Investigating Early-Career Teacher Propensity for Arts-Based Pedagogy

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INVESTIGATING EARLY-CAREER TEACHER PROPENSITY FOR
AR TS-BASED PEDAGOGY

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Education

by

Jamie Allison Hipp
B.S., Northwestern State University, 2007
M.A.T., Northwestern State University, 2013
August 2018
For my students, past and future.

Listen to the MUSTN’TS, child.
Listen to the DON’TS
Listen to the SHOULDN’TS
The IMPOSSIBLES, the WON’TS
Listen to the NEVER HAVES
Then listen close to me –
Anything can happen, child,
ANYTHING can be.

(Silverstein, 1974, p. 27)
ACKNOWLEDGEMENTS

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ABSTRACT
This study investigates the factors which support the use of arts-based pedagogy in elementary settings. To address the lack of a current profile of an early-career teacher (ECT) with a propensity to use the arts – music, theatre, dance, and visual art – this study illuminates ECT attitudes and behaviors related to arts-based pedagogy. The researcher administered Oreck’s (2001) *Teaching with the Arts Survey* (TWAS) and employed a non-experimental survey design using purposive sampling. The ECT population studied included currently employed elementary (1-5) teachers who completed the compulsory arts-based pedagogy class at a large Louisiana university in the fall of 2016, spring of 2017, or fall of 2017. Research questions related to the constructs of frequency, value, self-efficacy, and administrative support were analyzed using a variety of statistical routines including frequency analyses, correlations, independent samples t-tests, and one-way ANOVAs with relevant post-hoc tests. School-based administrative support emerged as a fundamental support to ECTs’ arts-based pedagogy. ECT’s current practice in an artform was also significant, however, the type of preservice arts class, i.e. arts-as-curriculum versus arts-integrated-curriculum, lacked influence on the constructs. These findings are important to arts-based pedagogy programming providers including institutions of higher education, teacher educators, district and school-based administrators, policy makers, and professional development providers from the private and nonprofit sector who are interested in factors related to the arts in elementary environments.
CHAPTER 1
INTRODUCTION

Let us please put to rest once and for all the false dichotomy between direct instruction in the arts and arts integrated teaching and learning. At a time when national issues of sustainability and conservation of energy and resources become ever more urgent, it is high time that those of us committed to quality arts education stop squandering time, money, and paper on arguing “either/or” when our schools are best served by a “both/and” approach. We need to stop seeing direct instruction and arts integration as contrary positions that need to battle it out for limited dollars, and start seeing them as complementary strategies in the service of learners.

- Arnold Aprill, founder, Chicago Arts Partnerships in Education

An impressive and significant body of existing literature chronicles the benefits of the arts when used as a pedagogical tool in the elementary classroom. Certain educational policies, over focused on accountability, however, have decimated student access to the arts. The testing requirements mandated by the No Child Left Behind Act (NCLB) (2001), recently renewed by the Every Student Succeeds Act (ESSA) (2015), require all upper elementary public school students to take literacy and mathematics examinations annually. Both NCLB and ESSA have spurred the prioritization of the high-stakes subjects, leading to reductions elsewhere in the instructional day, particularly in the arts (Center on Education Policy, 2006, 2008; Heilig, Cole, & Aguilar, 2010). “Access to classes in visual art and music is lower than both the regional average and national average,” in Louisiana, the setting for this current study. (Bell, 2014, p. LA-1).

Jensen stated, “A federally mandated arts education policy does not exist. That’s not just embarrassing and inexcusable, it’s irresponsible” (2001, p. vi). Combined with a dearth of funding for arts curriculum in schools, the emphasis on standardized curriculum, namely the high stakes subjects of literacy and mathematics, has led to an exodus of arts educators from elementary settings (Center on Education Policy, 2007; Parsad & Spiegelman, 2012). Classroom teachers, therefore, are increasingly becoming students’ sole providers of arts instruction.
Despite the focus on standardized testing, and de-emphasizing of the arts, arts instruction can be accomplished via arts integration, a pedagogical approach which marries a core curricular concept with an art form like music, theatre, dance, or visual art (Doyle, Hofstetter, Kendig, & Strick, 2014; Russell & Zembylas, 2007; Silverstein & Layne, 2010). Conversely, arts specialists are increasingly expected to integrate core curricular concepts into arts lessons. Widespread research from the field of arts integration supports this assertion.

For instance, in a study of elementary arts specialists one year after the advent of NCLB, Carey, Kleiner, Porch, and Farris (2002) discovered that, “72 percent of music specialists and 79 percent of visual arts specialists reported professional development activities focusing on the integration of music or visual arts into other subject areas” (p. iv). Moreover, some school administrators expect arts specialists to be able to integrate English and mathematics into their arts curriculum (Beveridge, 2010; Mishook & Kornhaber, 2006). The era of high-stakes testing in literacy and math appears permanent, thus it is crucial for classroom practitioners to recognize the value of the arts to their professional practice. How then, do teacher educators build a future teacher with a proclivity to use the arts? The purpose of this current study is to create a profile of an educator with the propensity to utilize the arts as a pedagogical approach, requiring an in-depth exploration of arts-based pedagogical frequency, self-efficacy, challenges/deterrents, and overall valuation of the arts.

The Kennedy Center, a leading provider of arts-based professional development for educators in the United States (US), suggests that both arts-as-curriculum and arts-integrated curriculum are two ways the arts currently coexist in schools (Silverstein & Layne, 2009). Benefits of both the arts as curriculum and arts integration, henceforth called ‘arts-based pedagogy,’ include cognitive development: brain-based improvements in retention, intelligence
quotient (IQ), and critical thinking skills (Berghammer, Federlein, & Nielsen, 1991; Bowen, Greene, & Kisida, 2014; Hardiman, Rinne, & Yarmolinskaya, 2014; Moreno et al., 2011; Orzulak, 2006; Rinne, Gregory, Yarmolinskaya, & Hardiman, 2011; Schellenberg, 2004) and noncognitive factors, crucial to college and career readiness, global workforce development, and educational attainment (American Institutes for Research, 2013; Farrington et al., 2012; Nagaoka et al., 2013; Stankov, Morony, & Lee, 2014). Furthermore, arts-based pedagogical practices are also considered culturally relevant and responsive (Bowman, 2006; Gay, 2000; Heise, 2010; Ladson-Billings, 2001; Robinson, 2006), an important consideration in schools in the US. Furthermore, the arts are cultural creations. “We have never discovered a culture on this planet, past or present, that doesn’t have art in some form” (Sousa & Pilecki, 2013, p. 9).

Considering both cognitive and noncognitive impact and addressing the need for culturally relevant and responsive pedagogy, arts-based pedagogy also promotes increased student achievement in both of the high-stakes subjects, English Language Arts (ELA) and Mathematics (An, Capraro, & Tillman, 2013; Anderson, 2012; Anderson & Loughlin, 2014; Cunnington, Kantrowitz, Harnett, & Hill-Ries, 2014; Greenfader & Brouillette, 2013; Harloff, 2011; Ingram & Seashore, 2003; Luftig, 2000; McMahon, Rose, & Parks, 2003; Rose, Parks, Androes, & McMahon, 2000; Walker, Bosworth McFadden, Tabone, & Finklestein, 2011; Walker, Tabone, & Weltsek, 2011).

Based on research culled from the fields of both arts education and arts integration, the impact of arts-based pedagogy in elementary settings is significant. Despite research illustrating the abundant benefits and value of arts-based pedagogy, classroom teachers’ use of the arts is varied. As with other fields of study, teacher self-efficacy in the arts is a strong predictor of the implementation of arts-based pedagogy. For example, positive prior experiences in the arts
(Alter, Hays, & O’Hara, 2009; Barry, 1992; Grauer, 1998; Lummis, Morris, & Paolino, 2014; Power & Klopper, 2011; Russell-Bowie & Dowson, 2005), arts-based coursework and practicums with opportunities for observation of best practices (Garvis & Pendergast, 2010b; Garvis, Twigg, & Pendergast, 2011; Lemon & Garvis, 2013), and school/administrative support (de Vries, 2017) all contribute to teacher self-efficacy with arts-based pedagogy. However, other factors impact implementation. Existing literature significantly focuses on classroom teachers’ arts-based pedagogy deterrents. Six significant deterrent/barrier/challenge themes surface in literature pertaining to classroom teachers. These are: 1) Deficiency in administrative support for arts education, 2) Lack of resources/materials/funding/supplies, 3) Shortage of both planning time and instructional time for the arts, 4) Lack of familiarity, confidence, comfort, and self-efficacy with varied art forms, 5) Hyper focus on high-stakes subjects and testing, and 6) Focus on pre-scripted curriculum. Each theme is explicated next with accompanying literature from the field:

1. Deficiency in administrative support for arts education signifies the viewpoint of many school-based administrators who consider the arts to be secondary to the core curriculum, often providing little space and support for arts-based practices (Bellisario & Donovan, 2012; Garvis & Pendergast, 2010b; Purnell, 2004; Saraniero, Goldberg, & Hall, 2014; Van Eman, Thorman, Montgomery, & Otto, 2008);

2. Lack of resources/materials/funding/supplies directly relates to the deficiency in administrative support. Administrators who consider the arts as inferior to core subjects do not promote arts-based professional development for teachers, arts-based instructional materials, or access to arts-based lesson plans (Bellisario & Donovan, 2012; Garvis & Pendergast, 2010b; Saraniero et al., 2014);
3. **Shortage of both planning time and instructional time for the arts** is described as a lack of collaboration time (including the collaboration/planning time between elementary generalist teachers with arts specialists or teaching artists) and the perceived demanding amount of standards and objectives traditionally covered during the school day (LaJevic, 2013; Oreck, 2006; Purnell, 2004; Rule, Montgomery, Tallakson, Stitcher, Barness, & Decker, 2012; Saraniero et al., 2014; Van Eman et al., 2008);

4. **Lack of familiarity, confidence, comfort, and self-efficacy with varied art forms** refers to teacher awareness of the art forms and arts-based pedagogy as well as the self-assurance of pedagogical skills related to the arts (Garvis & Pendergast, 2010b; Oreck, 2004);

5. **Hyper focus on high-stakes subjects and testing** is just that, a laser-like, myopic view that an over focus on accountability measures (Bellisario & Donovan, 2012; Oreck, 2004; Oreck, 2006; Rule et al., 2012); and

6. **Focus on pre-scripted curriculum** is connected to theme 5 in that the packaged curriculum used by many districts coincides with high-stakes testing objectives and standards (Garvis et al., 2011; LaJevic, 2013; Rule et al., 2012; Saraniero et al., 2014; Van Eman et al., 2008).

As an additional factor, arts experiences across life stages (childhood/adulthood/preservice/in-service) shape early-career teacher (ECT) attitudes towards arts-based pedagogy. Several studies have illuminated how previous childhood and adult arts experiences effect ECT self-efficacy with the arts (Garvis & Pendergast, 2010a; Garvis et al., 2011; Hagen, 2002). The role of previous experience, then, has important implications regarding
the propensity of ECTs to implement arts-based pedagogy. Previous personal experience is significant considering that enrollment in an elementary-based arts class to develop efficacy and comfort with the arts is required by numerous states prior to licensure and certification (Arts Education Partnership, 2014). Germane to this current study, pursuant to state requirements, Louisiana requires preservice teachers to complete one arts course totaling three semester hours (La. Admin. Code ch. 2, § 207). After transitioning from preservice to in-service, access to arts-based professional development for classroom practitioners has positive outcomes (Aprill, 2010; Cunnington et al., 2014; Doyle et al., 2014; Greenfader & Brouillette, 2013; Heitin, 2014; Hicks, 2013; Kinney & Forsythe, 2005; Richard & Treichel, 2013; Saraniero et al., 2014; Walker et al., 2011). Preservice teachers and students across other higher education disciplines alike benefit from arts-based pedagogy in higher education (Donahue & Stuart, 2008; Garrett, 2013; Pool, Dittrich, & Pool, 2011; Robinson, 2012b; Turner, 2014; Whitin & Moench, 2015).

**Purpose and Research Questions**

Although considerable research exists on the benefits of arts-based elementary pedagogy and the deterrents to arts-based pedagogy in elementary settings, there is a scarcity of studies related specifically to the self-reported frequency of ECTs’ arts-based pedagogy. Moreover, few comparisons have been made between arts-based pedagogical implementation and perceived limitations, teacher self-efficacy, and factors related to ECTs’ previous arts exposure, current artistic practices, preservice training in the arts, and arts-based professional development opportunities. The purpose of this study is to create a profile of a teacher with the propensity to utilize the arts as a pedagogical approach. The following research questions frame this study:

1. What factors influence ECT **frequency** of arts-based pedagogy?
a. Does prior arts exposure in childhood and adulthood (learned to play an instrument, participated in after-school plays, etc.) increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers?

b. Does current practice in an art form increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers?

c. What is the correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers?

2. What factors improve the perceived **value or importance** of the arts to ECTs?

   a. Does the type of preservice arts class (arts as curriculum versus arts-integrated curriculum) affect the self-reported value of arts-based pedagogy for early-career elementary teachers?

   b. Does arts-based professional development improve the self-reported value of early-career elementary teachers’ arts-based pedagogy?

3. What factors **challenge** ECT use of arts-based pedagogy?

4. What are ECT **self-efficacy** levels related to arts-based pedagogy?

   a. Does prior arts exposure in childhood and adulthood (learned to play an instrument, participated in after-school plays, etc.) increase the arts-based pedagogy self-efficacy for early-career elementary teachers?

   b. Does current practice in an art form increase the arts-based pedagogy self-efficacy for early-career elementary teachers?

   c. Does the type of preservice arts class (arts as curriculum versus arts-integrated curriculum) affect the arts-based pedagogy self-efficacy for early-career elementary teachers?
d. Does arts-based professional development improve the arts-based pedagogy self-efficacy of early-career elementary teachers’ arts-based pedagogy?

e. What is the correlation between the self-efficacy levels of early-career elementary teachers and the level of perceived overall arts instruction at their current school?

Hypotheses

Based on existing literature in the field of arts-based pedagogy, the null hypotheses which guided this study are as follows:

1. What factors influence ECT frequency of arts-based pedagogy?

   a. There is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who practiced an art form in childhood/adulthood and those who did not.

   b. There is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who currently practice an art form and those who do not.

   c. There is no correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers.

2. What factors improve the perceived value or importance of the arts to ECTs?

   a. There is no significant difference between the perceived arts-based pedagogical value of early-career elementary teachers who completed an arts-as-curriculum preservice course and those who completed an arts-integrated curriculum preservice course.
b. There is no significant difference between the arts-based pedagogical value of early-career elementary teachers who participated in an arts-based professional development in the twelve months prior to the survey and those who did not.

3. What factors challenge ECT use of arts-based pedagogy? Due to the descriptive nature of this research question, research will proceed guided by the question itself, without a hypothesis.

4. What are ECT self-efficacy levels related to arts-based pedagogy?
   a. There is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who practiced an art form in childhood/adulthood and those who did not.
   b. There is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who currently practice an art form and those who do not.
   c. There is no significant difference between teacher self-efficacy levels of early-career elementary teachers who completed an arts-as-curriculum preservice course and those who completed an arts-integrated curriculum preservice course.
   d. There is no significant difference between teacher self-efficacy levels of early-career elementary teachers who participated in an arts-based professional development in the twelve months prior to the survey and those who did not.
   e. There is no correlation between the self-efficacy levels of early-career elementary teachers and the level of perceived overall arts instruction at their current school.
Significance of the Study

As stated, ample research related to both the benefits of arts-based pedagogy and the deterrents associated with implementing the arts in classroom settings exists, however, there is a paucity of studies related to ECTs’ self-reported frequency of arts use, self-efficacy in the arts, and arts-based challenges/limitations. In general, literature defines ECTs as those educators with fewer than five years of teaching experience (Evans, Waring, & Christodoulou, 2017; Schaefer, Long, & Clandanin, 2012; Shernoff, Lakind, Frazier, & Jakobsons, 2015). For the purposes of the current study, ECTs are classified as elementary teachers within their first two years of teaching. Existing arts-based pedagogical research lacks a blueprint for teacher-educators to shape a teacher with the propensity to utilize the arts as a pedagogical approach. Finally, arts-based pedagogy has not previously been evaluated within the ECT population to the best of the researcher’s knowledge.

One significance of this study lies in its potential to shape teacher preparation programs and district programming for classroom teachers. The results of this study propose to determine the factors which lead to increased frequency of arts-based pedagogy, teacher self-efficacy with the arts, the perceived value of classroom arts use, and the factors which support and challenge ECT arts-based pedagogical use. The quantitative survey data gleaned and analyzed in this study may provide teacher educators, teacher preparation programs, and individual schools/school districts with numerous statistics that could be utilized to recruit future educators (prior arts exposure and current artistic practice), and make programmatic changes to existing teacher preparation programs (the type of arts-based pedagogy class offered to preservice learners and placement of student teachers in arts-rich environments as models of best practice). Furthermore,
statistics related to effective professional development for teachers and administrative support for the arts are valuable to individual schools and school districts.

**Brief Overview of the History of Arts-based Pedagogy in the United States**

Benjamin Franklin, one of the founding US fathers, advocated for arts education as early as the 1740s (Purnell, 2004; Whitford, 1923), however, the arts were not adopted as a part of America’s public-school curriculum until 1870, when the Massachusetts Drawing Act was signed into law (Bolin, 1990). Over the course of the next half-century, the World Fairs of Chicago, St. Louis, San Francisco, and San Diego, coupled with advancements in artistic tools led to less emphasis of arts’ instruction to teach the art skills needed by industry and more towards “arts for art’s sake” (Whitford, 1923, p. 111).

Approximate to the time that Dewey published *Art as Experience* (1934), supporting cognitive benefits of arts instruction and experiential learning through the artistic process, educators in the US began to weave arts disciplines with core ‘academic’ subjects. For instance, the 1933 and 1935 Music Educator’s National Conference (MENC) included sessions on *Fusion of Music with Academic Subjects* and *Projects in the Interrelation of Music and Other High School Subjects* (Dykema & Gehrken, 1941). In 1936, the National Council of Teachers of English (NCTE) published *A Correlated Curriculum*, encouraging the integration of the English curriculum with other subjects to unite the disciplines (Weeks, 1936).

A decade after NCTE published *A Correlated Curriculum*, The National Art Education Association was founded in 1947 (Michael, 1997), but did not, however, have a permanent office until 1958 (Dorn, 1997), the same year that President Dwight D. Eisenhower signed bipartisan legislation creating a National Cultural Center, known as the National Cultural Center Act (1958). Simultaneously, 1958 saw a suspension in interest, emphasis, and funding for the arts.
The passage of the National Defense Education Act (NDEA) of 1958 (P. L. 85-864), one year after the Soviet Union’s launch of Sputnik, called on schools to promote math and science to “counteract the seemingly superior Soviet school system that focused on training young scientists” (Jolly, 2009, p. 50). Funding all but froze for arts education and was not reinstated until, eventually, “legislators and school officials realized that national interest in education was not divisible in this way” (Soucy, 1990, p. 11).

The arts realized an advocate in President John F. Kennedy. During his tenure, he appointed a Special Consultant on the Arts and established the President’s Advisory Council on the Arts (National Endowment for the Arts, 1995). Kennedy’s staunch support for the arts is evident from a speech he delivered at Amherst College shortly before his assassination: “I look forward to an America which will steadily raise the standards of artistic accomplishment and which will steadily enlarge cultural opportunities for all of our citizens” (Kennedy, 1963). Since 1971, the John F. Kennedy Center for the Performing Arts has served as a provider of the performing arts and arts education programming (Meersman, 1980).

In the 1970s, The National Endowment for the Arts supported arts education by creating a task force devoted to the Education, Training and Development of Professional Artists and Arts Educators (National Endowment for the Arts, 1995). Also during this decade, noted educational philosopher and theorist, Broudy, deemed the arts as basic to education. Broudy promoted the integration of the arts with the core curriculum in his book, Enlightened Cherishing: An Essay of Aesthetic Education (1972) and believed that aesthetic skills would give students “the confidence that one is seeing, hearing, and imagining somewhat as the artist does” (1977, p. 9).

Throughout the 1980s, viewpoints on integrated instruction varied. Eisner, arts education researcher and champion, also avowed arts integration, but cautioned that the arts are more
beneficial when not utilized only as subservient tools to teach other subjects. “I fear, however, where [sacrificing arts’ integrity through arts integration] is the only model, the arts will not be treated appropriately because of existing priorities and assessment practices” (Brandt, 1988, p. 9). In a related manner, Gardner (1988) encouraged meaningful and effective assessment practices within arts education.

The professionalization of arts education continued into the 1990s. In 1994, the Consortium of National Arts Education Associations published the National Standards for Arts Education (National Endowment for the Arts, 1995). The same year, Greene, a former American Educational Research Association (AERA) president, published Carpe Diem: The Arts and School Restructuring in which she advocated for the prioritization of an aesthetic education and the value of engagement in the arts (Greene, 1994).

Strides in arts education have continued into the twenty-first century. The 2002 Arts Education Partnership publication of Critical Links: Learning in the Arts and Student Achievement and Social Development offered the first consolidation of studies concerning the cognitive skills stimulated by arts education (Deasy, 2002). In 2006, the United Nations Educational, Scientific, and Cultural Organization held its first World Arts Conference (Murray et al., 2016). One outcome was a stakeholders’ Roadmap for Arts Education (UNESCO, 2006) which recognized that “evidence supporting the benefits of integrating the arts into education exists, in many countries this evidence is scarce, anecdotal and difficult to access,” (p. 12) and is, thus, a “major setback for improving practice, influencing policy making, and integrating the arts into educational systems” (p. 13). This acknowledgement, coupled with Burnaford, Brown, Doherty, and McLaughlin’s (2007) exhaustive arts integration literature review, revealed the diverse and wide-ranging pedagogical approaches using the arts (and arts integration) in K-12
classrooms. The National Standards for Arts Education were amended in 2014 and named the National Core Arts Standards (State Education Agency Directors of Arts Education, 2014).

A January, 2018 search of the US Department of Education’s Education Resources Information Center (ERIC) database revealed more than 20,000 entries for the keyword ‘arts education.’ Furthermore, there has been exponential growth in ‘arts integration’ literature across the past five decades, possibly due to the strategy’s impact on elementary students’ cognitive and noncognitive factors chronicled in the literature itself. For ‘arts integration,’ the database returned a total of 577 studies. The oldest literature, dating to 1964, chronicles a New York State Department of Education arts integration experiment entitled ‘Project CUE.’ CUE stood for Culture, Understanding, and Enrichment and the project encouraged student experiential learning. Results showed improved student engagement, enthusiasm, and creativity. According to the abstract, one barrier encountered was the apparent “hesitancy by subject matter teachers to accept the new role of the arts in the curriculum” (New York State Education Department, 1964). Since the 1960s, ‘arts integration’ literature has grown exponentially (Table 1).

Table 1. ‘Arts Integration’ Literature from ERIC Search, 1960s-Present

<table>
<thead>
<tr>
<th>Decade</th>
<th>Number of relevant ERIC responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960s</td>
<td>9</td>
</tr>
<tr>
<td>1970s</td>
<td>35</td>
</tr>
<tr>
<td>1980s</td>
<td>82</td>
</tr>
<tr>
<td>1990s</td>
<td>130</td>
</tr>
<tr>
<td>2000s</td>
<td>124</td>
</tr>
<tr>
<td>2010-present</td>
<td>197</td>
</tr>
</tbody>
</table>
Defining Arts Integration

Although arts-based pedagogy is an umbrella term which encompasses arts-as-curriculum (also known as arts education) and arts-integrated curriculum, it is important to note the varied definitions of arts-integrated pedagogy. Widespread definitions of arts integration exist in literature (Table 2).

Table 2. Definitions of ‘Arts Integration’ Found in Existing Literature

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silverstein &amp; Layne, 2010, p. 1</td>
<td>“An approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both.”</td>
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<tr>
<td>Aprill, 2010, p. 7</td>
<td>“Teaching and learning in which arts learning and other academic learning areas are connected in ways in which the arts learning AND the other academic learning are both deepened.”</td>
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<tr>
<td>May, 2013, p. 5</td>
<td>“In essence, integrating the arts means that we are combining at least one other subject (e.g., math, science, social studies) with an arts subject (e.g. music, art, dance) to create a consolidated curriculum where both subject areas receive equal priority as a blended unit.”</td>
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<tr>
<td>Rabkin &amp; Redmond, 2006, p. 61</td>
<td>“An instructional strategy that brings the arts into the core of the school day and connects the arts across the curriculum.”</td>
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<tr>
<td>Hardiman, Rinne, &amp; Yarmolinskaya, 2014, p. 144</td>
<td>“The infusion of visual and performing arts activities into instruction in non-arts subjects.”</td>
</tr>
<tr>
<td>Richard &amp; Treichel, 2013, p. 224</td>
<td>“An instructional approach used by teachers to work collaboratively to teach the content and processes of two or more subject areas, including one or more arts areas, and to increase the ability of students to identify, create, and apply authentic learning connections.”</td>
</tr>
<tr>
<td>Robinson, 2012a, p. 8</td>
<td>“A curricular connection process that collaboratively engages all learners to promote learning through and with the arts.”</td>
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<tr>
<td>Biscoe &amp; Wilson, 2015, p. 3</td>
<td>“Arts integration teaches core academic content through the use of multiple art forms, such as drama, visual arts, music, and dance. Students engage in a creative process that connects an art form with subject matter to meet objectives for both, deepening an understanding of both. Arts integration facilitates interdisciplinary linkages. It enhances students’ personal competencies that propel learning in all subject areas.”</td>
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<td>Source</td>
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<tr>
<td>Baker, 2013, p. 1</td>
<td>“Art integration involves learning core content subjects (math, reading, language, science, social studies) through the arts (drama, dance, music, visual arts).”</td>
</tr>
<tr>
<td>Scheinfeld, 2004, p. 1</td>
<td>“To enhance learning outcomes for children by making artistic activity an integral part of the learning process in traditional academic subjects, such as reading, writing, math, science, and social studies.”</td>
</tr>
<tr>
<td>Deasy, 2003, p. 3</td>
<td>“Arts integration refers to the effort to build a set of relationships between learning in the arts and learning in the other skills and subjects of the curriculum…Others view it as a pragmatic and, perhaps, expedient way of providing comprehensive instruction in the arts and other disciplines within the confines of the limited school day and within the constraints of available manpower and financial resources.”</td>
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</tbody>
</table>

Cornett (2006) contends that, “While the approach goes by many names—arts integration, arts immersion, and arts infusion—they all share the same philosophy. Teachers believe drama, dance, music, and visual art should be integral to…instruction because they are essential means of constructing meaning” (p. 235). Burnaford et al. (2007), “examined the range of practices labeled as arts integration as described in published and available materials. Terms such as ‘interdisciplinary,’ ‘arts-infused,’ or ‘cross-disciplinary,’ not to mention ‘thematic’ and ‘arts-based,’ kept our conversations challenging” (Burnaford et al., 2007, p. iv). The Kennedy Center defines arts integration as “an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both” (Silverstein & Layne, 2010, p. 1). In 2002, the Arts Education Partnership invited a variety of integration organizations and stakeholders to collaborate on a definition. The agreed-upon description, “The effort to build a set of relationships between learning in the arts and learning in the other skills and subjects of the curriculum” (Deasy, 2003, p. 2) is similar to the Kennedy Center’s definition in that both the core and arts subjects are considered equals.

