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# **K-12 Teachers' Retention of Arts Integrated Professional Development**

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A Dissertation Submitted to the Graduate School at the University of Missouri-St. Louis  
In partial fulfillment of the requirements for the degree of  
Doctor of Education with an emphasis in Educational Practice

May  
2023

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### **Abstract**

Arts integration is an interdisciplinary teaching model in which the arts become a means for the comprehension of non-arts content. Research has shown this approach increases academic engagement and content retention (Rinne et al., 2011). The use of arts integration also provides gains for teachers. Teachers perceive their practice more innovative and better able to reach the needs of diverse learners (Bellisario & Donovan, 2012). For the benefits of arts integrated learning to be achieved, teachers must acquire the knowledge and techniques of this teaching model. This requires knowledge in both arts content as well as the pedagogical strategies of the instructional model.

Professional development (PD) is often how this learning is disseminated (Saraniero et al., 2018). Understanding what information is retained from these PD experiences may help provide a foundation to design subsequent training. A mixed-methods research design was used to discover to what extent learning from a prior arts integrated PD was retained by K-12 classroom teachers. Instruments used were a 5-point Likert survey and in-depth interviews. Retention from the PD was examined using Knowles' Six Assumptions of Andragogy (1980). Results showed an increase in teachers' understanding and implementation of the arts integration teaching model. Confidence and use of visual arts strategies were reported at higher levels than other art forms. Teachers identified a need for continued support after the PD to help with implementation of arts integration into their teaching practice.

### **Dedications**

I dedicate this work to my parents, Houshang and Toni Vafi. You encouraged my love of learning, fostered my curiosity in science, and gave me the space to express myself artistically. I know you would both be proud. Thank you to my children, Erin and Ian, for all your encouragement. The two of you maintained your confidence in me when my own wavered. Finally, to my husband, Chuck. Thank you for your love, support, and keen editing insights. I could not have made this journey without you.

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## **Chapter 1**

### **Introduction**

The arts are a fundamental component of human societies and a key to human communication (Eisner, 2003; Martin, 2016). Art forms such as drawing, dance, re-enactments, and music are early forms of expression that allowed humans to express and make meaning of their world (Dewey, 1934; Milbrath & Lightfoot, 2010). According to Martin (2016), "The arts are the true universal languages that predate spoken or written word and connect humanity in ways only to be expressed and experienced through our senses" (p. 117). With such an integral connection to human history, it only makes sense that arts should be an essential component in our schools.

Arts integration is a teaching model whereby students can examine academic content through the lens of an art form (Burnaford et al., 2007). Research has shown this approach benefits students by increasing academic engagement, as well as boosting the development of 21st Century Skills such as creativity, collaboration, and critical thinking (Robinson, 2018). However, for students to reap the benefits of arts integrated learning, teachers must first acquire the knowledge and techniques of this teaching model (Saraniero et al., 2018).

### **Background**

Citizens of the 21st century are faced with many global challenges. These include the effects of a changing climate, an increased need to maintain global health, and the struggle for equity and social justice. These systemic challenges will extend across multiple fields of knowledge and have extensive social, economic, and environmental

impacts (Tuzikov et al., 2019). Finding solutions will demand individuals who are creative and critical thinkers and unafraid of taking risks (Walan, 2019). Creative thinkers can utilize knowledge from outside sources and traditional concepts to formulate original ideas (Eagleman & Brandt, 2017; Runco, 2004). Creativity is just one of the skills needed to navigate the new century. Advancements in digital media and technology affect how we communicate and collaborate. Communication of ideas utilizes the traditional avenues of speaking and writing but artistic routes such as animation, videography, and 3-D modeling are emerging as new and accepted forms (Buczynski et al., 2012). Other skills that emerge as significant in this era include innovation, problem solving, and expertise in interpersonal skills such as collaboration and communication (Ghafar, 2020). Classified as 21st Century Skills, these areas of competency hold great value for economic growth in a rapidly changing world (Siddiq & Scherer, 2017; World Economic Forum, 2016). For our nation to maintain its position on the economic global stage, it is important to foster the further development of artistic skills in our young people (Ghafar, 2020; Snepvangers, et al., 2018; Walan, 2019).

Opportunities to develop creativity and other 21 century skills should be an important component in the education of our students, but the U.S. system of education is mired down in an endless loop of high-stakes testing (Kim, 2021; Snepvangers, et al., 2018). Beginning with the passage of the No Child Left Behind Act (NCLB) in 2001, this system of high stakes assessments produced an increasingly test-focused system that targets the reduction of achievement gaps and increases in international test scores (Kim, 2021). Since the implementation of NCLB and the passage

of Every Student Succeeds Act in 2015, twenty years of data has demonstrated no significant gains in narrowing the achievement gap in the US (Amadeo, 2021; Center for Global Education, 2021).

The Organization for Economic Cooperation and Development (OECD), a socio-economic body for global change, tests 15-year-old students every three years across its member countries. To aid in shaping educational policies, the OECD developed the Program for International Student Assessment (PISA) which assesses critical thought in the academic areas of reading, math, and science. While results indicate the US ranks slightly higher in reading scores, math and science results have not demonstrated significant growth since 2003 (Amadeo, 2021; Hanushek, 2014). Along with academic areas, PISA also examines cross curricular areas. During the 2015 assessment period, PISA examined collaborative problem solving. Of the 52 participating countries, Singapore ranked 1st and the US ranked 13th, falling behind Canada, Japan, and Finland (OECD, 2017). These results demonstrate there is room for improvement in US classrooms and indicate that something could be missing in our nation's educational system (Hanushek et al., 2013).

With each new educational reform initiative, teachers are pressured to increase rigor and raise student test scores. Subject areas such as music and art are often set aside to devote more class time to the core subjects of math and reading, the key components of standardized testing (Au, 2011; Gara et al., 2018). Increased focus on testing contributes to reduced levels of innovation among teachers during lesson planning. This leads to decreased levels of teacher innovation and less emphasis on

developing student imagination, creativity, and problem-solving skills (Kim, 2021). A test-focused educational environment is contrary to what is needed to foster flexible thinking and problem solving. Creativity, collaboration, communication, and problem solving are competencies that contribute to development of 21st Century Skills among students . Teaching academic content with and through the arts and using arts integration in the academic classroom is a fundamental way to foster the development of these skills (Burnaford et al., 2007; Edelen, 2020; Eisner, 2014; Hamblin, 1993).

