate the causal model, as well as provide qualitative data for ongoing formative assessment. All analyses will control for economic need.

Instrumentation will measure progress towards each goal and objective for teachers and students described in this proposal. The principal standardized measures will be NYS ELA tests.

Individual students' scores will be tracked over the complete length of the project. Dance and theater skills will be measured through classroom observations using the Classroom Assessment for Learning and Teaching (CALT) system.

The evaluation team will employ the CALT observational protocol for tracking student achievement, teacher/artist practice and partnership implementation that was developed for DELLTA, a prior ArtsConnection AEMDD program. CALT yields detailed quantitative and qualitative data on program goals. Details of the development of CALT are in the VSA publication *The Contours of Inclusion* (Horowitz, 2008). The observation protocol was first presented at the American Evaluation Association conference in November 2007 (Horowitz, 2007). Other instruments will include: 1) surveys of participating teachers and school-based administrators (Likert-type scales, descriptive data, and open-ended questions); 2) interviews with teachers, school-based and ArtsConnection administrators and staff; 3) observations of classroom instruction, professional development, planning meetings and other program activities; and 4) content analysis of program materials.

Dr. Horowitz has previously developed observation protocols, surveys, rating scales and rubrics based on national and New York state standards in the arts, as well as the *NYC Blueprints for Teaching and Learning in the Arts*. These measures have been piloted, revised and otherwise administered on several evaluations of programs based upon professional development of arts specialists and student achievement in the arts. The measures are effective for determining: 1) the degree to which teachers address each content standard in the arts; 2) the balance between content standards; and 3) the balance between arts and academic instruction within arts-integrated instruction, and the integrity of instruction within the arts disciplines. These measures will be used at the outset of the project to develop a profile of participating teachers.

Additionally, Dr. Horowitz developed rating scales and observation protocols for evaluating USED AEMDD grants to ArtsConnection. A peer-reviewed paper on the rating scale development was presented at the 2005 AERA conference in Montreal (Horowitz, 2005) with a more complete description published by the Dana Foundation (Rich, 2005). Several rating scales are designed to assess teachers' ability to integrate the arts, collaborate with teaching artists, and perceive children's development in the arts. Other rating scales measure children's cognitive, social and personal development through the arts. These instruments have been tested for reliability and validity.

For the Impact Study, several exploratory and confirmatory analyses will be conducted with various contrasts. The analysis will examine the effects of the program on students with multiple years of participation as compared to no participation, one year and two years of exposure. It is likely that the final analysis will include Hierarchical Linear Modeling (HLM), considering the effects of implementation at three levels (classroom, school and program) on three areas of potential student impact (dance, theater, ELA).

Data collection at participating schools will be continuous throughout the project. Test data will be obtained as soon as they are available each year. Surveys will be used to assess each program component, both to provide formative assessment and develop understanding of their potential impact on teachers and students. Comprehensive surveys will be administered to all participants in mid-fall and mid-spring each year to assess teachers' development of new skills/understandings and the application of new classroom practice. Participating teachers will be interviewed each year, as well. CALT classroom observations will take place throughout each school year (at least 50 classes observed each year, with a researcher observing 2 classes per site visit).

Reporting and Dissemination will include yearly interim reports (available each September during the grant period), and an overall final report. This will be in addition to required APR reports to US ED in May and November of each year. Instruments developed through the project will be made available to participating schools, ArtsConnection, New York City Department of Education, other AEMDD recipients, and others in the field. The evaluation results and methods will be presented at national conferences, such as AEA, AERA, ASCD, and/or AEP. Dr. Horowitz has presented evaluation and research findings at each of these conferences.