

# The Arts Infusion Project

Topeka Public Schools, USD 501  
*Proposal to the U. S. Department of Education  
Office of Innovation and Improvement  
Arts Education Model Development and Dissemination (AEMDD) Program  
April 28, 2014*

# The Arts Infusion Project

## Table of Contents

<b>Introduction</b>	<b>1</b>
<b>Need for the Project</b>	<b>2</b>
<b>Significance</b>	<b>8</b>
<b>Quality of the Project Design</b>	<b>11</b>
<b>Quality of Project Personnel</b>	<b>25</b>
<b>Quality of the Management Plan</b>	<b>27</b>
<b>Quality of the Evaluation Plan</b>	<b>36</b>
<b>Appendix</b>	
<b>Competitive Priority 1 – Turning around Low Achieving Schools</b>	<b>51</b>
<b>Competitive Priority 2 – Technology</b>	<b>53</b>
<b>References</b>	<b>55</b>
<b>Letters of Support</b>	<b>63</b>
<b>Staff Curriculum Vitae</b>	<b>66</b>

## **The Arts Infusion Project Narrative**

The proposed program, **The Arts Infusion Project** (TAIP), is designed to address the needs of underserved students in the Topeka Public Schools, USD 501 (501) by integrating fine arts (music, visual art, and drama) into the core curriculum, strengthening standard-based arts instruction (based on the National Arts Standards), and improving the academic performance of elementary and middle school students. TAIP will provide elementary and middle school educators in 501 with standards-based arts-integrated professional development (PD) that will foster key collaborative relationships in their school, in 501, and the community. In turn, students will experience an improved classroom environment, resulting in academic gains. Yet, we realize that a strong arts-based education alone will not ensure student success. Instead, we must teach students the higher-order skills necessary not only to think within the arts, but also to make connections to ideas outside the arts. We will utilize a Critical Thinking (CT) approach, defined as “purposeful, self-regulatory judgment, which results in interpretation, analysis, evaluation, and inference” (Facione, 1990, p. 3). This approach will enable our students to take their knowledge in the arts and the general curriculum one step further by finding creative and innovative solutions to problems beyond the arts.

Therefore, **TAIP is focused on two interconnected goals: (1) To strengthen the integration of standards-based arts instruction within other academic content areas; and (2) To strengthen standards-based arts instruction by infusing CT into all aspects of instruction and assessment, which will advance the education of the whole student, specifically in regard to math and reading performance.** Through intensive and sustained professional development, TAIP will give 501 teachers the tools to infuse and bridge their curricula with the arts—bringing the fine arts into the whole school day, and in turn, the whole

school day into the fine arts classroom. Teachers will also gain knowledge of CT-based teaching techniques, such as higher-order questioning, assessment and transfer. Ultimately, TAIP will benefit students at-risk of educational failure by making the fine arts and the benefits associated with it more accessible and providing students with the tools to succeed in the classroom.

## **1) NEED FOR PROJECT**

### **(a) The proposed project will address the needs of students at risk of educational failure.**

USD 501 is located in Topeka, Kansas. In 2010, an estimated 20.4% of the Topeka population lived below the poverty line, compared to the state average of 13.2%. Additionally, 36% of children under the age of 18 in Topeka live in poverty, nearly double the state average (19%). As a whole, Topeka exhibits environmental risk factors that may negatively impact its school-aged population, including high rates of violent crime: 6.01 violent crimes per 1,000 residents (state average=3.55); 53.6 property crimes per 1,000 (state average=31.4); and 124 crimes per square mile (state average=26 crimes/mi<sup>2</sup>). Further, school-aged children in Topeka experience risk factors at home: Two out of five children live in single-parent households, nearly 40% more than the state average (University of Wisconsin Population Health Institute, 2014).

USD 501, a Title I district, serves 14,021 students and employs 1,300 teachers and 1,100 support staff. The school district includes 17 elementary schools, six middle schools, and three high schools. **In 2012-2013, 77.1% of 501 students received free or reduced lunch, compared with the state average of 49.86%.** The racial/ethnic composition of the district is 41.3% Caucasian, 28% Hispanic, 19.6% African American, and 11.1% Other. The school district serves a total of 907 English Language Learners (ELLs) (PK – 5=675; 6 – 8=122; & 9 – 12=110), **representing a 165% increase since 1999** (Topeka Public Schools, n.d.).

ELLs in Kansas do not perform as well on state assessments as their peers. According to the

*2008-2009 Consolidated School Performance Report for Kansas*, ELLs scored significantly lower than their peers in every subject area and across all grades. Notably, 10% to 45% fewer ELLs attained proficiency in mathematics, reading/language arts, and science (USDE, 2010). A strong arts education, such as that proposed by TAIP, may provide a unique outlet for ELLs. Because there are a wide variety of verbal and nonverbal opportunities in the arts classroom, arts education can help to “engage learners whose language traditions are devalued in mainstream education” (Brown, Benedett & Armistead, 2010, p. 113).

TAIP will focus on two middle schools (Chase and Eisenhower) and their four feeder elementary schools (Quincy, Ross, State Street, and Highland Park Central). **Table 1** (p. 4) indicates that a large number of students in each school receive free/reduced lunch. Further, the student body at each school is predominantly comprised of minority groups, and the number of ELLs in each school is higher than district and state averages. The annual rate of suspensions at Ross, Chase and Eisenhower is also disproportionately high.

Of the schools targeted in TAIP, Quincy and Ross Elementary Schools are “priority” schools (i.e., persistently low-achieving schools, **Competitive Priority 1**). Priority schools are identified by the state as having the lowest levels of achievement and lack of progress. States must identify at least 5% of its Title I schools as Priority Schools and in Kansas, Quincy and Ross represent **2 of only 33 Priority Schools that were identified in the 2012-2013 school year**. The other four schools targeted in TAIP have been classified as Focus Schools (i.e., among the lowest-performing 10% of Title I schools).

**Table 1 – Targeted School Demographics (2013-2014)<sup>1</sup>**

School	Enrollment	% Minority	% ELL	% Free or Reduced Lunch	Number of Suspensions
Quincy ES	248	57.64%	27.40%	85.00%	3
Ross ES	636	67.10%	15.20%	85.80%	159
State Street ES	514	60.60%	15.60%	88.16%	40
Highland PC ES	362	72.90%	24.60%	94.20%	8
Chase MS	499	69.10%	17.40%	91.80%	152
Eisenhower MS	509	77.20%	15.70%	93.40%	101
<b>District Average</b>		58.70%	4.27%	77.13%	
<b>State Average</b>		33.29%	8.42%	49.86%	

**Table 2 –Math and Reading Performance 2013**

School	% Standard or Above Math (all grades)	% Standard or Above Reading (all grades)	Achievement Level	Met AYP
Quincy ES	61.53%	59.61%	Priority	Yes
Ross ES	48.43%	48.66%	Priority	No
State Street ES	75.62%	70.79%	Focus	Yes
Highland PC ES	57.77%	57.22%	Focus	No
Chase MS	66.82%	63.22%	Focus	No
Eisenhower MS	63.41%	70.66%	Focus	No
<b>District Average</b>	66.21%	69.54%		
<b>State Average</b>	80.1%	85.20%		

The data in **Table 2** reveals a large achievement gap – the majority of students in the schools targeted for TAIP scored well below the state average for standard performance in

<sup>1</sup> Demographic information for Table 1 and 2 provided by the Topeka Public Schools

reading and math for in 2013. However, **501 is seeking new and innovative ways to reach its most vulnerable students, and we believe that TAIP can successfully bridge these achievement gaps.** Studies have shown that a strong arts education can be a powerful tool to ensure academic success by increasing the cultural relevancy of education for students from low-income and/or diverse racial backgrounds (Allen & Boykin, 1992; Griffin & Miller, 2008). The arts in education also have behavioral benefits, providing a channel for the regulation of behavior and emotion (Lobo & Winsler, 2006). A strong arts education may help to provide mechanisms for adaptation and growth (Brand & Felner, 1996; Brown, Benedett & Armistead, 2010; Scripp, 2007). Enhanced arts programs have been shown to increase academic performance, behavioral resilience, and school attendance in ELLs of all ages (Ingle & Gates-Ingle, 2014).

TAIP will address the needs of some of 501's most underserved students and make an important difference in their academic lives, as well as in their social-emotional learning, and processing abilities. According to a needs analysis completed by the *Kansas State Department of Education's Learning Network*, "There is a perception that there are low . . . expectations for poor children" (p. 7). Thus, the TAIP curriculum aims to equip teachers with arts-infused and CT techniques that will aid in raising expectations for students. TAIP also seeks to increase student engagement in standards-based arts instruction, which has been shown to increase attendance, improve completion rates, and decrease disciplinary referrals (Johnson & Eason, 2013).