With the lack of a universal definition, true arts integration methods remain up for debate. Specific applications of the approach are widespread (Table 3).
<table>
<thead>
<tr>
<th>Source</th>
<th>Models/Styles</th>
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<tr>
<td>Bresler, L. (1995)</td>
<td>4 styles: Co-equal cognitive, subservient, affective, social</td>
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<td>Changing Education Through the Arts (CETA)</td>
<td>“Arts as curriculum”</td>
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<td>(Silverstein &amp; Layne, 2009)</td>
<td>“Arts-integrated curriculum”</td>
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<td>“Arts-enhanced curriculum”</td>
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<td>Burnaford, Brown, Doherty, McLaughlin (2007)</td>
<td>“Arts integration as learning ‘through’ and ‘with’ the arts”</td>
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<td>“Arts integration as a curricular connections process”</td>
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<td>“Arts integration as collaborative engagement”</td>
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<td>Elliot Eisner (in Brandt, 1988)</td>
<td>3 approaches:</td>
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<td>“Arts as a subject with its own particular characteristics, its own continuity and development.”</td>
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<td>“Provide spaces in the classroom for youngsters to pick up on their own individual work at various times during the week”</td>
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<td>“Ideally, the arts should be taught in relation to other subjects. In the best of all possible worlds, each of the arts would be taught in a way that allows for parity between subjects. What is aesthetic or artistic about each of the arts would not be neglected.”</td>
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<tr>
<td>Oreck (2007)</td>
<td>“An authentic arts experience. The arts experience in each lesson should be an open ended, problem-solving, discovery oriented process. Students have opportunities to express their individual ideas and feelings, and the activity can be developed further to stand alone as a piece of art, aside from the content objectives or curricular goal.”</td>
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<td>“Specific curricular objectives that are enhanced by the arts experience. The arts experience should be designed to improve student performance and achievement of learning objectives in specific ways (e.g. more effective use of descriptive language, increased comprehension of scientific processes, better understanding of vocabulary or terms, etc.) and further students’ ability to apply their knowledge in other contexts. The arts clearly offer many significant benefits for students including the development of learning skills and self-regulatory behaviors, and increased self-esteem, cooperation, enthusiasm, and enjoyment. In order to support the academic benefits of arts integration, however, student learning must reflect that the content was taught effectively.”</td>
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Bresler’s Arts Integration Styles

Bresler’s (1995) seminal typology of arts integration practices classified uses into four styles based on her work in schools. “The research literature is limited when it comes to explorations of learners’ experiences in relation to the style of arts integration that they are engaged with” (Melabiotis, 2018, p. 13),” however, Bresler’s paramount category, the co-equal cognitive style, which includes “higher-order cognitive skills as well as aesthetic qualities,” (Bresler, 1995, p. 6) is advocated by scholarly literature (Peel, 2014; Robinson, 2012a). The programs and teachers undertaking this approach have proven successes in student achievement and higher-order thinking skills. In one example, students were 77% more likely to pass the state standardized assessment when placed in a co-equal-based arts integration classroom in New Jersey (Walker et al., 2011). The co-equal cognitive approach presents objectives from both the arts and non-arts subjects as equals, however, it is the least practiced style (Bresler, 1995; Giles & Frego, 2004).

Bresler’s three other styles, the affective, social, and subservient styles are considered by many to enhance curriculum as opposed to integrate it. Affective integration affects the mood of the classroom community. “Occasionally, music was played as a background during lunch time and recess to calm students down” (Bresler, 1995, p. 7). In social integration, “The arts provided for the social functions of schooling,” (p. 8). The social style is evident in school gatherings, i.e. performances at parent-teacher organization meetings or holiday celebrations. Bresler’s most often observed style is the subservient variety, where the arts are used as a technique to enliven core curricular concepts. Examples of the subservient style in current classroom settings include foldables, illustrations of student readings/writings, story maps, and interactive notebooks. Within the subservient style, students do not learn the vocabulary or elements of the art form
they are working with; the arts are simply used as a vehicle for engagement. Other models would rank Bresler’s co-equal cognitive category as true integration and the other three categories as arts enhancement (Peel, 2014).

Although “researchers conducting studies involving arts-integrated instruction do not always explicitly state which style of arts integration they are exploring” (Melabiotis, 2018, p. 40), Mishook and Kornhaber (2006) used Bresler’s (1995) typology as a framework for principal interviews in an attempt to ascertain the most practiced style of integration at each principal’s school site. Of the responses from 18 principals of Virginia elementary and high schools of varied socioeconomic statuses (SES) and curricular foci (both arts and non-arts), the researchers used nine detailed responses to categorize the predominant type or style of arts integrated pedagogy at each school. Findings indicated that low-SES schools were more likely to practice the subservient integration style to as a means of preparing students for state high-stakes tests whereas schools with a preexisting strong arts focus were more likely to practice the co-equal cognitive style.

Krakaur (2017) further examined the “benefits and challenges for teachers when striving for the co-equal style of integration” (p. 309). In the author’s case study involving a cohort of 14 classroom teachers and arts specialists from 8 schools in a large urban district, cohort teacher participated in multiple semesters of arts integrated professional development focused on Bresler’s co-equal style. Interviews, focus group discussions, and observations between cohort teachers and the researcher revealed “teacher excitement, multiple ways to assess, and clarifying intentions in the arts” (p. 107) as the teacher benefits of the co-equal style. Challenges to the style included “lack of time, class size, and teacher lack of art knowledge” (p. 107).
Other Arts-Based Pedagogy Models

DeMoss and Morris (2002) present a continuum spanning arts enhanced and fully integrated curriculum. They also identify components of each extreme. Integrated pedagogy characteristics include connected instruction between the art form and core curriculum, inclusion of students in active roles, and outlined expectations/activities in both the arts and non-arts content. Enhanced pedagogy characteristics include an emphasis on arts products as opposed to the creative process, and a coexistence of arts and non-arts in lieu of interaction between the two. “In cases where the priority is on academic instruction, the arts learning tends to be reduced to activities designed to summarize content, rather than becoming applied concepts for investigating and expanding content” (Demoss & Morris, 2002, p. 7).

Similar to DeMoss and Morris, Davis (2008) differentiates between integration and enhancement, but uses the term ‘arts infusion’ in lieu of enhancement. “When educators ‘infuse’ the arts into the curriculum, artists or works of art are brought from outside in to enrich whatever is going on in arts and non-arts classes or activities” (Davis, 2008, p. 17). Davis also defines true integration of the arts as a space where the arts and core curriculum are intertwined and “included as equal partners” (p. 16).

Alternatively, Russell-Bowie (2009) suggests a balance between both a curriculum without links between the subjects and a curriculum where subjects lose individual integrity. She presents three models, all of which can be utilized simultaneously. In Service Connections, an art objective is not explicit, but the arts enhance the academic curriculum, similar to Bresler’s subservient approach and Davis’ arts infusion. In Symmetric Correlations, objectives in both the arts and non-arts component are of equal importance and each retains integrity. This is reminiscent of Bresler’s co-equal cognitive style. In Syntegration, subjects are completely
connected, without any integrity maintained, and higher Depth of Knowledge (Webb, 2005) is achieved. Additionally, there are rarely artificial connections between subjects and art forms in *Syntegration.*

The range of artistic practices in elementary classrooms is varied and, often, multifaceted. As a result, it would be unfavorable to limit the scope of the current study to a specific catchphrase or trend, therefore, throughout this study, ‘arts-based pedagogy’ will be used to describe instructional practices wherein ECTs utilize the artforms of music, theatre, dance, or visual art or a combination of multiple artforms.

**Epistemological Framework: Constructivism**

Arts-based pedagogy is grounded in constructivism, a research paradigm which suggests knowledge is constructed experientially (Koro-Ljungberg, Yendol-Hoppey, Smith, & Hayes, 2009; Piaget, 1970). Two fathers of constructivism, Piaget and Vygotsky, both espoused the arts within discussions of constructivism and child development. Piaget (1962) concluded that young children naturally use both creative movement and dramatic play to construct meaning. In the following decade, Vygotsky (1978) affirmed that for older children, “make-believe play, drawing, and writing can be viewed as different movements in essentially unified process of development of written language” (p. 116).

Piaget promoted experiential learning and found an “irreducible interdependence between experience and reasoning” (Piaget, 1952, p.16). Like Piaget, Vygotsky’s work also influenced social constructivism. “Every function in the child’s cultural development appears twice: first, on the social level, and later on the individual level… This applies equally to voluntary attention, to logical memory, and to the formation of concepts” (Vygotsky, 1978, p. 57). Arts-based and arts-integrated pedagogy requires social collaboration on numerous levels. True arts integrationist
classroom teachers collaborate with professional artists, teaching artists, and/or arts specialists and with one another to plan lessons and classroom experiences. Examples of student collaboration through arts-based pedagogy include rehearsing as a cast in the performing arts and to responding/critiquing in the visual arts.

Constructivist pedagogy is found across the four art forms (music, theatre, dance, and visual art). Student-centered musical composition, musical improvisation, and finding similarities between musical pieces are examples of constructivist pedagogy found in music classrooms (Cleaver & Ballantyne, 2014; Della Pietra & Campbell, 1995). Side coaching and scaffolding of embodied experiences are ways students construct knowledge and meaning during theatre activities (Frambaugh-Kritzer, Buelow, & Steele, 2015). By “encouraging the students to explore different ways to express ideas through body movement, having them choose their ideas for creating a dance, and encouraging them to create their own dance movement,” dance instruction is constructivist-oriented (Chen, 2001, p. 374). Teaching artist, Leysath (2015), recognizes constructivist learning within the visual arts and explains, “The experience of working like an artist involves student-directed projects that are facilitated by the freedom students have to explore their environment” (p. 140). In all art forms, the audience or viewers construct meaning or knowledge from what is seen, heard, and felt (Wiggins, 2015).

Arts integration as a pedagogical approach lacks a unanimous definition, however, two widely-accepted definitions include words related to the constructivist paradigm. The John F. Kennedy Center for the Performing Arts, a recognized leader in arts integrated professional development opportunities for teachers, strategically uses the verb *construct* in its widely accepted definition: “Arts Integration is an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which
connects an art form and another subject area and meets evolving objectives in both” (Silverstein & Layne, 2010, p. 1). This assertion that knowledge is actively created aligns with constructivist learning theory. In 2002, the Arts Education Partnership, a US entity, invited a variety of integration organizations and stakeholders to collaborate on a definition. The agreed-upon description deliberately utilizes another constructivist term, build. Like the use of the verb construct, build also implies active creation of knowledge. Deasy also targets this intentional wording in relation to arts integration as he posits, “The effort to build a set of relationships between learning in the arts and learning in the other skills and subjects of the curriculum” (2003, p. 2).

The hallmarks of successful arts-integrative practices include collaboration, experiential learning, and teachers acting as the facilitators of knowledge (Noblit, Corbett, Wilson, & McKinney, 2009; Silverstein & Layne, 2010). Each of these qualities is implicit within the paradigm. In constructivist learning theory, learners construct or create knowledge in lieu of simply receiving it from another (Steffe & Gale, 1995; von Glasersfeld, 1995). Both arts integrated experiential learning and the teacher-as-facilitator model encourage student construction and interpretation. Dewey, and early pioneer of constructivism, noted, “The teacher and the book are no longer the only instructors; the hands, the eyes, the ears, in fact the whole body, become sources of information, while teacher and textbook become respectively the starter and the tester” (Dewey & Dewey, 1915, p. 74). The arts are naturally experiential. Crafting character voices during a theatrical rehearsal, improvising jazz during a concert, creating a visual arts sculpture, or building a dance with symmetrical movements are all examples of experiential learning.
Arts-based pedagogy and constructivism integrate nicely. Both arts-based learning and constructivist learning are, fundamentally, about experiential creation. Students engaged in the arts build and construct, rather than simply record, knowledge.

**Summary**

The purpose of this study is to create a profile of a teacher with the propensity to utilize the arts as a pedagogical approach. This introduction as presented in Chapter 1 outlined the background and issue, purpose and research questions, hypotheses, and the significance of the study. Chapter 1 also offered a brief history of arts-based pedagogy, operationalized the terms associated with the research, and provided an overview of constructivism, the epistemological framework which guides the study. In Chapter 2, the forthcoming literature review examines both cognitive and noncognitive benefits of arts-based elementary pedagogy in existing literature. The review then explores teacher self-efficacy as it relates to the arts and beliefs regarding deterrents to arts-based approaches. Finally, research directly related to research questions including previous arts exposure, current artistic practices, preservice training, and professional development in the arts is reviewed.
CHAPTER 2
REVIEW OF LITERATURE

Teacher educators may not be fully cognizant (yet) of how to devise coursework or programming that assists a preservice teacher in building the knowledge and skill sets necessary to utilize arts-based pedagogy in the classroom. However, as illustrated in the literature reviewed in this chapter, the significance of the arts to teacher education, in both the value to preservice teachers and the value to their future students, is profound.

Successful teachers undertake a multitude of tasks requiring creativity, adaptability, and critical thinking skills daily (Darling-Hammond, 2010; Lorimer, 2012). The arts promote both creative and critical thinking (Berghammer et al., 1991; Bowen et al., 2014; DeSantis & Housen, 2007). As of 2014, however, only “thirty-four states specify arts requirements for their non-arts teachers” (Arts Education Partnership, 2014, p. 8). Lorimer (2012) proposes that “it is time to rethink teacher education by positioning arts-integrated learning directly within all teacher education programs” (p. 84). This study aims to illuminate early-career teacher (ECT) behaviors and attitudes related to arts-based pedagogy, through reflection on current instructional practices, preservice learning, and childhood/adolescent artistic practice.

This review covers five components related to ECT arts-based pedagogy – 1. Cognitive benefits, 2. Noncognitive benefits, 3. Teacher self-efficacy, 4. Deterrents to arts-based pedagogy, and 5. Factors that encourage arts-based pedagogy. First, this review examines the cognitive benefits of the arts, specifically retention (Hardiman et al., 2014; Orzulak, 2006; Rinne et al., 2011; Scheinfeld, 2004), IQ (Moreno et al., 2011; Schellenberg, 2004), and critical thinking (Berghammer et al., 1991; Bowen, et al., 2014; DeSantis & Housen, 2007). Afterward, the study-by-study curriculum section highlights the value of arts-based pedagogy in raising achievement in the high-stakes tests subjects: English Language Arts (ELA) and Mathematics. ELA
achievement, including the achievement of English Language Learners (ELLs), is reviewed initially, followed by relevant Mathematics achievement literature. Studies that reveal benefits in both high-stakes disciplines are also annotated.

The second thematic section is devoted to noncognitive benefits of arts-based pedagogy. Noncognitive benefits include social-emotional development (Brouillette, 2010; Menzer, 2015; Powell, 2007), engagement (Chand O’Neal, 2014; Charland, 2011; Greenfader & Brouillette, 2013; Powell, 2007), and empathy (Bellisario & Donovan, 2012; Stevenson & Deasy, 2005), as well as and the cultural relevance and responsiveness of the arts (Bowman, 2006; Gay, 2000; Heise, 2010; Ladson-Billings, 2001; Robinson, 2006).

The following thematic section outlines teacher self-efficacy with arts-based pedagogy. Teacher artistic background and personal experience (Alter et al., 2009; Barry, 1992; Grauer, 1998; Power & Klopper, 2011; Lummis et al., 2014; Russell-Bowie & Dowson, 2005), arts-based coursework and practicums with opportunities for observation of practice (Garvis & Pendergast, 2010b; Garvis et al., 2011; Lemon & Garvis, 2013), and school/administrative support (de Vries, 2017) are integral to teacher self-efficacy with the arts. The penultimate section focuses on deterrents to arts-based pedagogy. Challenge and barrier themes (Bellisario & Donovan, 2012; Garvis & Pendergast, 2010b; LaJevic, 2013; Oreck, 2004; Oreck, 2006; Purnell, 2004; Rule et al., 2012; Van Eman et al., 2008), while the final section offers a counterpoint with factors which encourage arts-based pedagogy. Literature related to the constructs of previous childhood/adult arts exposure and current artistic practice (Garvis & Pendergast, 2010a; Garvis et al., 2011; Hagen, 2002), arts-based preservice training (Donahue & Stuart, 2008; Pool et al., 2011; Robinson, 2012b; Whitin & Moench, 2015), and arts-based professional development (Aprill, 2010; Cunnington et al., 2014; Doyle et al., 2014; Greenfader & Brouillette, 2013;
Heitin, 2014; Hicks, 2013; Kinney & Forsythe, 2005; Richard & Treichel, 2013; Saraniero et al., 2014; Walker et al., 2011) are reviewed.

Although not explicitly themed in this review of literature, the arts also benefit a variety of specific student populations including economically disadvantaged learners (Barry, 2010; Catterall, Dumais, & Hampden-Thompson, 2012; Ingram & Reidel, 2003; Walker et al., 2011), and students with disabilities (Anderson, 2012; Cruz, 2009; Saldaña, 2016).

**Cognitive Benefits of Arts-Based Pedagogy**

The testing requirements mandated by NCLB (2001), recently renewed by the ESSA (2015), require all upper elementary public-school students to take literacy and mathematics examinations annually. Both NCLB and ESSA have spurred the prioritization of the high-stakes tested subjects, emphasizing student acquisition of measurable, cognitive skills (Baker, 2012; Berliner, 2014; Bracey, 2001; Ravitch, 2014; Ravitch & Kohn, 2014; Schneider, 2016).

**Arts-Based Pedagogy and the Brain**

Both arts-as-curriculum and arts-integrated curriculum lead to numerous cognitive benefits. Arts-based pedagogy improves retention (Hardiman et al., 2014; Orzulak, 2006; Rinne et al., 2011; Scheinfeld, 2004), IQ (Moreno et al., 2011; Schellenberg, 2004), and critical thinking (Berghammer et al., 1991; Bowen et al., 2014; DeSantis & Housen, 2007).

**Retention.** Rinne et al. (2011) reviewed a variety of studies across eight effects pertaining to the long-term retention of concepts. The eight effects are as follows: rehearsal, elaboration, generation, enactment, oral production, effort after meaning, emotional arousal, and pictorial representation. The authors argue that arts-based pedagogy promotes each effect, i.e. creating songs or theatrical performances which include learned information (oral production) and expressing character emotions in a story via dance or painting (emotional arousal).
In a similar study three years later, Hardiman et al. (2014) conducted research at one school, with 97 African American fifth grade participants. Each student received one arts integrated unit and one traditional unit of science across fifteen days of instruction. Information presentation order, technology usage, and lesson structure were all controlled, as not to lead to retention. The authors hypothesized that the integrated lessons would promote better retention on a delayed posttest. Prior to treatment and data collection, the school’s teachers received 10 hours of training and each taught one integrated unit and one traditional unit. Examples of arts-integrated replacements of traditional activities include drawn versus written responses and enactments versus oral language alone. Sixty percent of the time, observers were present in classrooms to ensure reliability. Based on 25-questions and constructed response pre, post, and delayed posttests, arts-integrated curriculum had significantly increased long-term retention, particularly for “basic” level students.

Arts-based retention is not limited to the student brain. Orzulak (2006) attended the Teacher Immersion course “Teaching Nonfiction through Theatre” at Chicago’s famed Steppenwolf Theatre. The course encouraged teachers to use arts integration to increase student connections, comprehend controversial issues, and encourage risk taking. Teacher participants first experienced the coursework as students themselves, learning to empathize and anticipate student questions and points-of-view. Orzulak used numerous ensemble activities in her own school, including the theatre warm-up, “Pass the Clap,” and the theatre and spoken word exercise, “Line by Line.” Cooperative tasks led to a unit in which participants read nonfiction articles about sweatshops and wrote monologues from the perspective of all involved parties, e.g. sweatshop workers, human rights activists, and members of government. This integrated activity led to increased teacher retention of content and concepts.
Intelligence Quotient. Across the four art forms, literature has emerged that music, in particular, has the capacity to increase IQ. Schellenberg (2004) investigated the effects of music lessons on Canadian six-year-olds’ IQ (N=144). The students were divided amongst four groups: two treatment groups (one voice lesson group and one piano lesson group) and two control groups (one drama lesson group and one group who received no lessons). Within the pre-and post-test experimental design, all participating children took three separate IQ tests prior to the beginning of the study and again after a years’ worth of treatment lessons, drama lessons, or an absence of lessons. The Wechsler Intelligence Scale for Children (WISC III), the Kaufman Test of Educational Achievement, and the Parent Rating Scale of the Behavioral Assessment Systems for Children served as the IQ instruments during data collection. Data analysis of the 132 participants who remained after the posttest revealed a statistically significant improvement in IQ compared to their control group peers ($p < .05$). Interestingly, the control group receiving the drama lessons showed statistically significant “adaptive social behaviors” (p. 3) as compared to the other control group and both treatment groups ($p < .0005$), although the drama lessons group did not have a significant IQ improvement.

In a subsequent Canadian study, Moreno et al. (2011) measured the IQ of 48 four-six year olds to determine if participation in a computer-based program featuring cartoon characters delivering musical content (i.e. pitch, melody, rhythm, etc.) improved IQ as opposed to participation in a similar visual-arts based program (line, color, shape, etc.). Students in each group received 20 hours of arts-based instruction across four weeks. In the pre-post-test design similar to Schellenberg’s 2004 study, children took the Wechsler Preschool and Primary Scale of Intelligence IQ test (Wechsler, 2002) before and after the treatment. Additionally, study participants underwent electroencephalography (EEG) brain scans. In the posttest, 90% of the
children in the musical training group demonstrated increased IQ across accuracy, reaction time, and vocabulary knowledge and the brain scans for these children showed significant brain changes. Researchers found no significant increases in brain changes or verbal IQ from the visual arts training group.

**Critical and divergent thinking.** State curriculum guides promote the arts to encourage critical thinking of elementary school children. In the 1991 *Iowa Curricular Guide for Developmental Drama*, authors Berghammer et al. call for creative drama in the classroom to promote “thinking skills at a developmentally appropriate level in a context which is meaningful and purposeful” (p. 3). In one example given, the authors juxtapose the traditional approach with the arts-based creative drama approach to teaching geographic regions in fourth grade. In the creative drama approach, students think critically in small groups to create a role-play based on a region chosen and view other groups’ role-plays to compare/contrast geographic regions.

DeSantis and Housen (2007) used a different art form, the visual arts, in their three-year longitudinal study of the Visual Thinking Strategies (VTS) arts-based curriculum on the critical thinking skills of 50 San Antonio third-fifth graders (25 experimental and 25 control). All participants had been identified as ‘at risk’ due to Limited English Proficiency or the failure to pass Texas reading and math assessments. Classroom teachers facilitated 10 VTS lesson per year and the researchers administered one pre and one posttest per year for the duration of the longitudinal study. Data collection methods included “pre- and post-VTS aesthetic development interviews (ADIs), demographic questionnaires, museum biographies, material object interviews (MOIs), and writing samples” (p. 1). By the end of year one of implementation, teachers noted marked improvement in experimental students’ critical thinking skills, namely in observation, speculation, and elaboration. By year three, these results were statistically significant across
ADIs and MOIs (ADIs p < .04, MOIs p < .003). The results of this study “convinced the San Antonio Independent School District to implement VTS system-wide” (p. 7).

Visual arts content can also be delivered in spaces outside traditional classrooms. In a randomized controlled museum-based study of 3,811 third-twelfth grade students (35 treatment groups and 35 control groups), researchers Bowen et al. (2014) analyzed students’ critical thinking based on arts exposure. Treatment group students attended a ½ day field trip to the museum hosted by tour guides who encouraged student-centered discussion. Two weeks after the field trip, the researchers used checklists to measure student critical thinking strategies when presented with an unfamiliar piece of visual art. Findings indicated that, as compared to their control group peers who did not attend the museum, there was a statistically significant increase in the use of critical thinking strategies by treatment students. In addition to brain-based benefits, arts-based pedagogy improves academic achievement.

**Arts-based Pedagogy and Academic Achievement**

Numerous quantitative, qualitative, and mixed methods studies have illustrated the benefits of arts-based pedagogy and academic achievement in both high-stakes tests disciplines, English Language Arts (ELA) (Anderson, 2012; Anderson & Loughlin, 2014; McMahon et al., 2003; Rose et al., 2000) and Mathematics (An et al., 2013; Werner, 2001). Some studies indicate the value to both disciplines (Harloff, 2011; Ingram & Seashore, 2003; Luftig, 2000; Walker et al., 2011).

**ELA achievement.** Anderson (2012) used a mixed-methods design to study a fourth-grade class (N=16) whose teacher utilized theatre arts interventions twice a week for eight weeks. Eighty percent of the classroom population was diagnosed with a learning, behavior, or developmental disability prior to the intervention. Integrated drama activities included process
drama and theatrical tableau. Language productivity and literate language feature quantities were tabulated across three written language activities during the intervention. The researcher used paired t tests to analyze data, thus, students acted as their own control. Students’ writing and literate language features within integrated activities showed significant improvement, particularly in the following categories: number of total words, number of different words, number of utterances, conjunctions, and nouns.

Anderson collaborated with Loughlin and selected an arts-integrated elementary school as the setting for subsequent drama-integrated research. Anderson and Loughlin (2014) examined a class of third graders (N=18), many of whom were English Language Learners (ELLs), as they participated in drama-integrated lessons. Qualitative data collection methods included observation, interviews, and language analysis. As opposed to the conventional lesson, students involved in arts integrated lessons produced more literate language features ($p = .05$), nouns ($p = .001$), verbs ($p = .04$), and overall linguistic production ($p = .0001$) within the context of the drama-integrated lesson. Much existing literature spotlights ELA and theatre connections.

