



## **Implementation of the A+ Schools Program: An Examination of Baseline Teacher Perceptions and Instructional Behaviors**

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### **ABSTRACT**

In a baseline study of teachers' attitudes towards arts integration, elementary teachers (23 experimental; 23 control) in grades K-6 indicated they valued arts integration and were willing to integrate the arts in their classrooms with no significant differences between groups. Additional analysis of teachers' instructional behaviors with structured protocols prior to program implementation showed that teachers from the control school demonstrated significantly higher uses of interdisciplinary curricula planning, experiential learning, and critical thinking. These data indicate that schools choosing to adopt an arts integrated curricula may be predisposed to the concepts underlying effective arts integration; they may also recognize their need for support in implementing arts integrated curricula via structured program implementation and support.

**KEYWORDS:** Arts Integration, Program Evaluation, Curriculum

The introduction of the Common Core State Standards (CCSS) (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) and the Next Generation Science Standards (NGSS) (Achieve, Inc., 2013) has effectively raised the bar by calling on schools to prepare students for college

and career readiness. These standards have shifted content expectations toward higher levels of cognitive demand including analysis, synthesis, and evaluation whereas previous state standards tended to emphasize comprehension level cognitive demands and task-based procedures (Porter, McMaken, Hwang, & Yang, 2011). This shift promotes teacher planning that emphasizes inquiry, student engagement, and promotion of critical thinking skills (Grindon, 2014).

One suggestion for actively engaging students to meet CCSS and the NGSS is through the use of arts integration. Incorporating the arts in the general curriculum has been shown to increase students' academic achievement in literacy, math, and science as well as improve their critical response skills (Burnaford & Scripp, 2013; DeBoer, Carman, & Lazzaro, 2010; Kimball, 2006). A well-developed arts integrated curriculum can enhance student engagement and promote skills deemed necessary for success in 21<sup>st</sup> century context, including "learning and innovation; information, media, and technology; and life and career skills" (Partnership for the 21st Century Skills, 2011, p. 2; Rotherham & Willingham, 2009). Student engagement occurs when students are actively involved in the learning process.

We present the baseline data of a research-based school initiative designed to support teachers in curriculum-based arts integration. The A+ Schools model works at a school-wide implementation level and assists teachers in developing creative, innovative ways of presenting content through integrating dance/movement, theater, music, creative writing, and the visual arts ("Arkansas A+ Schools," n.d.). Based on a school-wide vote to adopt the model, the A+ program faculty (i.e., practicing teachers, art experts, and retired teachers) provide educators with ongoing professional development and a network of support through a three year implementation period. This professional development model includes three years of summer professional development, year-long embedded support, and access to resources including both curriculum and materials. The A+ program then tracks success in the schools through structured observations as well as research into student learning outcomes.

### **Benefits of Arts Integration**

Curriculum that includes the arts is a means to enhance learning and can lead to improved student performance results. Arts integration has a positive relationship with academic achievement and has been shown to reduce the achievement gap and raise standardized test scores (Burnaford & Scripp, 2013; Catterall, Dumais, & Hampden-Thompson, 2012). When implemented properly, the arts promote cross-curricular learning of students and can help better prepare students for college and for career expectations through innovative classroom practices (Carlisle, 2011; Lindström, 2012).

In arts integrated classrooms, students have a better sense of ownership of their learning as well as increased engagement and more positive attitudes towards school (Ewing, 2012). According to Silverstein and Layne (2010), the following components are present in an arts integrated classroom: constructivist pedagogy, student showcase of knowledge, creation of art forms, creative expression, mutual connections between art

forms and content area, and meaningful learning objectives. Incorporation of art allows teachers to promote higher order thinking and encourages students to consider multiple perspectives (Radhakrishnan, 2014). Integration of art in schools allows teachers to support students to work at the higher levels of Blooms taxonomy as students analyze, evaluate, and create using art, music, movement, and theater. Students gain a deeper understanding of content and have increased self-efficacy, particularly for students who struggle to express their knowledge in linguistic or mathematical modalities (Robinson, 2013; Thompson, 2015).