### **Statement of the Problem**

Arts integration is an interdisciplinary pedagogical approach in which the arts are paired with other academic content to increase learning in both areas. Benefits of this method include increases in skill development and retention in academic subject areas such as literacy, science, and math (Burnaford, 2007; Lee, et al., 2015; Rinne et al., 2011). Positive effects are not limited to academic learning. Arts integration also boosts creativity, collaboration, and problem-solving skills (Miller & Bogotova, 2019).

Despite the documented benefits, arts integration is complex and not easily implemented into the classroom setting (Duma & John F. Kennedy Center for the Arts, 2014). Classroom teachers who build arts integrated lessons are tasked with developing standards-based lessons using both academic and arts content. Arts content on its own is large and far-reaching. When using the term “the arts,” we combine the four major genres of dance, music, drama, and visual art into one. Each genre is a distinct art form with an array of concepts and techniques necessary for application. Additionally, each of

these genres has sub-genres with increased specificity in content, skill, and technique (Burnaford et al., 2007).

During arts integrated professional development experiences, teachers acquire new content knowledge in the arts and adapt and pair this knowledge with the academic classroom content (Hipp et al., 2019). The plethora of diverse information presented during these training sessions challenges teachers with the task of processing and storing new information (Brooks & Shell, 2006). Understanding what information is retained and the factors that facilitate this retention may provide valuable insight when planning future training. Research related to professional development in arts integration has been reported in the literature, but there is a need for more research concerning the retention of knowledge from arts integration professional development. More research in this area may help to promote the success of future arts integrated professional development experiences. Insight into adult learning will be key to identifying what factors may have contributed to the teachers' knowledge retention from their professional development experience.

### **Theoretical Framework**

The theoretical underpinnings of this research are built upon Malcolm Knowles' Six Assumptions of Andragogy (1980). These six assumptions identify the conditions that help to increase an adult's capacity to acquire new knowledge (Hagen & Park, 2016). Knowles recognized that adults tend to approach learning differently than do children. An adult's motivation for learning is often based on the need to acquire new

information for career success or to facilitate a change in a life-stage role such as becoming a parent or caregiver (Knowles, 1980; Purwati et al., 2022).

Andragogy differs from the familiar term of pedagogy, the method of educating children. The pedagogical model was originally based on four assumptions: 1) dependent nature of the learner, 2) subject-centered learning, 3) learning is extrinsically motivated, and 4) prior experiences have little to no bearing on the learning (Leong, 2019). Andragogy began to separate from the traditions of pedagogy due to the increased understanding of the adult's learning needs in social, career, and personal realms. While pedagogy and andragogy typically focus on different learner groups, they work together to help to foster learning experiences throughout life by acknowledging and responding to developmental needs (Bowling & Hensche, 2020).

Knowles recognized that adults and children have different needs when acquiring knowledge. One area of note is that of prior learning and life experience. Children lack prior learning and life experience and therefore are dependent upon teacher-driven experiences to convey new knowledge. This is not always the case for adults. Many adult learners have had prior learning and life experiences to draw upon and therefore tend to be more self-reliant and self-directed in their learning (Purwati et al., 2022). According to O'Shea (2016), the diverse life experiences acquired by an adult of 25 years or older positively impacts their ability to self-direct new learning. Time is also a significant factor in the distinction between the two models. Learning content in a pedagogical model is subject centered and developed over a long range of time for future application. By contrast, content in an andragogical model is topic or problem

focused with the intent of a near-future or immediate application (Carpenter & Linton, 2016).

Utilizing the knowledge gained from his teaching experiences with adult learners, Knowles developed a series of six assumptions to cultivate educational experiences for the mature learner (Bedi, 2004; Purwati et al., 2022). Knowles' Six Assumptions of Andragogy define the elements needed to create a successful adult learning experience (Knowles, 1980, 1989):

1. Self-concept: As a human matures, the self-concept shifts from dependency to independence and to being self-directed.
2. Experience: As a person develops through life, accumulated life and career experiences become resources of knowledge.
3. Readiness to learn: As humans mature, they find increased meaning in learning information they believe is relevant and will hold significance for current career and/or social roles.
4. Problem orientation: The adult learner's perspective of learning shifts from subject-centered to problem and topic centered learning with the potential for immediate application.
5. Need to know: The acknowledgement that the value in learning will be of significance to professional and personal responsibilities.
6. Intrinsic motivation: The incentive to learn comes from within the learner.

The adult learner is most often independent, and self-directed, bringing an array of knowledge and life experiences that augment the contextualization of new



knowledge (Chan, 2010; Ouzah, 2005). Structuring educational experiences that utilize these elements have been shown to be influential factors in the ways in which an adult learner will undertake new learning events. (Beavers, 2009; Remenick & Goralnik, 2019).

### **Purpose**

Using arts integration in the classroom has many benefits for students including increases in engagement and the development of the 21st century skill of creativity, communication, and content (Burnaford et al., 2007; Edelen, 2020). According to Desimone (2011), effective professional development will allow teachers to utilize the new knowledge to strengthen their approach to content and pedagogy. For this application to occur, the new knowledge must be retained but many times only a portion of the new learning is saved for the long-term (Brooks & Shell., 2006). Examining what knowledge is retained may be key to increasing content retention from professional development training. The content retained by teachers who participated in an arts integration professional development program was the focus of this exploration. The program, Arts in Every Classroom (AEC), was provided to K-12 teachers in a midwestern state through a large, urban arts organization from the same state. Teachers' subject areas included math, science, social studies, and art. Including arts specialists into the PD process allowed arts instructors to integrate non-arts learning into their own classroom content as well as to provide an arts integrated-informed lens with which to collaborate with other teachers in their building (Rabkin & Redmond, 2004).

The AEC professional development consisted of large-group informational sessions and small learning groups. The large group sessions gave the teachers a broad overview of arts integration and why it is a beneficial teaching strategy for students and teachers. Participants were organized into small learning groups in which they had the opportunity to observe and reflect upon specific arts content, integration strategies and model lessons conducted by the program facilitators. The teachers from this program were revisited up to two years after the conclusion of the training to measure the retention of arts integrated pedagogical practices. A mixed-methods research approach was used to examine to what extent the content from this training was retained. Research methods was a 20 question Likert-type Survey and semi-structured interviews. Retention elements from the arts integration training was categorized using Knowles' 6 Principles of Adult Learning (1980).

### **Research Questions**

1. To what extent do classroom teachers retain and utilize arts integration content from their professional development experiences?
2. In what ways do the teachers who participated in arts integration training describe the experiences and content that continue to impact their current teaching practice?