Rose et al. (2000) also investigated the natural connections between theatre arts and ELA standards. Speaking and listening are inherent to both disciplines, as is reading comprehension and fluency (reading a script). The authors chose to explore theatre arts integration with the reading comprehension of fourth grade students, using a pre and posttest design. They randomly assigned N=94 students to the treatment group and N=85 students to the control group. The Whirlwind non-profit arts education organization offered twenty Reading Comprehension through Drama (RCD) integrated lessons to the treatment group and analyzed the resultant data using an Analysis of Covariance (ANCOVA). On statewide standardized tests, students from the treatment group who had received the theatre-integrated instruction showed significant increases
in overall reading skills. On the factual comprehension’ subscale, moreover, treatment group students significantly outperformed control group students.

In a study similar to Rose et al. (2000), McMahon et al. (2003) investigated the efficacy of dance-based reading lessons on Chicagoan first graders’ reading achievement. The Whirlwind organization again provided twenty integrated lessons, this time in ELA and dance, to the treatment group of N=328 first grade students. N=393 first graders served as the control group. Upon completion of the dance integrated lessons, teachers administered the Phonographix standardized test of reading ability. Results showed that the dance-integration treatment group’s phoneme segmentation, consonant recognition, and vowel recognition far exceeded the control group. Academic achievement through arts-based pedagogy is not limited to ELA or literacy.

Mathematics achievement. Arts-based pedagogy leads to mathematical gains as well. Werner (2001) surveyed 202 elementary school students attending second through fifth grades at the Whittier School for the Arts located in Minneapolis, MN. The researcher administered the thirteen item Likert-type Academic Motivation Inventory (Ginsburg-Block & Fantuzzo, 1998) to all participants in the fall to gauge student attitudes towards mathematics. Afterward, approximately half of the students received a year of dance-integrated math instruction, while the other half received traditional math instruction. All student participants in both the treatment and control groups took the same Academic Motivation Inventory again in the spring as a post-test. Results from the fall pretests showed no significant difference between the dance/math integration student group and traditional math instruction group (p = .07). In the spring post-test, however, the mean inventory score for the dance/math integration treatment group was 2.53 and the control group mean was 2.28 (p = .00), suggesting improved attitudes about mathematics.
from dance integration. Additionally, attitude scores from students in the non-integrated control group showed either no change or significant decreases.

An et al. (2013) investigated the integration of music with mathematical concepts in an elementary school setting. Two of the authors, An and Capraro, had previously developed the integrated curriculum used in this study. The participants included ethnically diverse first graders (N=21) and third graders (N=25), whose teachers participated in ten hours of arts integrated professional development prior to the study. All student participants received the integrated treatment curriculum, which included playing various instruments, singing, and composing music. Researchers conducted five pretests, prior to five integrated lessons, with a posttest administered after each treatment, for a total of five pretests and five posttests. Reliable Model-Strategy-Application tests were used for both pre and post-tests. The researchers used paired t-tests, qualitative content analysis, and coding to analyze the data. Results showed significant increases in all three areas of the Model-Strategy-Application assessments including creating word problems, using symbols representative of mathematical processes, and problem solving with visuals ($p < .001$).

**Achievement in both ELA and mathematics.** Some existing literature documents achievement in both high-stakes disciplines, ELA and mathematics. For instance, Luftig (2000) assessed the effect of the Schools, Parents, Educators, Children, Teachers Rediscover the Arts (SPECTRA+) arts integration program on the achievement of elementary students attending four schools in two Ohio school districts (N=615). The student participants were divided amongst a full control group, a modified control group (in one of the two school districts), and a SPECTRA+ arts integration treatment group within this quasi-experimental study. Student achievement scores on state standardized tests acted as the dependent variable. Luftig analyzed
data from each school district separately, since each district used separate standardized tests. An Analysis of Variance (ANOVA) and subsequent post-hoc Newman-Keuls test showed statistically significant differences in both districts, favoring the SPECTRA+ program. In the first district, the mean difference scores of the three groups on the variable of math comprehension follow: modified control = -6.59, full control = 1.08, SPECTRA+ = 4.50 ($p < .04$). In the second district, the students in the SPECTRA+ program outperformed the control group students’ reading and math scores. Mean difference scores were statistically significant in reading vocabulary ($p < .001$) reading comprehension ($p < .005$) and math comprehension ($p < .02$).

Ingram and Seashore (2003) summarized the longitudinal effects of a different arts integration program, the Arts for Academic Achievement (AAA), on reading and mathematics achievement. By the third year of program implementation, AAA reached 35 elementary schools, 4 middle schools, and 6 high schools. Gain scores (student test scores between years) improved for students whose teachers used arts integration in third grade reading and math, fourth grade reading, and fifth grade math. Qualitative frameworks including interviews and observations were also used to determine the intensity of integration. “When teachers integrated the arts into their mathematics lessons ‘a lot’, for example, their students showed greater achievement gains than teachers who integrated the arts ‘very little’. It was not the mere presence of arts integration, but the intensity that related to gains in student learning” (p. 4).

In lieu of studying a program similar to SPECTRA+ or AAA, Walker et al. (2011) analyzed the direct and lasting benefits and results of integration of a singular art form. The year-long New Jersey-based study attempted to integrate the theatre arts into 4th-7th grade language arts and mathematics classrooms. The Education Arts Team (EAT) selected twenty-eight
classrooms within eight schools (four arts integration treatment schools and four control schools) based on the numbers of proficient students on New Jersey’s state assessments. Participants included 540 ethnically diverse students (39% Latino, 36% African, 14% Asian, 10% Caucasian, 1% Native American); 77%-88% of this sample also received free or reduced-price lunch. The treatment group received 40 theatre arts standards-based integrated lessons through teacher/artist collaboration. The four points of natural literacy/drama connections were as follows: Scenery design with setting, acting with understanding characters, directing with understanding theme/plot/characters, and script writing with dialogue. Data were collected via scaled proficiency scores on New Jersey’s ELA and math assessments. Findings concluded that the arts integrated treatment group had a 77% higher probability of passing the state ELA tests than the control group students; Math passage rates for the treatment group increased by 44%. Students in the treatment group were also less likely to be absent. Benefits continued into the next grade in both ELA and absenteeism, even with the absence of integrated instruction. The largest literacy component affected through AI lessons was persuasive and speculative writing. Students demonstrated a clearer voice and better understanding of audience in these writing assignments.

In proximity to New Jersey as an eastern state, Harloff (2011) explored the ELA and mathematics achievement of fourth graders attending school in a large urban district in New York. Nine treatment schools (N=1,895 students) were randomly assigned to the treatment group and received ten arts integrated sessions each year for three years funded by a US Department of Education Arts in Education Model Development and Dissemination (AEMDD) grant, while the remaining twenty-eight schools in the district acted as the control. Data were collected from New York State’s standardized tests and was analyzed using one-way Analysis of Variance (ANOVA) to compare means of treatment versus control scores. ANOVA results indicated that the control
mean = 650.98 and the treatment mean = 656.51. Harloff concluded that arts integration treatments had a significant effect on student standardized tests scores in ELA ($F = 8.62, p = .003$). Harloff also questioned which art form (theatre, music, dance, or visual art) would lead to the most significant increase in scores. Pairwise comparisons revealed that the standardized test scores of the music integration students were, on average, more than 12 points higher ($p = .002$). The pairwise comparisons also indicated that the visual arts integration group scored significantly higher on the state’s mathematics test ($p = .004$). Despite discernable improvements across the high-stakes subjects through arts-based pedagogy, classroom teachers cite plentiful challenges to feasibility and implementation.

**Noncognitive Benefits of Arts-Based Pedagogy**

In the previous section, the literature reviewed has focused on students’ cognitive gains from arts-based pedagogical practices. The fifth edition of the *American Heritage Dictionary of the English Language* (2015) places the origination of the term ‘cognition’ from the Latin *cognōscere*, meaning “to know” or “to learn,” and defines the term as “The mental process of knowing, including aspects such as awareness, perception, reasoning, and judgment.” Cognitive factors have long been considered the sole predictors of college and career readiness (Sparkman, Maulding, & Roberts, 2012), however, recent research suggests otherwise. Non-cognitive factors, sometimes called ‘soft skills,’ is an umbrella term for dispositions not measured by standardized tests (Farrington et al., 2012; Heckman & Kautz, 2013; National Council of Teachers of English, 2014; Steele, 2016; Strauss, 2011; Zhang, 2012).

Noted educational researcher, Bracey, concluded that a drawback of standardized testing is a test’s inability to measure soft skills or noncognitive factors, including, “creativity, critical thinking, resilience, motivation, persistence, curiosity, endurance, reliability, enthusiasm,
empathy, self-awareness, self-discipline, leadership, civic-mindedness, courage, compassion, resourcefulness, sense of beauty, sense of wonder, honesty, and integrity” (Strauss, 2011). As opposed to academic achievement and cognitive domains which are “measured by IQ and standardized tests, explain what a person knows and can do with content” (Steele, 2016, p. 10), noncognitive factors are the “ways students interact with the educational context within which they are situated and the effects of these interactions on students’ attitudes, motivation and performance” (Farrington et al., 2012, p. 2). Levin (2012) acknowledged that “tests rarely assess the capacity to formulate and solve problems, or valuable interpersonal behaviors such as collaboration, listening skills, and the ability to communicate, and intrapersonal behaviors such as time management and impulse control” (Levin, 2012, p. 271).

Significantly, noncognitive factors are crucial to college and career readiness and to global workforce development (Farrington et al., 2012; Nagaoka et al., 2013). Soft skills are also predictors of educational attainment (American Institutes for Research, 2013; Stankov et al., 2014) and employment (DeLong & Elbeck, 2017; Deming, 2017; Robles, 2012), however, “fewer than three in 10 employers think that recent college graduates are well prepared” in soft skills including communication and critical thinking (Association of American Colleges and Universities, 2015, p. 11).

Arts-based pedagogy supports noncognitive factors as well: social-emotional development (Brouillette, 2010; Menzer, 2015; Powell, 2007), engagement (Chand O’Neal, 2014; Charland, 2011; Greenfader & Brouillette, 2013; Powell, 2007), and empathy (Bellisario & Donovan, 2012; Stevenson & Deasy, 2005). Empathy is a key disposition for realizing cultural relevance and responsiveness with diverse students (Dolby, 2012; McAllister & Irvine, 2002).
Arts-Based Pedagogy and Cultural Relevance/Responsiveness

Eighty-two percent of public school K-12 teachers in the US are White, teaching predominantly non-White students (Maxwell, 2014; National Center for Education Statistics, 2013). Although the population of diverse learners is increasing, “the majority of teachers and those in teacher education programs continue to be predominantly Caucasian, middle class, and English monolingual speakers” (Cho & DeCastro-Ambrosetti, 2005, p. 24). Furthermore, “Only one-third of states require teacher candidates to study some aspect of cultural diversity in their core preparation courses, and/or to have a teaching practicum in a culturally diverse setting” (National Education Association, 2008, p. 2). “The arts, as cultural products themselves, are ideal vehicles for cultural pedagogy” (Hanley & Noblit, 2009, p. 78). Elementary preservice teachers enrolled in arts-based teacher education coursework improve their understandings of both socio-cultural and multicultural knowledge (Kraehe & Brown, 2011).

The work of Ladson-Billings (2001) and Gay (2000) in the fields of Culturally Relevant Pedagogy (CRP) and Culturally Responsive Teaching (CRT) frames the following studies related to the arts and diverse learners. Moreover, Aronson and Laughter (2016) established that both CRP and CRT are inherently constructivist and “develop bridges connecting students’ cultural references with academic skills and concepts” (Aronson & Laughter, 2016, p.1).

In Crossing Over to Canaan, Ladson-Billings (2001) shares examples of culturally relevant music and theatre integration in practice. One such example chronicles the lessons of a novice teacher, who recognized his students’ proclivity for music. Through this recognition and the subsequent development of musical-based pedagogy, he was able to reach students and deepen learning. Gay (2000) promotes “multidimensional culturally responsive teaching” (p. 33) through the recognition of various cultures and perspectives therein. Through an example lesson
encompassing a controversial protest in opposition of racial discrimination, she promotes the use of the arts, namely spoken word, visual art, and music to examine varied viewpoints.

In a related vein, folk art serves as both a culturally relevant and responsive pedagogical tool in K-12 settings. When students involved in folk art and fieldwork “display their traditional culture and learn the important skills of observing, listening, interviewing, mapping, analyzing, organizing, and presenting their fieldwork findings, they learn that all of us contribute to creating culture and weaving a complex of meaning for our lives” (Bowman, 2006). Folk art is not only limited to a general education classroom but also serves as a culturally inclusive tool in the arts classroom. The Common Core State Standards encourage student familiarity with the subjective “magnificent works of art” (Coleman, 2012, p. 1), however, many urban youths have never been to a museum to view “magnificent works.” Heise (2010) recounts the story of an informal survey of an urban Tennessee middle school art class revealing that while no student in class had ever visited an art museum, every student was familiar with one or more community members who created folk art. “Through folk art, urban youth have access to primary resources in their families and communities and who courageously voice their ideas and opinions through folk art” (Heise, 2010, p. 63).

Like the visual arts, music can also promote cultural understanding. Robinson (2006) followed three culturally relevant music pedagogues for six years. Their CRT repertoire included the incorporation of multicultural instruments and images, writing musical accompaniments for songs students were singing outside of the music classroom, and submitting grant proposals to bring a West African dance residency to their urban school in the Northeastern region of the US.
Self-Efficacy and Arts-Based Pedagogy

Self-efficacy, defined as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments,” (Bandura, 1997, p. 3) has been well documented in relation to teaching of the arts at the elementary level. “Teacher self-efficacy beliefs about their capacity to deliver arts education shapes their perceived competence in teaching the arts, which in turn impacts on the degree and nature of inclusion of arts in the curriculum” (Lemon & Garvis, 2013, p. 2). Self-efficacy is related to effective teaching (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998), thus, it can be assumed that teacher self-efficacy can impact the frequency and effectiveness of arts-based pedagogical practices.

Literature from the field also illustrates the following factors which influence teacher self-efficacy in the arts: background and personal experience (Alter et al., 2009; Barry, 1992; Grauer, 1998; Power & Klopper, 2011; Lummis et al., 2014; Russell-Bowie & Dowson, 2005), arts-based coursework and practicums with opportunities for observation of practice (Garvis & Pendergast, 2010b; Garvis et al., 2011; Lemon & Garvis, 2013), and school/administrative support (de Vries, 2017). The current study’s investigation of ECT arts-based pedagogy self-efficacy is significant; Bandura and Locke (2003) suggest that poor self-efficacy leads to negative task perceptions, coupled with the discontinuance of the task.

The impact of positive prior experiences in the arts cannot be overstated. Power and Klopper’s (2011) investigation of 66 Australian elementary generalist teachers across 108 schools uncovered that 48.5% believed “experience (personal and/or professional)” (p. 20) was the largest factor contributing to confidence in varied art form pedagogy. Russell-Bowie and Dowson’s (2005) study of 936 elementary teachers across five countries revealed that a majority of teachers “had very little formal background in any of the art forms,” and, “in every creative
arts area, background is very strongly, and positively, predictive of confidence and enjoyment in teaching” (p. 7). Positive background arts experiences improve teacher confidence in arts-based pedagogy and teachers’ perceived value of the arts (Alter et al., 2009; Lummis et al., 2014; Russell-Bowie & Dowson, 2005), however, negative experiences can hinder both the quantity and quality of arts experiences provided in elementary classrooms (Barry, 1992; Grauer, 1998).

While prior arts experiences play a significant role in teachers’ pedagogy, competence in pedagogical techniques is also paramount. Supervising or mentor teachers contribute greatly to the development of preservice teacher identity (Cattley, 2007; Izadinia, 2015; Zhou & Zhang, 2017) and shape preservice teachers’ instructional practices and beliefs, which can substantially impact novice teachers’ learning (Cochran-Smith, 1991; Hall, Draper, Smith, & Bullough, 2008; Hawkey, 1997). Susanne Garvis, a leading researcher on teacher self-efficacy with arts-based pedagogy, suggests that coursework in the arts coupled with practicum-based arts experience improves preservice teacher self-efficacy (Garvis, 2009; Garvis & Pendergast, 2010a; Garvis & Pendergast, 2010b; Garvis et al., 2011). Furthermore, Garvis suggests preservice teachers observe arts-based pedagogy in practice, stating, “By observing examples of practice, this would help inform their self-efficacy to develop positive beliefs about how arts education is taught” (Lemon & Garvis, 2013, p. 7).

Arts and creativity-based training models for teachers can lead to improved self-efficacy with arts-based pedagogy. Collins (2016) utilized the Self-Efficacy Across Arts Education survey instrument, based on Bandura’s (2006) Teacher Self Efficacy Scale to longitudinally assess preservice teacher self-efficacy with arts-based pedagogy. Preservice teachers received 15 hours of interventions in each of the four art forms, encouraging them to “practice planning, teaching and evaluating small arts concepts multiple times to increase their confidence and embed their
practice and understanding” (p. 10). Post-test results indicated a 23-38 point jump in pedagogical self-efficacy across the four art forms on the 100-point scale.

While not as prevalent in the literature as the importance of positive prior experiences and effective models of arts-based pedagogy, school and administrative support also contributes to self-efficacy with arts-based pedagogy. Researcher, de Vries (2017), used narrative inquiry to determine the self-efficacy hindrances of teachers with five years of experience and concluded, “Teachers need the support of school administrators to teach music, have adequate resources to teach music, and have the time to teach music,” (p. 20). Not surprisingly, a lack of administrative support is a leading deterrent to arts-based pedagogy.

According to Smith and Fouad (1999) self-efficacy is domain specific. Elementary ECTs may have high self-efficacy for using theatre in their classroom but a low self-efficacy for implementing dance strategies. Self-efficacy will be explored throughout within the data analysis phase in keeping with research questions 4a-4e. Closely related to the construct of self-efficacy is the construct of challenges to arts-based pedagogy. Literature to further explore the challenges, barriers, and deterrents to arts-based pedagogy are now presented.

**Deterrents to Arts-Based Pedagogy**

Although the existing literature chronicles the immense benefits of arts-based pedagogy, many classroom teachers are resistant to utilizing the arts in school settings. The following literature explores classroom teacher deterrents to arts-based pedagogy including deficiencies in administrative support, time, funding, professional development opportunities, materials and resources, as well as the prioritization of the high-stakes tests subjects and pre-scripted curricula (Bellisario & Donovan, 2012; Garvis & Pendergast, 2010b; LaJevic, 2013; Oreck, 2004; Oreck, 2006; Purnell, 2004; Rule et al., 2012; Van Eman et al., 2008).
Oreck (2004) employed a survey design to examine N=423 classroom teachers’ arts-based attitudes and behaviors. The participants taught across ninety-seven schools in six states that had access to arts-integrated programming and professional development opportunities. Prior to the study, the version of the researcher’s *Teaching with The Arts* (TWAS) (see Appendix B) survey was tested for reliability and validity on teachers comparable in demographics to study participant teachers. The survey consisted of 48 items including two open-ended items. In one open-ended survey item, teachers were asked to identify what would encourage them to utilize arts integration more. One teacher stated, “I need training in how to integrate the arts, since I was never taught how to teach/use music/art/movement in the classroom” (Oreck, 2004, p. 63). Oreck analyzed the data using factor loadings and response frequency analysis. Teachers identified both a need for arts integration training (N=114) and focus on pre-scripted curriculum (N=65) as the most common barriers to integration.

Based on responses to the TWAS survey, Oreck (2006) selected six teachers from six schools to participate in a qualitative study where the researcher interviewed teachers regarding their arts integration perspectives. All six school districts offered arts integrated professional development opportunities. “The major constraint to arts use in the classroom mentioned by five of the six teachers was increased pressure in recent years from their administrations and districts to follow specific, standardized teaching methods. They reported that this pressure resulted in a lack of autonomy and freedom to manage the time, organization, and curriculum in the classroom” (p. 14). Despite this, five of the six teachers also credited professional development experiences for improving both their frequency of arts-integrated pedagogy and comfort with various art forms.
Like Oreck, Purnell (2004) also used a survey design to determine the roadblocks to arts integration of 75 elementary school teachers, representative of urban, suburban, and rural school environments. Of the 32 respondents, a large percentage highly valued integration for meeting learners’ needs, however, a majority also did not integrate with any consistency. These teachers cited a lack of both administrative support and collaboration/planning time with fellow teachers as the main hindrances to successful arts integration implementation. Purnell calls for improved support and resources to boost integration in today’s classrooms.

In contrast to the quantitative survey methods employed by Oreck and Purnell, LaJevic (2013) used a qualitative case study to examine the arts integrated beliefs and practices of six elementary practitioners. Semi-structured interviews included question 15, “What do you think are the challenges of Arts Integration” (p. 22)? Participant responses underscored both time constraints and the focus on high-stakes testing as challenges to the approach, although, according to researcher observations, these deterrents did not lessen the teachers’ actual use of integrated pedagogy. Another theme that arose from data collection was that of the ‘Devaluing the Arts in Arts Integration.’ This was exemplified in numerous visual arts projects and worksheets used as time-fillers to “decorate the walls,” and the use of arts integration to, “fill up extra class time in the schedule” (p. 10).

Van Eman et al. (2008) used a qualitative design to follow the arts integrated practices and perspectives of three elementary school teachers across three years, despite a districtwide focus on increased high-stakes test scores and adoption of a rote memorization test preparation program, TargetTeach. Teacher interview responses emphasized the lack of integration support from the district/administration. One teacher expressed frustration with administrative curriculum and testing mandates, stating, “The administration seems to believe that too much
time is spent on ‘fun’ activities such as art, or using alternative teaching and learning strategies” (Van Eman et al., 2008, p. 14). Another, “Saw an entirely arts-integrated curriculum as an impossibility due to the pressure she felt by her principal…to focus on test mandates.” The third bemoaned, “Not enough hours in the day to incorporate the arts in lessons…time is always limited.” Both quantitative and qualitative research methods can be used to explore the complexities of challenges to arts-based pedagogy in classroom settings.

Bellisario and Donovan (2012) conducted a mixed-methods study to ascertain the attitudes of 204 in-service teachers regarding arts integration. All study participants were graduates of an integration-focused Master’s program at Lesley University. Data collection methods included surveys, focus groups, interviews, and observations. Participants created graphic organizers to articulate the support for and opposition against integration within their professional practice. Although teachers identified numerous benefits of arts integration on both teaching and learning, they recognized high-stakes tests foci, pre-scripted curriculum, lack of supplies and funding, an absence of administrative support, and the lack of space for arts integration as obstacles.

Rule et al. (2012) were specifically interested in preservice teachers’ attitudes regarding arts integration. They studied elementary preservice teacher perspectives from three Social Studies methods classes at the University of Northern Iowa (N=65). The researchers created and administered an attitudinal survey in a pre and post-test manner: prior to the preservice teachers using arts integration to teach Social Studies units on African cultures and customs, and again after the arts integrated unit was complete. Participants selected one of seven spaces along a continuum for each survey statement. A frequency table indicated the most common responses of deterrents from integrating in elementary settings on the pretest were time and a focus on NCLB
standards (p. 24). Most frequently recorded responses for barriers in the post-test were apprehension about standardized tests and, again, time.

Teacher barriers to integration of the arts surface beyond the US. Garvis and Pendergast (2010b) surveyed 201 Australian classroom teachers with less than three years of experience to determine arts-integration self-efficacy. Within this study, “The notion of ‘supportive environments for the arts’ were described as rare” (p. 19). Findings related to arts integration hindrances revealed limited perceived support from administrators, pressure to prioritize the high-stakes testing subjects, and lack of access to arts resources and materials. Moreover, numerous teachers’ requests for arts-integration professional development opportunities went unanswered. “No allowance for PD (several requests denied)” (p. 14)! The researchers recommend changing beliefs about the arts in school environments to improve teacher pedagogy. Prior arts exposure has the potential to minimize teacher deterrents to arts-based pedagogy use.

Factors That Encourage Arts-Based Pedagogy

Despite research findings that illustrate significant deterrents to arts-based pedagogy, multiple themes have emerged from literature illuminating factors which promote arts’ use in the classroom. The following factors encourage and/or predict classroom teachers’ arts-based pedagogy use: prior arts experiences and exposure, preservice learning in the arts, and arts-based professional development opportunities.

Prior Arts Experience and Arts-Based Pedagogy

The first two research questions in this study address to teacher self-efficacy in the arts. The questions pertaining to previous arts exposure in childhood/adulthood as well as current artistic practice are examined in relationship to teacher self-efficacy (Garvis & Pendergast, 2010a; Garvis et al., 2011; Hagen, 2002).
Garvis and Pendergast (2010a) analyzed 201 early-career Australian teachers’ past arts experiences during seven life experience stages, spanning childhood through the first teaching years. Participants self-reported past arts experiences throughout the stages in an open-ended writing assignment. Researchers then classified each stage of response as positive or negative. Seventy-four percent of ECTs reported negative prior arts experiences during the ‘Preservice’ life stage. Negative examples included “the need for application of their arts courses to a teaching context; conflict with lecturers/tutors; limited exposure at university to the range of arts subjects; competing subject interests with Maths and English; assessment and general pressure within arts subjects” (p. 35). Furthermore, 72% of ECTs reported negative experiences ‘Within the First Months of Commencing Teaching’ stage. Specific responses showed respondents “lacked confidence, were continually struggling, lacked time to focus on the arts and didn’t have supportive teaching colleagues who valued the arts” (p. 36).

In a similar study, Garvis and Pendergast teamed up with Twigg to survey Australian early-career early-childhood teachers regarding their experiences with the arts during preservice learning (Garvis et al., 2011). After answering 10 open-ended survey items, participants ranked each of their responses as ‘positive’ or ‘negative.’ Data analysis through content analysis and coding found almost exclusively negative preservice experiences in the arts. Participants attributed this to pre-scripted curriculum, mentor teacher modelling of instructional practice, and mentor teacher/preservice teacher discussions. One ECT recounted, “My teacher thought the arts weren’t as important. When I started teaching them, I got in trouble” (Garvis et al., 2011, p. 39).

Hagen (2002) also investigated the relationship between preservice teachers’ comfort in using arts-based pedagogy (namely music) after enrollment in a required university arts class. The researcher examined participants’ previous music exposure as well. “Years of experience in
performing groups in high school and private lessons were predictors of higher comfort levels with singing and multicultural activities” (p. 1). Similar to prior arts exposure, preservice learning in the arts can improve teacher propensity for arts-based pedagogy.