Teachers integrating the arts encourage positive communities of learning where students collaborate and celebrate the talents and skills each student brings to the classroom. Teachers integrating the arts ask their students to use multiple modalities and intelligences. More specifically, it encourages differentiation by equipping teachers with various means of content representation and by providing students with multiple means to express their knowledge of content (Lynch, 2007). Students engagement and retention of content can be improved when teachers incorporate activities that allow students to (1) extend content through original artwork or activities, (2) showcase their learning through an art form, (3) perform material, (4) produce content orally, (5) create meaningful products, (6) connect emotion to content, and (7) illustrate information graphically (Rinne, Gregory, Yarmolinskaya, & Hardiman, 2011).

### **Teachers' Attitudes about Arts Integration**

Understanding teachers' perceptions and attitudes about arts integration can aid in the development of appropriate and effective professional development opportunities. Oreck (2004) investigated 423 teachers' attitudes towards arts integration and found that teachers valued the arts and believed art instruction was important for students. Teachers also believed that arts integration supported instructional differentiation for their students (Oreck, 2006) and allowed them to support all learners in the classroom through inclusion of multiple modalities.

Despite their positive feelings about the arts, Oreck (2004) concluded that the majority of teachers rarely integrated the arts into their curriculum because of limited time, pressure of standardized tests, and lack of confidence due to limited training in the arts. Providing teachers with targeted supports in arts integration may promote their ability to incorporate the arts into their classroom. Specifically, teachers can be encouraged to integrate the arts by providing them additional support from visiting artists (Andrews, 1999, 2008; Burnaford & Scripp, 2013; Garcia, 2003), professional development opportunities (Andrews, 2008; Oreck, 2006; Patteson, 2002), or on-site collaborative art teachers as resources (Andrews, 2010; Smithrim & Uptis, 2005).

### **A+ Schools**

The A+ Schools program combines the use of cross-disciplinary thematic units and daily arts instruction to provide students the opportunity to think critically, creatively, and innovatively through multiple measures. It encourages teachers to use various modes

of instruction to help better engage students. Critical to the model is a consideration of the *A+ Essentials* (“A+ Schools,” n.d.). The *A+ Essentials* include the following components: (1) instruction in the arts, (2) thematic and interdisciplinary curriculum mapping and design (to include the arts), (3) a focus on experiential learning, (4) planning instruction for multiple learning pathways, (5) enriched assessment design, (6) collaborative classroom design, (7) a supportive school infrastructure, and (8) a climate of teacher autonomy. These essentials provide the foundation of the professional development (PD) the teachers receive. Schools adopting the A+ model receive five days of PD the first summer of the implementation, three days the following summer, and two days in the final summer. The first five days of PD focus entirely on the *A+ Essentials* and in providing teachers with experiences in practicing arts integration via targeted activities designed for K-12 students. The teachers work in the second and third summers to design curriculum specific to their classrooms.

The A+ model was originally implemented in North Carolina and Oklahoma and demonstrated improved student outcomes in participating schools – with particularly impressive results with low-income school populations. Research from these states has shown that the A+ program has had an appreciable and positive effect on student learning and student engagement (Kimball, 2006). Additionally, the A+ program has led to a reduction in reported disciplinary problems (Barry, 2010).

The A+ Schools Program began in the early 1990’s in Wilmington, North Carolina when two educators in that state replicated the success of two arts-based magnet-type schools in Georgia and South Carolina. Following a 4-year pilot study of the program, North Carolina designated the A+ model a comprehensive education reform program. This label helped the North Carolina A+ initiative to secure funding from Department of Education Goals 2000 funds which it used to reach out to other states interested in creating statewide A+ Schools programs (Burrows, 2014).

Oklahoma, Louisiana, and Arkansas became early adopters of the A+ Schools program with Oklahoma leading the way in the region. Each state developed local networks of A+ schools, often involving partnerships with local institutions of higher education, which have continued to expand and bring national recognition to school reform inclusive of the arts (“Brief history of the A+ Schools program,” n.d.). Following a 4-year training partnership with North Carolina’s A+ network, six Oklahoma A+ Schools in grades 3 through 5 were examined to compare their academic performance to six controlled matched schools in the state. Kimball (2006) noted that the A+ Schools significantly outperformed the control schools in math and reading on the Oklahoma Core Curriculum Tests.

The Windgate Charitable Foundation began talks with the A+ Schools program in Arkansas in 2001 (“Brief History of the A+ Schools Program,” n.d.). The Thea Foundation also joined the collaboration as a funder and promoter of the model. Large-scale school recruitment and adoption in the state led to the first professional development summer trainings offered in summer 2011 for teachers in participating

public, private, and charter schools. Currently 14 schools in Arkansas are participating in the network.