**(b) Specific gaps or weaknesses in services, infrastructure, or opportunities.**

**(1) Limited Access to the Arts** – Although 501 administrators value arts instruction for all students across the district, most 501 students have limited access to arts instruction. This is especially evident at the schools targeted in TAIP. At Chase and Eisenhower MS, visual arts and music are only offered as electives. Further, if a student is receiving an academic intervention at

either of these schools, they are unlikely to receive any arts instruction unless enrolled in the after school program. At the elementary schools, K-2 students receive only 80 min. of vocal music instruction per week and students in grades 3-5 receive an average of 100 min. per week. Fifth grade students have the option to take band or strings (about 40 min. per week), with instruction occurring exclusively outside the regular school day. **Only one of the targeted elementary schools offers visual arts (Quincy), where students receive 40 min. of instruction per week.** Recent state-level funding cuts to education have adversely affected arts programs in 501, and some schools have been forced to cut their arts programs altogether. TAIP will address the gap in arts instruction by expanding arts program offerings, introducing arts instruction into core subject areas, and strengthening existing arts instruction through collaborative and community opportunities.

**(2) Limited Opportunities for Professional Development and Arts Training** – The No Child Left Behind Act emphasizes the importance of arts education as a core subject area; thus, it is important that teachers develop the capacity to teach the arts. Given the need for high-quality arts instruction for students in 501, teachers in target schools require high-quality PD in order to be effective. According to a needs-analysis of 501 conducted by the Kansas State Department of Education (2008), general PD opportunities at 501 are adequate. However, according to teacher comments in this survey, PD opportunities were not necessarily focused, systemic or tied to Kansas state standards (2008, p. 10). Arts instructors receive only three district-sponsored, arts-based PD opportunities each year, and non-arts teachers do not receive any arts-related PD. To address this gap in service, TAIP will offer intensive, on-site PD to educators in target schools focused on cross-curricular arts infusion tied directly to state standards.

**(3) Lack of Arts Leadership in 501** – Currently, 501 does not employ an Arts Coordinator at the

district level (although they are in the process of hiring for this position for the 2014-2015 school year). Three elementary schools and one middle school have arts coordinators, but all are grant-funded positions focused on after-school programs. TAIP would hire an “Arts Infusion Coach” (AIC) to provide leadership, support, and oversight for the schools targeted in this project. This additional position and subsequent leadership would help to close this gap in 501. Additionally, the AIC would work collaboratively with the new 501 Arts Coordinator to build skill and capacity within that individual to continue aligned efforts in integrating arts past the grant period.

**(4) Need for Arts Integration across the Curriculum** – Although 501 leaders understand the importance of the arts across the school day, there have been few, if any, specific efforts to provide teachers with the necessary training to integrate the arts in their classrooms. And though some collaboration among arts teachers and classroom teachers does take place, there is little organized effort to encourage sustained collaboration. The PD provided through TAIP would offer arts and classroom teachers the opportunity to learn together, build cross-curricular lesson plans, and establish long-term relationships rooted in collaboration and arts integration.

**(5) Need for CT Skills in Arts Curricula** –Previously AEMDD projects have addressed the unique needs of underserved children, enhancing learning opportunities and engagement through the arts. Although these educational outcomes are important, less emphasis has been placed on developing CT skills. Arts education has been shown to be an effective vehicle to teach CT skills (Eason, Johnson, Brunkan, & Memmott, 2013). In addition to helping teachers infuse the arts across the curricula, TAIP will provide them with a strong knowledge of CT and its role in the classroom. There is a natural symbiotic relationship between the arts and CT; we anticipate that an arts-infused curriculum resulting from TAIP will build on CT skills, which will ultimately lead to improved student outcomes. Through TAIP, teachers will be equipped with key tools to

help their students **think within the arts** (i.e. make transfers across subjects, ask higher-order questions, assess their work and that of their peers), and in turn, succeed in school. Studies indicate that students who receive instruction infused with CT skills earn higher test scores as well as demonstrating improved metacognition (Bissell and Lemons, 2006; Estes, 1972; Nickerson, 1988-1989; Schoenfeld, 1979).

## **2) SIGNIFICANCE**

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

From TAIP's involvement with 501, several quality products, including classroom resources, lesson plans, and training modules, will be designed and disseminated. Classroom resources will be designed to be useful in a variety of classes and easily adaptable to other age groups. Training modules will be accessible to teachers with limited experience teaching the arts to ensure success. Moreover, these products will be disseminated using direct training, the Internet, conference presentations, journal publications, and an online Community of Practice. The utility of the products will be strengthened and reinforced as teachers across disciplines collaborate together, and are supported by an Arts Infusion Coach, the Project Director and Professional Development (PD) Instructors. All of the information, processes, methods, and techniques will be evaluated and improved throughout the life of the grant to ensure that the products are of high quality and meet the targeted population. Finally, the magnitude of TAIP's product lies in its depth of reach; the six target schools committed to participating, and have a goal of 100 percent faculty participation. Furthermore, teacher-created lesson plans will be made available online so that other teachers across the state and nation can implement and build on the arts-infused and CT-based lessons plans.

***(1) Resources for Teachers – a) An online Community of Practice (CoP) will be created to***

provide participating teachers with an online community to share arts-infused classroom ideas, collaborate with colleagues, evaluate colleague work, and document successful lessons (**Competitive Priority 2**). Participating teachers will receive graduate credit and as part of their coursework, each participant will be required to submit *two teaching videos for peer-evaluation* each semester. Model videos will be posted on the CoP for viewing and replication by other teachers. Similar to the popular social media platform Pinterest, the CoP will assist in the dissemination of best practices across participating schools, 501, and beyond. In collaboration with PD instructors and the Arts Infusion Coach, teachers will also develop b) **high-quality lesson plans** integrating the arts and CT skills into state curriculum standards for use in K-8 classrooms. Participating teachers will design lesson plans that address state and National subject area standards and arts standards, while also infusing components of CT. The teachers will implement the lessons in their classrooms, and revise them throughout the project. Model lesson plans will be made available online so other teachers can adapt them to their classroom. With support from PD Instructors and the Arts Infusion Coach, participating teachers will also develop c) **Assessments**. Assessment tools for each lesson plan will promote standards-based, effective practice, evaluate students' CT skills, and serve as a feedback loop for revising and improving lessons. Examples of assessments will be made available on the CoP for dissemination among participating teachers. Peers can replicate exemplary assessments in their own lesson plans or modify them to suit their unique lessons.

**(2) Resources for Schools and Districts -- Curriculum for PD Trainings** – Developed by the AIC and PD Instructors, TAIP's curriculum combines arts education, state and national standards, common core, with CT skills into each teachers' classroom. Project information, process, methods, and techniques will be made available online to 501 administrators and

evaluators. The curriculum, will provide feedback through semi- and annual review processes (formative and summative) aimed at continuous improvement.

**(3) Other Resulting Products** – A comprehensive a) **Evaluation Report** will summarize TAIP objectives, evaluation procedures, assessment tools, and outcomes. The report will include data collection tools (e.g., teacher surveys, assessment rubrics, and classroom observation/focus group protocols) and will play a key role in dissemination of information, program format, and evaluation methods to other settings. Findings will be made available via white papers and research briefs, as appropriate. b) **Conference presentations and publications** will document the implementation, evaluation, and outcomes of TAIP. TAIP staff has extensive histories of presenting at local and national conferences and submitting for publication in nationally recognized arts education journals (e.g., *The Journal for Research in Music Education*, *Bulletin of the Council for Research in Music Education*.) These venues provide an extensive reach for disseminating the project model to a variety of settings.

The utility of TAIP perhaps can be best seen in **the transformation** that participating teachers will experience in their teaching and the changes students experience in their learning. Teachers will gain information and techniques in arts-integration and CT, and will collaboratively work to enhance student learning through school-year coursework and summer training. Teachers will have the opportunity to learn more about CT—how it affects their teaching and how it can positively influence their students’ learning. They will work closely with PD Instructors to hone the skill of including and developing them in their courses and practice them with colleagues. Teachers will implement arts-infused CT curriculum in their classrooms, with mentoring from the AIC. Teachers will focus on arts integration and CT to increase student engagement, broaden artistic thinking, and increase academic achievement across all areas.

**Students will also benefit directly from the newly acquired skills and knowledge of their teachers.** New arts-integrated units will create materials that offer students new and unique opportunities for learning. This approach will teach them CT skills that can be applicable across the curricula and transferred to all of their coursework. The students themselves will generate new information and learning techniques as a result of TAIP. Further, students will experience an improved classroom environment, which will produce academic gains and the acquisition of transferable skills that will provide utility across many academic and extracurricular domains.