### **Definition of Terms**

- 21st Century Skills: Skills needed to compete in the 21st century global workforce such as creativity, critical thinking, innovation, and problem-solving skills (Ghafar, 2020)

- The Arts: Broad categories of major art forms which include visual arts, drama, dance, and music (Burnaford et al., 2007)
- Arts Learning: Educational processes taught about and through an art form
- Arts Integration: An interdisciplinary teaching model that uses an art form to teach academic content (Bresler, 1995)
- Andragogy: Methods of teaching the adult learner (Knowles, 1980)
- Adult Learner: A person with an independent, self-directed learner with a wealth of life experience that can be used to contextualize new knowledge (Knowles, 1980)
- Learner Engagement: A learner's level of effort and interaction as indicated by participation, learning satisfaction, and cognitive task solving (Lee et al., 2015)
- Pedagogy: Methods and practices of teaching
- Professional Development: Structured learning for educators designed to increase knowledge and change practice with the ultimate goal of improving student performance (Darling-Hammond et al., 2019)

## **Procedures**

A mixed-methods research design was implemented to gather quantitative and qualitative data in two separate phases using an explanatory sequential format (Creswell & Guetterman, 2019). The utilization of this approach has the potential to offer deeper insight into the research problems than would one approach yield on its own (Molina-Azorin, 2016). A Likert-type survey was implemented to determine the extent in which participants incorporated the arts and arts integration strategies into

their practice. Survey data was analyzed using descriptive statistics. To ascertain how the results of this work represent the lived experiences of the participating teachers, in-depth individual interviews with five of the participating teachers was conducted.

### **Significance**

Arts integration is practiced to varying degrees in schools throughout the United States, however there is still a need to determine best practices when designing professional development for classroom teachers. Identifying best practices in arts integration may help to increase successful arts integrated teaching and learning experiences (Saraniero et al., 2018). Teachers who have experienced success with the implementation of arts integration perceive their practice as more innovative and they can more effectively meet the needs of diverse learners (Lee, et al., 2015). Successful integrated arts experiences allow students to view learning from multiple perspectives. Using the arts also permits students to demonstrate their knowledge through an art form instead of traditional avenues such as written tests or essays. Assessments can be done through drawings or paintings, drama scenes, radio plays, or even choreographed dance pieces (Bellisario et al., 2012).

A deeper awareness regarding the long-term pedagogical concepts and skills that teachers retain may help guide the design of future professional development experiences. Furthermore, using qualitative interviews to analyze the experiences of teachers may uncover notable elements or methods of the training that promoted memorable learning. Developing an understanding of the information and experiences

that were remembered and what factors affected the retention provides a foundation of knowledge to build subsequent training.

### **Limitations and Delimitations of the Study**

Data was gathered through both quantitative and qualitative methods as per the mixed-methods design (Creswell & Guetterman, 2019). The quantitative portion was implemented through a Likert-type survey and the qualitative portion utilized semi-structured in-depth interviews that were facilitated and analyzed. The organization presented limitations, and delimitations.

Limitations are the possible shortcomings of a study that are out of the control of the researcher. The participants were teachers who participated in the Arts in Every Classroom (AEC) professional development experience and were all from the same midwestern state. This population was a sample of convenience that will limit the generalizability of the results. An invitation to participate was sent electronically to all the teachers who had previously participated in the AEC professional development. It was stated in the invitation that the researcher will make every attempt to maintain privacy and confidentiality, therefore it was assumed that teachers should be able to respond honestly. Compromising this assumption of honesty was the fact that the researcher was one of the facilitators of the AEC training. This may have had the potential to cause the participants to be biased in their responses both on the survey and in the interviews. This possible bias can be seen as a limitation to the research. Additionally, multiple presenters taught the PD sessions bringing in a variety of teaching

styles. This variation in facilitation methods may have affected the content understanding and subsequent retention by the PD participants.

Another limitation was the conclusion of the training corresponded with the advent of the Covid-19 pandemic in 2020. The challenges of the pandemic left many teachers feeling exhausted and emotionally depleted. This may have potentially created a barrier for teachers to practice the new learning and this may affect their retention of content (Chan et al., 2021).

Delimitations to the study are apparent within the research design. A mixed-methods research design was utilized, but this limits the generalizability based on the contextual nature of the qualitative data (Osbeck & Antczak, 2021; Polit & Tanto, 2010). Qualitative data was limited to semi-structured interviews. Data gathering through focus groups or observations were not utilized. Finally, the Likert-type survey was developed by the researcher. While it was piloted for clarity and validated using Lawshe's Content Validity Ratio (1975), there may be embedded bias.

### **Organization**

The research was organized into five chapters to provide the reader with ample background and clear picture of the work presented. Chapter 1 presents an overview of the work. Chapter 2 provides the reader with the research and criticism, present and past, on the following subjects: arts learning, arts integration, Adult Learning Theory, and professional development in arts integration. Chapter 3 details the methodology, research methods, and descriptions of the study participants and the setting. Chapter 4 summarizes data in the form of detailed quantitative survey data and comprehensive

qualitative coded interview data. Finally, Chapter 5 provides an interpretation of the data, describes the implications of the findings, and identifies opportunities for future research.

## Chapter 2

### Review of the Literature

Arts integration and its role within the school is examined in this chapter. Also included are the issues and challenges general education teachers face during the learning processes involved in the application of arts integration. Classification structures used to categorize the types of arts integration are also discussed. The theoretical framework supporting the work is Malcolm Knowles' 6 Assumptions of Andragogy (Knowles, 1980). These assumptions are analyzed from both an historical perspective and current applications. Finally, teacher professional development is explored through the lens of arts integration learning and Knowles' Assumptions of Andragogy (Knowles, 1980).

#### Search Description

A broad search was implemented utilizing online databases such as ERIC, EBSCOhost, JSTOR, ProQuest and SCOPUS. Online search engines such as Google and Google Scholar were also utilized. Subjects and keywords searched included, *arts integration, teachers' perceptions of arts integration, benefits of arts integration, arts learning, professional development and arts integration, assumptions of andragogy, adult learning theory, and andragogy and professional development*. The results were analyzed and reviewed carefully to understand the current research into andragogy and arts integration as they relate to teacher practice.