### **Program Evaluation**

Given the current cultural climate in education calling for increased accountability, schools are now accountable for making data-based decisions to enhance student improvement. As a result, the role of program evaluation in monitoring improvement initiatives is increasingly important and can provide the education profession with a means to monitor progress and validate innovation and best practices (Carlisle & Kruzich, 2013; Malone, Mark, Miller, Kekahio, & Narayan, 2014). Program evaluation provides a systematic method for collecting, analyzing, and using information to inform improvement effectiveness and efficiency (Potter, 2008; U.S. Department of Health and Human Services, Administration for Children and Families, 2010). Benefits of program evaluation outweigh concerns about the evaluation process which can include program resources, cost of program evaluation, and fear of negative results (U.S. Department of Health and Human Services, Administration for Children and Families, 2010).

Program evaluation focuses on determining program impact. Best practices in program evaluation involve both internal and external evaluators (U.S. Department of Health and Human Services, Administration for Children and Families, 2010). Internal evaluators are embedded in the program design and implementation and have a better knowledge of the overall context of the program and its variables. However, they may be less objective or unable to see confounding variables due to being embedded in the research context. External evaluators have less knowledge of the program and its complexities. As a result, they are able to be more objective and to offer novel perspectives (U.S. Department of Health and Human Services, Administration for Children and Families, 2010).

For purposes of the baseline study of the A+ program, the program evaluators focused on program design and impact. Assessment of program design involves examining how the program's structure is meant to achieve the intended outcomes. Often assumptions made by the program creators are implicit in the design model and should be explicitly examined to ensure that the model is completely developed. Evaluating a program for its design involves input from many different stakeholders and focuses on resources/inputs, activities, and program outcomes. One means of examining program design, and the means used in the context of this study, is through assessment via preliminary observation, a methodology that involves firsthand observations of the program to check agreement between program theory and the program design (Rossi, Lipsey, & Freeman, 2004).

In this study, schools taking part in the A+ curriculum initiative were observed over time with baseline data collected before intervention and follow-up data collected at several key points following intervention. Additionally, data were collected in control schools chosen for characteristics matching the A+ schools (e.g., demographics, location). For purposes of this article, the baseline data will be reported comparing the

performance of A+ and control teachers in implementing the A+ curriculum elements prior to the A+ schools receiving their first professional development in the model. A limitation of this study lies in the fact that the A+ schools self-selected to adopt the A+ model resulting in lack of random assignment (Miller & Salkind, 2002).

### **Purpose of the Study**

The purpose of this study is twofold: (a) to describe teacher perceptions about arts integration prior to A+ Model implementation, and (b) to establish a baseline measure of teacher behaviors relative to the eight essentials of an A+ Model. The following research questions guide this study:

1. What are teachers' perceptions of arts integration before the A+ Schools Summer Institute?
2. To what degree do schools implement the Arkansas A+ Schools eight essentials prior to the A+ Schools Summer Institute?

### **Method**

#### **Design**

In the initial phase reported here, data were collected to compare the classroom practices and art integration perceptions of an experimental and control group of teachers prior to an Arkansas A+ Summer Institute. First, teachers completed an online survey that focused on three constructs: willingness to integrate the arts, barriers to integrating the arts, and value of the arts. Second, teachers were observed to examine their current instructional practices. Data will be reported for both experimental and control teachers prior to intervention.

#### **Participants**

Twenty-three teachers were selected as the experimental group; 23 teachers as the control group. All teachers were practicing in one state in the south central region of the United States. Schools were matched for demographics (e.g., race, ethnicity, socioeconomic status) and geographical markers (e.g., urban, rural). Table 1 summarizes teachers' grade levels disaggregated by school (e.g., Washington, Madison, Lincoln – school names are pseudonyms) and condition (i.e., experimental, control). Although random selection was utilized in selecting the teachers within each school setting, all participants were female except one. The experimental group consists of teachers in the following grades: four in grade K, five in grade 1, two in grade 2, three in grade 3, six in grade 4, one in grade 5, and two in grade 6. The control group includes teachers in the following grades: four in grade K, two in grade 1, four in grade 2, four in grade 3, four in grade 4, three in grade 5, and two in grade 6.