Preservice Learning and Arts-Based Pedagogy

The next research question in this study (question 3) pertains to preservice training in the arts and subsequent arts-based pedagogical frequency. A number of teacher preparation programs have transformed required arts-based pedagogy classes to include arts-integrated methods (Donahue & Stuart, 2008; Pool et al., 2011; Robinson, 2012b; Whitin & Moench, 2015). Moreover, other disciplines within higher education settings are now using arts-integrated methods to engage students and deepen learning (Garrett, 2013; Turner, 2014).

Arts-based preservice programs. Several teacher educators have already transformed traditional teacher-preparation courses and programs to include arts-based pedagogy. Robinson (2012b) created two arts-integrated Master’s programs and two professional development courses by removing six courses from a preexisting teacher preparation program and replacing these classes with integrated learning. Courses were co-developed with faculty members from Arts programs. On-campus integrated summer courses and online integrated school-year courses were offered and “art coaches” identified to build collaborations between all stakeholders. Qualitative themes emerged from the data, including improved climate through classroom collaboration, increased teacher “fun” in developing and teaching AI coursework, higher levels of teacher collaboration, and, perhaps most important, students who had been struggling were making greater strides.

Like Robinson, Donahue and Stuart (2008) transformed an existing teacher preparation course to include arts-based pedagogy. The authors examined 17 preservice teachers’ previous
arts exposure and lesson plans to investigate the dichotomy between a limited curricular focus in a culture of standardized testing and a broad curriculum that fosters creativity. The student teachers were enrolled in the authors’ university course. The authors modeled a making-centered or response-centered arts integrated lesson during each class meeting and encouraged students to create balanced lesson plans, which they acknowledge requires extended time (not always conducive with the cooperating teacher and district expectations during student teaching).

Donahue and Stuart promote student teacher placements in arts-accepting settings, as well as increased arts exposure and professional development for preservice and ECTs. They also encourage teachers to take a stand against narrowed, standardized curriculum and integrate the arts as much as possible.

Whitin and Moench (2015), both professors of Education, hoped to build preservice teachers’ confidence in and appreciation of the visual arts and help them determine how to best utilize arts with students. Participants, an unidentified number of students in the authors’ university classes, connected with the visual arts in a variety of ways. Students discussed principles and observed/responded to various works (through the author-developed Seeing with a Critical Visual Eye journaling project). They also created their own images including a final multimodal project with images, original text, and an accompanying paper identifying their process. Results showed that students responded to both the images themselves and the messages they communicated. Through self-reporting, students noted increased understanding of abstract concepts through connecting with art. Based on their findings, the authors suggest increased student choice for improved student curiosity and imagination, as well as greater experiences with artistic elements and collaborations between teachers and arts teachers/museums. They also
recommend low-risk, open-ended questions to aid students in considering artists’ ideologies and motives.

Teacher-educators Pool et al. (2011) overhauled one week of instructional time within an undergraduate Educational Psychology class in the fall of 2008 to include arts-integrated best practices and teaching methods. Participants included thirty-five undergraduate elementary and secondary preservice teachers. Lessons included the integration of mathematical concepts in geometry paired with visual art (Raphael’s The School of Athens painting) and student photography of geometric shapes found within the students’ communities. Participant narratives post-learning documented the value of arts-integration with core curriculum and their deepened understanding of content through the arts. One participant explained, “I personally never really cared for math, for instance, and in learning it through more visual and kinesthetic ways, I was able to comprehend geometry in new and interesting contexts” (p. 7) Another stated, “The best part of this lesson was learning about learning in new, creative ways. It made me want to participate, and put a new twist on a ‘boring’ subject such as geometry” (p. 8). The inclusion of arts-based pedagogy to improve learner outcomes is not restricted to teacher education.

**Arts-Based Pedagogy across Higher Education.** Teachers in other disciplines also recognize the benefits of arts-based pedagogy in higher education settings. Garrett (2013) detailed the specifics of the Priddy Fellows Learning Community at Oklahoma City University (OCU). In this program, faculty from varied disciplines were grouped and trained on numerous arts integrated practices. A 4.6 million dollar grant funded the program for five years, allowing fellows to meet weekly and convene at an annual spring retreat week with arts experiences. Over these five years, more than 33% of faculty members voluntarily participated in AI activities, taking a creative approach to teaching. This led to thirty new integrated courses developed across
Garrett describes four of these courses: Sociology integrated with Visual Art, History with Music, History with Visual Art, and Law with Multimedia Arts. These classes instigated a change in OCU’s climate. Student attendance at live performances, art exhibits, and concerts exceeded the national average. “In a random survey of OCU students conducted by CETL, 97% of respondents stated that they would be interested in taking another arts-integrated course” (Garrett, 2013, p. 30). Students thought the AI courses were “hands on” and “refreshing” (p. 30). Faculty feedback praised the program for pushing them to become learners again. The program was the impetus for other faculty focus groups at OCU. Two of the four courses described, “SOC 4603: Mapping [Sub]Cultures” and “HIST 2413: Popular Culture in America: Performing Race and Ethnicity in America,” encouraged cultural relevance/responsiveness. Garrett advocates replicating these experiences at other institutions.

Turner (2014) chronicles another example of arts-based pedagogy in a (non-teacher education) higher education setting. When teaching second-year undergraduates a Molecular Biology unit on genetics, namely prokaryotic and eukaryotic transcription, the professor utilized 3D visual art with pipe cleaners, animations, and dramatic pantomime technique to deliver content. Ninety percent of students found the arts-based pedagogy more enjoyable than non-arts lectures. Student responses and test achievement were compared with those of students from the same unit during the previous instructional year using a two-way unpaired t test. Students who had witnessed the arts-based delivery showed statistically significant improvement on their exam as compared to the exams of students from the previous year ($p = .0009$).

In addition to arts-based learning within preservice teacher education programming, arts-based pedagogy is also beneficial across college and university campuses. After graduation, arts-based professional development and continuing education in the arts also shows promise.
Outcomes of Arts-Based Professional Development

The fourth and final research question in this study focuses on arts-based professional development and subsequent pedagogical frequency. Teachers’ use of the arts is examined in relationship to professional development opportunities and evaluation reports of existing arts-based professional development models (Aprill, 2010; Cunnington et al., 2014; Doyle et al., 2014; Greenfader & Brouillette, 2013; Heitin, 2014; Hicks, 2013; Kinney & Forsythe, 2005; Richard & Treichel, 2013; Saraniero et al., 2014; Walker et al., 2011).

Cunnington et al. (2014) explored *Framing Students for Success*, an integrated program with lessons designed through collaborations between arts specialists and core curricular specialists. The research setting included six Title I elementary schools in New York City. All six schools served substantial ELL and disabled populations. Across the three-year cohort, N = 266 third, fourth, and fifth grade students participated in the Framing Students for Success treatment group and benefitted from (12) arts integrated units. Treatment group teachers also received integrated professional development while the 227 students in the control group did not receive any *Framing Students for Success* integrated lessons. Student scores on New York State’s ELA and Mathematics tests acted as dependent variables. The treatment group had higher mean scores on both the ELA and Math tests every year. Additionally, a multiple regression analysis indicated statistically significant improvement of treatment group achievement over that of the control group in both ELA and Math, even after controlling for prior achievement and demographic factors.

Saraniero et al. (2014) also examined an arts-integration professional development program: The *Developing Reading Education through Arts Methods* (DREAM) professional development offerings. The authors compared two DREAM models – an arts integration summer
institute for 30 hours (N=56) and arts integration coaching throughout the year for 25 hours (N=60). Within both models of DREAM programming, elementary teachers from ten school districts learned to integrate theatre and visual arts with the reading curriculum. A control group who received no coaching and did not attend the institute was also considered (N=71). Data sources included teacher surveys, sample lesson plans, and focus groups. Although 95% of participants in both treatment groups agreed that arts integration with reading was a successful practice, participants from the institute-only group were more likely to report the following integration deterrents: lack of time, lack of administrator support, and lack of resources. In the eyes of one institute-treatment teacher, “I found DREAM very helpful. It’s still hard to find the time to do art because of all the testing we are required to do” (p. 12). The coached teachers overcame many of these obstacles with the help of the coaching.

As opposed to DREAM programming which centered on both theatre and visual arts-based professional development, Walker et al. (2011) focused specifically on a professional development that integrated only the theatre arts. The researchers conducted a randomized controlled longitudinal study of over 1,100 fourth and fifth graders from an urban school district to determine the effectiveness of the Theatre Infusion program on the state’s standardized language arts test. The Theatre Infusion program provided the teachers of treatment group students with twelve hours of arts-integrated professional development and offered treatment group students twenty theatre/language arts integrated lessons. Findings indicate that, when controlling for socioeconomic status and gender, the theatre arts-integrated treatment group students were 42% more likely that the control group students (who lacked arts integrated instruction) to pass the state’s standardized language arts test.
Kinney and Forsythe (2005) used state standardized test scores as dependent variables in their study, comparable to Walker et al. (2011). The authors employed a quasi-experimental design to study the *Arts IMPACT* program on the standardized test scores in Ohio. The *Arts IMPACT* program is an arts integrated professional development program for classroom teachers. The researchers selected two elementary schools as treatment (*Arts IMPACT*) sites. The *Arts IMPACT* team collaborated with teachers at the sites to design and implement arts integration. Two-way Analysis of Variance (ANOVA) was used to analyze mean differences between both a low-income treatment school and a high-income treatment school on achievement. Students attending the low-income treatment (*Arts IMPACT*) school had significantly higher student writing and math achievement than their peers attending the low-income control school. Additionally, the difference between the low-income control group and low-income treatment group exceeded the difference between the high-income control group and high income treatment group.

In another study based in the Midwest, Richard and Treichel (2013) also studied arts-based professional development. The authors describe the *Perpich Arts Integration Project* (PAIP), a two-year Minnesota arts integrated professional development program with goals of increasing both arts and non-arts achievement. Richard and Treichel discuss outcomes of the 9 participating secondary schools (40 teachers) with 14 arts classrooms and 26 regular education classrooms. Prior to the beginning of the school year, teachers received 3 days of arts integrated professional development, 4 days throughout the instructional year, and 2 days at the end of the year, totaling 30 hours. Teachers reviewed student arts integrated work with colleagues, collaborated, and designed integrated lessons based on standards at the professional development sessions. The teachers self-reported improved collaboration and increased understanding of
student learning. Teachers also found that co-teaching allowed for deeper connections across disciplines in their classrooms. In a panel-review process between year one and two of program implementation, a need for explicit cross-curricular integrated learning was expressed, as there was much more co-planning than co-teaching. The panel also reported a lack of rigorous learning goals in arts integrated lessons. These were both improved in year two. Since only 13 arts integrated lessons were taught year 1, and even fewer year 2, there are still many questions about the sustainability of co-planning and co-teaching.

The Chicago Arts Partnerships in Education (CAPE) is likely the most widely-acclaimed arts-based professional development program in the Midwest. Aprill (2010) evaluates the CAPE model which advocates integrated planning time and requires strong leadership. CAPE promotes cooperative, co-equal, co-planning, collaborative environments between classroom teachers, arts specialists, and visiting artists to enable connections. The program does not utilize the arts as mere superficial enhancement to a lesson but as a structure for creative and critical thinking. Other key CAPE features include exhibitions/performances/presentations/products, documentation through metacognition, whole-school themes, arts teacher (artists) professional development and residencies, school and community audiences, long-term partnerships between teachers and artists, and research. A six-year research study of CAPE and non-CAPE schools illustrated improved test scores in CAPE schools.

Similar to the CAPE model, Hicks (2013) describes the National A+ Schools Consortium, an arts-integrated whole-school professional development reform network. The Kenan Institute founded the first 25 A+ schools in North Carolina in 1995. Hicks reported that as of 2013, the network had over 120 schools across its first three states – North Carolina, Oklahoma, and Arkansas. A+ Schools serve diverse students and most schools are funded by a
mixture of district funding, grants, and donations. Hicks profiles some schools in depth. At Douglas Elementary in Raleigh, North Carolina, teachers collaborate to write lessons connect art forms and the core curriculum, including tornadoes with dance, punctuation with drama, and music with research. At Rochelle Middle School, discipline referrals plummeted from 2,000 to 200 after one year in the A+ network. Nelson (2001) also examined the A+ network schools and provided an executive summary of a 4-year study of the A+ schools in North Carolina. In his study, Nelson revealed positive changes stemming from arts integration, including increased attendance, community/parent involvement, and decreased behavior problems.

In a New York-based study featured in *Education Week*, Heitin (2014) described New York’s Everyday Arts for Special Education (EASE) program through the Center for Arts Education Research (Teacher’s College, Columbia University), managed by the Urban Arts Partnership (UAP). This model received a coveted i3 grant in 2010 for 4.6 million/5 years. EASE offers professional development to special education teachers and provides mentoring teaching artists to these teachers for three years. The author insists that the arts are not used as mere lesson enhancement, but as the framework for the content. Teachers received approximately 25 arts-integrated activities that were adaptable to various curriculum topics. Most were movement, creativity, or sensory-focused and facilitate whole-class engagement. In addition to positive teacher feedback citing the ‘fun’ in both the teaching and learning of EASE lessons, the findings revealed that over ¾ of participating students have demonstrated growth in IEP goals such as socialization, engagement, following directions, and staying on task. Just as arts-based pedagogy has implications for Special Education students, learners whose second language is English can also benefit greatly from the arts.
Greenfader and Brouillette (2013) identified an immense problem facing California’s educators: few teachers receive oral language training in preservice programs but the state’s English learners desperately need oral practice, since many do not speak English at home. The Teaching Artist Project (TAP) in San Diego used arts integration to combat this problem. The TAP, a 2-year professional development project funded by a US Department of Education Arts in Education Model Development and Dissemination (AEMDD) grant, was implemented in 30 schools with high ELL populations to both train teachers on oral language best practices and to use arts integration to promote oral language in Kindergarten through second grades (N=3,212). Results showed statistically significant Listening and Speaking improvements for the TAP treatment Kindergartners in the \( p < .05 \) and somewhat significant improvement in the overall English language development for TAP treatment first graders \( p \leq .10 \). Teachers cited many noncognitive benefits including fewer management issues and increased engagement. “It's the kinesthetic piece…ELL students are hearing it. They're doing it. They are understanding it. It's huge. It's hearing it and doing it themselves. This is how people learn. It's different from sitting at the table,” one teacher enthused (p. 175).

Situated in San Diego, Doyle et al. (2014) researched the outcomes for an arts-integrated professional development model for teachers – Collaborations: Teachers and Artists (CoTA). The authors surveyed teacher participants with an extensive questionnaire regarding teacher confidence and exposure to integration methods. CoTA then matched teaching artists to 45 teachers at three low socio-economic status elementary schools in San Diego County and offered professional development opportunities in the arts over a three year period. In year one, teaching artists primarily led the integrated lessons. During year two, teaching artists facilitated the lessons alongside classroom teachers. In the final year of implementation, teachers facilitate all
lessons while teaching artists observe and offer support. Qualitative interviews were conducted during program implementation with teachers in addition to observations of integrated instruction. Quantitative intervention-comparison statistics were used to evaluate arts integrated lessons versus lessons at three comparison schools. After the first year, researchers found that the CoTA treatment group of teachers demonstrated statistically significant increased confidence with AI. Additionally, teachers cited increased enjoyment of lessons. Qualitative themes that emerged included student risk taking, increased motivation, and improved listening skills.

A growing body of work documents the benefits of arts-based professional development. Positive outcomes include numerous cognitive benefits (Aprill, 2010; Cunnington et al., 2014; Saraniero et al., 2014; Kinney & Forsythe, 2005) and noncognitive benefits (Doyle et al., 2014; Greenfader & Brouillette, 2013; Hicks, 2013; Richard & Treichel, 2013). Arts-based professional development has implications for students with accommodations as well (Cunnington et al., 2014; Heitin, 2014). These investigations point to the efficacy of arts-based pedagogy in terms of impacting student outcomes.

Summary

The constructivist-focused arts-based research reviewed presents a strong case for the use of arts-based pedagogy in elementary settings, hence the researcher’s focus on creating a profile of an ECT with the propensity for arts-based pedagogical use. The value inherent in arts-based pedagogy includes both cognitive and noncognitive benefits. Additional research explains that, despite numerous deterrents to the arts’ use in classrooms, prior arts experiences, exposure, preservice, and professional development opportunities are significant predictors of future arts-based pedagogy. A proposed methodology to further explore the research questions is presented in Chapter 3.
CHAPTER 3
METHODOLOGY

The purpose of this study is to create a profile of an elementary teacher with the propensity to utilize the arts as a pedagogical approach. The following research questions guide this study:

1. What factors influence early career teacher (ECT) **frequency** of arts-based pedagogy?
   a. Does prior arts exposure in childhood and adulthood (i.e. learned to play an instrument, participated in after-school plays, etc.) increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers?
   b. Does current practice in an art form increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers?
   c. What is the correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers?

2. What factors improve the perceived **value** or **importance** of the arts to ECTs?
   a. Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) affect the self-reported value of arts-based pedagogy for early-career elementary teachers?
   b. Does arts-based professional development improve the self-reported value of early-career elementary teachers’ arts-based pedagogy?

3. What factors **challenge** ECT use of arts-based pedagogy?

4. What are ECT **self-efficacy** levels related to arts-based pedagogy?
   a. Does prior arts exposure in childhood and adulthood (i.e. learned to play an instrument, participated in after-school plays, etc.) increase the arts-based pedagogy self-efficacy for early-career elementary teachers?
b. Does current practice in an art form increase the arts-based pedagogy self-efficacy for early-career elementary teachers?

c. Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) affect the arts-based pedagogy self-efficacy for early-career elementary teachers?

d. Does arts-based professional development improve the arts-based pedagogy self-efficacy of early-career elementary teachers’ arts-based pedagogy?

e. What is the correlation between the self-efficacy levels of early-career elementary teachers and the level of perceived overall arts instruction at their current school?

**Research Design**

The current study utilizes a non-experimental survey research design. Survey research employs “standardized questionnaires or interviews to collect data about people and their preferences, thoughts, and behaviors in a systematic manner” (Bhattacherjee, 2012, p. 73). The proposed cross-sectional survey will collect data from ECTs about their arts-based pedagogical behaviors, attitudes, and demographics. The research questions necessitated a quantitative methodology, with data collected using a survey instrument. Data analysis will include both descriptive statistics (frequency tables, graphs, etc.) and inferential statistics (independent samples t tests, one-way ANOVA with related post-hoc tests).

One advantage of a survey design is a rapid turnaround (Nardi, 2014). A cross-sectional emailed survey is also considerate of participants’ time, since it is administered only once. Qualtrics © software for data collection is compatible with the *Statistical Package for the Social Sciences* (SPSS) (Version 24; IBM, 2017). Multiple SPSS routines for subsequent data analysis involve both descriptive and inferential measures. Both Qualtrics © and SPSS are user friendly
and cost effective thanks to a license agreement with the researcher’s university. The researcher can access data entered into SPSS via numerous computers on campus or through the university’s Virtual Lab. Some limitations of a survey design, however, include “non-response bias, sampling bias, and social desirability bias” (Bhattacherjee, 2012, p. 73).

Mann (2016) examines researcher situatedness in qualitative methods, and warns that, “Shaping and influence comes from aspects of an interviewer’s identity and background, familiarity with the topic of the interview, and prior relationships with the interviewee” (p. 59). Conversely, quantitative research methods typically allow the researcher to remain increasingly impartial and unbiased. Specific to the current study, the researcher is not a member of the population, but was previously an adjunct instructor of an arts-integrated pedagogy class at the university and is familiar with the members of the population who were enrolled in the class.

**Setting**

The flagship university attended by the study’s population is located in south Louisiana and certifies approximately 50 to 75 elementary teachers per calendar year. The compulsory three-hour arts-based pedagogy class is offered during the final semester prior to students’ graduation while students are student teaching. Online Qualtrics © data collection occurred during a two-week period from the end of March and beginning of April 2018. This data collection window covered all local school systems’ week-long Spring Break, allowing ECTs time to catch up on emails.

**Population and Sample**

Teachers with fewer than five years of teaching experience are defined as ECTs (Evans et al., 2017; Schaefer et al., 2012; Shernoff et al., 2015). For the purposes of this study, ECTs are classified as elementary teachers within their first two years of teaching. From the entire
population of ECTs in elementary placements, the selected convenient purposive sample included currently employed ECTs who are also graduates of a large university in Louisiana. Enrollment in an elementary-based arts class to develop efficacy and comfort with the arts is required by numerous states prior to licensure and certification (Arts Education Partnership, 2014). Pursuant to state requirements, Louisiana requires preservice teachers to complete one arts course totaling three semester hours (La. Admin. Code ch. 2, § 207). All sample participants were enrolled in one of six sections of an arts-based pedagogy class during their last semester of university coursework during one of the following semesters: fall 2016, spring 2017, fall 2017. Two sections were taught using arts-as-curriculum methods (N=38), and the other four were taught using arts-integrated-curriculum methods (N=81).

Institutional Review Board (IRB) approval was obtained on March 26, 2018, prior to requesting participation in the study (see Appendix C). Upon receiving approval, the researcher contacted the university’s alumni association as well as the university’s School of Education to obtain emails for graduates, now ECTs. After compiling a list of former class rosters and emails for the specified population, the researcher sent an email request for participation in the study. For the purposes of this study, neither random selection nor random assignment was employed. All ECTs who were enrolled in one of the six arts-based pedagogy classes during a contiguous three semester span from 2016 fall semester to 2017 fall semester, which occurred during their final semester as a preservice teacher within the university’s School of Education, were invited to complete the questionnaire. Study participation was voluntary. The resultant pool of respondents was considered a non-probability purposive sample. “The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses” (Etikan, Musa, & Alkassim, 2016, p. 2). Based on the
research questions, it was necessary to choose participants who were ECTs and who had completed an arts-based pedagogy class (arts-as-curriculum or arts-integrated curriculum) at the university during fall 2016, spring 2017, or fall 2017.

**Hypotheses**

The research questions germane to this study measure the constructs of frequency, value, self-efficacy, and administrative support in relation to ECT arts-based pedagogy use. With the exception of the descriptive research question #3, each question has a related null and alternative hypothesis (Table 4).

**Table 4. Research Questions and Related Hypotheses**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables (Independent, Dependent)</th>
<th>Null Hypothesis (H₀)</th>
<th>Alternative Hypothesis (H₁)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a.</td>
<td>Independent = 5 prior arts exposure groups Dependent = frequency</td>
<td>H₀ : µ₁ = µ₂ = µₖ</td>
<td>H₁ : Means are not all equal</td>
</tr>
<tr>
<td>1b.</td>
<td>Independent = 2 current artistic practice groups Dependent = frequency</td>
<td>H₀ : µ₁ = µ₂</td>
<td>H₁ : µ₁ ≠ µ₂</td>
</tr>
<tr>
<td>1c.</td>
<td>2 variables: administrative support, frequency</td>
<td>H₀ : r = 0</td>
<td>H₁ : r ≠ 0</td>
</tr>
<tr>
<td>2a.</td>
<td>Independent = 2 preservice arts class groups Dependent = value</td>
<td>H₀ : µ₁ = µ₂</td>
<td>H₁ : µ₁ ≠ µ₂</td>
</tr>
<tr>
<td>2b.</td>
<td>Independent = 2 groups of professional development Dependent = value</td>
<td>H₀ : µ₁ = µ₂</td>
<td>H₁ : µ₁ ≠ µ₂</td>
</tr>
<tr>
<td>3.</td>
<td>Descriptive question, guided by research question itself as opposed to null hypothesis and alternative hypothesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a.</td>
<td>Independent = 5 prior arts exposure groups Dependent = self-efficacy</td>
<td>H₀ : µ₁ = µ₂ = µₖ</td>
<td>H₁ : Means are not all equal</td>
</tr>
<tr>
<td>4b.</td>
<td>Independent = 4 current artistic practice groups Dependent = self-efficacy</td>
<td>H₀ : µ₁ = µ₂ = µₖ</td>
<td>H₁ : Means are not all equal</td>
</tr>
<tr>
<td>4c.</td>
<td>Independent = 2 preservice arts class groups Dependent = self-efficacy</td>
<td>H₀ : µ₁ = µ₂</td>
<td>H₁ : µ₁ ≠ µ₂</td>
</tr>
<tr>
<td>4d.</td>
<td>Independent = 2 groups of professional development Dependent = self-efficacy</td>
<td>H₀ : µ₁ = µ₂</td>
<td>H₁ : µ₁ ≠ µ₂</td>
</tr>
<tr>
<td>4e.</td>
<td>2 variables: self-efficacy, perceived overall arts instruction</td>
<td>H₀ : r = 0</td>
<td>H₁ : r ≠ 0</td>
</tr>
</tbody>
</table>
Instrumentation

Oreck (2001) developed the Teaching with the Arts Survey (TWAS) to research classroom teachers’ frequency of arts usage, along with attitudes and self-efficacy pertaining to arts-based pedagogy (See Appendix B). “The TWAS was directly adapted from two previously validated instruments – the Arts in the Classroom Survey (ACS) (ArtsConnection), and the Teacher Background Questionnaire” (Oreck, 2001, p. 67). A comprehensive review of literature helped establish content validity, while the Principal Component Analysis (PCA) of the piloted instrument aided in the establishment of construct validity. The pilot included a sample of 70 classroom teachers across four schools. The PCA distinguished four components: importance, self-efficacy/self-image, support, and constraints. Cronbach’s Alpha coefficient (1951) ranges from 0 to 1 and the closer the value of Cronbach’s Alpha is to 1.0, the higher the internal consistency/reliability between items (Cronbach, 1951). Cronbach’s Alpha reliability determined from the PCA were as follows: importance ($\alpha = .91$), self-efficacy/self-image ($\alpha = .88$), support ($\alpha = .71$) and constraints ($\alpha = .50$) (Oreck, 2001, p. 70). Items were then checked for reliability by experts in psychology, education, and art education, who recommended further revisions. Oreck rewrote five items and deleted ten items from the survey and then used the TWAS to research 423 teachers’ arts attitudes and the frequency of arts use for his doctoral dissertation research. He found participant self-reporting to be the largest validity threat.