#### Review of Research

##### *The Role of Arts Learning*



Arts education scholar Elliot Eisner (1987) contends the arts are one of our most important societal assets and cultural investments. Deep connections exist between the arts and human experience. The arts in education is an essential component of the learning process (Eisner, 2014; Martin 2016). Through the arts, humans are able to express elements which cannot be communicated through spoken or written language. To reap the benefits of the arts schools should provide young people with the opportunities to learn with and about the arts (Eisner, 2014). Scholar Ellen Dissanayake (1995) asserts that humans have an inherent need for art. She explains that art is not an auxiliary outcome of the human experience; art is a means for processing and expressing information and has been a component of the human experience since the early days of *Homo sapiens*. The arts benefit the individual within the society through communication of events and enhancement of ritual, evolving into the development of community and fostering group identification. The processes of art, such as envisioning, and planning, promote experimentation and problem solving. Additionally, arts experiences access emotion, stimulating the production of memory and creating lasting learning experiences (Davies, 2005; Dissanayake, 1995; Heller, 2017).

The application of the creative and aesthetic elements of the arts cultivates learning growth in the general education classroom (Robinson, 2018). Music, visual arts, and dance became part of school curriculum during the 19th century. It was believed that the use of the arts within the school could help to support cognition through the uses of symmetry and repetitive actions (Hayes & Clark, 2017; Raber, 2017). The application of the arts supplemented school curriculum with new approaches for

communication, expression, and social interplay (Phillips, et al., 2010). Despite these advantages, the curricular position of the arts weakened during the latter half of the 20th century due to an increased focus on standardized testing (Eisner, 2003).

In 1993 researchers examined the effects of Mozart's "Sonata in D Major K. 448" on spatial reasoning (Verrusio et al., 2015). The impacts of this study were notable, especially for arts educators. Results from the study demonstrated a temporary increase in spatial reasoning which prompted many in academia to more closely examine the role the arts play in improving other learning skills (Catterall, 2005). According to Catterall (2005), the "Mozart Effect" inspired new research into the ways in which learning in the arts affects the development of cognitive skills. Although replication of the study results failed, the arts were no longer perceived as a dispensable subject but instead seen as a subject with the ability to boost the acquisition of learning in other areas.

For many arts educators, the "Mozart Effect" study offered validation for the implementation of the arts into academic subject areas. However, not all arts educators endorsed this idea. Eisner was not convinced the arts should be used in service of academic learning. While arts learning has important benefits for students, Eisner argued academic achievement through the arts are overstated. Additionally, he asserted that arts educators can be quick to justify the value of the arts due to their potential effects on academic coursework rather than defending the intrinsic value of the arts (Eisner, 1999). To determine the efficacy of the arts as a tool for the enhancement of academic achievement, it requires evidence of learning transfer. Transfer of learning occurs when the application of learned strategies and skills from one content area can

successfully be applied to a new content area. Eisner was not convinced that the current research was able to demonstrate this effect (Eisner, 1999).

In a 2017 interview, arts scholar Lois Hetland concurred with Eisner's point of view regarding learning transfer. She explained that while research into the transfer of arts learning continues, many unanswered questions remain and was therefore not convinced the effect could be demonstrated. What is not in question is the power of the arts. Hetland states the arts are an essential component of the human experience and are fundamental in the ways we think, relate, and communicate (Heller, 2017). The arts should be valued for the attitudes they develop, such as persistence and reflection, which benefits both academics and the arts (Hetland & Winner, 2001, 2004). However, they warn that while academic learning using the arts may offer new opportunities within the school environment, there could also be unintended negative results. If anticipated gains in the academic subject areas are not manifested using the arts, the arts may then lose value from the perspective of educators and school administrators (Eisner, 1999).

### ***The Role of the Arts in the 21st Century Classroom Setting***

Eisner, Hetland, and Winner assert that positive attributes developed during arts learning, such as persistence and reflectivity are important educational components that can be applied across subject areas (Eisner, 2014; Heller, 2017). Other beneficial skills developed through the arts are creativity, critical thinking, the ability to communicate ideas and collaborate. These skills are part of a group of competencies classified as 21st Century Skills (Haug & Mork, 2021; Walan, 2019). Global challenges

and surges in technology are requiring a workforce with abilities in innovation, collaboration, and problem solving. Focus on the cultivation of 21st Century Skills is evident internationally. Education leaders throughout the world are bringing attention to the need to prepare young people to effectively grapple with the challenges of this century (Care et al., 2018; Winner et al., 2013). Former Education Secretary, Arne Duncan asserts that the arts have a role in the development of creativity in young people. He says,

“Education in the arts is more important than ever. In the global economy, creativity is essential...To be successful in today’s economy, America’s children will need to be inventive, resourceful, and imaginative. The best way to foster that creativity is through arts education” (PCAH, 2011, p.1).

The use of the arts and arts integration to develop 21st Century Skills was examined through The Creative Classroom Collaborative: Creativity, Confidence & Competence (C3). Corbisiero-Drakos et al. (2021) suggest that implementing arts integration strategies and incorporating collaborations between classroom teachers, teaching artists, and cultural organizations demonstrate increases in creativity, critical thinking, collaboration, and communication. C3 was a three-year study that utilized a curriculum developed by classroom teachers and teaching artists. This curriculum incorporated drama, dance, music, and visual arts in tandem with the academic, non-arts content. Instruments used were pre and post rubrics, which was completed by classroom teachers, student reflections, and teacher focus groups. Results indicated those students who were part of the treatment classrooms showed positive effects from

the C3 program especially in the area of critical thinking. Students self-reported increases in creating original ideas, greater ease in collaboration and enjoyment in problem solving. Positive outcomes were not limited to students. Focus group data revealed increased teacher satisfaction in multiple areas. Teachers reported feeling more confident when incorporating hands-on learning and gained new positive perceptions regarding the incorporation of new teaching methods. They reported improvement in their abilities to find and utilize outside resources and felt an increasing sense of happiness in the classroom (Corbisiero-Drakos et al., 2021).

### ***Arts Integration in Classrooms***

**Frameworks for Arts Integration.** Arts integration is generally understood to be an interdisciplinary teaching model using the arts as a way for students to contextualize and understand other academic content. Researchers use varying categorizations of arts integrated learning to specify how and to what extent the arts are utilized: learning with the arts, learning in and about the arts and learning through the arts. Classification models for arts integrated learning have been created to identify the ways the arts can be used as a pedagogical tool within the general education classroom (Garrett, 2010).

The categorization model most widely utilized was developed by Liora Bresler (Leysath & Bronoski, 2016; Mishook & Kornhaber, 2006; Strand, 2006). In her seminal work on the styles of arts integration, Bresler (1995) engaged in a three-year ethnographic study examining to what extent the arts were used in the elementary classrooms. Bresler created four categories of arts integrated learning: subservient, co-equal, affective and social. Each category is dependent on the teacher's comfort level,

understanding, or willingness or ability to modify traditional curricular structure (Bresler, 1995).