#### **Procedure**

To measure teachers' existing attitudes towards arts integration, all teachers at both the control and experimental schools were sent a link to an electronic survey (i.e., *Putting the Arts and the Classroom Together*) (*PACT*; Miller, Whittingham, Wake, & Adelson, 2016). *PACT* includes Likert scale survey questions that were designed to measure teachers' perceptions about arts integration including their value of arts integration, willingness to integrate the arts in their curriculum, and self-reported barriers to arts integration. The links were sent at the end of the 2013-2014 academic year. Survey responses were anonymously submitted with teachers receiving several follow-up emails to increase response rate.

Teachers were observed in both the experimental and control school settings at the end of the 2013-2014 academic year to measure their instructional behaviors in key criteria aligned with the A+ curriculum model including integration of the arts. At the time of these observations, participants were asked to teach a typical day's lesson and to allow an observer to simply be present in the classroom. The evaluators measured teachers' performance of the A+ essentials by using the *A+ Essentials Teacher Observation Protocol (A+TOP)* (Miller, Wake, & Whittingham, 2014; Miller, Wake & Whittingham, 2015). The *A+TOP* included the following categories: arts, curriculum, non-traditional or enriched assessment, experiential learning, multiple learning pathways, critical thinking, student collaboration, and climate. Each category was rated with one of the following levels of performance (1 = *No Evidence*, 2 = *Basic*, 3 = *Proficient*, and 4 = *Distinguished*). Evaluators spent a day at each school site observing the selected teachers. Three evaluators observed in six schools across a 2 week period. All observational data were submitted to the lead researcher and was entered into a database by the lead researcher. Prior to observations, the evaluators completed a one-hour professional development training on the A+ Essentials. In addition, the evaluators were not aware of the school's designation (control, experimental) in collecting the data. Due to logistical difficulties, multiple observers were unable to observe the same schools, so inter-rater reliability was not able to be established. Additional comparative data in all schools were collected in the 2014-2015 and 2015-2016 academic years and will yield additional data for consideration based on the A+ program implementation as an intervention.

## **Instrumentation**

### **Teacher perceptions about arts integration.**

*PACT* (Miller et al., 2016) is an instrument designed to assess teachers' responses to arts integration including the value of arts integration, teachers' willingness to include the arts in their curriculum, and any perceived barriers to including the arts in existing curriculum. Survey items 1-14 measure teachers' reporting of the value of the arts; items 15-26 address teachers' willingness to integrate the arts; and items 27-35 measure teachers' perceptions of classroom barriers. Teachers responding to the survey rate each of the 35 items using a 5-point scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). Teachers' responses are averaged by construct (i.e., value, willingness, barriers) and overall.

Miller et al. (2016) validated the *PACT* through an iterative development process with 1,426 K-12 teachers taking part in the finalized version. Results of this validation process indicated sound construct validity and reliability. The three-factor model was examined and resulted in adequate fit,  $CFI=.89$ ,  $TLI=.89$ ,  $RMSEA=$ ,  $SRMR=.05$ . The alpha reliability was examined for each of the three factors and resulted in the following: Value (.99), Willingness (.99), and Barriers (.99).

### **Teacher classroom practices related to arts integration.**

The *A+TOP* (Miller et al., 2014) was administered to evaluate teachers' classroom practices related to arts integration (Appendix A). The *A+ TOP* targets teacher behaviors associated with the eight essentials of the A+ Program ("A+ Schools," n.d). The *A+TOP* was developed directly from the stated A+ Program curriculum model and curriculum progressions and includes eight criteria and four levels of performance (1 = *No Evidence*, 2 = *Basic*, 3 = *Proficient*, and 4 = *Distinguished*). The developed rubric is an analytic rubric wherein each criterion is independently measured allowing evaluators to assess multiple outcomes simultaneously (Allen, 2004). Analytic rubrics provide richer, more complex data than holistic rubrics as they allow for evaluation of relative strengths and weaknesses across multiple dimensions and describe performance at each level in detail.

The rubric was vetted for criteria-fit and readability by experts working closely with the A+ curriculum model. Content experts were purposefully selected from university and A+ Schools faculty with expertise in multiple content areas, including art education. These content experts were responsible for judging criteria-fit and readability of the initial draft of the *A+ TOP*. Additionally, the tool has internal consistency reliability established at .90. In this protocol, teachers are assessed on the following essentials of the A+ Program: arts, curriculum, non-traditional or enriched assessment, experiential learning, multiple learning pathways, critical thinking, student collaboration, and climate.