The TWAS primarily uses a 5-point Likert-type scale from 1 (‘strongly disagree’) to 5 (‘strongly agree’) for 23 items which assess teacher attitudes pertaining to the arts. In his email B. A. Oreck (personal communication, January 30, 2018) explains that these items span five literature-based constructs – motivation, concerns, self-efficacy, self-image, and support. Furthermore, 8 items assess arts-based teaching frequency and 24 nominal, dichotomous, and
ordinal demographic items spanning prior arts experience and professional development as well as participant teaching background and current placement (Oreck, 2001). The TWAS culminates with two open-ended items, initially used “for the statistical and qualitative analyses and to identify candidates for in-depth semi-structured interviews” (personal communication with B. A. Oreck, January 30, 2018). Specific to the current study, the researcher elected to retain open-ended items on the TWAS survey to maintain Dr. Oreck’s reliability and validity from the TWAS Technical Report (personal communication, January 30, 2018), and to confirm or disconfirm quantitative findings with qualitative responses.

Permission to use the TWAS was obtained from its developer and copyright holder, Dr. Barry Oreck on January 30, 2018 (See Appendix A). The survey provided a reliable and valid tool to collect data in regards to the research questions and constructs measured for this study. The researcher for this study updated demographic questions in the TWAS to reflect current gender and ethnicity standards and added a third qualitative text-entry item, “Describe the best arts-based lesson currently in your teaching arsenal.” Furthermore, the researcher removed personally identifying items from the TWAS, i.e. name and current school name, to eliminate the possibility of the study necessitating full IRB approval, thus delaying the data collection towards the elementary high-stakes testing time of late April and early May.

**Ethical Considerations**

“Like all research that involves human subjects, the survey researcher needs to be attentive to the ethical manner in which the research is carried out” (Fowler, 2009, p. 163). To ensure anonymity, survey participants were assigned a respondent number only known to the researcher. Participant names were not disclosed in subsequent data analysis, nor in discussions pertaining to the research. Furthermore, the researcher ensured that participants’ identifying
information is stored in a “verifiably secure location,” in accordance with Council of American Survey Research Organizations code of ethics (CASRO, 2011).

The first page of the Qualtrics © survey displayed an informed consent statement for participants. This served to inform participants that the study involved minimal risks and that participants could choose to partake in the survey using their own free will. Participants in this study were not be exposed to any risks other than those associated with normal life. Ethical treatment of any human subject is mandated by the National Research Act of 1974 (P. L. 93-348). Both the informed consent form and approved IRB proposal are found in the appendices.

Data Collection

Dillman, Smyth, and Christian (2009) advocate repeated, personalized contact between researcher and potential survey respondents to boost response rates. Over the course of two data collection weeks, participants received a total of three emails requesting participation, each with the link to the modified Qualtrics © TWAS instrument.

The first page of the Qualtrics © survey displayed an informed consent statement and identify participant instructions. This served to inform participants that the study involved minimal risks and that participants could choose to partake in the survey voluntarily. Participants in this study were not be exposed to any risks other than those associated with normal life. Upon consent, the modified TWAS instrument was be presented to each participant.

For the first section of the modified TWAS questionnaire, participants were asked to answer a series of demographic items. Each set of data collected was assigned a responder number, so that potentially identifiable information (IP address, etc.) could be deleted. No personally identifying information was entered into SPSS for data analysis or utilized in subsequent discussions regarding data analysis. The next three sections of the modified TWAS
addressed attitudes, perceived importance, and frequency of arts-based pedagogy use. These sections asked respondents to select a level of agreement on a Likert-type scale from 1 (‘strongly disagree’) to 5 (‘strongly agree’). The last page of the Qualtrics © survey expressed appreciation for participation.

**Participants and Response Rate**

Although n=50 participants opened the Qualtrics © survey link, the total response rate to the survey administered to 119 members of the population was n = 40. This amounts to 33.6%, which is consistent with Nulty’s (2008) suggested findings. Nulty conducted a response rate comparison across nine pieces of prominent survey-based literature, revealing an average online survey response rate of approximately 33% (Nulty, 2008, p. 303). Nulty also promotes incentivizing survey participation with prizes, however, the study’s researcher decided that distribution of a prize at the completion of the collection period would call the anonymity of participants into question in two ways: 1. Participants may have wanted to know the identification of the survey participant who won to ensure that the incentive was disseminated as promised, and 2. Participants would have had to enter personally identifying information in order to be eligible for the incentive.

**Analysis Plan**

After collecting data from the modified TWAS over a two-week data collection window in the spring of 2018, the researcher conducted a consistency check of the collected data set within SPSS and cleaned the data set to discard any missing responses, thoroughly analyzing what percentage of respondents had not completed the entire questionnaire. The researcher then determined that no questions within the data set required reverse coding. Afterward, each scale
(frequency, value, self-efficacy, administrative support) was transformed into a new variable for the constructs the researcher intended to measure.

Both descriptive and inferential statistics were utilized in data analysis of the research questions. The first research question, “Does prior arts exposure in childhood and adulthood (i.e. learned to play an instrument, participated in after-school plays, etc.) increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers,” has five independent variables groups of levels of previous arts exposure and one dependent variable (frequency of arts-based pedagogy). The null hypothesis is that the means of all groups are equal ($H_0 : \mu_1 = \mu_2 = \mu_k$). Based on the data, the researcher elects to use a one-way ANOVA (Hinkle, Wiersma, & Jurs, 2003) to analyze the data collected for this question. The following assumptions accompany a one-way ANOVA: independence, an absence of outliers, and homogeneity of variance.

Since participants can only choose one response to the prior arts exposure item, the subjects in each level of the independent variable are assumed to be independent of each other. To check for an absence of outliers in the data set, the researcher will ensure that all scores from respondents were within a “normal” range on the Likert-type scale for frequency and within the “normal” range (0-5) for levels of the independent variable. A Levene’s Test (Hinkle et al., 2003) procedure will be conducted within SPSS to check for homogeneity of variances between the two samples. The researcher intends to run the one-way ANOVA routine in SPSS. If the F test statistic is significant at the .05 alpha level, the researcher will reject the null hypothesis that the difference between group means is zero.

The second research question, “Does current practice in an art form increase the self-reported frequency of arts-based pedagogy for early-career elementary teachers,” has two independent variables (current art form practice, does not currently practice an art form) and one
dependent variable (frequency of classroom arts use). The null hypothesis is that the means of both groups are equal ($H_0: \mu_1 = \mu_2$). The researcher elects to analyze data with the independent samples t test. This statistical routine also has various assumptions including an independent variable measured with two categorical groups, a dependent continuous variable, independence of observations, and an absence of outliers. The grouping variable of current artistic practice is divided into two categorical groups (1 = current practice, 0 = lack of current practice), while the continuous dependent variable of frequency was computed with the means of the frequency scale. To check for an absence of outliers in the data set, the researcher will ensure that all scores from respondents were within a “normal” range on the Likert-type scale for frequency and within the “normal” range (0-5) for levels of the independent variable. Independent observations are apparent; Participants can only belong to one or the other level of the grouping variable. If the t test statistic exceeds the $t_{cv}$ and if the significance is < .05, the researcher will reject the null hypothesis that the difference between the frequency means of the group which currently practices an art form and the group which does not is zero.

Research question 1c. asks, “What is the correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers?” The data collected will be analyzed using the Pearson Product Moment Coefficient (Pearson, 1896). The Pearson $r$ ranges from -1 to +1, and shows both the strength (closer to -1 or to +1) and direction (negative or positive) of the relationship. The null hypothesis for this research question states that, “There is no correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers,” which will be rejected if a significant relationship between the two variables is revealed.
Unlike research questions 1a, 1b, and 1c which were concerned with ECT frequency of arts-based pedagogy, research questions 2a and 2b are concerned with the perceived value/importance of arts-based pedagogy. Question 2a, “Does the type of preservice arts class (arts as curriculum versus arts-integrated curriculum) affect the self-reported value for arts-based pedagogy for early-career elementary teachers,” has two independent variables (preservice arts-as-curriculum class, preservice arts-integrated curriculum class) and one dependent variable (value). The null hypothesis is that the means of both groups are equal (H₀ : μ₁= μ₂). The researcher will again use the independent samples t test to analyze the data collected. All previously mentioned assumptions will apply. If the t test statistic exceeds the tcv and if the significance is < .05, the researcher will reject the null hypothesis that the difference between the value means of the different preservice arts classes is zero.

Research question 2b is also concerned with ECT value of arts-based pedagogy, “Does arts-based professional development improve the self-reported value for early-career elementary teachers’ arts-based pedagogy.” This question has two independent variables (arts-based professional development in the last year, lack of arts-based professional development) and one dependent variable (value). The null hypothesis is that the means of both groups are equal (H₀ : μ₁= μ₂). The researcher will again use the independent samples t test. All previously mentioned assumptions will apply. If the t test statistic exceeds the tcv and if the significance is < .05, the researcher will reject the null hypothesis that the difference between the frequency means of different arts-based professional development groups is zero.

Research question 3 is unique. It does not have a hypothesis due to its descriptive nature. The question reads, “What factors challenge ECT use of arts-based pedagogy?” Data analysis was guided by the question itself in lieu of statistical analyses determined a priori.
Research questions 4a-4e necessitate a return to inferential analyses, this time focusing on the construct of ECT self-efficacy. The null hypothesis for question 4a asserts that “There is no significant difference between the arts-based pedagogical self-efficacy of early-career elementary teachers who practiced an art form in childhood/adulthood and those who did not. The researcher will use a one-way ANOVA was used to test the equality of means amongst the five independent groups of prior artistic practice (0=no prior artistic practice, 1= prior practice in one art form, 2=prior practice in two art forms, 3 = prior practice in three art forms, and 4 = prior practice in all four art forms) and the dependent variable of ECT self-efficacy. All aforementioned assumptions accompanying the one-way ANOVA will apply. The null hypothesis is that the means of all groups are equal (H₀: μ₁= μ₂= μ₃). If the F test statistic is significant at the .05 alpha level, the researcher will reject the null hypothesis that the difference between group means is zero.

Question and related hypothesis 4b examines self-efficacy through the lens of current artistic practice. Hypothesis 4b states that, “There is no significant difference between the arts-based pedagogical self-efficacy of early-career elementary teachers who currently practice an art form and those who do not,” requiring another one-way ANOVA routine was used to examine the data. If the F test statistic is significant at the .05 alpha level, the researcher will again reject the null hypothesis that the difference between group means is zero.

Research question 4c returns to the preservice arts training groups and their impact on ECT self-efficacy. The research question states, “Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) increase the arts-based pedagogy self-efficacy for early-career elementary teachers?” The null hypothesis is that the means of both groups are equal (H₀: μ₁= μ₂). The researcher will again use the independent samples t test. All previously
mentioned assumptions will apply. If the t test statistic exceeds the $t_{cv}$ and if the significance is < .05, the researcher will reject the null hypothesis that the difference between the self-efficacy means of different arts-based preservice groups is zero.

Similar to question 2b, research question 4d is also concerned with ECT arts-based professional development. The question looks at professional development in relation to ECT self-efficacy with arts-based pedagogy, “Does arts-based professional development improve the self-reported value for early-career elementary teachers’ arts-based pedagogy?” This question has two independent variables (arts-based professional development in the last year, lack of arts-based professional development) and one dependent variable (value). The null hypothesis is that the means of both groups are equal ($H_0 : \mu_1 = \mu_2$). The researcher will again use the independent samples t test. All previously mentioned assumptions will apply. If the t test statistic exceeds the $t_{cv}$ and if the significance is < .05, the researcher will reject the null hypothesis that the difference between the frequency means of different arts-based professional development groups is zero.

Much like research question 1c, question 4e is correlation-based. The null hypothesis claims that, “There is no correlation between ECT’s perceived value or importance of the arts and ECT self-efficacy with arts-based pedagogy.” The data collected will be analyzed using the Pearson Product Moment Coefficient. The null hypothesis will be rejected if a significant relationship between the two variables, value and self-efficacy, is revealed.

Should data analysis reveal significant differences between means, effect sizes will be generated to measure the magnitude of the significant differences. The researcher will use Cohen’s (1988) $d$, or the difference between means, divided by the Rosnow and Rosenthal’s (1996) pooled standard deviation to determine effect sizes of significant differences which emerge from independent samples t test routines. For one-way ANOVA routines, eta squared
\( \eta^2 \) estimates the degree association for the sample, whereas omega squared \( (\omega^2) \) estimates the degree of association for the population. Should a one-way ANOVA routine produce a significant difference between means, the researcher elects to use a Univariate ANOVA SPSS© output and the formula \( \eta^2 = \frac{SS_{\text{effect}}}{SS_{\text{total}}} \) to determine the effect size of the sample. Finally, if correlation coefficients are found to be significant, the researcher will square the \( r \) value to find the coefficient of determination \( (r^2) \) to determine the explained variability in the data correlated.

**Limitations**

Several limitations influence the scope and generalizability of this study. First, this study is limited by the type of sampling (purposive sampling), the sample itself, and the sample size. “The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses” (Etikan, Musa, & Alkassim, 2016, p. 2). Potential participants were also excluded from survey participation if they did not complete all survey items, were not currently teaching, or were teaching in a non-elementary setting. Samples of convenience are also “relatively homogenous…and they often have direct or indirect relationships with the researchers” (Saldaña & Omasta, 2018).

Indeed, the sample is ethnically and gender homogenous (89.3% White and 100% female), however, it is highly reflective of Louisiana’s public school teacher demographics, and indicative of national trends. While 82% of public school K-12 teachers are White, teaching predominantly non-White students (Maxwell, 2014; National Center for Education Statistics, 2013), the results of this study cannot be generalized to ethnically diverse teachers. The study also lacks generalizability to male teachers, since 100% of respondents identified as female. Researcher knowledge of members of the population serves as another limitation. These individuals were previously enrolled in the researcher’s arts-integrated university class and may
be biased to answer survey items leaning a particular way, knowing who will eventually interpret the data.

The sample size is limited to ECTs who were enrolled in arts methods classes at the university from the fall of 2016, spring of 2017, and the fall of 2017. This condensed time frame is necessitated by research questions 2a, “Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) affect the self-reported frequency of arts-based pedagogy for early-career elementary teachers?” and 4c, “Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) increase the arts-based pedagogy self-efficacy for early-career elementary teachers?” It is imperative that all participants are members of one of the two preservice training groups.

Finally, Oreck (2001) found that participant self-reporting was the chief threat to validity. By participating in the modified TWAS, early-career elementary teachers employ self-reporting strategies, which may not be entirely accurate (i.e. the inability to remember all prior arts exposure or length of time they studied the arts as a child).

**Delimitations**

This research study was specifically delimited in three ways. The researcher has selected a cross-sectional survey in lieu of a longitudinal one. Although a pre- and post- test design based on preservice class type would be beneficial, the researcher would have needed to administer a pre-test years ago, prior to the arts-based pedagogy instruction in the fall of 2016. Another delimitation is the researcher’s decision to submit an exempt form for IRB approval, understanding that names and personally identifying information could not be collected from participants, excluding the possibility that the study had to endure a full review. The third delimitation was the concept of only studying recent graduates, now ECTs, from one university.
This is the only university in the state that offers an arts-based pedagogy class taught two ways, arts-as-curriculum versus arts-integrated-curriculum, which served as the impetus for a one-university study.

**Researcher’s Perspective on Positionality**

As a researcher, I first became enamored with the arts, particularly the performing arts, while participating in community theatre as a young child in the 1980s. Throughout elementary and middle school, I gleefully enrolled in a multitude of dance classes, voice lessons, and piano lessons. In the eighth grade, I gained a spot on my school’s dance team and marched/danced in numerous Mardi Gras parades, a highlight in South Louisiana! I chose to attend an arts-based boarding school for both my junior and senior year of high school and was selected as a member of the all-state choir during this time. During my undergraduate years, I performed in frequent theatre productions and was a member of the university’s tap repertory company. After obtaining my Bachelor’s degree in Musical Theatre, I moved to New York City to audition full time.

Incredible opportunities presented themselves while auditioning in New York, including an 8-month stint as a singer/actress/dancer at Wild Adventures Theme Park in Valdosta, Georgia, as well as two consecutive Disney Cruise Line contracts. Performing internationally for thousands of audience members per day was the thrill of a lifetime. It was Disney’s ‘VoluntEARS’ program which opened my eyes to underserved communities’ lack of access to the arts. This galvanized my decision to return to Louisiana to teach the arts and obtain a Master’s degree in teaching.

Through my career as a theatre specialist within a large urban public school system in South Louisiana, my consulting work with several statewide arts and creative learning organizations, and my arts-based presentations and workshops at numerous national conferences
and conventions, I recognize firsthand the power and promise of arts-based pedagogy. Furthermore, I have been fortunate to use arts-based pedagogy with preservice learners as the instructor of the “Arts in the Elementary School” class within my university’s School of Education since the fall of 2016. This course metamorphosis has led to improved course evaluation scores. Follow-up surveys with preservice participants expose self-efficacy and confidence with multimodal teaching. Additionally, most students enrolled in these courses express the “value” of the arts to their work with students and has infused enjoyment into both teaching and learning.

Summary

A quantitative survey research design was selected for this study. The data will be collected using a modified TWAS, and subsequent descriptive statistical analysis aims to assist in the creation of a profile of a teacher with the propensity to utilize the arts as a pedagogical approach by measuring ECT arts-based frequency, value, self-efficacy, and related administrative support, filling a chasm in existing literature. Resultant data could be advantageous to a variety of educational stakeholders including teacher educators, institutions of higher education, teacher preparation programs, and individual schools/school districts. Hopefully, the results of this study can be utilized to recruit future educators (prior arts exposure and current artistic practice), and to make programmatic changes to existing teacher preparation programs (i.e. the type of arts-based pedagogy class offered to preservice learners). Furthermore, statistics related to effective professional development for teachers are valuable to schools and districts who offer their employees professional development opportunities.
CHAPTER 4
RESEARCH FINDINGS

The purpose of the current study was to create a profile of a teacher with the propensity to utilize the arts as a pedagogical approach. In an attempt to glean a rich picture of elementary arts-based pedagogical valuation and frequency, teacher self-efficacy in the arts, and deterrents to arts-based practices, the researcher selected a survey research methodology to examine phenomena in ECT elementary classrooms.

Population and Sample

For the purposes of this study, ECTs are classified as novice elementary teachers within their first two years of teaching. Parameters for inclusion in the population include the following: ECTs currently teaching in an elementary school; ECTs who were enrolled in one of six sections of an arts-based pedagogy class during their last semester of university coursework at the researcher’s university in the fall of 2016, the spring of 2017, or the fall of 2017. Two sections of the arts-based pedagogy class were taught using arts-as-curriculum methods (N=38), while the other four were taught using arts-integrated curriculum methods (N=81). The total population contained 119 ECTs. IRB approval was received on March 26, 2018 (Appendix C).

Regrettably, the population’s alma mater terminates university ‘.edu’ emails upon graduation. This posed sampling concerns for survey dissemination using the intended purposive sampling procedure. The researcher, a former elementary theatre specialist for a large local public school system and an arts consultant for a nearby school system, both of which employ countless graduates from the ECT pool’s alma mater, was familiar with several ECT placements post-graduation and had access to current email addresses. Upon receiving IRB approval, the researcher sent short emails and messages on social media containing the Qualtrics © survey link to acquaintances in the population using school system email addresses. The email recipients
then forwarded the link to fellow members of their university cohort, indicative of respondent-driven snowball sampling (Coleman, 1958). This study did not employ random selection or random assignment. The study employed voluntary participation, thus, the forthcoming results and findings are generalized only to the ECTs who participated in the research study. Although n=50 participants opened the Qualtrics © survey link, the total response rate to the survey administered to 119 members of the population was n = 40. This amounts to 33.6%, which is consistent with Nulty’s (2008) recommendations. Nulty conducted a response rate comparison across nine pieces of prominent survey-based literature, revealing an average online survey response rate of approximately 33% (Nulty, 2008, p. 303). Of these n = 40 responses, twelve participants’ responses were discarded. Data from participants who did not complete the survey in its entirety were removed when the dataset was cleaned. Data from participants who were not teaching, or not teaching in elementary settings at the time of the survey were removed.

**Participant Demographics**

Of the n = 28 ECTs who completed the survey, the sample was 100% female (n = 28) and 0% male (Table 5). The national teaching population in the US is increasingly female; Approximately 84% of the teacher workforce identified as female in 2011, up from 74% in 1996 and 69% in 1986 (National Center for Education Information, 2011). The sample was also ethnically homogenous; White ECTs accounted for 89.3% of the sample (Table 6). Eighty-two percent of public school K-12 teachers are White, teaching predominantly non-White students (Maxwell, 2014; National Center for Education Statistics, 2013). The sample was also predominantly 23 years old (Table 7).

<table>
<thead>
<tr>
<th>Table 5. Gender</th>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Valid Female</td>
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Table 6. Ethnicity

<table>
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<th>Valid Percent</th>
<th>Cumulative Percent</th>
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</thead>
<tbody>
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<td></td>
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<td></td>
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<td>3.6</td>
<td>3.6</td>
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<td>7.1</td>
<td>10.7</td>
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<td>Total</td>
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<td>100.0</td>
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</table>

Table 7. Age

<table>
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<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>4</td>
<td>14.3</td>
<td>14.3</td>
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<td>23</td>
<td>15</td>
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<td>26</td>
<td>1</td>
<td>3.6</td>
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<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
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</tbody>
</table>

Although three participants did not respond with their current grade, the frequencies of each grade represented ranged from 2 participants currently teaching fifth grade to 9 participants currently teaching third grade (Table 8).

Table 8. Grade Currently Teaching

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
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<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>21.4</td>
<td>21.4</td>
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<td>2</td>
<td>5</td>
<td>17.9</td>
<td>17.9</td>
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<td>9</td>
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<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
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</tbody>
</table>
The percentage of survey respondents who were enrolled in an arts-as-curriculum section in the fall of 2016, spring of 2017, or fall of 2017 was \( n = 8 \) while those enrolled in an arts-integrated-curriculum section during the same semesters was \( n = 20 \) (Table 9).

Table 9. Preservice Arts Class, 1 = Arts-as-curriculum, 2 = Arts-integrated curriculum

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1.00</td>
<td>8</td>
<td>28.6</td>
<td>28.6</td>
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<td>20</td>
<td>71.4</td>
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<td>Total</td>
<td>28</td>
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</table>

Participants views on the level of arts instruction at their current teaching placements varied greatly by artform. The modified TWAS asked respondents to categorize arts instruction at their current school as excellent, adequate, or inadequate. The bar graphs in Figures 1, 2, 3, and 4 illustrate the frequency of respondents’ answers to these items.

Figure 1. ECT Perception of Current Visual Arts Instruction
Figure 2. ECT Perception of Current Dance Instruction

Figure 3. ECT Perception of Current Music Instruction
Scales, Constructs, and Reliability

From the scales inherent to Oreck’s TWAS which measured artistic importance or value, self-efficacy with the arts/self-image with teaching the arts, support for the arts, and constraints, the researcher of the current study opted to compute the following new variables to use when analyzing constructs within individual research questions: frequency, self-efficacy, value, and administrative support. Items 17.1 through 17.8 completed a Likert scale which asked participants about the importance of the arts. These items were computed into the VALUE_Scale variable. Similarly, items 18.1 through 18.8 comprised a second Likert scale which asked participants about their frequency of arts implementation. These items were computed into the FREQ_Scale variable. A third Likert scale asked participants to select their level of agreement regarding their arts attitudes and concerns. Some items were concerned with teacher self-efficacy, some with administrative support for the arts, and some with deterrents to using the arts. Items 19.1, 19.3, 19.5, 19.8, 19.10, and 19.14 were computed into the SELFEFF_Scale variable to study the construct of teacher self-efficacy with the arts. Items 19.6, 19.11, and 19.13 were computed into the ADMINSUP_Scale to study the construct of administrative support.
Items 19.2, 19.4, 19.7, 19.9, and 19.15 related to arts deterrents are examined further later in this chapter, as is item 19.12 which does not fit a construct variable. No scale items were deleted or changed, in order to maintain internal consistency of the TWAS.

Upon the creation of the new variables, the researcher chose to run a series of reliability analyses to measure stability of results. Oreck’s (2001) pilot of the TWAS with 70 teachers produced the following internal consistency reliability ratings: importance or value (α = .91), self-efficacy/self-image (α = .88), support (α = .71) and constraints (α = .50) (Oreck, 2001, p. 70). Germane to the current study, the Cronbach’s alpha for each of the computed variables are as follows: Frequency α = .742 (Table 10), Value α = .762 (Table 11), Self-Efficacy α = .725 (Table 12), and Administrative support α = .791 (Table 13).

Table 10. Frequency Construct Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
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<tbody>
<tr>
<td>.742</td>
<td>.757</td>
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<td>.742</td>
<td>8</td>
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Table 11. Value Construct Reliability Statistics

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<thead>
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<td>.762</td>
<td>.769</td>
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Table 12. Self-Efficacy Construct
Reliability Statistics

<table>
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<tr>
<td>Cronbach's Alpha</td>
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<td>.714</td>
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<td>N of Items</td>
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Table 13. Administrative Support Construct
Reliability Statistics

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<tr>
<td>Cronbach's Alpha</td>
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<td>.803</td>
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<td>N of Items</td>
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**Results for Hypotheses**

The following sections present the findings of the current research study. Specifically, an examination of whether or not various inferential routines revealed a statistical significance for each research question hypothesis and the decision related to the null hypothesis for each research question based on the data analysis is presented.

**Hypotheses 1a, 1b, and 1c**

Hypotheses 1a, 1b, and 1c fall under the overarching umbrella concerned with factors which influence the frequency of ECT arts-based pedagogy use. Specifically, hypothesis 1a stated: There is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who practiced an art form in childhood/adulthood and those who did not. In lieu of using multiple t tests with a heightened Type-I error rate, a one-way ANOVA was used to test the equality of means amongst the five independent groups of prior artistic practice (0=no prior arts experience, 1=prior arts experience in one art form, 2=prior arts experience in
two artforms, 3=prior arts experience in 3 art forms, and 4=prior arts experience in all four art forms) and the dependent variable of ECT arts-based pedagogical frequency. The ANOVA output shows that, of the N=27 respondents, only five respondents did not practice and art form in the past, either as a child or as an adult (Table 14). Levene’s test is not significant, thus the homogeneity of variance assumption has been met (Table 15). The lack of a significant F value in the one-way ANOVA (Table 16) output resulted in not rejecting the null hypothesis for research question 1a.