Bresler's subservient style of arts integration is used solely in support of academic pedagogy and learning structures. Most often this is seen in the form of coloring, singing, or drawing (Krakaur, 2017). The focus of this style is to reinforce academic content without the development of artistic skills or aesthetic awareness. The structure of the subservient form is in direct contrast with the complex nature of the co-equal style of integration. In co-equal style, arts and non-arts content learning are paired to create integrated learning experiences. Instead of the arts serving as support, academic content is learned through an art form. Artistic skills and aesthetic awareness occur in tandem with academic learning (The Kennedy Center, 2020).

Bresler's third form, affective arts learning focuses on students' feelings about and attitudes towards art. Art experiences are used to develop and express personal creativity not emphasized through other academic content. Finally, social arts learning occurs through performance or events experienced outside the classroom. These are opportunities for students to engage interpersonally through the arts (Bresler, 1995). The co-equal style of arts integration is most visible throughout the literature but the least implemented due to its complexities. (Krakaur, 2017; Mishook & Kornhaber, 2006).

Bresler's framework for arts integration appears to be the prevailing structure in literature, however, it does not stand alone. Diedre Russell-Bowie (2009) examined integrated arts usage and created an arts integrated framework based on three levels of integration: service connections, symmetric correlation and syntegration. Service

connections emerge when one subject area is used for the benefit of another subject area. In symmetric correlational learning two subject areas, and arts and a non-arts subject area are paired with the intent that learning objectives will be met in both areas. In synte-gration, a broad theme is explored through multiple subject areas with each area supporting the other. Synergy is reached when student understanding of the theme is greater than the comprehension of the subject matter taught in discrete forms (Russell-Bowie, 2009).

**Arts Integration and its Benefits to Students.** Research has documented the ways in which arts integration benefits students. These include increases in innovation, creative thinking, and problem-solving skills (Brouillette, 2009; Edelen, 2020; Harp & Stanich, 2019). The Partners for Arts Integration Research (PAIR) project is an example of successful arts integration. PAIR was a three-year federally funded program that was overseen by the Chicago Arts Partnership and the Chicago Public Schools. The goal of the program was to provide evidence for the positive effect of arts integration on teaching and student learning (Scripp & Paradis, 2014). The research indicated a positive impact on treatment school populations. Treatment schools received arts integrated units co-taught by teaching artists and the classroom teachers. Integrated arts learning was further extended throughout the curriculum by the classroom teachers. Results reported statistically significant increases in student achievement in the arts integration treatment schools as measured by standardized academic tests (Scripp & Pardais, 2014).

The creative process embedded within the arts integration model promotes an increase in engagement and investment in the new educational content. Building in

opportunities for students to work collaboratively on open-ended projects allows students to take ownership of their learning (Hipp & Dowell, 2019; Robinson, 2018). A 2017 mixed-methods study of 231 New York state high school freshmen attempted to determine the impact of arts integration on engagement, attendance, and achievement in core subject areas. Results indicated 93% of students who participated in the arts integrated treatment group reported growth in academic understanding due to increased engagement. A 60% gain was reported in participants' collaborative skills, as well as noteworthy increases in the self-perceptions of creativity ability and confidence in learning autonomy (Robinson, 2018).

Positive outcomes related to cognitive growth and learning retention in academic areas using arts integration strategies are documented within scholarly literature (Edelen, 2020; Miller & Bogatova, 2018; Rinne et al., 2011). A literature review by Rinne et al. (2011) posited arts integration utilizes eight factors that play a role in long-term content retention: rehearsal, enactment, oral production, elaboration, generation, effort after meaning, emotional arousal and pictorial representation. Encountering information through aural, kinesthetic, and visual senses allow for students to process the same information repeatedly through a variety of modalities (Edelen, 2020). Learning experiences through these multi-sensory learning events can help to foster the development of cognitive connections leading to increases in academic content retention (Rinne et al., 2011). This research is supported by Kisida et al., (2020) who examined the effects of arts integration on elementary social studies students. Treatment classrooms using arts integration demonstrated increased interest,



understanding, and retention in the historical event studied. Students also developed a heightened sense of empathy towards those who had been involved in the historical event (Kisida et al., 2020).

Integrated arts learning boosts student engagement through creative opportunities offering choice and collaboration with peers (Harp & Stanich, 2019; Strand, 2006). These elements are key ingredients for cultivating student interest and involvement (May & Robinson, 2016). Anderson et al. (2020) observed increases in engagement, reflectiveness and metacognition for 6th and 7th grade students using arts integrated learning in academic subject areas. Participating students expressed satisfaction in their learning experiences using arts integration and increased connections to classroom content when engaging in creative-based academic learning in which they were able incorporate personal feelings and experiences.

Learning through the arts helps students broaden their thinking (Anderson et al., 2020). In a three-year qualitative study, examining the impacts of arts integration on both university level teachers and students, Harp & Stanich (2019) explain the ways in which students perceive arts integration to expand learning and understand content. Using the arts, students learned how to shift perspectives and challenge traditional ways of thinking. Being able to consider new viewpoints will become increasingly important as global communities grow closer and more collaborative through increases in digital technologies (Walan, 2019).

**Arts Integration and its Benefits to Teachers.** The benefits of using arts integration are not specific to students. The use of arts integration as a teaching model

also provides benefits to teachers through reports of increases in overall teaching satisfaction. This includes the utilization of new strategies to reach learners, boosts in student engagement driving down the need to implement classroom management strategies (Bellisario et al., 2012; Hayes & Clark, 2017).

The Integrated Arts in Teaching (IAT) program has been supporting teachers in arts integration for 35 years. Researchers from Lesley University examined the long-range effects of the program on participating teachers' practice and found 67% of the teachers who reported a continued use of arts integration felt rejuvenated in their practice. The teachers indicated their participation in IAT positively impacted their attitudes towards teaching and played a part in their decisions to remain in the teaching field (Bellisario et al., 2012).