### **3) QUALITY OF THE PROJECT DESIGN**

**(a) The design of the project reflects up-to-date knowledge from research and practice.**

The design of TAIP is rooted in research and effective practice in regard to PD, cross-curricular collaboration, arts-integrated curriculum, and CT.

**Professional Development (PD)**– PD is a beneficial tool for teachers to help strengthen their content knowledge (Sparks, 2002). According to Killion (2006), PD that is sustained and involves collaboration, application and support is the most effective. Research also indicates that for schools attempting arts integration, success is more likely when built on a strong PD model, which includes ongoing professional development, collaborative relationships, mentoring, etc. (Burnaford, 2009; Wilcox, Bridges & Montgomery, 2010). The PD of TAIP is focused on a constructivist PD model, as outlined by Gordon (2004). In this model, as in TAIP, teachers actively participate in improving curriculum to ultimately improve student performance.

**Cross-Curricular Collaboration** – Research highlights the importance of fostering collaboration among teachers. A collaborative teaching environment can benefit the student (Goddard, Goddard & Tschannen-Moran, 2007) and can positively impact teacher effectiveness in the classroom (Dugan & Letterman, 2004). Teachers who collaborate are likely to feel more

supported and unified in the common goal of helping students achieve success. Arts integration is often defined as a process of collaboration (Burnaford et al., 2007), and serves as a means to reduce isolation of the arts educator in any given building (Detels, 1999). Further, results from a study by Goddard, Goddard and Tschannen-Moran (2007) showed that elementary students who attended schools with high levels of teacher collaboration had higher levels of achievement in math and reading. The design of TAIP will encourage regular and active collaboration among teachers across the curriculum, helping to foster long-lasting relationships, and creating a more effective and positive educational environment for teachers and students alike. Additionally, utilizing the Community of Practice (CoP) designed for this project, participating teachers will have access to an online community to share arts and CT-infused classroom ideas, evaluate colleague work, and document successful lessons.

**Arts-Integrated Curriculum** – The literature is replete with examples of schools across the US that have adopted arts integration. Several of these schools and their models have served as examples for TAIP. *The Chicago Arts Partnership in Education (CAPE)* infused arts in Chicago public schools and demonstrated strong improvements in student reading and math scores, especially at elementary and early secondary levels. Furthermore, the program improved school climate, teacher collaboration, and teacher buy-in (Catterall & Waldorf, 1999). *The A+ Schools Program* infused two-way arts instruction in North Carolina public schools as a means to bridge the achievement gap in math and reading for culturally and linguistically diverse students, improving teacher collaboration, and increasing community involvement (Nelson, 2001). *The Arts for Academic Achievement (AAA)*, instituted in 45 Minneapolis public schools to integrate the arts into core subject areas, improved student learning and reading, particularly for economically-disadvantaged students and ELLs. Reading and math test scores improved

significantly, especially at the elementary levels.

**Critical Thinking in the Arts-Infused Curriculum–** (THE INFORMATION IN THIS SECTION WAS DEEMED PROPRIETARY BY THE AUTHORS.)

Table 3 outlines the recruitment plan for TAIP across the four years of the project.

**Table 3 – Recruitment Plan**

<b>Year</b>	<b>Participant Group</b>	<b>Number of Participants</b>
1	Two feeder elementary and middle school	10-15 teachers from each school (Cohort 1a).
2	Two feeder elementary schools and middle school (same schools as Year 1)	10-15 additional teachers from each school (Cohort 1b)
3	Remaining two feeder elementary schools and remaining middle school	10-15 teachers from each school (Cohort 2a)
4	Remaining two feeder elementary schools and middle school (same schools as Year 3)	10-15 teachers from each school (Cohort 2b).

As shown in Table 3, two triads of at-risk schools (two elementary schools and the middle school they feed) will be served as a cohort in TAIP for two intensive years each (total of four years for the proposed project). Participants in each cohort will be general classroom teachers, core teachers and arts teachers. Participants will be recruited by the Program Director, Arts Infusion Coach, and school principals. We will over-recruit each year to account for attrition. If more than 15 teachers from a school want to participate in any given year, we will accommodate up to 5 additional teachers per school. If we are unable to recruit at least 10 teachers from each school, we will recruit additional teachers from the other participating schools in the program.

A two-week intensive **Summer Professional Development** will be held annually at a central location in 501. These two week long sessions (one week at the beginning of the summer, and the second week at the end of the summer for a total of 60 contact hours), in conjunction with the other program commitments for participants (see Table 4, p. 16) will have academic integrity such that 6 hours of graduate credit will be awarded after completion.

**During the first week of the summer PD, teachers will spend their instructional time honing their CT skills and learning how to infuse these skills into their teaching approach.**  
(THE INFORMATION IN THIS SECTION WAS DEEMED PROPRIETARY BY THE AUTHORS.)

**The second week of the summer PD will focus on arts infusion across the curriculum.**  
(THE INFORMATION IN THIS SECTION WAS DEEMED PROPRIETARY BY THE AUTHORS.)

The PD session will be followed with ongoing support from other participants, the AIC and the PD Instructors. 1) The **core small group of teachers** (5 teachers) will meet face-to-face every other week during their planning time in Fall and Spring semester to discuss and collaborate on cross-curricular lesson plans and give feedback to one another. 2) The **10 teachers from each school** will also meet after school with the AIC once a month to give each other additional feedback and support. 3) Additionally, all participants will be continually utilize the CoP; posting teaching videos and lesson plans for feedback from participants across schools. 4) The AIC will visit each participating teacher once a month for an hour in the Fall and Spring following the intensive coursework. During these visits, the AIC will provide immediate feedback to the teachers regarding their incorporation of both the arts and CT in their lesson plans. 5) Teachers will also attend three PD days of follow-up training with the PD Instructors throughout the school year, which will fall on building-level PD days. These trainings will include check-ins with teachers and opportunities to problem-solve any issues that have arisen during the implementation of their new arts-infused lesson plans.

Table 4 outlines the required responsibilities and time commitments for teachers during their one-year participation in TAIP. As this table demonstrates, participating teachers will be expected to make a substantial, but not unreasonable, time commitment to TAIP. (*Table Abbreviations: Arts Infusion Coach (AIC), External Evaluators (EEs), Community of Practice (CoP), Professional Development (PD)*)

**Table 4 – Teacher Commitment Table**

Action Item	Timeframe	Required Teacher Time
Teachers complete pretests.	Late Spring	1
Teachers allow EEs in classroom for pre-observations.	Late Spring	1
Teachers participate in PD coursework.	Summer	60
Teachers meet with core small group every other week.	Fall and Spring	16
Teachers meet with large group from school once a month.	Fall and Spring	8
Teachers create and share lesson plans in CoP.	Summer - Spring	ongoing
Teachers create and share teaching videos in CoP.	Fall - Spring	ongoing
Teachers receive coaching sessions from AIC 1x month.	Mid – Late Fall	4
Teachers allow EE to visit classroom for post-observation.	Late Fall	1
Teachers complete posttests.	Late Fall	1
Teachers participate in 3 hour-long follow-up PD sessions.	Oct., Dec., Mar.	3
Teachers receive coaching sessions from AIC 1x month.	Spring	4
	<b>Total</b>	<b>99 hours</b>

In a sample arts-infused and CT lesson resulting from TAIP, teachers may develop a lesson

connecting math, visual arts, and CT. For example, a kindergarten teacher who wants to address the Kansas Common Core Standard of identifying and describing shapes may ask students to view a work of art, which includes many geometric shapes. The students will identify and describe the shapes in the painting, practice CT skills by classifying and categorizing the shapes, and make decisions about their own art creation. The students will also transfer their learning to the world around them as they explore their environments for similar shapes. In this simple lesson, students will meet the National Standards for Arts Education visual arts standard of understanding and applying media techniques and processes and Common Core math standards, thereby making connections between visual arts and other disciplines. In addition, students will strengthen their ability to communicate about visual images as they analyze, evaluate, and explain the works of art, which is also reflected in the writing Common Core writing standards.

***(b) The project is supported by strong theory (as defined in this notice).***

The TAIP model is built on the following theories and assumptions: 1) Teacher professional development (PD) can impact student learning; 2) Arts integration across the curricula can benefit students and improve outcomes; 3) CT skills will benefit students. **Thus, a PD model focused on arts-integration and CT will positively impact student learning.**

Aforementioned, **professional development** is a critical tool for teachers to help strengthen their content knowledge (Sparks, 2002), and to improve the students' quality of education (Guskey, 2000). Research indicates that for schools attempting arts integration, success is more likely when built on a strong PD model, utilizing research-based effective PD principles, including ongoing collaborative relationships, mentoring, etc. (Burnaford, 2009; Wilcox, Bridges & Montgomery, 2010).