Table 14. Hypothesis 1a. Descriptives

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<tr>
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<th>Std. Error</th>
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<th>Upper Bound</th>
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<tbody>
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<td>.00</td>
<td>5</td>
<td>2.7250</td>
<td>.62750</td>
<td>1.9459</td>
<td>3.5041</td>
<td>1.63</td>
<td>3.13</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td>10</td>
<td>2.2500</td>
<td>.76376</td>
<td>1.7036</td>
<td>2.7964</td>
<td>1.25</td>
<td>3.88</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>7</td>
<td>2.7321</td>
<td>.39810</td>
<td>2.3640</td>
<td>3.1003</td>
<td>2.13</td>
<td>3.13</td>
</tr>
<tr>
<td></td>
<td>3.00</td>
<td>2</td>
<td>2.5000</td>
<td>.70711</td>
<td>-.38531</td>
<td>8.8531</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>4.00</td>
<td>3</td>
<td>1.8333</td>
<td>.50518</td>
<td>.5784</td>
<td>3.0883</td>
<td>1.25</td>
<td>2.13</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>2.4352</td>
<td>.65813</td>
<td>.12666</td>
<td>2.1748</td>
<td>2.6955</td>
<td>1.25</td>
<td>3.88</td>
</tr>
</tbody>
</table>

Table 15. Hypothesis 1a. Levene’s Test for homogeneity of variance

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Based on Mean</td>
<td>.361</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Based on Median</td>
<td>.410</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Based on Median and with adjusted df</td>
<td>.410</td>
<td>4</td>
<td>17.546</td>
</tr>
<tr>
<td></td>
<td>Based on trimmed mean</td>
<td>.362</td>
<td>4</td>
<td>22</td>
</tr>
</tbody>
</table>
Table 16. Hypothesis 1a. One-way ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.475</td>
<td>4</td>
<td>.619</td>
<td>1.549</td>
<td>.223</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8.786</td>
<td>22</td>
<td>.399</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.262</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 1b indicated that there is no significant difference between the arts-based pedagogical frequency of early-career elementary teachers who currently practice an art form and those who do not. Of the 28 survey respondents, 27 responded to the item “Do you currently practice an artform?” Twelve respondents do not currently practice an art form while fifteen respondents do (Table 17). An independent samples t test was used to compare mean differences from both the current arts group and the group that does not currently practice an art form on the dependent variable of Frequency. There is a statistically significant (.012 significance at the .05 \( \alpha \) level) between means (Table 18). The frequency of arts-based pedagogy use by teachers who currently practice an art form is statistically higher than by those who do not currently practice. The researcher elected to reject the null hypothesis for research question 1b. In order to measure the magnitude of the significant difference between means, Cohen’s \( d \), a measure of effect size, the researcher used Table 17 to calculate the mean difference and pooled standard deviation. Using the formula \( d = \frac{|M_1- M_2|}{s_{\text{pooled}}} \), the effect size was found to be .2887, a relatively small effect.

Table 17. Hypothesis 1b. Group Statistics

<table>
<thead>
<tr>
<th>Insert_Curr_Freq</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean</td>
<td>.00</td>
<td>12</td>
<td>2.5417</td>
<td>.84667</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td>15</td>
<td>2.3500</td>
<td>.47293</td>
</tr>
</tbody>
</table>
Table 18. Hypothesis 1b. Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>7.430</td>
<td>.012</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.702</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Hypothesis 1c states: There is no correlation between administrative support for the arts and the self-reported frequency of arts-based pedagogy for early-career elementary teachers.

Pearson’s Correlation Coefficient was used to determine the relationship between the frequency of arts-based usage and administrative support. The correlation routine output shows a moderately positive correlation ($r = .575$) with a significance of $.002$ (Table 19). This significant finding was cause to reject the null hypothesis which predicted no significant relationship between the variables. The coefficient of determination, $r^2$, equals .33, thus, 33% of the variance in the frequency of arts-based usage was accounted for by administrative support.

Table 19. Correlation between Frequency and Admin. Support

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean Pearson Correlation</td>
<td>1</td>
<td>.575**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>N</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>mean Pearson Correlation</td>
<td>.575**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>N</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

Table Cont’d.
**. Correlation is significant at the 0.01 level (2-tailed).

**Hypotheses 2a and 2b**

Similar to Hypothesis 1a and 1b, hypotheses 2a and 2b fall under an overarching umbrella. These hypotheses, however, focus on the overarching construct of value. Specifically, hypothesis 2a stated: There is no significant difference between the perceived arts-based pedagogical value of early-career elementary teachers who completed an arts-as-curriculum preservice course and those who completed an arts-integrated curriculum preservice course. The results of an independent samples t test routine indicated no statistically significant difference between the value means of respondents who were enrolled in an arts-as curriculum class (n=8) and those enrolled in an arts-integrated curriculum class (n=20) (Table 20).

<table>
<thead>
<tr>
<th>Insert_Teacher</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>8</td>
<td>4.2969</td>
<td>.41693</td>
<td>.14741</td>
</tr>
<tr>
<td>2.00</td>
<td>20</td>
<td>4.1050</td>
<td>.53660</td>
<td>.11999</td>
</tr>
</tbody>
</table>

Surprisingly, however, one quintessential value-based item not within the value scale obtained the highest mean across any scale. This item (19.2) within the self-efficacy scale asked participants to rank their level of agreement with the following statement: “I feel that there are many students in my class who would especially benefit from more arts activities in the curriculum.” Although not included in the computed variable “Value” due to the item’s Likert scale instruction variations between the Value/Importance Scale instructions and the Self-Efficacy scale instructions, if included with the computed ‘Value’ variable, it would have increased Cronbach’s alpha from .762 to .777. The mean for item 19.2 was $\bar{x} = 4.37$, however, in the arts-as curriculum group, the mean was an extremely high 4.75 (Table 21).
Table 21. Item 19.2 Mean
I feel that there are many students in my class who would especially benefit from more arts activities in the classroom.

<table>
<thead>
<tr>
<th>Insert_Teacher</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>4.75</td>
<td>8</td>
<td>.463</td>
</tr>
<tr>
<td>2.00</td>
<td>4.21</td>
<td>19</td>
<td>.535</td>
</tr>
<tr>
<td>Total</td>
<td>4.37</td>
<td>27</td>
<td>.565</td>
</tr>
</tbody>
</table>

Hypothesis 2b focused on perceived value and importance based on professional development in the arts. The hypothesis stated: There is no significant difference between the arts-based pedagogical value of early-career elementary teachers who participated in an arts-based professional development in the twelve months prior to the survey and those who did not. Unfortunately, of the n=28 ECTs who responded to the question, “Have you attended any ARTS workshops for teachers in the past 12 months,” twenty-seven respondents had not attended any (Table 22).

Table 22. Have you attended any ARTS workshops for teachers in the past 12 months?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Yes</td>
<td>1</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>27</td>
<td>96.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>28</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Although the research question could not be adequately assessed with the data collected, there is a significant need for arts-based professional development for ECTs, as evidenced by many respondents’ end-of-survey text entry to the prompt, “What do you feel would motivate you to use the arts more than you already do?” Out of n=23 text entries, respondents 1, 7, and 27 cited “training” and respondent #13 mentioned “appropriate professional development.
tools/materials.” Arts-based resources also surfaced as a need. Respondents 4, 5, 6, 8, 14, and 18 expressed a lack of appropriate supplies, resources, and materials.

**Hypothesis 3**

Due to the descriptive nature of research question 3, “What factors challenge ECT use of arts-based pedagogy?”, the research proceeded guided by the question itself, without a hypothesis. In considering the arts-based deterrents and challenges found within Chapter Two’s literature review and the deterrent-based items within the modified TWAS, the researcher compiled the following table (Table 23). With $n = 27$ respondents, pre-scripted curriculum constraints ($\bar{x} = 4.19$ on a 5-point Likert scale) and time constraints ($\bar{x} = 3.67$ on a 5-point Likert scale) were identified as deterrents. According to the data, the means of the noise level of arts activities ($\bar{x} = 2.11$), space concerns ($\bar{x} = 2.89$), and students inability to concentrate post-arts activity ($\bar{x} = 2.96$) fell between the ‘disagree’ (selection 2 of a 5-point Likert scale) and ‘neither agree or disagree’ (selection 3 on a 5-point Likert scale).

Both deterrents of pre-scripted curriculum and time constraints are echoed in the end-of survey text entries. More participants (# 5, 6, 8, 12, 17, 20, and 22) named time as a chief deterrent than any other factor. When asked about the foremost motivator to use the arts, Participant 23 wrote, “If the curriculum I taught wasn’t so demanding. The lessons that I have to teach are already so long and scripted, that it has been very hard to work in my own creativity.” Respondents 10, 11, 22, and 24 also commented on the narrowsness of the pre-scripted curriculum.
Table 23. Hypothesis 3. Deterrent Descriptives

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel that I don't have enough time to teach the arts along with</td>
<td>27</td>
<td>1</td>
<td>5</td>
<td>3.67</td>
<td>1.271</td>
</tr>
<tr>
<td>the rest of the curriculum.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am concerned that music, dance, and theatre activities are too</td>
<td>27</td>
<td>1</td>
<td>5</td>
<td>2.11</td>
<td>1.086</td>
</tr>
<tr>
<td>noisy or disruptive for the classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don't have enough space to use movement effectively in the</td>
<td>27</td>
<td>1</td>
<td>5</td>
<td>2.89</td>
<td>1.251</td>
</tr>
<tr>
<td>classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My students have trouble concentrating on other work after an</td>
<td>27</td>
<td>1</td>
<td>5</td>
<td>2.96</td>
<td>1.018</td>
</tr>
<tr>
<td>arts activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel constrained by the demands of the curriculum I have to</td>
<td>27</td>
<td>2</td>
<td>5</td>
<td>4.19</td>
<td>.921</td>
</tr>
<tr>
<td>teach.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Similar to the deterrent-specific items within the modified TWAS, three survey items also regarded administrative support for the arts in schools. When computed into their own variable, these three items, 19.6, 19.11, and 19.13 had a Cronbach’s alpha of .791, showing strong internal consistency. Of the n=27 participants’ responses to the three individual items on a five-point Likert scale, a supervisor who encouraged creativity (\(\bar{x} = 3.04\)), administrative support of innovative teaching (\(\bar{x} = 3.19\)), and the ability to use new teaching approaches (\(\bar{x} = 3.52\)), the responses all fell between ‘Neither agree or disagree’ (selection 3) and ‘Agree’ (selection 4) on the Likert scale (Table 24). Correspondingly, three participants’ text entry to an end-of-survey
question responded that administrative support is the chief motivator to increase their arts’ use.

Respondent #18 expounded, “If I had a school that supported and understood the importance of the arts in education, I would be much more open and willing to use the arts more often.”

<table>
<thead>
<tr>
<th>Table 24. Hypothesis 3. Administrative Support Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>My supervisor encourages teacher creativity.</td>
</tr>
<tr>
<td>In general, my school is supportive of innovative teaching approaches.</td>
</tr>
<tr>
<td>I am free to use new teaching approaches in my classroom as I see fit.</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

**Hypotheses 4a, 4b, 4c, 4d, and 4e**

The final research questions and interrelated hypotheses focus on ECT self-efficacy.

Hypothesis 4a stated: There is no significant difference between the arts-based pedagogical self-efficacy of early-career elementary teachers who practiced an art form in childhood/adulthood and those who did not. In lieu of using multiple t tests with a heightened Type-I error rate, a one-way ANOVA was used to test the equality of means amongst the five independent groups of prior artistic practice (0=no prior artistic practice, 1= prior practice in one art form, 2=prior practice in two art forms, 3 = prior practice in three art forms, and 4 = prior practice in all four art forms) and the dependent variable of ECT self-efficacy. The ANOVA output shows that of the n=27 respondents, only five respondents did not practice an art form in the past whatsoever, either as a child or as an adult (Table 25).
Table 25. Hypothesis 4a. Descriptives

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>5</td>
<td>2.9000</td>
<td>.45031</td>
<td>2.3409 - 3.4591</td>
</tr>
<tr>
<td>1.00</td>
<td>10</td>
<td>2.9667</td>
<td>.80814</td>
<td>2.3886 - 3.5448</td>
</tr>
<tr>
<td>2.00</td>
<td>7</td>
<td>3.6667</td>
<td>.44096</td>
<td>3.2588 - 4.0745</td>
</tr>
<tr>
<td>3.00</td>
<td>2</td>
<td>3.4167</td>
<td>.11785</td>
<td>2.3578 - 4.4755</td>
</tr>
<tr>
<td>4.00</td>
<td>3</td>
<td>3.7778</td>
<td>.09623</td>
<td>3.5387 - 4.0168</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>3.2593</td>
<td>.66238</td>
<td>2.9972 - 3.5213</td>
</tr>
</tbody>
</table>

Table 26. Hypothesis 4a. Test of Homogeneity of Variances

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.347</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Based on Mean</td>
<td>3.258</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Based on Median</td>
<td>3.258</td>
<td>4</td>
<td>17.056</td>
</tr>
<tr>
<td>Based on Median and with adjusted df</td>
<td>3.345</td>
<td>4</td>
<td>22</td>
</tr>
</tbody>
</table>

Levene’s test is significant (Table 26), thus violating the homogeneity of variances assumption. Due to this violation, the $F$ in the one-way ANOVA is not significant (Table 27), thus, the researcher used the Welch and/or Brown Forsythe tests, both robust adjusted $F$ tests. Due to the significant $F$ value (.015 and .008, respectively) on both robust tests (Table 28), the null hypothesis that there are no mean differences was rejected. The researcher’s decision to use Games-Howell post hoc test was twofold; The robust tests produced significant $F$ values and groups did not have equal numbers of subjects. The post hoc test (Table 29) revealed a significant difference between the group with no prior arts exposure whatsoever and those with prior exposure in all four art forms (.048 significance at the .05 alpha level). The researcher elected to use eta squared ($\eta^2$) to establish the effect size. After running a Univariate ANOVA
routine to find Between-Subjects Effects (Table 30), the researcher used the formula $\eta^2 = \frac{SS_{\text{effect}}}{SS_{\text{total}}}$ to determine the effect size. By dividing the sum of squares of the effect (3.519) by the total sum of squares (298.222), the $\eta^2$ value = .012, a small effect size.

Table 27. Hypothesis 4a. One-way ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3.519</td>
<td>4</td>
<td>.880</td>
<td>2.454</td>
</tr>
<tr>
<td>Within Groups</td>
<td>7.888</td>
<td>22</td>
<td>.359</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.407</td>
<td>26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 28. Hypothesis 4a. Robust Tests of Equality of Means

<table>
<thead>
<tr>
<th>Statistic, df1, df2, Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch 6.545, 7.269, .015</td>
</tr>
<tr>
<td>Brown-Forsythe 4.746, 18.788, .008</td>
</tr>
</tbody>
</table>

a. Asymptotically F distributed.

Table 29. Hypothesis 4a. Multiple Comparisons

Dependent Variable: mean

Games-Howell

<table>
<thead>
<tr>
<th>(I) Inser_Level_Prior_Arts</th>
<th>(J) Inser_Level_Prior_Arts</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>1.00</td>
<td>-.06667</td>
<td>.32537</td>
<td>1.000</td>
<td>-1.0952</td>
<td>-.9618</td>
<td>.9618</td>
</tr>
<tr>
<td>2.00</td>
<td>-.76667</td>
<td>.26141</td>
<td>.096</td>
<td>-1.6534</td>
<td>.1200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>-.51667</td>
<td>.21794</td>
<td>.262</td>
<td>-1.3974</td>
<td>.3641</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>-.87778*</td>
<td>.20891</td>
<td>.048</td>
<td>-1.7478</td>
<td>-.0077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>.00</td>
<td>.06667</td>
<td>.32537</td>
<td>1.000</td>
<td>-.9618</td>
<td>.10952</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>-.70000</td>
<td>.30510</td>
<td>.202</td>
<td>-1.6473</td>
<td>.2473</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>-.45000</td>
<td>.26880</td>
<td>.489</td>
<td>-1.3347</td>
<td>.4347</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>-.81111*</td>
<td>.26152</td>
<td>.068</td>
<td>-1.6757</td>
<td>.0535</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table Cont’d.
<table>
<thead>
<tr>
<th></th>
<th>Inser_Level_Prior_Arts</th>
<th>Inser_Level_Prior_Arts</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.00</td>
<td>.00</td>
<td>.76667</td>
<td>.26141</td>
<td>.096</td>
<td>-1.200</td>
<td>1.6534</td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>.00</td>
<td>.70000</td>
<td>.30510</td>
<td>.202</td>
<td>-2.473</td>
<td>1.6473</td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>.00</td>
<td>.25000</td>
<td>.18634</td>
<td>.678</td>
<td>-4.218</td>
<td>.9218</td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>.00</td>
<td>-.11111</td>
<td>.17568</td>
<td>.965</td>
<td>-.7362</td>
<td>.5140</td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>.00</td>
<td>.51667</td>
<td>.21794</td>
<td>.262</td>
<td>-3.641</td>
<td>1.3974</td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>.00</td>
<td>.45000</td>
<td>.26880</td>
<td>.489</td>
<td>-4.347</td>
<td>1.3347</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>.00</td>
<td>-.25000</td>
<td>.18634</td>
<td>.678</td>
<td>-9.218</td>
<td>.4218</td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>.00</td>
<td>-.36111</td>
<td>.10015</td>
<td>.210</td>
<td>-1.1806</td>
<td>.4584</td>
<td></td>
</tr>
<tr>
<td>4.00</td>
<td>.00</td>
<td>.87778</td>
<td>.20891</td>
<td>.048</td>
<td>.0077</td>
<td>1.7478</td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>.00</td>
<td>.81111</td>
<td>.26152</td>
<td>.068</td>
<td>-.0535</td>
<td>1.6757</td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>.00</td>
<td>.11111</td>
<td>.17568</td>
<td>.965</td>
<td>-.5140</td>
<td>.7362</td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>.00</td>
<td>.36111</td>
<td>.10015</td>
<td>.210</td>
<td>-4.584</td>
<td>1.1806</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.

Table 30. Hypothesis 4b Test of Between-Subject Effects

Tests of Between-Subjects Effects

Dependent Variable: mean

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>3.519a</td>
<td>4</td>
<td>.880</td>
<td>2.454</td>
<td>.076</td>
<td>.309</td>
</tr>
<tr>
<td>Intercept</td>
<td>219.261</td>
<td>1</td>
<td>219.261</td>
<td>611.531</td>
<td>.000</td>
<td>.965</td>
</tr>
<tr>
<td>Inser_Level_Prior_Arts</td>
<td>3.519</td>
<td>4</td>
<td>.880</td>
<td>2.454</td>
<td>.076</td>
<td>.309</td>
</tr>
<tr>
<td>Error</td>
<td>7.888</td>
<td>22</td>
<td>.359</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>298.222</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>11.407</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .309 (Adjusted R Squared = .183)

Much like hypothesis 4a which examined ECT self-efficacy through the lens of prior arts exposure, hypothesis 4b examines self-efficacy through the lens of current artistic practice.

Hypothesis 4b states that there is no significant difference between the arts-based pedagogical self-efficacy of early-career elementary teachers who currently practice an art form and those
who do not. Another one-way ANOVA routine was used to examine the data. This ANOVA tested only four groups (0=no current artistic practice, 1=current artistic practice in one art form, 2=current artistic practice in two art forms, and 3=current artistic practice in three art forms) as no respondent selected all four art forms as being currently practiced. The ANOVA output shows that of the n=27 respondents, ten respondents did not practice an art form in the past whatsoever, either as a child or as an adult (Table 31).

Table 31. Hypothesis 4b. Descriptives

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00</td>
<td>10</td>
<td>3.1500</td>
<td>.54120</td>
<td>.17114</td>
<td>2.7628</td>
<td>3.5372</td>
<td>2.17</td>
<td>4.00</td>
</tr>
<tr>
<td>1.00</td>
<td>11</td>
<td>3.0758</td>
<td>.78303</td>
<td>.23609</td>
<td>2.5497</td>
<td>3.6018</td>
<td>1.83</td>
<td>4.00</td>
</tr>
<tr>
<td>2.00</td>
<td>4</td>
<td>3.9583</td>
<td>.20972</td>
<td>.10486</td>
<td>3.6246</td>
<td>4.2920</td>
<td>3.67</td>
<td>4.17</td>
</tr>
<tr>
<td>3.00</td>
<td>2</td>
<td>3.4167</td>
<td>.11785</td>
<td>.08333</td>
<td>2.3578</td>
<td>4.4755</td>
<td>3.33</td>
<td>3.50</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>3.2593</td>
<td>.66238</td>
<td>.12747</td>
<td>2.9972</td>
<td>3.5213</td>
<td>1.83</td>
<td>4.17</td>
</tr>
</tbody>
</table>

Table 32. Hypothesis 4b. Test of Homogeneity of Variances

<table>
<thead>
<tr>
<th></th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Based on Mean</td>
<td>3.260</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Mean</td>
<td>Based on Median</td>
<td>2.972</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Mean</td>
<td>Based on Median and with adjusted df</td>
<td>2.972</td>
<td>3</td>
<td>18.804</td>
</tr>
<tr>
<td>Mean</td>
<td>Based on trimmed mean</td>
<td>3.217</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>

Levene’s test was significant (Table 32), thus violating the homogeneity of variances assumption. Due to this violation, and the lack of a significant $F$ value on the one-way ANOVA (Table 33), robust adjusted $F$ tests were used (Table 34). Due to the significant $F$ value on both the Welch (.008) and Brown-Forsythe (.019) tests, the null hypothesis that there are no mean differences was rejected.
Table 33. Hypothesis 4b. One-Way ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.494</td>
<td>3</td>
<td>.831</td>
<td>2.145</td>
<td>.122</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8.913</td>
<td>23</td>
<td>.388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.407</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 34. Hypothesis 4b. Robust Tests of Equality of Means

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Statistica</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch</td>
<td>7.844</td>
<td>3</td>
<td>8.650</td>
<td>.008</td>
</tr>
<tr>
<td>Brown-Forsythe</td>
<td>4.170</td>
<td>3</td>
<td>20.308</td>
<td>.019</td>
</tr>
</tbody>
</table>

a. Asymptotically F distributed.

Table 35. Hypothesis 4b. Multiple Comparisons

Dependent Variable: mean

Games-Howell

<table>
<thead>
<tr>
<th>(I) Insert_Level_Curr</th>
<th>(J) Insert_Level_Curr</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>.00</td>
<td>1.00</td>
<td>.07424</td>
<td>.29160</td>
<td>.994</td>
<td>-.7508</td>
</tr>
<tr>
<td>2.00</td>
<td>.00</td>
<td>-.80833*</td>
<td>.20071</td>
<td>.008</td>
<td>-1.4045</td>
</tr>
<tr>
<td>3.00</td>
<td>1.00</td>
<td>-.26667</td>
<td>.19035</td>
<td>.529</td>
<td>-.8590</td>
</tr>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00</td>
<td>.00</td>
<td>-.88258*</td>
<td>.25833</td>
<td>.022</td>
<td>-1.6434</td>
</tr>
<tr>
<td>3.00</td>
<td>1.00</td>
<td>-.34091</td>
<td>.25037</td>
<td>.546</td>
<td>-1.0950</td>
</tr>
<tr>
<td>2.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.00</td>
<td>.00</td>
<td>.80833*</td>
<td>.20071</td>
<td>.008</td>
<td>.2122</td>
</tr>
<tr>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.2122</td>
</tr>
<tr>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.0317</td>
</tr>
</tbody>
</table>

Table Cont’d.
The post-hoc Games-Howell test (Table 35) revealed a significant difference between the group who does not currently practice an art form and the group which currently practices two art forms (.008 significance at the .05 alpha level), as well as a significant difference between the groups who currently practice one and two art forms, respectively (.022 significance at the .05 alpha level). The researcher elected to use eta squared $\eta^2$ to determine effect size. After running a Univariate ANOVA routine to find Between-Subjects Effects (Table 36), the researcher used the formula $\eta^2 = \frac{SS_{effect}}{SS_{total}}$. By dividing the sum of squares of the effect (2.494) by the total sum of squares (298.222), the $\eta^2$ value = .008, which can be rounded to .01, a small effect size.
Much like hypothesis 2a which focused on type of preservice arts course and related value, hypothesis 4c also surveys type of preservice course, but with ECT self-efficacy. Hypothesis 4c states: There is no significant difference between teacher self-efficacy levels of early-career elementary teachers who completed an arts-as-curriculum preservice course and those who completed an arts-integrated curriculum preservice course. To reiterate, all sample participants were enrolled in one of six sections of an arts-based pedagogy class during their last semester of university coursework during one of the following semesters: fall 2016, spring 2017, fall 2017. Two sections were taught using arts-as-curriculum methods (N = 38), predominantly focused on Visual Arts pedagogical practices. The other four were taught using arts-integrated curriculum methods (N = 81), marrying core curricular standards in ELA, math, science, and social studies, with four art forms: music, theatre, dance, and visual art. The independent samples t test routine used teacher preservice arts class enrollment as the grouping variable (arts-as-curriculum n = 8; arts-integrated-curriculum n = 19) and the researcher-computed Self-Efficacy variable to determine the differences in means from the two groups (Table 37). The test exhibited no statistically significant difference between the means, thus, the null hypothesis regarding no difference between self-efficacy levels based on preservice arts class type was not rejected (Table 38).

Table 37. Hypothesis 4c. Group Statistics

<table>
<thead>
<tr>
<th>Insert_Teacher</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.00</td>
<td>8</td>
<td>3.0833</td>
<td>.78174</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>19</td>
<td>3.3333</td>
<td>.61363</td>
</tr>
</tbody>
</table>
Table 38. Hypothesis 4c. Independent Samples Test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.398</td>
<td>.534</td>
</tr>
<tr>
<td>Equal variances not</td>
<td>.806</td>
<td></td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In a similar vein to hypothesis 2b, hypothesis 4d also examines ECT arts-based professional development. Hypothesis 4d states: There is no significant difference between teacher self-efficacy levels of early-career elementary teachers who participated in an arts-based professional development in the twelve months prior to the survey and those who did not. Parallel to Hypothesis 2b, of the n = 28 ECTs who responded to the question, “Have you attended any ARTS workshops for teachers in the past 12 months,” twenty-seven respondents had not attended any. Although the research question could not truly be addressed with the data collected, there is an urgent need for arts-based professional development for ECTs, as evidenced by many respondents’ end-of-survey text entry to the prompt, “What do you feel would motivate you to use the arts more than you already do?” For instance, respondent #9 cited “More confidence in teaching the curriculum.” Although this could be interpreted as either confidence with the core curriculum or as the arts curriculum, this participant was contacted via telephone post-survey. The researcher identified herself via phone and asked the participant to not identify themselves. When asked to clarify the text-entry response, the ECT explained that
they wished they were more confident with the teaching of “arts standards” and proposed that “an arts workshop might help.”