LaGarry & Richard (2016) used a qualitative approach to evaluate the Perpich Arts Integration Project for teachers in rural Minnesota. Collaborative learning communities, consisting of general education teachers and arts specialists (arts content area teachers) were organized to build arts integrated learning experiences for students with the goal of boosting achievement. The program demonstrated increases in student engagement and connections between academic and arts learning as measured by interviews, written reflections from students, and classroom observations. Teachers valued the collaboration process and expressed satisfaction in combining the artistic process into instructional design. The teachers expressed appreciation for the opportunity to learn the ways in which arts integration strategies serve as pedagogical options to deepen students' learning experiences. Similar to the outcomes of the

Integrated Arts in Teaching program, teachers reflected that the professional learning in arts integration improved their practice (Bellisario et al., 2012; LaGarry & Richard, 2016).

Arts integration research often focuses on the perceptions of the general education teachers rather than arts specialists, those educators teaching course-specific arts classes such as music and visual art. May and Robinson (2016) examined arts specialists' perceptions and attitudes towards a state-wide arts integration initiative in Utah. The Beverly Taylor Sorenson Arts Learning Program was a collaborative program between arts specialists and general education classroom teachers. The program aimed to integrate core arts standards with other academic learning experiences. Arts specialists in music, dance, theatre, and visual art were surveyed using Likert surveys and open-ended questionnaires. Results indicated the arts specialists expressed satisfaction in the increased engagement of students and a decrease in student behavior issues. Arts specialists expressed value in the opportunities to collaborate with the general education teachers but felt time constraints regarding collaborative planning (May & Robinson, 2016).

Arts integration opportunities in the classroom often necessitate a period of teacher professional development prior to implementation allowing for teachers to acquire the new content and practice arts integrated strategies (Hayes & Clark, 2017; Oreck, 2004). The Erie Arts and Culture partnered with Edinboro University and 35 classrooms from three local school districts to participate in a four-year arts integration project. The project attempted to cultivate classroom teachers' ability to implement arts integration and utilize artmaking in the teaching and learning process. Arts integration

was used in treatment classrooms to strengthen achievement in math and reading, increase student engagement, and foster positive learning habits. Teachers were provided training in arts integration lesson development and pedagogy in order to implement the model in their classrooms. While results in math and reading could not definitively be determined as linked to the art integration, increases in student engagement and learning habits linked to arts integration such as expression of ideas, collaboration, and learning confidence were identified (Miller and Bogatova, 2019).

**Challenges of Implementing Arts Integration.** Arts integrated learning can be beneficial for building connections between content areas, yet teachers often face challenges with its implementation. Integrating the arts into classroom learning is often a complex process and beset with multiple barriers (Vitulli et al., 2014). In a meta-analysis of arts integration, teachers report impediments to arts integration such as curricular inflexibility, deficits in planning time and lack of administrative support. Inadequate classroom space and a paucity of specialized art supplies were also reported (Duma & John F. Kennedy Center for Performing Arts, 2014). Research throughout the literature demonstrates a generalization of classroom teachers' lack of content knowledge in the arts and how it can lead to gaps in arts integration pedagogy (LaGarry & Richards, 2016; Oreck, 2004). Additionally, self-perceptions regarding creativity and the avoidance of creative activities may create a barrier preventing teachers from exploring new pedagogical opportunities (Daker et al., 2019; Lee et al., 2015).

### ***Andragogy and Adult Learning***

The theoretical underpinnings of this research are built upon the Six Assumptions Andragogy developed by Malcolm Knowles (1970). Knowles recognized the differences between the learning processes of adults and children and through his work developed a series of assumptions to cultivate educational experiences for the mature learner (Bedi, 2004). Knowles (1980, 1984) developed Six Assumptions of Andragogy to delineate the elements needed to create successful adult learning experiences: (a) self-concept, (b) experience, (c) readiness, (d) orientation to learning, (e) need to know, and (f) intrinsic motivation. These assumptions propose that adults often present as self-directed, independent learners. They enter the learning space with the motivation to acquire focused knowledge to support career or life-stage changes. They will bring to the classroom an array of knowledge and life experiences that augment the contextualization of new learning content (Mukhalalati & Taylor, 2019). These assumptions distinctly contrast from the premises of pedagogy, the methods of teaching children. Pedagogy is a subject-centered, knowledge-based learning approach in which the learner depends on the teacher for direction. The pedagogical learner takes in knowledge that is given, while the andragogical learner seeks out knowledge, developing understanding through prior experiences (Knowles, 1980). Research throughout the literature identifies increases in conceptualization of knowledge and retention when applying the principles of andragogy into adult educational practices (Harper & Ross, 2011).

The term andragogy is credited to German educator Alexander Kapp in 1833 who used it to encourage the furthering of education into adulthood. Kapp's ideas were rooted in the philosophies of Plato as a way to perfect human nature. For man to achieve perfection he must acquire acumen and reason, searching within themselves to gain knowledge (Leong, 2017; Mukhalalati & Taylor, 2017). Kapp's views did not gain popularity during his lifetime, and it was not until the 1920's that andragogy was revived. Moved by his experiences in World War I, Eugen Rosenstock-Huessy introduced a new kind of teaching and learning aimed at adults with the goal of bettering society and finding solutions to social issues. According to Rosenstock-Huessy, modern society demands a new educational format for adults centered on knowledge derived from life's experiences (Leong, 2013).

Andragogy moved to North America via American educational theorist Eduard Lindeman. He served as both a mentor and motivating source for Malcolm Knowles (Ozuah, 2005). Lindeman emulated Rosenstock-Huessy's ideas on andragogy, describing it as the amalgamation of theoretical and practical learning into a creative experience. He clarifies this notion by explaining that schools are meant for children and life itself is the classroom for the adult who seeks to obtain new knowledge through experience (Leong, 2013).

Until the mid-20th century much work in educational practices was focused on the teaching of children (Hagen & Park, 2016). After World War II, schools saw an influx of adult learners. This new population of adult students brought a vast array of experiences and knowledge to the classroom and the traditional pedagogical practices

became less effective (Knowles, 1970). Educational researchers began examining the differences between the adult learner and child learner. Through this process, adult education began to be seen as a discrete discipline, fostering the development of distinct models and theories to help explain the adult learning process (Merriam, S. B., 2017a). Knowles, understanding the gravity of trend, began expanding on the work of Lindeman and developed his research into adult learning (Chan, 2010; Ozauh, 2005). Initially, Knowles organized his ideas into four principles, Self-Concept, Experience, Readiness to Learn and Orientation to Learning. A fifth and sixth, Need to Know and Intrinsic Motivation were later added, but have not been fully accepted in the field and are not often included in the academic literature (Hagen & Park, 2016).