**Importance of an Arts-Integrated Curriculum** – There is strong evidence that a good

arts education relates to academic success across the curriculum. Reported benefits of the arts include the development of the imagination (Greene, 1995), greater motivation to learn (Csikszentmihalyi, 1997), increased student creativity, lower dropout rates, increased social skills (Catterall, 1998; Luftig, 1994), and strengthened memory (Page, 1995). Further, research suggests that arts education positively affects aspects of living and learning beyond the intrinsic values of the arts themselves (Beane, 1997; Gardner & Boix-Mansilla, 1994; Gee, 2000; Hobday-Kusch, 2009; Smilan & Miraglia, 2009). Another benefit of arts integration into the overall curriculum and participation in the arts is increased standardized test scores (Cossentino & Shaffer, 1999; Johnson & Eason, 2013; Johnson & Memmott, 2006; Luftig, 2000; Reardon, 2005; Smithrim & Upitis, 2005).

**Critical Thinking in Arts-Infused Curricula** – Critical thinking is an inherent and reciprocal part of an arts-integrated curriculum. The artistic process inherently encourages CT skills; it incorporates elements of reflection, analysis, evaluation, refinement, and synthesis – all of which are important elements of CT (Idaho Commission on the Arts, 2009). Marshall’s (2006) cognitive theory of arts-integration stresses the idea that CT is a natural part of an arts-infused curriculum: “Art education principles represented in standards and framework necessitate lessons that go deep; mining the concepts behind images, ideas and processes – making a web of connections between...other domains and ideas” (2006, p. 19). Amdur (1993) links arts-integration to CT skills via contextual inquiry, which, he states, is consistent with arts integration as it encourages and empowers students to question ideas and concepts across disciplines.

With this in mind, TAIP is rooted in the idea that a **PD model focused on arts-integration and CT will positively impact student learning**. The TAIP Logic Model (Figure 1) shows how this project will attain the long-term outcomes of increased teacher knowledge and improved

student performance through the activities and resources outlined in this application.

**Figure 1 – TAIP Logic Model**

<b>Resources</b>	<b>Activities</b>	<b>Outputs</b>	<b>Short-Term Outcomes</b>	<b>Mid-Term Outcomes</b>	<b>Long-Term Outcomes</b>
External Funding	Teachers participate in PD focused on 1) arts-infusion and 2) CT	30 teachers each year will begin and complete TAIP	Teachers will show gains in knowledge in arts-integrated curricular design	Teachers will incorporate arts content throughout the curriculum	Teachers continue to utilize CoP as an active tool to expand curriculum
Arts Infusion Coach	Teachers create lesson plans based on 1) arts-infusion and 2) CT PD	30 teachers each year will create lesson plans that reflect 1) arts infusion and 2) CT	Teachers will show gains in knowledge in CT skills and techniques	Teachers will incorporate CT throughout the entire curriculum via lesson plans	Students will see improvement in National Arts Standards and Common Core in math and reading
PD Instructors (KU Faculty)	Teachers practice lesson plans with other participants	30 teachers each year will practice lesson plans that reflect their knowledge of 1) arts infusion and 2) CT	Teachers will demonstrate proficiency in arts integration and CT via lesson plans	Students will demonstrate increased academic progress via teacher created arts-integrated lesson plans	Teachers model learned skills through transformed teaching, resulting in an improved classroom environment
USD 501 Resources	Teachers implement	30 teachers each year will	Teachers will demonstrate	Students will demonstrate	Arts-infused curriculum

(Project Director, Facilities, Principals, Consulting Teacher)	lesson plans in the classroom	implement lesson plans that reflect their knowledge of 1) arts infusion and 2) CT	proficiency in implementation of lesson plans with peers	increased CT skills via comprehensive curriculum	will result in an enhanced learning culture throughout participating schools
External Evaluators	Teachers revise lesson plans based on AIC and peer feedback and post in CoP	30 teachers each yr will revise lesson plans based on AIC & peer feedback and post in CoP		Teachers continue to demonstrate expertise via model posts to CoP	

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

Based on the literature referenced in Section 3b, it is clear that an arts-integrated curriculum relates to academic success. Students who are involved in integrated curricula develop valuable learner strategies such as CT, creative thinking and questioning skills (Brown, 2006; Caine & Caine, 1991; 2001; Hart, 1983; Pikulski & Cooper, 1997; Vars 2001). These skills not only help students become lifelong learners, but can be seen as immediately and positively affecting daily achievement. These benefits to student learning are persuasive, but are even stronger in tandem with the data indicating that an integrated teaching methodology can also be linked with level or improved standardized test scores (Arhar, 1997; Bolak, Bialach, & Dunphy, 2005; National Association for Core Curriculum, 2000; Vars, 1991; 1996). Further, research indicates that CT

can lead to increased learning in all areas of academic endeavors. Central to CT is the idea that these habits of mind can transfer beyond the course where it was originally taught to positively influence all of a student's thinking. Thus, the combination of a quality arts education with CT should result in improved student achievement, both in the arts and in other academic areas. 501 is committed to defining an aligned curriculum across the arts and core curricula. The reciprocal processes in reading and writing outlined in the National Common Core Standards integrate closely with TAIP goals and objectives. This alignment creates a comprehensive and systemic approach to improving instruction and student achievement.

Efforts are underway to improve arts education in the schools chosen for this project, such that we can build upon with TAIP. 501 is using a "signature schools" model to enhance the neighborhood school concept around a theme, offering students unique thematic classes and co-curricular opportunities. Themes have been developed to promote students' interests, cultural learning, pride in their school, and community empowerment to support the school's signature concept. Signature schools also encourage performance and demonstration of newly acquired skills. Three of the chosen schools are "arts signature schools," which means that TAIP can build upon the focus and efforts already underway.

Three systems will ensure the rigor of the academics presented in conjunction with TAIP activities. **First**, the assurance of rigor comes from the course materials themselves. Experienced KU faculty will design, instruct, and guide participants in the creation of lessons that are standards-based and demand that the students learn at a proficient level. All curricular units will have enhanced assessment of student learning built in to the curriculum to verify academic rigor for them as well. **Second**, the onsite AIC will observe teachers employing the techniques presented and will both coach and assess teacher effectiveness in the classroom. The AIC will

collaborate with the participating teachers, and modifications will be made to the activities as needed. These formative assessments will also be used to inform the KU instructors, so that subsequent years' instructional curriculum can be more effective. **Third**, along with the informal assessments conducted by the AIC, the External Evaluators (EEs) will conduct more formal assessments of the instruction of participating teachers. Evaluators will assess teacher disposition regarding the use of arts integration and CT in their classrooms, thus assuring the rigor of project implementation. These assessments will also be used to inform future instruction. All assessments will assess change in the learning and teaching culture of the affected schools.

Lastly, 501 is in the process of hiring a district-level Arts Coordinator for the 2014-2015 school year. TAIP instructors and Arts Infusion Coach will work closely with this Coordinator to ensure that the lesson plans developed from the TAIP curriculum are directly aligned with the KCCS (Kansas Common Core Standards) and the National Arts Standards.

**(d) The incorporation of project purposes, activities, or benefits beyond the end of the grant.**

**Teachers** – The most tangible result of TAIP will be the transformation that teachers experience in their teaching. With these new skills, teachers will focus on arts-integration and CT to increase student engagement, broaden artistic thinking, and increase academic achievement across all areas. Teachers will learn arts-integrated, higher-order thinking models and will work collaboratively to enhance student learning through summer and school-year instruction. These programs will enhance knowledge and assess progress through behavioral indicators that will demonstrate acquisition of arts achievements, cross-curricular achievements, and CT. One of the significant advantages to the adoption of CT into the elementary and middle school classrooms is that it is not an “add on;” CT can be utilized to enhance and deepen the learning of lessons and concepts that are already being taught. The ease with which CT can be incorporated into the

elementary and middle school classrooms will help ensure TAIP's success.

**Students** – Students will benefit directly from the newly acquired skills and knowledge of their teachers. Units designed via TAIP will offer students new and unique opportunities to experience the arts, enhanced by an approach that will teach them CT skills that can be applicable across the curriculum and transferred to any of their coursework. Further, since teachers will be incorporating CT skills into their daily teaching, students will benefit from sophisticated questioning and expanded thinking every day. Because students will go from a feeder elementary to its partner middle school, we anticipate learning gains, since they will experience multiple years of instruction from teachers who have received TAIP instruction. This instruction could even ease the often difficult transition from elementary to middle school, since teachers will be using similar language and techniques.

**Schools** – Because faculty members of the elementary and middle schools will receive TAIP training together, we anticipate a tangible shift in the overall teaching and learning philosophy of each participating school. Through ongoing support and check-backs, this shift towards a broadened arts and CT-infused curriculum will develop into a permanent part of each school's culture. Further, by participating in cohorts of middle schools with their feeder elementaries, we anticipate long-term cultural change, tangible to both teachers and students.