## **Data Analysis and Results**

### **Teacher perceptions about arts integration.**

Converting the *PACT* descriptors to a numerical Likert for data analysis, the following values were assigned: *Strongly Disagree* = 1, *Disagree* = 2, *Neutral* = 3, and *Agree* = 4, and *Strongly Agree* = 5. Scores for the three constructs represented in the survey (e.g., value, willingness, and barriers) were derived for both control and experimental schools (Table 2).

Experimental teachers ( $n = 23$ ) valued the importance of arts integration (e.g., helps students work on higher levels of Bloom's taxonomy; accommodates students' different learning styles) with a mean of 4.42 and control teachers ( $n = 23$ ) indicated similar perceptions with a mean of 4.32. Both groups reported a willingness to integrate the arts (e.g., willing to provide students opportunities to design or create; willing to



teach an arts integrated lesson) with experimental teachers' scores at a mean of 4.24 and control teachers at 4.42. Additionally, both groups felt neutral about the barriers that hindered or prohibited their ease of integrating the arts (e.g., cannot include the arts because of common core requirements; unable to add additional content to my curriculum) with experimental teachers' results yielding a mean of 3.20 and control teachers a mean of 3.08.

To examine the differences between the groups, multivariate analysis of variance (MANOVA) was performed to determine if there were differences between A+ experimental schools and the control schools on the three constructs of the *PACT*. Results indicated that there were no statistically significant differences in value, willingness, and barriers between the experimental and control group. Group means for each construct are included in Table 2.

### **Teacher classroom practices related to arts integration.**

Teachers were observed for baseline data based on the framework of the *A+TOP* in the following categories: arts, curriculum, non-traditional or enriched assessment, experiential learning, multiple learning pathways, critical thinking, student collaboration, and climate. Each category included a standardized evaluation scale: *No Evidence* = 1, *Basic* = 2, *Proficient* = 3, and *Distinguished* = 4.

The scores were aggregated to give each observed teacher an overall score on the rubric. Overall score means for the experimental group ranged from 1.13 to 1.87 whereas the means for the control group ranged from 1.48 to 2.37. In terms of the eight rubric criteria, the experimental group demonstrated *no evidence* in all eight essentials. The control group indicated a *basic* performance in experiential learning, critical thinking, and student collaboration; and *no evidence* in the remaining categories. Data broken down by criteria are reported in Table 3.

To account for the correlation between the eight dependent variables, a multivariate analysis of variance (MANOVA) was performed to determine if there were differences between A+ Schools and controls on the eight A+ Essentials (i.e., arts, curriculum, non-traditional or enriched assessment, experiential learning, multiple learning pathways, critical thinking, student collaboration, climate). In order to perform the MANOVA, the following assumptions were examined and met before the analysis was completed: univariate and multivariate outliers, multivariate normality, linear relationship, homogeneity of variance-covariance matrices, and multicollinearity.

An overall MANOVA effect was obtained  $F(8, 38) = 2.97, p = .011$ ; Wilks'  $\Lambda = .616$ ; partial  $\eta^2 = .384$ . Univariate ANOVA analyses on each of the eight dependent variables were conducted as follow-up tests to the MANOVA. Based on the observation baseline results of the *A+ TOP*, there were statistically significant differences between experimental and control groups for curriculum, experiential learning, and critical thinking. Although some of the rubric results yielded an observed performance level difference with the control group being assigned a higher performance level of *basic* on

three criteria (i.e., experiential learning, critical thinking and student collaboration), results from the control group were significantly higher for only one of these observed performance level differences. On average, the control group had significantly higher scores for curriculum mapping including use of thematic webbing, essential questions, interdisciplinary units, and/or cross-curriculum integration than the experimental group ( $F = 5.33$ ;  $p = .03$ ). The control group also had significantly higher scores for experiential learning to include hands-on learning, support of innovation, and educational risks than the experimental group ( $F = 9.13$ ;  $p = .004$ ). In addition, the control group had significantly higher scores for providing opportunities for students to engage in creative thinking and/or problem solving than the experimental group ( $F = 6.63$ ;  $p = .01$ ). It is important to note that participants were not familiar with the *A+ Essentials* before the baseline observations were completed. Table 3 includes the means, standard deviations, and univariate ANOVA results of the eight dependent variables.