**Self-Concept.** The most important aspect of development of the adult learner's self-concept is a key element in the structure of Knowles' work. The development of the adult learner's self-concept is derived from two elements: the reciprocal respect between the teacher and learner, and the recognition of the adult as an independent scholar (Gregson & Sturko, 2007). To achieve this understanding, an adult must have the opportunity to direct the course of their own learning (Reichert, 2012). When offered the opportunity to take control of their own learning, adults should feel a sense of empowerment to fuel their educational commitment. Knowles identifies three phases in the process of developing an adult learner's sense of educational self-awareness. The first phase involves the identification of the competencies and skills needed to succeed in an area of study. The second includes the learners' self-assessment of their present skills and abilities related to the area of study. Finally, the learner must be able to

identify areas of missing knowledge or learning gaps to visualize the course of learning that must occur to achieve the learning goals (Knowles, 1970).

To determine to what degree a learner has assimilated new knowledge, an assessment should be performed. Traditional assessment where the judgment of one adult is placed over another is contradictory to the sense of independence and respect that should be recognized in the adult learner. According to Knowles (1973), assessment is the “crowning instance of incongruity” (p. 43). For the adult learner to maintain their identity as an active participant in the development of their learning, assessment must evolve as a mutual understanding between instructor and student.

**Experience.** Knowles believed adults enter the classroom with a wealth of skills and abilities. These experiences are a combination of knowledge learned during school years and career learning (Knowles, 1980). The adult learner’s prior experiences become a learning channel. Based on these prior understandings there is a potential for a reinforcement or challenge of new content being taught. These life and knowledge experiences shape the adult learner and determine the ways new learning will be processed. These prior experiences provide a contextualization for the application of the new learning (Riechert, 2012).

**Readiness.** The readiness to learn is affected by the needs of social and career goals in the adult developmental life stages. These can include the growth of career and family in early adulthood, establishing economic stability in middle age, and learning to live with declining physicality or the death of a spouse in later maturity. It is during these phases of development when life roles and tasks change prompting the readiness



to learn (Knowles, 1973). Adults are more inclined to uptake knowledge that has specific significance to their life or career circumstance. Within each stage, there exists necessary learning specific for each stage of development. In all cases, the learning needs to be relevant and distinctly focused on the knowledge needed for this change (Purwati et al., 2022).

**Orientation to Learning.** Perspectives on learning differ for children and adults. Young people tend to view the application of learning as deferred. They build knowledge piece by piece to achieve greater understanding over time (Knowles, 1973, 1980). Adults' view of learning is one of immediacy. It is goal-oriented, and problem centered. Adults will engage in learning specifically to fill a deficiency and will work to apply the knowledge expeditiously. Additionally, the adult learner must be able to see the ways in which the new learning will connect with vocational life experiences (Knowles, 1973, 1980).

**Need to Know.** Adults have a need to understand the value of learning and in what ways it will relate to them. Adults will employ time and energy to understand the benefits of engaging in new learning if they see the value in it. This value can be intrinsic or extrinsic in nature. Spending time clarifying specific benefits to the adult learner will help satisfy this need to know (Ozuah, 2005).

**Intrinsic Motivation.** For an adult, the motivation to learn often occurs because of internal pressure for betterment (Knowles & Associates, 1984). Adult learners seek new educational experiences to better themselves as an individual or within their

career. Unlike the child learner, the adult learner uses educational experiences to improve their vocational satisfaction or standard of living (McCauley et al., 2017).

### ***Application of Andragogy***

**Andragogy and Arts Integrated Professional Development.** The central question regarding adult learning during the early part of the 20th century was determining to what extent adults were able to learn. Perceptions of the adult learning process were often generalized from research with children or research that mimicked the similar design conditions (Merriam, 2017b). Research-based approaches to the development of adult learning strategies helped to identify and develop best practices for adult learning (Mukhalalati & Taylor, 2019).

Learning experiences through professional development (PD) play a significant role in a teacher's career. The pressures of the high stakes testing as well as Education initiatives that demand the acquisition of new learning and skill sets call for effective PD to create lasting and relevant learning experiences (Burner & Svendsen, 2020). Research into PD has shown a need for ongoing support of new concepts, as well as strategies and skills that can be implemented immediately (Gaikhorst et al., 2016; Lanford, 2021). The use of Knowles' Six Assumptions may be beneficial when considering PD design elements to help build successful adult learning experiences (Conner et al., 2018; Reichert, 2012; Schlaack & Steele, 2018).

Smith & Robinson (2020) examined teacher perceptions of PD using both traditional methods and a cohort model. Within the cohort model were embedded the andragogical assumptions of self-concept, need to know, and readiness to learn.

Teachers participating in the andragogy cohort reported higher positivity toward the design of the PD experience than those who were not involved in traditional learning. Similarly, Conner et al. (2018) examined the needs of professional development for vocational trainers through the lens of Knowles' Assumptions of Andragogy. Researchers identified 22 topics relating to andragogy and developed a survey instrument to measure the relevance of each topic. Results indicated the topics that ranked highest were, intrinsic motivation, orientation to learning, self-concept and experience. The application of Knowlesian andragogy approaches has demonstrated increases in satisfaction and engagement in professional development experiences (Conner et al., 2018; Smith & Robinson, 2020)

Novitasari & Sugito (2018) examined the effects of utilizing Knowles' Six Assumptions of Andragogy on lesson plan design. This research focused on early childhood teachers' abilities to create and evaluate learning in detailed and developmentally appropriate lesson and unit plans. Fifteen teachers self-identified the need to improve their lesson and unit planning capabilities. A training program based in Knowles' andragogical approach was designed as a collaborative learning experience using four stages: planning, implementation, observation, and reflection. The teachers had a voice in multiple aspects of this training including the identification of needs, schedule, teaching methods, collaborative structure of the training and training venue. The choice to participate in the training as well as inviting the learner's voice into the development of the content, how the content was to be taught, and even where the teaching was to take place demonstrates a firm grounding in Knowles' assumptions of

self-concept, readiness and orientation to learning. The use of experience was also of benefit to the participants, and according to Knowles (1980), bringing in prior experiences can benefit the adult learner. During the training, learners shared and reflected upon prior experiences when developing lesson and unit plans. They discussed their use of pedagogical and subject matter knowledge, fostering collaboration within the group setting. Results of the training demonstrated increases in teacher confidence, participation and learning independence as measured by observation and teacher self-reports. Lesson and unit plans demonstrated improvement as measured by language and vocabulary usage, appropriate developmental learning themes, and relevant learning material usage (Novitasari & Sugito, 2018).