**Community Partnerships** – TAIP will establish/strengthen community partnerships. TAIP allows teachers to work with 501 to bring artists from the community into the schools, where they can demonstrate their art (visual, music, drama) for students, enhancing the lesson plans created by participating teachers. Further, TAIP funds will allow participating schools to travel off-site to locations where they can engage in experiential learning in the arts—attending concerts, art museums, and theatre performances. By working to aid 501 in establishing

community partnerships, that these relationships will continue after the life of the grant, and also deepen student appreciation and understanding of the art in their own community.

***Systemic change*** – We have designed a program that focuses on infusing the elementary and middle curriculum with two value-added elements: standards-based arts education and CT. These two elements, braided together in an energized curriculum with engaged students, will result in positive changes to the school culture in the participating schools. Both teachers and students will experience opportunities for intellectual growth and expansion, as well as for enjoying the depth of learning that comes with an arts-integrated education. Specifically, arts-integrated learning will help our students make key connections between the arts and the other core subjects with which the arts are paired (for example, Beane, 1997, and Vars, 2001). Students should see increased contextualization of the topics they are studying. For example, a lesson that contextualizes the music of the 1950s within the storyline of *The Outsiders* and understanding why those connections exist will lead to a better understanding of both art and literature. These stronger connections should lead to sustained learning, and academic gains.

Further, 501 is in the process of hiring a district-level Arts Coordinator for the 2014-2015 school year. TAIP instructors and Arts Infusion Coach will work closely with this Coordinator to ensure that the TAIP professional development is included in the district's long-range PD plans. Further, the Arts Infusion Coach will work collaboratively with the Coordinator to build skill and capacity within that individual to continue aligned efforts in integrating arts past the grant period.

***Dissemination*** – TAIP findings will be disseminated through scholarly reports and conference presentations. The success of this program will yield quantifiable results borne out of rigorous research design and assessment, and KU evaluators will share these results with the research community via peer-reviewed publications. The evidence that this project produces will

quickly join the extant literature to inform others of the results of this critical work.

#### **4) QUALITY OF THE PROJECT PERSONNEL**

**(a) The applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented.**

All personnel, both those employed by 501 and by the subcontractors, will be hired following our stringent equal opportunity policies. 501 does not discriminate on the basis of race, color, religion, sex, national origin, age, handicap, or disability in the administration of any employment initiative, including hiring, firing, termination, disciplinary procedures, or other related programs and activities. Further, our subcontractor (KU) provides equal opportunity for all qualified individuals to be considered for benefits and conditions of employment, educational programs, and activities, regardless of race, religion, color, sex, disability, national origin, ancestry, age, veteran status, sexual orientation, marital status or parental status, and will take action to ensure that such individuals are recruited for all employment opportunities. In addition to providing equal opportunity and a discrimination-free community, KU will take specific, result-oriented steps to increase the number of historically underrepresented persons and overall diversity. For any positions associated with TAIP, KU will actively seek applicants from underrepresented group members – particularly those whose diversity reflect that of 501 – and will endeavor to provide a supportive environment for staff to thrive and be successful.

**(b) The qualifications, including relevant training and experience, of key project personnel.**

The staff of TAIP represents nearly 30 years of providing, designing, implementing and evaluating high-quality arts-based programs for teachers and students. Further, all staff have extensive experience in managing and evaluating USDE grants. TAIP staff is also committed to providing outstanding and unique opportunities for low-income youth. (See appendix for CVs.)

TAIP's key personnel will include a triad of Principal Investigators (PIs) (Lead PI, PI for PD, and PI for Administration), who will work together collaboratively to ensure leadership on the proposed project. Other key personnel will include an Arts Infusion Coach (AIC), PD Instructors, a Consulting Teacher, and External Evaluators (EEs).

*Diane Cox, PhD., General Director of Teaching and Learning for 501* will serve as the Lead Principal Investigator and Project Director. Dr. Cox has over 30 years of experience in public education, and has diverse experiences in curriculum development and implementation in multiple districts and states. She is a strong supporter of integrating arts into core curriculum and aligning National Common Core Standards in all curricular areas, including the arts.

An Arts Coordinator is in the process of being hired by 501 and will serve a *Consulting Teacher*. This individual will ensure that any proposed changes to the curriculum that arise as a result of TAIP are aligned with the National Arts Standards and the Common Core, other district curricular initiatives, and meet the district's standards for fidelity and rigor. This individual will also ensure that the benchmarks and indicators created as a result of TAIP become institutionalized, and will continue past the grant period.

An *Arts Infusion Coach* will be hired. Ideally, this individual would have experience working in 501, and should have a depth of knowledge in both arts integration and foundations of CT. This individual will serve as both the Internal Evaluator and Curriculum Coach for the project, and will ensure TAIP goals and objectives are being met. Additionally, this individual will assist in delivering PD; monitor implementation of competencies acquired through PD; and assist in both formal and informal assessment of classroom activities.

*Christopher M. Johnson, Ph.D., Professor of Music Education and Music Therapy (University of Kansas) and Director of the Music Research Institute* will serve as the Principal

Investigator of the PD subcontract, and will serve as a PD Instructor. Johnson will oversee the creation and delivery of PD, ensure PD quality, and will serve as co-instructor for the PD courses. Johnson has nearly 30 years of experience in arts education and integration. Most recently, Johnson has designed and implemented a three year federally funded project in the Kansas City, Kansas Public Schools focused on providing CT-based PD for fine arts teachers.

*Cynthia Colwell, Ph.D., Professor of Music Education and Music Therapy (University of Kansas)* will serve as a PD Instructor. Colwell will assist in the creation and delivery of the PD, will ensure the quality of the PD, and will co-instruct the PD courses. Colwell has nearly 30 years experience designing curricula for a changing world and training teachers and therapists.

*Becky Eason, Ph.D., Associate Director of the Center for Public Partnerships and Research (CPPR – University of Kansas)* will serve as the PI for the External Evaluation and Administration subcontract. Eason's will oversee all evaluation activities, coordination of staff efforts and logistics, and administration of the KU subcontracts. In addition to running a major research unit at KU, Eason has served as PI on eight grants, and, along with CPPR staff, manages nearly \$7 million of research endeavors. She has considerable experience with a variety of qualitative techniques, including focus groups and field observation.

*Jenny Memmott, MME, Research Analyst (CPPR – University of Kansas)* will serve as an External Evaluator. Memmott has nearly 10 years of experience as an analyst and evaluator with numerous research projects, including several projects focused on arts advocacy.

## **5) QUALITY OF THE MANAGEMENT PLAN**

**(a)The management plan will achieve the objectives of the project on time and within budget, including clearly defined responsibilities, timelines, and milestones.**

Management of TAIP will be the shared responsibility of three key staff members: Dr.

Christopher Johnson, PI of the PD, Dr. Becky Eason, PI of the evaluation, and Dr. Diane Cox, PI of project administration. While Cox is responsible for overall project oversight and ensuring that logistics in 501 run smoothly, Eason and Johnson will maintain oversight of their fields. This **TAIP Management Team**, which will also include the Arts Infusion Coach, the Consulting Teacher and school principals, will meet monthly beginning in Spring 2015 until the project is launched in Summer 2015, and then quarterly (September, December, February and April) to troubleshoot any problems, refine program design and ensure program goals are being met (once protocols and procedures are established. Eason will take minutes.

Table 5 shows how the plan will meet objectives, activities, and milestones in a timely manner over the course of a year. Project activities will recur each year of TAIP following a similar schedule. In instances where more than one responsible party is listed, the lead member is indicated in **bold**. (The Budget Narrative describes the resources necessary for TAIP.) (*Table Abbreviations*): Arts Infusion Coach (AIC), Arts Infusion (AI), External Evaluators (EEs), Community of Practice (CoP), PD Instructors (PDI))

**Table 5 – Project Management Plan**

**GOAL 1: Strengthen the integration of standards-based arts instruction within other academic content areas.**

*OBJ 1: Teachers will participate in a PD program in which they gain skills and knowledge to infuse standards-based arts curriculum into the other core academic content areas.*

Milestone	Personnel	Timeline
Staff recruits arts and K-8 educators to participate in Project training.		
At least 30 participants recruited.	<b>Project Director</b> , AIC	By Feb. each year
Teaching staff develop curriculum focused primarily on AI throughout the school curriculum.		

A high-quality curriculum is designed.	<b>PDI</b> , Project Director, AIC	Feb. 2015, with yearly updates
PD Instructors delivers curriculum to K-8 teachers.		
Course is delivered in 501.	PDI	Summer each year
Teachers develop proficiency in all key concepts of arts integration.		
Teachers complete the coursework.	<b>PDI</b> , 501 participants, AIC	Summer each year
Teachers complete all class assessments at a satisfactory level.		