Unlike the previous independent samples t test and ANOVA-based hypotheses used to measure ECT self-efficacy, hypotheses 4e is correlation-based. Hypothesis 4e states: There is no correlation between ECT’s perceived value or importance of the arts and ECT self-efficacy with arts-based pedagogy. The SPSS Correlation routine (Table 39) reveals a moderate positive correlation between perceived Value and Self-Efficacy with arts-based pedagogy (r=.489), thus, the null hypothesis associated with research question 4e was rejected. Furthermore, the coefficient of determination, $r^2$, equals .24, indicating that 24% of the variance in self-efficacy with arts-based pedagogy was accounted for by perceived value of the arts.

Table 39. Hypothesis 4e. Correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Pearson Correlation</td>
<td>1</td>
<td>.489**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.010</td>
</tr>
<tr>
<td>N</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Mean Pearson Correlation</td>
<td>.489**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.010</td>
</tr>
<tr>
<td>N</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Interesting Qualitative Findings

The first qualitative open-ended response survey item, Question 32, asked participants, “What do you feel would motivate you to use the arts more than you already do?” A large majority of responses (64.3%) included the words “students” or “learners” as shown in Table 40 and Figure 5. For example, respondent # 14 stated, “The arts make the lessons more engaging, interactive, and fun for students!” Respondent # 24, who also ended their text-entry with an exclamation mark, specified, “To help the students remain captivated and wanting to learn!”
Table 40. Item 32 Frequency of “Students” or “Learners” within Text-Entry

<table>
<thead>
<tr>
<th>StudentsLearners_Entry</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>1.00</td>
<td>10</td>
<td>35.7</td>
<td>35.7</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>18</td>
<td>64.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5. Item 32 Percentage of Responses with “Students” or “Learners” in Text-Entry

The researcher of the current study elected to retain open-ended items on the TWAS survey to maintain Dr. Oreck’s reliability and validity from the TWAS Technical Report (personal communication, January 30, 2018), and to confirm or disconfirm quantitative findings using qualitative responses. A third open-ended question, “Describe the best arts-based lesson currently in your teaching arsenal,” was added prior to survey dissemination to discern iterations of arts-based pedagogy currently utilized by ECTs. Descriptive statistics (Tables 41 and 42) and bar graphs (Figures 6 and 7) illustrate the frequency of respondents’ answers to this open-ended text-entry item, specifically isolating the art form and core curricular subject of respondents’ “best” arts-based lesson. While a majority of respondents who specified an art form discussed a
visual arts-based lesson, specified responses related to core curricular responses were more evenly distributed between the ELA, math, science, and social studies.

Table 41. Item 34 Arts Type Frequency

<table>
<thead>
<tr>
<th>Arts_Type</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid .00</td>
<td>11</td>
<td>39.3</td>
<td>40.7</td>
<td>40.7</td>
</tr>
<tr>
<td>1.00</td>
<td>11</td>
<td>39.3</td>
<td>40.7</td>
<td>81.5</td>
</tr>
<tr>
<td>2.00</td>
<td>3</td>
<td>10.7</td>
<td>11.1</td>
<td>92.6</td>
</tr>
<tr>
<td>3.00</td>
<td>2</td>
<td>7.1</td>
<td>7.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>96.4</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>1</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 42. Item 34 Core Curriculum Type Frequency

<table>
<thead>
<tr>
<th>Core_Curriculum_Type</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid .00</td>
<td>13</td>
<td>46.4</td>
<td>48.1</td>
<td>48.1</td>
</tr>
<tr>
<td>1.00</td>
<td>5</td>
<td>17.9</td>
<td>18.5</td>
<td>66.7</td>
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<td>2.00</td>
<td>3</td>
<td>10.7</td>
<td>11.1</td>
<td>77.8</td>
</tr>
<tr>
<td>3.00</td>
<td>2</td>
<td>7.1</td>
<td>7.4</td>
<td>85.2</td>
</tr>
<tr>
<td>4.00</td>
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<td>14.3</td>
<td>14.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>96.4</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing System</td>
<td>1</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td></td>
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</tr>
</tbody>
</table>
Figure 6. Item 34 Arts Type Response Frequency

Figure 7. Item 34 Core Curriculum Type Response Frequency

Summary

The purpose of this study is to develop a profile of an elementary teacher with the propensity to use the arts. The constructs of frequency, value, self-efficacy, and administrative support aid in measuring ECT behaviors and attitudes in relation to arts-based pedagogy. An
online survey was disseminated in late March and early April 2018 to employed elementary (1-5) teachers who completed the compulsory arts-based pedagogy class at a large Louisiana flagship university in the fall of 2016, spring of 2017, or fall of 2017.

In the 4th chapter, the researcher reported the results of this study and used frequency analyses, independent samples t tests, one-way ANOVAs, and Pearson’s Product Moment Coefficient to determine relationships between variables and statistically significant differences between means. Multiple null hypotheses were rejected. Further examination of the research questions and related statistical analyses are discussed in Chapter 5.
CHAPTER 5
CONCLUSION AND DISCUSSION

This study investigated early-career elementary teacher arts-based pedagogical practices and attitudes using a modified TWAS in an attempt to create a profile for a teacher with the propensity to utilize the arts as a pedagogical approach. The emphasis on creating an early-career teacher (ECT) arts-based pedagogy profile stems from the benefits of arts-based pedagogy in elementary settings, evidenced in existing literature. The study’s participants were, specifically, practicing early-career elementary teachers who were in their first two years of teaching who had also been enrolled in a preservice arts-based pedagogy class during the fall of 2016, spring of 2017, or fall of 2017. To reiterate, the research questions examined multiple facets of arts-based pedagogy usage in elementary settings in the US including frequency, value, challenges, and self-efficacy, as well as perceived administrative support for arts-based pedagogy.

Findings Related to the Modified TWAS

Due to the multifaceted nature of the modified TWAS and the multitude of research constructs, this chapter first addresses the response rate and respondents, followed by discussions related to each research construct. Afterward, implications for future studies and recommendations based on the current study are examined.

Survey Participants

The researcher of the current study did not anticipate teacher attrition’s emergence as a limitation, thus, literature related to attrition was not explored until post-data analysis. According to the National Center for Education Statistics, of the almost 3.4 million public school teachers in the US employed during the 2011-2012 school year, approximately 8% left the teaching profession the following school year (Goldring, Taie, & Riddles, 2014). Teacher attrition is highest in the early and late-career populations, producing a U-shaped distribution well-
documented in existing literature (Grissmer & Kirby, 1997; Guarino, Santibañez, & Daley, 2006; Ingersoll, 2001). The first five years of teaching emerge as particularly detrimental to retention (Borman & Dowling, 2008), with one study estimating early-career attrition “between 40 and 50%” (Ingersoll, 2003, p. 13).

Numerous factors contribute to ECT attrition, oftentimes not influenced by the teaching district (National Commission on Teaching and America’s Future, 2007). “Some beginning teachers may also find that they are not well suited to teaching,” (p. 3). School characteristics also play a role in retention; early-career charter school teachers have higher attrition rates than their public school counterparts while ECTs in medium poverty setting are less likely to leave than their colleagues in high-poverty placements (Smith & Ingersoll, 2004). Novice teachers also leave the profession for a variety of familial and personal reasons (Boe, Cook, & Sunderland, 2008; Wayne, 2000), however, some ECTs ultimately return to the profession (Wayne, 2000).

Teacher attrition was particularly evident from the demographic responses to items in the modified TWAS survey. From the N=50 total participants who opened the survey, the researcher received a total of N=40 complete and partial responses. As per IRB exemption, the informed consent form preceding the survey discussed that pregnant persons were specifically excluded from the study. This boundary may have eliminated possible participants. A modified TWAS demographic item asked participants to enter text regarding what grade they are currently teaching. One participant responded, “none anymore,” signifying teacher attrition (either from the classroom or from the profession altogether) or teacher unemployment. Another participant responded, “graduate school,” indicative of leaving the classroom for an advanced degree opportunity, while others replied, “substitute teaching,” which may indicate that respondents are substitute teaching while they seek full-time employment in the teaching profession, or, simply
prefer the substituting profession over full classroom teacher status. Furthermore, a respondent entered “5th-8th,” signifying a middle school placement. Since the current study sought ECTs who held current elementary placements, this participant’s responses were omitted. Data from participants who did not complete the survey in its entirety were also removed when the dataset was cleaned.

In summary, 12 participants’ data were not included in the analysis for a variety of reasons including missing values, teaching in part-time or within non-elementary placements, and/or teacher attrition due to personal factors. This left N=28 total ECT participants in the sample. Findings and conclusions based on the modified TWAS responses of the 28 participants related to the constructs of frequency, value, challenges, and self-efficacy are now presented.

**The Construct of Frequency**

As discussed in the review of literature, both prior and current arts exposure in childhood and adolescence into adulthood has been found to increase arts-based pedagogical frequency as well as a multitude of other arts-based factors including self-efficacy, confidence, quality of arts-based programming, and valuation of the arts, which, it can be inferred, lead to pedagogical frequency (Alter et al., 2009; Garvis et al., 2011; Garvis & Pendergast, 2010a, 2010b; Hagen, 2002; Lummis et al., 2014; Power & Klopper, 2011; Russell-Bowie & Dowson, 2005). Results from a one-way ANOVA across five groups (those with prior exposure in 0, 1, 2, 3, or all 4 art forms) failed to reveal a significant difference in frequency of arts-based pedagogy usage means. Considering this result, it would be easy to dismiss the importance of arts experiences in childhood and adolescence into adulthood. However, when responding to the text-entry prompt, “What do you feel is the strongest current motivation for using the arts in your teaching?”, participant #3’s response disputes this narrative. She contends that:
My strongest current motivation to use arts in my teaching is the fact that art has always been a part of my life and through my experiences with the arts growing up, the impact art has had on myself and some of my family members, and my personal experiences with teaching the arts in a classroom has shown how valuable the arts can be to students. Dissimilar to the lack of significance when measuring pedagogical frequency based on prior arts exposure, current artistic practice proved fundamental to frequency ($p = .012$). What surprised the researcher, however, was the number of respondents who reported not practicing an art form previously compared to the number who reported not currently practicing an art form. For the previous arts exposure item, only 5 respondents did not select prior exposure in any art form. This number doubled to 10 respondents who selected no current artistic practice whatsoever in any art form. Current artistic practice gives individuals knowledge of the practiced art form and, often, exposure to arts-based pedagogical practices. Consider an ECT who participates in community theatre rehearsals and performances. Throughout the rehearsal process, the ECT would become fluent in the vocabulary of the theatre arts including cue, improvisation, blocking, upstage, downstage, pantomime, places, curtain call, and strike. They would also learn from the director, often using best pedagogical practices to elicit exceptional performances. In turn, the ECT currently involved in the theatre arts would have prior knowledge to rely on when attempting a theatre arts-based activity in their own classroom.

Another important connection to frequency found in existing literature is administrative support (Bellisario & Donovan, 2012; de Vries, 2017; Garvis & Pendergast, 2010b; Purnell, 2004; Saraniero et al., 2014; Van Eman et al., 2008). Data analysis exposed a moderately positive correlation between administrative support and frequency of arts-based pedagogical use ($r = .575$). The themes of adequate time, resources, and training in the arts emerged from text-entry responses to the prompt asking respondents what would motivate them to use the arts more frequently. Consistent with existing literature, to improve pedagogical frequency, administrators
could support the arts by providing both instructional and planning time for the arts, (de Vries, 2017; Krakaur, 2017; LaJevic, 2013; Oreck, 2006; Purnell, 2014; Rule et al., 2012; Saraniero et al., 2014; Van Eman et al., 2008), visual and performing arts materials and resources including space for the arts (Bellisario & Donovan, 2012; de Vries, 2017; Garvis & Pendergast, 2010b; Purnell, 2004; Saraniero et al., 2014), and could offer arts-based professional development and training opportunities (Aprill, 2010; Cunnington et al., 2014; Donahue & Stuart, 2008; Doyle et al., 2014; Greenfader & Brouillette, 2013; Heitin, 2014; Hicks, 2013; Kinney & Forsythe, 2005; Krakaur, 2017; Oreck, 2006; Saraniero et al., 2014; Richard & Treichel, 2013; Walker et al., 2011) to faculty to meet the ECT needs expressed in participant responses.

The Construct of Value

The researcher was equally concerned with the construct of the value of the arts to ECTs. Specifically, the researcher questioned if the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) affected teacher valuation of the arts. All ECT participants were enrolled in one of six sections of an arts-based pedagogy class during their last semester of university coursework at the site of the study – the university where ECTs were enrolled – in the fall of 2016, the spring of 2017, or the fall of 2017. Two sections of the arts-based pedagogy class were taught using arts-as-curriculum methods (N=38), while the other four were taught using arts-integrated curriculum methods (N=81). Although an independent samples t test failed to reveal a statistically significant difference between the value means of respondents who were enrolled in an arts-as curriculum class (n=8) and those enrolled in an arts-integrated curriculum class (n=20), an isolated value-based item from the self-efficacy scale, “I feel that there are many students in my class who would especially benefit from more arts activities in the curriculum,” proved significant (p = .02) when measured through the preservice class lens. Although this item
was value-based, it was included in the self-efficacy scale since the value-based Likert scale instructions differed from the self-efficacy scale instructions. The mean for item 19.2 was $\bar{x} = 4.37$, however, in the arts-as curriculum group, the mean was an extremely high 4.75 as opposed to the arts-integrated-curriculum preservice class mean of 4.21. This suggests that the emphasis on arts-as-curriculum practices in preservice programs, where the arts are taught as standalone subjects instead of as a counterpart to a core curricular discipline within integrated practices, improve overall ECT valuation of the arts.

The rejected null hypothesis for research question 2a, “Does the type of preservice arts class (arts-as-curriculum versus arts-integrated-curriculum) affect the self-reported frequency of arts-based pedagogy for early-career elementary teachers?”, should be examined further. Unfortunately, only 8 of the n=28 respondents were formerly enrolled in an arts-as-curriculum preservice section as opposed to the n=20 arts-integrated-curriculum participants. A larger sample size may have increased the chance of finding a significant difference between means, consistent with the literature of which endorses arts-integrated preservice programming (Donahue & Stuart, 2008; Pool et al., 2011; Robinson, 2012b; Whitin & Moench, 2015).

The lack of a significant difference in value based on type of preservice arts class speaks to the overarching nature of the term arts-based pedagogy. The ‘arts-based pedagogy’ umbrella term used in this study includes iterations of arts-as-curriculum (also known as arts education) and arts-integrated-curriculum. Participant responses to the text-entry prompt, “Describe the best arts-based lesson currently in your teaching arsenal,” were wide-ranging, covering all four of Bresler’s (1995) arts integration styles. As described in chapter 2, Bresler posits that there are four styles of arts integration found in school environments: the subservient, social, affective, and co-equal cognitive styles. Addressing this issue from the field, participant #11 specified,
“Songs to remember dates and bone structures,” an example of Bresler’s subservient integration style, while Participant #27 mentioned a “Black History Month play,” an illustration of Bresler’s social integration style. Participant #17 “usually put[s] on music in the morning to help students liven up, but also to maintain focus,” a hallmark of Bresler’s affective style. Bresler’s acclaimed co-equal cognitive style was evident in Participant #5’s entry about the students creating “plant diagrams using collage.” The vast spectrum of arts-based pedagogical practices mentioned indicates that many artistic modes, styles, and approaches occur in elementary environments. Attempts to limit teachers to one approach or style, i.e. arts-as-curriculum or arts-integrated-curriculum, seem irresponsible based on survey findings.

ECT perceptions of the value of arts-based pedagogy were also gathered through text-entry responses to the prompt in item 32, “What do you feel is the strongest current motivation to use the arts in your classroom?” A considerable majority of participants included the words “learners” or “students” in their responses (64.3%). This student-centered language indicated that many ECTs consider arts-based pedagogy beneficial to students and/or student learning. Of the n = 28 responses to the prompt, n = 11 responses centered on noncognitive benefits/value of the arts. Table 43 illustrates noncognitive value-based responses to this prompt.

Table 43. Participants’ Noncognitive-Based Responses to Item 32

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Students are more attentive</td>
</tr>
<tr>
<td>6</td>
<td>To make my students more well-rounded</td>
</tr>
<tr>
<td>9</td>
<td>Student engagement</td>
</tr>
<tr>
<td>10</td>
<td>Student interest</td>
</tr>
</tbody>
</table>

Table Cont’d.
<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Student engagement</td>
</tr>
<tr>
<td>14</td>
<td>The arts make the lessons more engaging, interactive, and fun for students!</td>
</tr>
<tr>
<td>18</td>
<td>Student focus after an activity</td>
</tr>
<tr>
<td>19</td>
<td>My students enjoy the arts and it is a great way for them to get moving and be creative.</td>
</tr>
<tr>
<td>23</td>
<td>To motivate other students that lack interest in textbook style learning.</td>
</tr>
<tr>
<td>24</td>
<td>To help the students remain captivated and wanting to learn!</td>
</tr>
<tr>
<td>27</td>
<td>Getting my students engaged</td>
</tr>
</tbody>
</table>

Upon returning to the items which comprised the value-based Likert scale (17.1 – 17.8) within the modified TWAS, it became clear that these items asked teachers to rank the importance or value of cognitive-based measurable factors within instruction of each artform. ECTs in this study seem more willing to embrace the noncognitive benefits and value of the arts, consistent with exiting literature (Bellisario & Donovan, 2012; Brouillette, 2010; Doyle et al., 2014; Menzer, 2015; Powell, 2007; Stevenson & Deasy, 2005). As the name implies, early-career practitioners are still in the early stages of developing lessons and assessment and creating teacher identities, both using the arts and without the arts. The question remains if, over time, ECTs begin to value the cognitive benefits of arts-based pedagogy.

The researcher also intended to measure ECT valuation of the arts based on professional development in the arts. The research question could not truly be addressed with the data collected, however, arts-based professional development for ECTs, as evidenced by many respondents’ end-of-survey text entries detailing what would motivate them to use the arts more. In particular, based on n=23 text entries for this item, respondents #s 1, 7, and 27 cited “training”
and respondent #13 mentioned “appropriate professional development tools/materials.” Arts-based resources also surfaced as a need. Respondents 4, 5, 6, 8, 14, and 18 also refer to the lack of arts materials and resources as a paramount deterrent to use. These findings mirror those in existing literature (Aprill, 2010; Bellisario & Donovan, 2012; Cunnington et al., 2014; de Vries, 2017; Donahue & Stuart, 2008; Doyle et al., 2014; Garvis & Pendergast, 2010b; Greenfader & Brouillette, 2013; Heitin, 2014; Hicks, 2013; Kinney & Forsythe, 2005; Krakaur, 2017; Oreck, 2006; Purnell, 2004; Saraniero et al., 2014; Richard & Treichel, 2013; Walker et al., 2011).

Congruent with this existing literature, arts-based professional development for educators could offer training, resources, and materials to meet ECT needs. Participant responses to the open-ended text-entry prompt, “Describe the best arts-based lesson currently in your teaching arsenal,” were overwhelmingly centered around the visual arts. Thus, beginning arts-based professional development for ECTs could focus on theatre, dance, and musical core curricular connections.

The Construct of Challenges

Based on ECT responses, the challenges to arts-based pedagogy were not exclusively limited to a lack of training, resources and materials. Respondents provided strong text-entry evidence of challenges stemming from pre-scripted curriculum and time constraints. These findings are consistent with challenges found in existing literature including the theme of the sortage of both planning and instructional time for the arts (LaJaveic, 2013; Oreck, 2006; Purnell, 2004; Rule, Montgomery, Tallakson, Stitcher, Barness, & Decker, 2012; Saraniero et al., 2014; Van Eman et al., 2008) and the theme of a focus on pre-scripted curriculum (Garvis et al., 2011; LaJevic, 2013; Rule et al., 2012; Saraniero et al., 2014; Van Eman et al., 2008). As demonstrated by the disproportionate ‘inadequate’ responses to the prompt “How would you
characterize the arts instruction in your school?”, many elementary environments experienced by these ECTs seemingly lack arts classes and specialists.

While professional development in arts education can improve teacher understanding and awareness of arts-based instructional time, lesson planning, and assessment, school and district-based administrators control access to these opportunities for ECTs. The scope of administrative support in relation to arts-based pedagogy should not be dismissed. Every ECT-named deterrent to arts-based pedagogy can be resolved via administrative support, thus, it is not surprising that administrative support emerged as the factor which most supported arts-based pedagogy. This finding is consistent with those from existing literature on supports to arts-based pedagogy (Bellisario & Donovan, 2012; Garvis & Pendergast, 2010b; Purnell, 2004; Saraniero et al., 2014; Van Eman et al., 2008). Administrators can provide time for both arts-based planning/collaboration and instructional time for the arts. They also have the capacity to afford space for the arts within elementary school settings, no dance or paint studio necessary. For example, in the researcher’s tenure as a theatre specialist within a large urban public-school system in South Louisiana, many principals who supported arts-based pedagogy asked the cafeteria staff to delay the mopping of the lunch space until after afternoon performing arts rehearsals. Furthermore, the researcher has seen arts-supportive principals cold call parents and educational stakeholders to solicit donations of visual art supplies for classrooms. Arts-supportive administrators also recognize that although the district-mandated curriculum may be scripted and restrictive, the arts can be used to engage and motivate learners within any existing curriculum.

Perhaps most importantly, administrators can provide access to arts-based professional development opportunities. Teaching artist visits, on-site professional development with arts
specialists, arts education conferences and conventions, and online teacher webinars can improve teacher understanding of arts-based pedagogy. Professional development opportunities in the arts can lead to amassing the resources and materials ECTs identified as deficient. Although not explicitly outlined within existing literature, arts-based professional development programs presumably provide participants with resources and materials in addition to strategies and best practices for both obtaining and utilizing them.

**The Construct of Self-Efficacy**

When the valuation of the arts was measured in relation to prior arts exposure, the one-way ANOVA routine failed to reveal a significant difference in means. A second one-way ANOVA illustrated when arts-based self-efficacy was measured in relation to prior arts exposure, the difference in means between ECTs who lack of previous arts exposure of any kind and those who had previous arts exposure in all four art forms is statistically significant ($p = .048$). Ironically, although this research promotes childhood and adolescent exposure in the four art forms, few elementary schools offer programming in all four – visual arts, theatre, music, and dance – potentially leading to fewer eventual teachers who will have prior exposure.

Similar to the previously discussed results on current artistic practice and arts-based pedagogical frequency, current practice in an artform also has implications for ECT self-efficacy with the arts, echoing existing arts-based self-efficacy literature (Alter et al., 2009; Barry, 1992; Grauer, 1998; Power & Klopper, 2011; Lummis et al., 2014; Russell-Bowie & Dowson, 2005). Not surprisingly, ECTs who are engaged in an art form outside of the classroom such as singing in a choir, crafting, or performing with a band or community theatre feel more comfortable and confident with the arts inside the classroom. Thus, arts-based professional development can expose teachers to multiple opportunities for current practice within local communities. The
urban community where the ECT research participants engaged in university coursework has a thriving arts council, multiple community theatres, church choir opportunities, adult jazz and tap classes, ballroom dance classes, and multiple art studios. Moreover, the ECTs’ alma mater offers arts-based leisure classes to adults 18+ year-round.

Also under the self-efficacy umbrella, the type of preservice class (arts-as-curriculum versus arts-integrated curriculum) proved to have no bearing on the construct. Again, only 8 of the n=28 respondents were formerly enrolled in an arts-as-curriculum preservice section as opposed to the n=20 arts-integrated-curriculum participants. A larger sample size may have increased the chance of finding a significant difference between means. Much current literature endorses arts-based preservice programming as a means of improving teacher confidence and self-efficacy with arts-based pedagogy (Alter et al., 2009; Collins, 2016; Garvis, 2009; Garvis & Pendergast, 2010b; Garvis et al., 2011; Lemon & Garvis, 2013; Lummis et al., 2014; Power & Klopper, 2011; Russell-Bowie & Dowson, 2005; Whitin & Moench, 2015). The current study’s findings do support the place of inclusive arts-based programming – in all iterations and forms – in elementary teacher preparation settings.

Arts-based self-efficacy is also important to the overall valuation of the arts, as evidenced in the moderately positive self-efficacy and valuation of the arts correlation. Within the existing self-efficacy and arts-based valuation literature, Lemon and Garvis (2013) state, “Teacher self-efficacy beliefs about their capacity to deliver arts education shapes their perceived competence in teaching the arts, which in turn impacts on the degree and nature of inclusion of arts in the curriculum” (Lemon & Garvis, 2013, p. 2). Thus, it can be surmised that ECTs with high self-efficacy use the arts more and, likely, see the value that arts bring to their classrooms.
To conclude the research questions associated with self-efficacy, the researcher examined the self-efficacy levels of ECTs who participated in arts-based professional development in the twelve months prior to the survey and those who did not. Unfortunately, only one participant out of n=28 had attended an arts-based professional development workshop in the twelve months prior to survey participation. Although the research question could not truly be addressed with the data collected, there is an urgent need for arts-based professional development for ECTs, as evidenced by many respondents’ end-of-survey text entry to the prompt, “What do you feel would motivate you to use the arts more than you already do?” For instance, respondent #9 cited “More confidence in teaching the curriculum.” While this could be interpreted as either confidence with the core curriculum or as the arts curriculum, this participant was contacted via telephone post-survey. The researcher identified herself via phone and asked the participant to not identify themselves. When asked to clarify the text-entry response, the ECT explained that they wished they were more confident with the teaching of “arts standards” and proposed that “an arts workshop might help.” As affirmed in existing literature, one outcome of arts-based professional development includes self-efficacy with the arts (Garett, 2010; Powell, 2007; Saraniero et al., 2014).

The profile of a teacher with the propensity to incorporate the arts as a pedagogical approach is complex. It involves a balance of arts exposure, instruction, and, eventually, administrative support. Opportunities for arts-based pedagogical training focused on instructional resources, time, and pre-scripted curriculum are also essential. Finally, teacher valuation of varied art forms and self-efficacy with the arts in teaching are effective indicators of arts-based pedagogical use.
Implications for Future Studies

The small sample size, particularly as it relates to arts-based professional development attendees (n=1) and arts-as-curriculum preservice programming (n=8), emerged as a limitation of the current study. Furthermore, the effect sizes of significant differences between means were relatively small ($d = .2887; \eta^2 = 0.012; \eta^2 = .008$) and would likely have been strengthened by an increased sample size. The current study would benefit from the addition of more participants from both arts-as curriculum and arts-integrated curriculum preservice class sections, e.g. spring 2018, fall 2018, spring 2019, etc. In addition to rectifying the logistical issue of sample size, the study has uncovered numerous issues and questions to guide new research.