### Discussion

The results of this study indicate that elementary teachers value the importance of arts integration and are willing to integrate the arts into their curriculum as evidenced by teacher responses to the *PACT* survey; however, teachers appear to struggle in operationalizing these concepts in their classroom practice as evidenced by the *A+ TOP* data. In other words, while teachers value arts integration and are willing to integrate the arts at least conceptually, they appear to need support in terms of concrete tools and resources for implementing arts integration in their curriculum.

Results of the *PACT* survey indicate that teachers understand and support the various benefits of arts integration (Oreck, 2004, 2006; Rinne et al., 2011). Participants in this study believed that the arts can help students work at higher levels of Bloom's taxonomy, allow students to examine content through multiple perspectives, and enhance student learning in content areas (Lynch, 2007). Study participants also indicated a willingness to integrate the arts into their curriculum. In addition, they were neutral in their views of the various barriers they faced in integrating the arts into their classrooms. While these barriers were not overly prohibitive, they were present and include factors such as lack of time and lack of confidence in this content area (Oreck, 2004).

While teachers in this study saw the value of arts integration and were willing to integrate the arts, their existing practice in arts integration as measured by the *A+ TOP* protocol indicated minimal to no evidence of these concepts being naturally practiced by the teachers in their everyday classroom routines. When observed using the *A+ TOP* protocol, both control and experimental teachers scored in the unsatisfactory to basic range in integrating the arts into the curriculum, using thematic curriculum, providing multiple measures for student assessment, incorporating real-world applications of learning objectives, providing multiple pathways for students, engaging students in critical and higher level thinking, encouraging student collaboration, and creating a student-centered climate. MANOVA results indicated that the control group displayed significantly higher performance levels than the experimental group in curriculum, experiential learning, and critical thinking.

The focus of this study is on teachers' perceptions of arts integration before the A+ Schools Summer Institute and the degree to which teachers implement the A+ Schools eight essential elements prior to intervention via the summer professional development. However, an examination of the *A+ Essentials* reveals that inclusion of the arts is only one criterion of the A+ model and specifically addressed in only two elements (e.g., arts integration and non-traditional or enriched assessment). In fact, many of the elements of the *A+ Essentials* do not explicitly mention the arts at all. Nonetheless, inclusion of these elements conceptually supports arts integration in the classroom (e.g., curriculum, experiential learning, multiple learning pathways, critical thinking, student collaboration, and climate).

Because six of the A+ essentials do not explicitly reference the arts, the researchers anticipated that teachers would score more strongly than realized in these "other" elements to include the following: (1) curriculum mapping that reflects interdisciplinary thematic alignment around essential questions, (2) experiential learning grounded in differentiated instruction, (3) inclusion of multiple learning pathways, (4) ongoing and reflective assessment to include multiple and non-traditional approaches, (5) teacher and student collaboration, and (6) teacher and student autonomy.

This assumption was not supported in the data leading the researchers to support the research base finding that teacher success in arts integration must be supported by intensive professional development in arts integration to include broader pedagogical and curriculum considerations (Andrews, 2008; Oreck, 2006; Patteson, 2002). This professional development must extend beyond traditional PD delivery of content to include curriculum mapping or enriched assessment approaches as well as additional arts integration resources such as support from visiting artists (Andrews, 1999, 2008; Burnaford & Scripp, 2013; Garcia, 2003) and on-site collaborative art teachers as resources (Andrews, 2010; Smithrim & Uptis, 2005).

Given the recent research results that demonstrate an increase in student achievement when students are immersed in arts integration (Burnaford & Scripp, 2013), the A+ Schools Program is a timely catalyst for developing such opportunities for young children. The data resulting from this study seem to indicate that the experimental schools have recognized deficiencies in curriculum and implementation that could be addressed by adoption of a progressive model including arts integration. The experimental schools included in this study are lagging further behind their peers in the A+ elements and, encouragingly, appear to have self-identified that there are problems in their schools that need addressed. For this reason, these schools have joined the A+ initiative in response to a perceived need, which this data can now corroborate.

### **Implications**

Teachers may not be including arts integration concepts and pedagogy in response to the rising call for standardization and accountability. For these reasons, teachers may be unwilling or unable to create learning experiences for their students that move beyond

traditional, didactic teaching models. Additionally teachers may be stretched too thin with the increased demands of the profession to think beyond traditional classroom structures. Further study about teacher qualifications and experience may also provide more insights into the effectiveness of the A+ model.

While this is all speculation, it does indicate a need for further study. An examination of teacher perceptions and classroom environments can help guide the types of professional development, additional support, and resources teachers need in order to effectively implement a school program (Rossi et al., 2004).