*OBJ 2: Teachers will incorporate arts content throughout the entire standards-based core academic curriculum, using the most modern tools available. Teachers will model these skills through transformed curriculum, which will result in an improved classroom environment.*

Milestone	Personnel	Timeline
Teachers will learn to apply key concepts of arts integration throughout the curriculum.		
Teachers complete the coursework.	PDI	Summer each year
Teachers will increase use of instructional technology as a means to deliver instruction.		
CoP and other technology (i.e. iPads) are integrated into the curriculum.	501 participants/ <b>PDI</b> /EEs	Next academic year
Teachers will begin integrating arts activities into selected academic units.		
Revised lesson plans are created and piloted.	<b>PDI/501 participants</b>	Next academic year
Model lessons are posted to CoP.	501 participants	Ongoing
Teachers integrate at least one artistic aspect into every major teaching unit in the non-arts curriculum.		

Revised lesson plans are created and piloted.	501 participants/ <b><u>PDI</u></b>	Next academic year
---	-------------------------------------	--------------------

*OBJ 3: Students will demonstrate increased acquisition of core academic and arts curriculum, which will lead to academic gains, including improvements on the National Arts Standards.*

Milestone	Personnel	Timeline
Teachers will teach using the arts activities infused into the academic year curriculum.		
Revised lesson plans are created and piloted.	<b><u>PDI/501 participants</u></b>	Next academic year
Students will demonstrate academic gains in the subjects covered by the integrated units and across the integrated curriculum.		
Assessment scores show student gains.	501 Teachers	Fall, Spring
Assessment scores show student gains in math and reading ( <b><u>GPRA 1 and 2</u></b> )	501 Teachers	Fall, Spring
Delivery of arts curriculum is observed and coached.		
EE and AIC monitor classroom progress.	<b><u>EEs/AIC</u></b>	Fall, Spring

*OBJ 4: All standards-based curricular benchmarks and behavioral indicators will be maintained after the life of the grant via school-wide cultural change and continued student assessment.*

Milestone	Personnel	Timeline
Teachers are supported in implementing integrated lesson plans via observation and mentoring.		
EE and AIC monitor classroom progress.	<b><u>EEs/AIC</u></b>	Fall, Spring
Impact of integrated instruction on student progress continues to be evaluated.		
Project-specific student assessments	501 Teachers	Fall, Spring

conducted in each classroom.		
------------------------------	--	--

**GOAL 2: Strengthen standards-based arts instruction by infusing CT into all aspects of instruction and assessment, which will advance the education of the whole student.**

*OBJ 1: Teachers will gain skills and knowledge enabling them to link CT techniques and assessments with the already present benchmarks and behavioral indicators for the National Standards in their academic subjects.*

Milestone	Personnel	Timeline
Staff recruits arts and K-8 educators to participate in Project training.		
At least 30 participants recruited.	<b><u>Project Director</u></b> , AIC	Feb. each year
A rigorous PD curriculum on CT is created.		
PDI designs/refines curriculum equivalent to 6 graduate credit hours.	PDI	By Feb. 2015
Teaching staff develop curriculum focused on CT skills throughout the school curriculum.		
Revised lesson plans are created and piloted.	PDI/ <b><u>501 participants</u></b>	Next academic year
Engage teams in developing Standards-based benchmarks that include CT.		
Lesson plans are vetted against district, state and national standards and benchmarks.	PDI/ <b><u>501 participants</u></b> , AIC/Consulting Teacher	Next academic year
Delivery of arts curriculum is observed and coached.		
EEs and AIC monitor classroom progress.	<b><u>EEs</u></b> /AIC	Fall, Spring

*OBJ 2: Teachers will incorporate CT techniques into the classroom, such that the National Standards are being taught in conjunction with higher-order thinking, using the most modern tools available. Teachers will model these skills through transformed teaching techniques, which*

will result in an improved classroom environment.

Milestone	Personnel	Timeline
Increase understanding of CT and its relevance to the classroom.		
Pre/post testing shows increased understanding.	EEs	Spring, late Summer
Increase understanding of the relationship between CT and the National Standards.		
Pre-Post testing shows increased understanding.	EEs	Spring, late Summer
Lesson plans demonstrate understanding of these concepts.	<u>EEs/AIC</u>	Next school year
Increase use of instructional technology as a means to deliver CT instruction.		
CoP and other technology is integrated into curriculum.	PDI	Summer, next school year
Teachers will begin integrating activities into selected academic units.		
Revised lesson plans are created and piloted.	PDI/ <u>501 participants</u>	Next school year
Model lessons are posted to CoP.	501 participants	Throughout project
Teachers integrate at least one CT component aspect into every major teaching unit in the non-arts curriculum.		
Revised lesson plans are created and piloted.	PDI/ <u>501 participants</u>	Next school year

*OBJ 3: Students will demonstrate acquisition of CT as part of a comprehensive curriculum, which will lead to academic gains, including improvements on the National Arts Standards. CT will be demonstrated through measurement across the assessed curriculum.*

Milestone	Personnel	Timeline
Teachers will teach using CT techniques as learned and honed the previous spring and summer.		
Lesson plans continue to be revised/ refined.	PDI/ <b><u>501 participants</u></b>	Next academic year
Increased proficiency of delivery is reinforced through additional seminars, delivered quarterly.		
Teachers participate in follow-up activities.	PDI/ <b><u>501 participants</u></b>	Next academic year
Additional assessments show continued gains.	EEs	Next academic year
Delivery of CT based lessons is observed and coached.		
EE and AIC monitor classroom progress.	<b><u>EEs</u></b> / AIC	Fall, Spring
Demonstrate student academic gains in subjects wherein CT techniques have been used.		
Project-specific student assessments conducted in each classroom.	501 participants	Fall, Spring

*OBJ 4: CT benchmarks and behavioral indicators will be maintained after the life of the grant via school-wide cultural change and through continued student assessment.*

Milestone	Personnel	Timeline
AIC supports teams in implementing CT lesson plans through observation, mentoring.		
AIC monitors progress/offers coaching.	AIC	Fall, Spring
Impact of integrated instruction on student progress continues to be evaluated.		
AIC, district staff, project director, consulting teacher, and school principals provide ongoing monitoring.	<b><u>AIC</u></b> /Project Director/501 Staff, Consulting Teacher	Ongoing

**(b)The time commitments of the key project personnel are appropriate and adequate**

**Table 6 – Staffing Time Commitments**

Cox, PI	.20 (in-kind)	Oversee all aspects of grant; ensure quality and fidelity of work product
Johnson, PI PD	.25 year (1.0 summer)	Supervise delivery of PD; ensure quality of PD offerings.
Eason, PI Evaluation	.30	Develop evaluation instruments; monitor performance; data analysis; ensure completion of quarterly and annual reports
Arts Infusion Coach	.50	Serve as both the Internal Evaluator and Curriculum Coach for the project, ensure TAIP goals and objectives are being met.
TBD, Consulting Teacher	.10 (in-kind)	Ensure that proposed changes to curriculum that arise are aligned with district curricular initiatives; ensure that benchmarks created as a result of TAIP become institutionalized.
Colwell, PD	.15 year (1.0 summer)	Develop and deliver PD curriculum; monitor implementation of competencies acquired through PD
Memcott, Evaluation	.40	Administer evaluation instruments; evaluate student performance; data analysis

**(c) Procedures are adequate for ensuring feedback and continuous improvement.**

It is key that subsequent cycles of TAIP learn from the successes and obstacles encountered in previous years. We will employ formative data to examine objectives, monitor activities through measurement instruments, and inform the project based on resulting data. TAIP includes a number of check backs and verifications of project quality and fidelity, including our Quality Assurance Plan (QAP, Table 7). The QAP, which allows for data-driven decision making, creates a feedback loop that examines objectives through a series of questions, monitors

activities through various instruments, and informs project decisions based on data. The QAP: 1) poses questions about the accomplishments over the project period; 2) indicates the instruments to be used, person(s) responsible for data collection, timelines, and individuals who will receive feedback; and 3) suggests how the feedback will be used. External Evaluators will compile and analyze progress data, prepare summary feedback reports, and submit results to project staff. Adequate checks and balances are built into the system to guarantee efficient delivery of a quality program. (Lead staff is indicated in **bold**.) (Table Abbreviations: Arts Infusion Coach (AIC), Arts Infusion (AI), External Evaluators (EE), PD Instructors (PDI))