As previously stated, 12 participants’ data were not included in the analysis for a variety of reasons including missing values, teaching in part-time or within non-elementary placements, and/or teacher attrition due to personal factors. This left N=28 total ECT participants in the sample. According to the National Commission on Teaching and America’s Future (2003), “Hiring well-prepared teachers reduced first-year attrition by 50%” (p. 84). Although existing literature does not explicitly explore the relationship between arts-based teacher training and teacher attrition, the researcher of the current study contends that the benefits and outcomes of arts-based pedagogy (as discussed in chapter 2) could be seen as a way for teacher preparation programs to increase teacher preparedness and, therefore, reduce ECT attrition. A future study could focus on the research question, “Does preservice arts-based pedagogical training prevent early-career attrition?”

Also while compiling the literature review in chapter 2, the researcher noticed an unmistakable deficit in research pertaining solely to the current artistic practice of teachers. Numerous studies explored teachers’ prior and professional arts exposure (Garvis and
Pendergast, 2010a; Garvis et al., 2011; Hagen, 2002), but literature devoted to teachers’ current participation in visual arts, music, dance, or theatre outside of the classroom is sparse. Since current ECT artistic practice proved statistically significant to both the frequency and self-efficacy related to arts-based pedagogy, future research should examine current practice further. That is, what type of current artistic practice specifically leads to improved arts-based pedagogical frequency in the classroom? Does a specific amount of time per week or per month spent on current artistic practice lead to improved pedagogical usage of the art form? Do teachers who currently practice an art form cite fewer challenges to arts-based pedagogy than those who do not? These questions can be asked not just of ECTs in elementary settings but of mid and late-career teachers at varied levels from early childhood to high school placements.

The current study measured multiple constructs related to ECT arts-based pedagogy beliefs and practices in a cross-sectional manner. Beliefs and practices can change over time, thus, a future study could measure these constructs longitudinally. Ideally, the constructs of frequency, self-efficacy, perceived value, and challenges would be measured pre- and post- arts-based pedagogical preservice training. Preservice teachers would be asked to respond to the same survey both prior to enrollment in an arts-based pedagogy university class and again after completing the class. Numerous teacher preparation programs have modified their arts-based class offerings to focus on arts-integrated curricular methods (Donahue & Stuart, 2008; Pool et al., 2011; Robinson, 2012b; Whitin & Moench, 2015). Lorimer (2012) contends that “it is time to rethink teacher education by positioning arts-integrated learning directly within all teacher education programs” (p. 84). A longitudinal study would provide rich data related to the outcomes from the type of preservice arts class, arts-as-curriculum versus arts-integrated-curriculum.
Administrator beliefs and practices, as related to the arts and arts-based pedagogy, could also be measured longitudinally, providing a varied perspective on support for the arts which emerged in this study as essential to ECTs. De Vries (2017) concluded, “Teachers need the support of school administrators to teach music, have adequate resources to teach music, and have the time to teach music,” (p. 20). Based on the researcher’s own tenure in numerous elementary schools, this is true for all art forms. Administrators approve teacher instructional schedules, planning time, curriculum, lesson plans, and procure resources and materials as well as allocate space. They also provide access to arts-based professional development opportunities for faculty and staff. Because only n=1 study participant received arts-based professional development in the twelve months prior to the survey, a longitudinal measure of administrators’ support for arts-based pedagogy, perhaps pre-professional development and post-professional development exposure would be timely.

Administrators directly supervise in-service ECTs, however, mentor teachers directly supervise preservice teachers. The mentor teacher population and their contributions to preservice teacher arts-based beliefs and practices should also be studied. To the best of the researcher’s knowledge, this population’s impact on arts-based pedagogical practices of preservice teachers has not been studied previously. Supervising or mentor teachers shape preservice teachers’ instructional practices and beliefs, which can substantially impact novice teachers’ learning (Cochran-Smith, 1991; Hall, Draper, Smith, & Bullough, 2008; Hawkey, 1997) and contribute greatly to the development of preservice teacher identity (Cattley, 2007; Izadinia, 2015; Zhou & Zhang, 2017). “Pre-service teachers who choose to take risks in their pedagogies are particularly vulnerable if by doing so, their mentor teachers identify them as being out of tune with their own way of thinking (Cattley, 2007, p. 338),” therefore, it can be
assumed that preservice teachers may be disparaged for their attempts at arts-based strategies within student-teaching placements. A study which examines mentor teacher usage/promotion of/beliefs about arts-based pedagogy would be expedient.

In order to maintain IRB exemption compliance, the modified TWAS did not contain items related to school characteristics including type of school (public, private, charter, etc.) nor did it ask participants to identify the type of community the school was a part of (urban, suburban, or rural). Future research, likely requiring full IRB review, could identify school characteristics which contribute to effective arts-based pedagogy.

Another important study could delve into the concepts of the multiple measures of success. “Sometimes the most brilliant and intelligent minds do not shine in standardized tests because they do not have standardized minds” (Ravitch, 2015). While traditional schooling is enamored with measurable, cognitive factors (as discussed in chapter 2), the noncognitive factors promoted by the arts are plentiful and accounted for n=11 responses to the prompt, “What do you feel is the strongest current motivation to use the arts in your classroom?” In particular, a study focused on student success based on teachers’ noncognitive use of the arts would be timely. In the researcher’s experience, it is often the children who struggle with cognitive-based ‘academic’ concepts within the core curriculum who also thrive once exposed to experiential arts-based pedagogical strategies within constructivist classrooms. These classrooms often promote the noncognitive side of the arts including social-emotional development (Brouillette, 2010; Menzer, 2015; Powell, 2007), engagement (Chand O’Neal, 2014; Charland, 2011; Greenfader & Brouillette, 2013; Powell, 2007), and empathy (Bellisario & Donovan, 2012; Stevenson & Deasy, 2005), as well as the cultural relevance and responsiveness of the arts (Bowman, 2006; Gay, 2000; Heise, 2010; Ladson-Billings, 2001; Robinson, 2006).
The researcher would also be most interested in future research related to students who would benefit from the arts. The highest mean of any item within any scale was the mean associated with item 19.2: I feel that there are many students in my class who would especially benefit from more arts activities in the curriculum. The mean for item 19.2 was $\bar{x} = 4.37$, with the arts-as-curriculum group mean even higher at $\bar{x} = 4.75$. This begs the question: What type of students, specifically, would benefit from more arts activities in the classroom? The researcher encourages future studies focused on the demographic makeup of students who would benefit. For example, would kinesthetically-inclined learners benefit? Visual learners? Auditory learners? Tactile learners? Ethnically diverse students? Students with accommodations?

Finally, this study could be replicated with different demographic groups of ECTs. The sample is ethnically and gender homogenous (89.3% White and 100% female), however, it is reflective of Louisiana’s public school teacher demographics. Eighty-two percent of public school K-12 teachers are White, teaching predominantly non-White students (Maxwell, 2014; National Center for Education Statistics, 2013) thus, the findings from the current study are not generalizable to ethnically diverse teachers or males. By replicating the current study with ECT graduates of a Historically Black College or University (HBCU), and/or with male-only graduates from a variety of colleges or university, generalizability would increase.

**Plans of Action**

While exploring the existing literature pertinent to the current study, the researcher re-read Davis’ (2008) *Why Our Schools Need the Arts*. One section, which chronicled the author’s recollection on keynoting at a superintendents’ conference, particularly resonated with the researcher. Following the keynote, superintendents asked a variety of questions regarding lack of two-way collaboration between classroom teachers and arts specialists, arts-related scheduling
issues, and deficient funding for arts-only spaces within schools, all three recommendations that the author had given in her keynote speech. Davis then considered the following:

I was embarrassed to say that I had been too busy defending the arts to consider some of [the] practical issues and that I came to them with theoretical arguments instead of plans. Like many arts advocates, I was more about recommendations for action than actual plans of action (p. 87).

Thus, the researcher of the current study could not in good conscience title this section “Recommendations.” There is no quick answer to placate both the arts advocate camp and those who “oversee the planning and enactment of curricula” (Davis, 2008, p. 87). What follows in this “Plans of Action” section are strategies for action at the school, district, teacher preparatory, and policy levels, based on research outcomes from the current study.

Every ECT challenge or deterrent to arts-based pedagogy cited within data collection and subsequent analysis can be eliminated with administrative support for the arts at the school level. Administrators should research the benefits (both cognitive and noncognitive) of the arts in elementary settings and promote arts-based pedagogy with appropriate time, funding, space, resources, and curricular expectations. With n = 27 respondents to the challenge/deterrent items on the modified TWAS, pre-scripted curriculum constraints (x̄ = 4.19 on a 5-point Likert scale) and time constraints (x̄ = 3.67 on a 5-point Likert scale) emerged as main deterrents. Both deterrents are also echoed in the end-of survey text entries. More participants (# 5, 6, 8, 12, 17, 20, and 22) named time as a chief deterrent than any other factor. When asked about the foremost motivator to use the arts, Participant 23 wrote, “If the curriculum I taught wasn’t so demanding. The lessons that I have to teach are already so long and scripted, that it has been very hard to work in my own creativity.” Respondents 10, 11, 22, and 24 also commented on the narrowness of the pre-scripted curriculum. By promoting arts-based pedagogy as a valid use of instructional time, reconsidering instructional time for the arts, and encouraging classroom teachers to
supplement pre-scripted lessons with arts-based strategies, administrators can support the arts at the school level.

Also specific to the school level, administrators can encourage teachers to practice an artform outside of school, access local community arts entities, or can even set up artistic opportunities for faculty and staff. From the data analysis, current artistic practice proved fundamental to frequency ($p = .012$). Administrators supportive of arts-based pedagogy should recognize the importance of current teacher practice in varied art forms and work to implement arts programming for teachers, thereby improving arts-based pedagogical frequency.

The district can also implement an action plan related to arts-based pedagogy. When ECT self-efficacy with the arts was measured in relation to prior arts exposure, the difference in means between a total lack of prior exposure in any art form and the previous arts exposure in all four art forms was statistically significant ($p = .048$). At the elementary level, instructional minutes devoted to all four art forms each week is extremely uncommon. There is no doubt that many of today’s elementary students who aspire to become future teachers are at an artistic exposure disadvantage. Districts can work to ensure students have exposure and experiences within all art forms. At the district level, this does not necessarily require funding for music, theatre, visual art, and dance specialists in every school, albeit a utopian model! The district can ensure that classroom teachers provide numerous opportunities for students to experience varied art forms through integrating the arts into the core curriculum through arts-based field trips, teaching artist visits, involving parents, families, and community with arts expertise, etc. Districts can also work to rotate art forms into ancillary schedules, e.g. emphasis on one art form each nine weeks.
Furthermore, data analysis elucidated the need for arts-based professional development for ECTs. Of the n=28 ECTs who responded to the question, “Have you attended any ARTS workshops for teachers in the past 12 months,” twenty-seven respondents had, unfortunately, not attended any. Although the research question could not be adequately assessed with the quantitative data collected, the significant need for arts-based professional development for ECTs is overwhelmingly evidenced by the qualitative end-of-survey text entry to the prompt, “What do you feel would motivate you to use the arts more than you already do?” Out of n=23 text entries, respondents 1, 7, and 27 cited “training” and respondent #13 mentioned “appropriate professional development tools/materials.” Arts-based resources also surfaced as a need. Respondents 4, 5, 6, 8, 14, and 18 all refer to the lack of arts materials and resources as their paramount motivator. Furthermore, open-ended text-entry prompts exposed a need for theatre, music, and dance-based classroom strategies, as a majority of ECTs cited a visual arts lesson as “the best arts-based lesson currently in [their] teaching arsenal.” Arts-supportive districts can offer ECTs access to professional development in the arts.

The paramount importance of professional development as a training method for arts-based pedagogues is also a substantial finding for arts-based programming providers. In addition to the limited obligatory preservice arts offerings at colleges and universities, higher education institutions, along with the private sector, would do well to offer arts-based professional development to in-service ECTs who are developing their teaching repertoire. Additionally, the academy could offer training for administrators and other stakeholders focused on arts-based pedagogical support.

Also important to the academy are the results gleaned for preservice arts-in-education programming for elementary candidates. Findings from this study support that the classification
and isolation of arts-based preservice instruction into the silos of arts-as-curriculum, arts-integrated-curriculum, etc. is futile. One method did not improve eventual frequency of arts use during instructional time nor self-efficacy with the art forms with the sample studied. Based on these results, teacher educators should promote any and all arts-based methodology and approaches, particularly within elementary settings, as evidenced by the insightful ECTs’ desire for strategies, ideas, resources, and support.

In addition to plans of action at the school, district, and teacher preparation levels, this study has made clear two distinct policy opportunities. Currently, the Louisiana Department of Education requires classroom teachers to obtain hundreds of hours of continuing learning units (CLU)s prior to renewing or upgrading a teaching certificate (Louisiana Department of Education, 2018), however, specifications governing CLU programming during teacher in-service days and faculty meetings do not exist. A policy which institutes a required number of arts-based pedagogy programming CLU hours for classroom teachers would improve awareness of arts-based strategies and benefits and, in turn, likely improved pedagogical frequency and self-efficacy with the arts.

Another policy opportunity lies in the requirements of teacher preparatory programs throughout Louisiana. Pursuant to state requirements, Louisiana requires preservice teachers to complete one arts course totaling three semester hours (La. Admin. Code ch. 2, § 207). This policy, however, does not offer recommendations as to the nature of arts-based programming to meet state requirements. Currently, all first-fifth grade traditional teacher preparation programs in Louisiana offer three to four hours of arts methods courses for elementary education majors. Much programming focuses on the elements and principles of visual arts and, to a lesser extent, music. An informal review of class syllabi from teacher-educators across the state reveal an
absence of theatre, dance, or arts-integrated opportunities within existing teacher preparation programming. Germane to the current study, although no significant difference emerged between type of preservice arts class (arts-as-curriculum versus arts-integrated curriculum) and relative ECT value for the arts or self-efficacy with the arts, the researcher contends that the existing policy is antiquated. The highest mean of any item within any scale ($\overline{x} = 4.37$, with the arts-as-curriculum group mean even higher at $\overline{x} = 4.75$) was the mean associated with the following statement: I feel that there are many students in my class who would especially benefit from more arts activities in the curriculum. This finding, coupled with the almost redundant value-centric responses from participant text entries, shows immense value for the arts as a pedagogical practice. By mandating that state-approved teacher preparation programs are inclusive of all art forms and arts-integrated practices, it is likely that ECTs will emerge with higher self-efficacy levels and better prepared to use arts-based pedagogy regardless of grade or school placement.

In short, the current study provides arts advocates, classroom teachers, administrators, district personnel, teacher educators, and policy makers much to ponder and to accomplish. “This requires vision, leadership, and effort. As does any educational success” (Aprill, 2010, p.15).
REFERENCES


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McAllister, G., & Irvine, J. J. (2002). The role of empathy in teaching culturally diverse students:


State Education Agency Directors of Arts Education. (2014). *National Core Arts Standards.* Dover, DE: State Education Agency Directors of Arts Education.


APPENDIX A
PERMISSION TO USE ORECK’S SURVEY

On Mon, Jan 29, 2018 at 2:17 PM, Jamie A Hipp <jhipp2@lsu.edu> wrote:

Dear Dr. Oreck,

My name is Jamie Hipp and I am currently a Ph.D. candidate studying within Louisiana State University’s School of Education. My dissertation asks, “How do we (as teacher educators) build a future teacher with a proclivity to use the arts? What is the blueprint?” Although integration is great, so is arts education, enhancement, infusion, immersion, and creative learning – all with evidence in literature to back up student achievement, acquisition of soft skills, and cultural relevance/responsiveness. As soon as we start trying to classify and define, parties are labelled as ‘wrong’ and integration types must pass the sniff test. Your articles within JIEA, JTE, and TAJ have been instrumental in my work.

At this time, I am writing to ask your permission to utilize the entire Teaching With The Arts Survey in a cross-sectional manner in my work. I intend to give you full citational authority and will gladly share results/findings with you if requested. It was also my hope to add examples to the item that reads: “Do you currently practice an art form?” to elicit more responses. Some examples might include participant involvement in dance classes or playing instruments. I intend on disseminating the survey via Qualtrics software.

Thank you in advance for your consideration of this request.

Sincerely,
Jamie Hipp, ABD

Barry Oreck, on behalf of Barry Oreck <barry@barryoreck.com>

You replied on 2/6/2018 11:10 AM.

Jamie,

Yes, you have my permission to use the survey and I would like to see your results. I have included a pdf of the survey along with the technical report.

I would definitely consider adding more background and current arts involvement items at the beginning of the survey. In my situation time was extremely limited so I tried to get the whole process down to 15 or 20 minutes. But I wanted a lot more information about people’s arts involvement as well as previous professional development experience. The biggest problem I have run into with the arts involvement questions is that people forget or underestimate their artistic experiences. It’s not just about taking ongoing classes or performing in an art form. People often don’t consider singing in the church choir, learning to tango, knitting, photography, calligraphy, flower arranging and other such “hobbies” as arts involvement. So I think more details in that area would be helpful in understand the responses to the survey. Another issue to consider with the TWAS is the narrow range of examples given for different types of arts integration. Talking about the arts, looking at historical photos from an aesthetic viewpoint, or visiting a museum for example, are not covered. You might consider a few more open-ended items that ask people for other ways they may have used the arts in their teaching.

Please let me know if you have any questions or would like to discuss anything else about the survey.

all the best

Barry

Barry Oreck, Ph.D.
Consultant in Arts Education Research and Professional Development
718-622-2176
Barry@barryoreck.com
APPENDIX B
TWAS INSTRUMENT

Teaching with the Arts
Survey

by Barry A. Oreck, Ph.D.

The Role of Dance, Music, Theater, & Visual Arts in Your Classroom

This questionnaire asks you to consider the role of the arts in your curriculum. Please answer all of the questions honestly and completely; if you leave any blanks your data is automatically excluded from the analysis. Choose an answer even if a specific item seems obvious or does not seem relevant to your current position or practice (i.e. frequency of teaching music if you are a music teacher). Your responses will be kept strictly confidential and will not be reported on an individual basis. A small percentage of respondents will be asked to participate in a voluntary follow-up interview.

Name __________________________ Phone # (optional) _________________________

School __________________________ City ____________________________ State ______

Grade/Class ______________________ Specialist? Y / N if yes, what subject? ______________________

Gender (please circle): Female / Male

Age: ______

Ethnicity (please circle): African American / Latino / White / Asian / Other

# of Students in Class (avg.) _______ # of Years Teaching _______

Do you currently practice an art form?

Which art form(s)? ___________________________________

How frequently do you practice? ___________________________________

Have you received instruction or performed in an art form in the past, either as a child or as an adult?

Which art form(s)? ___________________________________

For how long? ___________________________________
What is the highest academic degree you have earned? _______________Major _______________

Approximately how many staff development workshops of any kind have you attended this year?____

Have you attended any arts workshops for teachers in the past 12 months?  Yes / No

If yes, was your attendance voluntary?  Yes / No

Did the workshop(s) focus on a specific art form? Which art form?

Visual / Music / Dance / Theater / Literary / Media/ other _______________

Which (if any) in-service staff development workshops (arts or other subject ) have you found to be most helpful in your teaching practice?

______________________________________________________________________________

How would you characterize the arts instruction in your school?

Inadequate Adequate Excellent

Dance
Theater
Music
Visual Arts
The following questions ask you to rate the importance of using various art forms and types of artistic activities as part of the classroom curriculum to help students learn and communicate what they know.

**IMPORTANCE SCALE**

1 = not important  
2 = of little importance  
3 = somewhat important  
4 = important  
5 = very important

<table>
<thead>
<tr>
<th>How important do you feel it is for your students to:</th>
<th>not important ← ---- → very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. view a video tape of a dance (e.g. to study a culture, concept, or time period)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. listen to a piece of music (e.g. to study a culture, concept, or time period)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. engage in dance activities (e.g. create a short movement study to explore natural processes such as the water cycle, or the movement of planets)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. read or attend a play (e.g. to study a culture, concept, or time period)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. engage in music activities (e.g. create a sound score to accompany a story, write and sing a song in the style of a different time period)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. look at works of art (e.g. to study a culture, concept, or time period)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. engage in theater activities (e.g. play a role from a piece of literature, write a play with characters students developed)?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. engage in visual arts activities (e.g. draw a cartoon of a current political situation, create a storyboard of the major events of a book)?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
The following questions ask you to estimate how frequently, on average, you use various art forms and different types of artistic activities in your classroom.

**FREQUENCY SCALE**
1 = never
2 = rarely
3 = once a month
4 = once a week
5 = daily

<table>
<thead>
<tr>
<th>How frequently do you:</th>
<th>never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. lead a movement activity with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. show a video tape of a dance to your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. lead a music activity with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. lead a theater activity with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. actively listen to a piece of music with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. read or watch a tape of a play with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. study works of art with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. lead a visual arts activity with your students?</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The following questions refer to your own attitudes and potential concerns about the arts in the curriculum. Please respond to the following statements based on how strongly you agree or disagree with the assertion.

**AGREEMENT SCALE**
1 = strongly disagree  
2 = disagree  
3 = neither agree nor disagree  
4 = agree  
5 = strongly agree

<table>
<thead>
<tr>
<th><strong>To what extent do you agree with the following statements?</strong></th>
<th><strong>strongly disagree</strong></th>
<th><strong>&lt;--- ----------- ---&gt;</strong></th>
<th><strong>strongly agree</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>17. I feel confident in my ability to facilitate dance activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. I feel that I don’t have enough time to teach the arts along with the rest of the curriculum.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. I consider myself an artist.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. I am concerned that music, dance, and theater activities are too noisy or disruptive for the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21. I feel confident in my ability to facilitate music activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. My supervisor encourages teacher creativity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23. I don’t have enough space to use movement effectively in the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24. I feel confident in my ability to facilitate visual arts activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25. My students have trouble concentrating on other work after an arts activity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Number</td>
<td>Statement</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>26</td>
<td>I feel confident in my ability to facilitate theater activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>In general, my school is supportive of innovative teaching approaches.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I feel that there are many students in my class who would especially benefit from more arts activities in the curriculum.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>I am free to use new teaching approaches in my classroom as I see fit.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>I consider myself a highly creative person.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I feel constrained by the demands of the curriculum I have to teach.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The final open-ended questions ask you to consider why you use the arts and what would make you use them more.

32. What do you feel is the strongest current motivation for you to use the arts in your teaching?

33. What do you feel would motivate you to use the arts more often than you already do?

Thank you for your time.

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APPENDIX C
IRB APPROVAL

ACTION ON EXEMPTION APPROVAL REQUEST

TO: Margaret Mary Sulentic-Dowell
    Education
FROM: Dennis Landin
    Chair, Institutional Review Board
DATE: March 26, 2018
RE: IRB# E11008
TITLE: Investigating Early Career Teacher Capacity for Arts-Based Pedagogy


Review Date: 3/26/2018
Approved X Disapproved

Approval Date: 3/26/2018 Approval Expiration Date: 3/25/2021

Exemption Category/Paragraph: 2a

Signed Consent Waived?: Yes

Re-review frequency: three years unless otherwise stated

LSU Proposal Number (if applicable):

Protocol Matches Scope of Work in Grant proposal: (if applicable)

By: Dennis Landin, Chairman

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is CONDITIONAL on:
1. Adherence to the approved protocol familiarly with, and adherence to the ethical standards of the Belmont Report
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants.
   including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc. Approvals will
   automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

* All investigators and support staff have access to copies of the Belmont Report, LSU’s Assurance with DHHS,
  DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in
  this office or on our World Wide Web site at http://www.lsu.edu/irb
APPENDIX D
INFORMED CONSENT

Welcome to the research study!

Thank you for your interest in this survey, which is being conducted by a doctoral candidate at [Name of University]. There are no right or wrong answers in this survey, however, your opinion is important to us. The purpose of the study is to determine early career teachers’ behaviors and attitudes regarding the use of the arts in teaching. The survey will take no more than 10 minutes of your time. Please note that this survey is best displayed on a laptop or desktop. Some features may be less compatible on a mobile device. Please find more study details below:

Study Title: Investigating Early-Career Teacher Capacity for Arts-Based Pedagogy

Data Collection Site: Online (Emailed Survey)

Participants: You have received the survey invitation due to the following reasons:

a. You are 18 years of age or older
b. You are a recent graduate of [Name of University’s] 1-5 teacher education program
c. You have taught for two years or less.

Study Investigators:

If you have questions about the study, you can contact:
[Name, rank, and phone number of Principal Investigator]
[Name, rank, and phone number of co-Principal Investigator]
The investigators are available M-F, 8:00 a.m. – 4:30 p.m.

You are eligible to participate in this study if you are at least 18 years old and are not pregnant.

Participation in this survey is voluntary and participants can choose not to participate. You can also choose to not answer particular questions and stop participating at any time before or during this study. The only study risk is the inadvertent release of sensitive information found in the survey. However, every effort will be mad to maintain the confidentiality of everyone who participates in the study. Study data will be kept in a secure location so that only the investigators have access. All personal information will be kept confidential and will not be shared with anyone. Identifying information will not be connected with the data collected from this survey.

If you have any questions about participants’ rights or other concerns, please contact [Name and phone number of IRB chair].

By agreeing to participate in this study, you are confirming that you are at least 18 years of age and not pregnant.
VITA

Jamie Allison Hipp holds a Bachelor’s degree in Musical Theatre and a Master of Arts in Teaching from Northwestern State University. After years of performing internationally as an actress, singer, and dancer, Ms. Hipp returned to her home state of Louisiana where she served as a theatre specialist for the East Baton Rouge Parish Public School System for seven years. In 2014, she became a fellow for Louisiana A+ Schools, a whole-school arts integration reform network. Through her work as a fellow, Ms. Hipp offers full-faculty professional development and model instruction using best practices in the arts. Since 2016, she has taught at the undergraduate level, training preservice teachers to use the arts effectively.

Ms. Hipp has focused on scholarly work throughout her teaching career. Recent national presentations include workshops at the national conferences/conventions of the International Literacy Association (ILA), the National Association of Elementary School Principals (NAESP), and the National Association for Gifted Children (NAGC). Favorite publications include articles within NAESP’s Principal Communicator, ILA’s Literacy Today, and the American Alliance for Theatre & Education’s Youth Theatre Journal. She also serves as a reviewer for several journals and conferences, acts as a National Writing Project Teacher-Consultant, and holds a seat on the LSU Writing Project board.