Integrating the arts should be considered for curriculum planning and instruction. This instructional approach provides relevance to the content and equips our students with the skills needed to be successful in the 21<sup>st</sup> century. By incorporating creativity and artistic expression into the content, students are able to explore their particular interests, meet the expectations of CCSS, and cultivate the skills needed to be successful in the 21<sup>st</sup> century. Collaborating with art specialists and seeking out additional professional development opportunities can be pursued when addressing interdisciplinary standards during instruction. Implementing the Arkansas A+ Essentials can provide rigor and relevance within multiple standards as teachers use them to enhance student engagement and learning. The A+ Model supports creative and innovative opportunities for students to reason, problem solve, and think outside of the box within their general curriculum.

### **Limitations of the Study**

One limitation of the study is the narrow range for data collection. The baseline data were collected on only three out of ten schools that are beginning the A+ Schools Program in Arkansas and only included elementary schools. Three of the A+ Schools were compared to three matched control schools. While the focus on elementary schools provided a narrow focus for research purposes as supported by best practices models (Malone et al., 2014), this focus is also a limitation in that the results cannot be generalized to middle school or high school contexts. Additionally, intervening events (e.g., unanticipated summer inservice, teacher and administrator turn over, re-districting of experimental schools) could introduce confounding variables. To control for the effects of such events, analyses to check for equivalency of the teacher groups is part of the overall design of the study. Since this study only includes baseline data, it does not provide evidence as to whether or not the Arkansas A+ Model is effective. In addition, teachers' voices were not included in the data collection. Although this study has minimal implications for classroom teachers, these results can assist administrators, specialists, and stakeholders in making decisions for the Arkansas A+ Model or other instructional models in their schools.

### **Conclusion**

Teacher baseline data were collected as an initial assessment for the Arkansas A+ model. *PACT* survey results indicated that teachers believed that arts integration was beneficial to students, but *A+TOP* observational data indicated that teachers were lacking

the support or skills needed to effectively implement the arts into their curriculum. A comparative evaluation was used to examine teachers' perceptions of arts integration and their current implementation of the eight *A+ Essentials*. Baseline evaluation results indicate that teachers in the control group performed statistically higher in three of the eight *A+ Essentials*: curriculum, experiential learning, and critical thinking leading to recommendations for continued research on the effect of the A+ model on teacher pedagogical practice. These data provide administrators and A+ faculty with a guide for the level of content and pedagogical strategies that can be taught at future A+ professional development meetings.

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Table 1

*Experimental and Control Teachers by Grade Level and School*

School	Group	Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Washington	E	1	1	0	1	2	0	2
Madison	E	1	2	1	1	2	1	0
Lincoln	E	2	2	1	1	2	0	0
Carter	C	2	1	1	1	2	1	0
Coolidge	C	1	0	1	2	1	2	0
Buchanan	C	1	1	2	1	1	0	2

Note <sup>1</sup>: Pseudonyms used for school names.

Note <sup>2</sup>: E = Experimental group. C = Control group.

Table 2

*Teacher perceptions about arts integration*

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<i>PACT Factors</i>	Group	Means
Value	E	4.42
	C	4.32
Willingness	E	4.24
	C	4.42
Barriers	E	3.20
	C	3.08

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*Note:* E = Experimental group. C = Control group.

Table 3

*Means and Standard Deviations of A+ Essentials by Treatment and Control Schools*

A+ Essentials	A+ Schools		Control Schools		<i>df</i>	<i>F</i>	<i>p</i>	$\eta$
	<i>n</i> = 24		<i>n</i> = 23					
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
Arts	1.40	.61	1.54	.74	1,45	.56	.46	.01
Curriculum	1.13	.34	1.48	.67	1,45	5.33	.03	.11
Nontraditional or Enriched Assessment	1.60	.64	1.78	.84	1,45	.68	.42	.02
Experiential Learning	1.38	.61	2.17	1.13	1,45	9.13	.004	.17
Multiple Learning Pathways	1.75	.74	1.65	.78	1,45	.20	.66	.004
Critical Thinking	1.75	.61	2.37	1.00	1,45	6.63	.01	.13
Student Collaboration	1.71	.86	2.00	1.13	1,45	1.00	.32	.02
Climate	1.87	.54	1.85	.86	1,45	.02	.90	.000

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