**Table 7 – Quality Assurance Plan**

Questions About Program Operations	Monitoring Format				Usage
	Instruments	Completed By	Timeline	Feedback To	
Are teachers learning about effective CT and about AI design?	Pre-post quizzes	EEs	End of Summer, after PD	501, PDI	Quarterly & annual reports, refinements to courses & PD
	Interviews/ focus groups	EEs	End of Summer, School year		
Are teachers incorporating what they have learned into their classrooms?	Classroom Observation	<b>EEs</b> & AIC	School year	501, PDI	Quarterly and annual reports, refinements to courses & PD
	Interviews/ focus groups	EEs	Fall, Spring		
Do students show gains in academic performance?	Pre-post quizzes	Teachers/ AIC/ <b>EEs</b>	School year	501, PDI	Quarterly and annual reports, refinements to PD, Federal
	Comparisons to control	Teachers/ <b>EEs</b>	School year		

Questions About Program Operations	Monitoring Format				Usage
	Instruments	Completed By	Timeline	Feedback To	
	group				APR
	Interviews/ focus groups	EEs	End of school yr		
Is arts integration being sustained beyond teachers' participating years?	Returning teacher participant rates	<u>EEs</u> / PD Instructors	Summer	501, PDI	Quarterly and annual reports, Federal APR
	Focus groups	<u>EEs</u> /AIC	End school year		

## 6) QUALITY OF THE PROJECT EVALUATION

*(a) The evaluation includes the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data.*

The evaluation plan will provide assessment of the program's effectiveness in meeting the goals, objectives, and outcomes outlined in the Project Design. Dr. Eason will head the team from the Center for Public Partnerships and Research (CPPR) at KU, and will work together with the AIC and other project staff to conduct the evaluation. Over the past ten years, CPPR (formerly the Institute) has carried out extensive applied research and evaluation using a continuous improvement framework to evaluate PD efforts in Kansas and the Midwest. CPPR currently has more than a dozen contracts and subcontracts for evaluation services on a wide variety of federal grant projects. The Evaluation Team (External Evaluators and AIC) will utilize a Context-Input-Process-Product (Stufflebeam, 1971; Stufflebeam & Shinkfield, 1985) approach that addresses both *process* (how the change is implemented) and *product* (the desired

outcomes). The evaluation plan will include both quantitative and qualitative measures. Worthen, Sanders, and Fitzpatrick (1997) note that blending both approaches helps to strengthen data interpretation and overcome evaluation bias.

Several instruments will assess progress toward TAIP objectives: 1) Pre/post-tests will assess knowledge of art integrated-curricular design and CT. Selected tools will be administered and utilized from the outset of TAIP in both the schools participating as Cohort 1, and those in Cohort 2. This design will provide the evaluators both time differences (pre/post) as well as a **quasi-experimental** Control Group, for an even more stringent evaluation. Through this design, Cohort 2 schools (i.e., schools that are scheduled to receive the intervention in the last two years of the grant cycle) will serve as the Control for the analysis of the intervention effects on Cohort 1. Teachers will utilize Stufflebeam's "Guidelines for developing evaluation checklists" (2000) to ensure rubrics and assessments reflect relevant and objective criteria for judging participant work; 2) An electronic survey will assess participant disposition pre/post program instruction. Survey items will be designed to measure classroom implementation, satisfaction with project mentoring, and continued growth in utilization of TAIP's instruction; 3) Student assessments will be created by participants to assess their own students' learning. Assessments will be developed with guidance from the AIC and EEs to ensure maximum reliability and validity.

Data analysis will be conducted jointly by Evaluation and project staff. A comparison of pre- and posttest scores will evaluate progress toward intended outcomes for teachers and students. The Evaluation Team will also compute rubric scores to assess participant skills in CT, arts-integrated design and assessment. Content analysis of qualitative interview, observation and survey data will be completed to identify project successes and opportunities for improvement.

The Evaluation Team will share formative and summative results regularly with TAIP staff

(See the Quality Assurance Plan, p. 35). Consistent data sharing ensures that all participants receive follow-up support can make mid-course correction in instruction, as well as being used for planning and continuous improvement purposes. Stakeholders (i.e. USDE, 501 administration, principals, Topeka community leaders) will receive summative data on an annual basis on the project's effectiveness in meeting the specific objectives outlined in the Project Design. The report will also discuss differences by school, both in terms of implementation and outcomes, to address the transferability of the project.

Evaluators will examine project replication by exploring building-level differences. Stufflebeam's transportability evaluation framework (2007) will be used to guide the study. First, data will be collected regarding the integrity of implementation. During the EE and AIC's site visits, field notes will be taken regarding the school setting, and local adaptations to the program will be documented. Content analysis will then be conducted to identify any building-level differences in implementation. Outcome data will also be disaggregated at the building level to identify significant differences in project impact.

***Data collection*** - The Evaluation Team will collect outcome data, with assistance from 501. Student achievement data will be supplied by the district, with identification information limited to the teacher's name. No identifying information will be attached to the data files. The Evaluation Plan (Table 8) provides a summary of the benchmarks, measures, data collection procedures, and proposed analyses that will be used to assess progress toward outcomes.

***Instrument development*** - Multiple instruments will be developed and/or refined to assess progress toward outcomes. 1) A pre/posttest teacher survey has been designed to assess knowledge and skills in CT, and the survey will be refined and extended to include questions regarding arts-integrated instruction. The EEs and AIC will work with the PD Instructors and

Consulting Teacher to develop items to ensure alignment with the subject matter standards and with best practices. The IT'S Music and STArts grants used similar tools (see Section 6c); further refinement of these existing tools will be conducted by the PD Instructors prior to their instruction sessions to ensure alignment of the instrument with TAIP's content, goals, and objectives. 2) A rubric will be developed for use in classroom observations to determine technique utilization and learning environment using Stufflebeam's Guidelines (2000), to ensure that the rubric reflects applicable scoring criteria and aligns with best practices and recent research concerning both of the project's goals as related to student learning. Rubrics designed by the participants themselves will serve as the basis for assessment of student learning. Though the teachers will create these rubrics, the Evaluation Team will ensure that they reflect appropriate scoring criteria and align with best practices.

Lastly, the Evaluation Team will examine project reliability by exploring school-level differences, using Stufflebeam's transportability evaluation framework (2007). First, data will be collected regarding implementation integrity. As part of the process evaluation, the EEs and AIC will track fidelity to the work plan and note adaptations to the original design. Analysis of implementation records will be conducted to identify any school level differences, and outcome data will be disaggregated at the school SES level to identify significant differences in project impact. At the grant's end, the EEs will compare implementation and outcome data and provide a summative report of the most effective strategies. Table 8 outlines TAIP's Evaluation Plan.

(THE DATA ANALYSIS METHODS IN THIS SECTION WERE DEEMED PROPRIETARY BY THE AUTHORS.)

**Table 8 – Evaluation Plan**

**GOAL 1: Strengthen the integration of standards-based arts instruction within other academic content areas.**

*OBJECTIVE 1: Teachers will participate in a PD program in which they gain skills and knowledge to infuse standards-based arts curriculum into other core academic content areas.*

Outcomes	Outcome Measures	Data Collection	Data Analysis
<p><b>1.1.a.</b> 100% of participants will demonstrate increased knowledge of arts integrated-curricular design.</p>	<p><b>1.1.a.</b> Pretest/posttest, focus groups</p>	<p><b>1.1.a.</b> Pre/Post Teacher survey (quizzes)</p>	
<p><b>1.1.b.</b> 100% of participants will demonstrate proficiency in creation of arts integrated curricular lessons.</p>	<p><b>1.1.b.</b> Lesson Plans</p>	<p><b>1.1.b.</b> Focus groups</p>	

<p><i>OBJECTIVE 2: Teachers will incorporate arts content throughout the entire standards-based core academic curriculum, using the most modern tools available. Teachers will model these skills through transformed curriculum, which will result in an improved classroom environment.</i></p>			
<b>Outcome</b>	<b>Outcome Measures</b>	<b>Data Collection</b>	<b>Data Analysis</b>
<p><b>1.2.a.</b> 100% of participants will implement arts integrated-curricular lessons in their classrooms.</p>	<p><b>1.2.a.</b> Participant survey, AIC and EE observation notes</p>	<p><b>1.2.a.</b> Pre/post coursework</p>	
<p><b>1.2.b.</b> 100% of participants will receive one-on-one support and mentoring.</p>	<p><b>1.2.b.</b> Participant survey, AIC and EE observations, Focus Groups</p>	<p><b>1.2.b.</b> Pre/Post Coursework, Follow-up</p>	

1.2.c. 80% of affected students will demonstrate improvement in knowledge of concepts in arts-integrated lessons.	1.2.c. Participant-designed assessments	1.2.c. Pre/post lessons	
---	---	-------------------------	--

*OBJECTIVE 3. Students will demonstrate increased acquisition of core academic and arts curriculum, leading to academic gains and improvements on the National Arts Standards.*

Outcome	Outcome Measures	Data Collection	Data Analysis
1.3.a. 100% of Students in the affected group will demonstrate greater achievement in the assessed curriculum.	1.3.a. Teacher-assigned assessments on specific unit subject matter.	1.3.a. Teacher-assigned scores on assessments	
1.3.b. 100% Students in the affected group will demonstrate greater achievement in the national standards.	1.3.b. Teacher-assigned performance assessments and	1.3.b. Teacher-assigned scores on assessments	

	<b>1.3.b.</b> Standardized assessments		
--	--	--	--

*OBJECTIVE 4: All standards-based curricular benchmarks and behavioral indicators will be maintained after the life of the grant via school-wide cultural change and through continued student assessment.*

<b>Outcome</b>	<b>Outcome Measures</b>	<b>Data Collection</b>	<b>Data Analysis</b>
<b>1.4.a.</b> 100% of teachers in the program will actively participate in TAIP PD through 501.	<b>1.4.a.</b> 501 PD Records	<b>1.4.a.</b> Academic year	
<b>1.4.b.</b> 100% of the teachers in the program will continue to report significant levels of art	<b>1.4.b.</b> Teacher Survey, Arts Infusion Coach (AIC)	<b>1.4.b.</b> Academic Year	

integration in their lessons after the life of the grant.	observation		
---	-------------	--	--

**GOAL 2: Strengthen standards-based arts instruction by infusing CT into all aspects of instruction and assessment, which will advance the education of the whole student.**

*OBJECTIVE 1: Teachers will gain skills and knowledge enabling them to link CT techniques and assessments with the already present benchmarks and behavioral indicators for the National Standards in their academic subjects.*

<b>Outcome</b>	<b>Outcome Measures</b>	<b>Data Collection</b>	<b>Data Analysis</b>
<b>2.1.a.</b> 100% of teachers receiving PD will demonstrate gains in knowledge and skills in infusing CT techniques into all aspects of education.	<b>2.1.a.</b> Teacher survey (quizzes), Focus groups	<b>2.1.a.</b> Teacher survey (quizzes) – Pre/ Post Class	
<b>2.1.b.</b> Teachers in the participating group will	<b>2.1.b.</b> Teacher survey	<b>2.1.b.</b> Focus groups –	

demonstrate greater knowledge and skills in infusing CT techniques into all classrooms than teachers in the control group.	(quizzes), lesson plans	Spring	
--	-------------------------	--------	--

*OBJECTIVE 2: Teachers will incorporate CT techniques into the classroom, such that the National Standards are being taught in conjunction with higher-order thinking, using the most modern tools available. Teachers will model these skills through transformed teaching techniques, which will result in an improved classroom environment.*

<b>Outcome</b>	<b>Outcome Measures</b>	<b>Data Collection</b>	<b>Data Analysis</b>
2.2.a. 100% of participating teachers will demonstrate CT teaching techniques in the context of the all subject matter.	2.2.a. Classroom visits and observations (rubric assessments),	2.2.a. Classroom Observations (rubrics) – Academic Year	

<p><b>2.2.b.</b> Teachers participants will have classrooms with CT techniques occurring, and will present a richer learning environment than those of teachers in the control group.</p>	<p><b>2.2.b.</b> Focus groups Classrooms visits and observations (rubric assessments)</p>	<p><b>2.2.b.</b> Focus groups - Spring</p>	

*OBJECTIVE 3: Students will demonstrate acquisition of CT as part of a comprehensive curriculum, which will lead to academic gains, including improvements on the National Arts Standards. CT will be demonstrated through measurement across the assessed curriculum.*

<b>Outcome</b>	<b>Outcome Measures</b>	<b>Data Collection</b>	<b>Data Analysis</b>
<p><b>2.3.a.</b> 100% of students in the affected group will demonstrate increased ability accomplishment in CT.</p>	<p><b>2.3.a.</b> Classroom performance on CT Rubrics.</p>	<p><b>2.3.a.</b> Teacher-assigned rubric assessments- Fall/Spring</p>	
<p><b>2.3.b.</b> Students in the</p>	<p><b>2.3.b.</b></p>	<p><b>2.3.b.</b></p>	

<p>affected group will demonstrate greater achievement in the national standards.</p>	<p>Teacher-assigned arts performance assessments. Standardized assessments.</p>	<p>Teacher-assigned scores on assessments- Fall/Spring</p>	
<p><b>2.3.c.</b> Students in the participating group will demonstrate greater achievement in 1) math and 2) reading (<b><u>GPRA 1 and 2</u></b>).</p>	<p><b>2.3.c.</b> 501-district math and English assessments, Teacher-created assessments</p>	<p><b>2.3.c.</b> Student scores on assessments- Fall and Spring</p>	

*OBJECTIVE 4: CT behavioral indicators will be maintained after the life of the grant via school-wide cultural change and through continued student assessment.*

Outcome	Outcome Measures	Data Collection	Data Analysis
2.4.a. 100% of participants will actively participate in CT PD through 501.	2.4.a. 501 PD Records	2.4.a. Academic Year	
2.4.b. 100% of participants will continue to report greater levels of CT techniques continuing in their classroom.	2.4.b. Teacher Survey	2.4.b. Academic Year	

*(b) Evaluation will provide performance feedback and permit periodic assessment of progress.*

**Process evaluation and feedback** – Process evaluation will focus on implementation of project activities and adherence to the work plan. This part of the evaluation will be designed for continuous monitoring, feedback, and improvement, and will serve as the basis for modifications and adjustments throughout TAIP. Table 8 outlines the benchmarks, measures, and data collection that will be used to assess progress toward objectives and implementation of TAIP activities. In addition to those measures, the Quality Assurance Plan (Table 7) outlines process evaluation measures, which will include interviews with project personnel, observations of TAIP

activities, and questionnaires with a sample of teachers and students to assess program implementation and satisfaction with services.

**Reporting** – The Evaluators and AIC will share process and outcome evaluation results regularly with program staff. Teacher scores will be communicated immediately so that participants can receive follow-up support. Data collected from focus groups and surveys will be shared on an annual basis for planning and continuous improvement purposes. Stakeholders (i.e. USDE, 501 administrators, principals) will receive outcome data on an annual basis. We will report on GPRA measures 1 and 2 to the USDE in semi- and annual reports. The communication of immediate feedback in this manner will allow for continual monitoring of TAIPs’ progress towards achieving intended outcomes, and ensure design fidelity. In addition to the continual feedback throughout the course of the project, the evaluator will provide a comprehensive report of the project’s effectiveness in meeting the specific objectives outlined in the Project Design. This report will include a full description of TAIP and its implementation at different schools.

*(c)The methods of evaluation will, if well-implemented, produce evidence of promise.*

Both of TAIP’s components—Arts integration and CT—will be infused across the curriculum and evaluated in that context. TAIP is designed to be an amalgamation of two PD programs that have produced positive results and outcome attainment: The IT’s Music Project and Project STArts: Skillful Thinking in the Arts. The IT’S Music Project set a precedent for successful PD that targeted arts infusion across the curriculum. Using a quasi-experimental design, final reports showed gains in both of the project’s objectives—increased knowledge and use of instructional technology, and increased integration of the National Arts Standards throughout the assessed curriculum. Pre/post scores regarding arts integration showed increases in teacher confidence in their ability to integrate the arts into a range of academic subjects.

The second component of TAIP is the infusion of higher order thinking skills throughout 501's educational culture. Evaluators have developed expectations for evidence of promise on the results from Project STArts: Skillful Thinking in the Arts. This project used a pre/posttest model with a control group to assess academic outcomes. In STArts, participants demonstrated significant gains in knowledge and skills related to CT in the fine arts classroom using a knowledge inventory of CT assessment ( $t(37) = 21.41, p < .001$ ); a disposition toward using CT procedures inventory ( $t(3.70) = 27.00, p < .001$ ); and classroom observations (mean change of 2.87 from pre to posttest; again, significant).

The Evaluation Plan for TAIP involves a higher level of rigor than the previously implemented projects. This plan uses a pre/posttest control group (quasi-experimental) design to determine the evidence of promise in this project. Furthermore, validated measures will be utilized to show all of the identified outcomes in TAIP's Logic Model (see Figure 1), including gains of knowledge in arts-integrated curricular design and CT skills and techniques, evidenced by tests, lesson plans, practice teaching with peers, and measured in situ classroom teaching. Evaluations will also include posts and continued use of the CoP, improvements of student academic progress, and improvements in school learning cultures.

TAIP is grounded in solid foundational precedents of successful PD programs for arts educators. Based on previous work by the evaluators in this field, there is ample evidence that TAIP will result in measurable outcomes that will lead to a sustained, enhanced learning culture throughout the participating schools in 501. As the design of this project evaluation will include pre- and posttest measures with control groups, evidence of gains will have sufficient scientific rigor to result in trustworthy and reputable findings that can be shared broadly with the arts and research communities, and lead to significant and lasting change in the field.