Research throughout the literature identifies increases in conceptualization of knowledge and retention when applying the principles of andragogy in adult educational practices (Harper & Ross, 2011). Awareness of the cognitive impacts of these learning principles is key to developing focused plans to deepen adult learning (Hagen & Park, 2016).

**Criticisms of Andragogy.** Knowles' Assumptions of Andragogy hold promise for the development of accessible adult learning structures, but it is not without criticism. Three areas of criticism are evident in the literature: use of the term theory when referring to Knowles' work on andragogy, the focus of the individual, and scholarly discussion regarding the strict use of andragogy solely for adults (Merriam, 2017a).

It has been debated within the literature as to whether Knowles' seminal work should be referred to as a theory. Knowles' work has been described within the

literature as a technique, a theory, and principles, but lacked specific definition (Hagen & Park, 2016; Merriam, 2017a). Knowles did not attempt to explain the ways in which adults learn, therefore it should not be referred to as a theory (St. Clair, 2002). Knowles responded to these critiques by identifying his work not as a theory, but rather, as a set of assumptions (Hagen & Park, 2016).

Knowles' work focuses on the independence of the individual and does not view socio-cultural implications of the individual's place in society (Merriam, 2017a).

Andragogy can be divided into North American and European-based andragogy. The two strands differ through learner focus: individual vs society (Leong, 2018; Note et al., 2021). North American andragogy, based on Knowles' work, utilizes principles of humanistic psychology and centers on the development of the individual (Knowles, 1984). The European model differs from Knowles' interpretation in that the focus is not the individual learner, but rather what ways the individual adds to the betterment of the community (Leong, 2018; Note et al., 2021). The European model acknowledges the effects of the individual's place in society, culture, gender, and race as experiences brought to learning environment. The North American individualist's view does not recognize these components (Leong, 2018; Merriam, 2017a). Knowles' development of andragogical assumptions occurred during a time when learning was thought to be generally a cognitive process, therefore these socio-cultural elements were not incorporated. Over time Knowles continued to refine his assumptions, stating that the principles should be modified to suit the learner and should not be applied in total without adaptations (Landford, 2021). These changes within Knowles Assumptions of

Andragogy have currently not been addressed. Knowles' Six Assumptions remain the product of their time, but based on Knowles' statements allowing for future modifications, there remains space for these socio-cultural elements to be addressed (St. Clair & K  plinger, 2021).

Debates have occurred regarding whether the principals of andragogy are strictly for adults or can be used with young people. Many young people, especially adolescents, have a developing sense of independence and self-direction in their learning (Hagen & Park, 2016). It has been also suggested that youth experiences can be utilized to create rich learning experiences (Anderson et al., 2020; Robinson, 2018). Discussion within the literature indicates the utilization of Knowles' assumption can help to foster these attributes (Hagen & Park, 2016).

## **Conclusion**

Research into the arts and arts learning demonstrates its value within the school curriculum. Skills such as envisioning, experimentation, and problem solving are practices that develop when students participate in arts learning experiences (Hetland and Winner, 2001). Furthermore, arts learning provides open-ended learning opportunities that develop persistence, creativity, and imagination (Edelen, 2020; Eisner, 2014).

Arts integration, the utilization of the arts to support and teach academic content, is widely reported in the literature. Arts integration has been used in many ways to support and enhance learning in non-arts subject areas and frameworks have been developed as a way to classify the various methods of this teaching model.

Bresler's (1995) co-equal model of arts integration, one in which the arts are used to teach academic content, is most often cited in the literature as the standard model for arts integration structure. Specific to this commonly used model is that learning objectives are met in both the arts and non-arts content areas (Krakaur, 2017). Research into this teaching model demonstrates positive student outcomes such as increased engagement, improvements in collaboration and retention of academic content (Duma & The John F. Kennedy Center for Performing Arts, 2014). Benefits to teachers include perceptions of rejuvenation in their practice and the acquisition of new pedagogical strategies (Bellisario et al, 2012; LaGarry & Richard, 2018). The literature reveals many challenges to the implementation of arts integration (Bellisario & Donovan, 2012; Harp & Stanich, 2019). Challenges include, lack of planning time, paucity of supplies, and most often reported, a lack of confidence and content knowledge in the arts and arts integration as a teaching model (May & Robinson, 2016; Miller & Bogatova, 2018).

According to Lacina & Griffith (2021), one of the many challenges facing schools today is the need for effective professional development. Research into effective professional development shows positive change in teacher practice and improvements in student achievement (Darling-Hammond et al., 2017). What is absent from the literature is the reporting of how professional development content, and more specifically, arts integration content is retained over an extended period of time. This research seeks to learn more about this subject. Andragogy, the way in which adults learn, has been favorably reported within the literature in conjunction with teacher professional development and other adult learning situations (Conner et al., 2018;

Lanford, 2021; Smith & Robinson, 2020). Examining to what extent teachers retain professional development content considering Malcolm Knowles' Six Assumptions of Andragogy may help to reveal insights to foster increases in arts integrated content retention and the increased possibility of utilization in the classroom.



## Chapter 3

### Methodology

Strong connections have long been demonstrated between human expression and the arts. The arts allow humans a way to express thoughts, explore new ideas, and attempt to understand their world (Costes-Onishi, 2019; Dissenayake, 1995; Eisner, 2014). Utilizing the connection between the arts and expression may be advantageous to develop student learning since arts learning fosters growth in abilities such as persistence, pioneering new ideas, and reflectivity. These competencies, classified as 21st Century Skills (Walan, 2019), are beneficial not only for success in the arts but also for success across the non-arts, academic subject areas (Siddiq & Scherer, 2017). Supporting the development of 21st century skills will be helpful for young people as they seek future employment (Ghafar, 2020; Harp & Stanich, 2019).

Arts integration is an interdisciplinary teaching model whereby teachers merge standards-based arts and academic content to create integrated lessons for students (Duma & John F. Kennedy Center for the Arts, 2014). The point of integration between the arts content and academic content should be thoughtfully designed to allow for learning outcomes to be met in both areas (Hipp & Sulentic-Dowell, 2019). Academic research highlights the advantages of connecting arts education to academic content through this model. Integrating the arts into academic subject areas fosters many of the gains of arts learning such as student engagement and content retention (Hetland & Winner, 2001; May & Robinson, 2016). Additionally, teachers have reported increased

positive perceptions of their teaching practice when implementing lessons using arts integration strategies (Miller & Bogatova, 2019).

Integrating the arts calls for an understanding of general arts learning (Oreck, 2004). "The arts," as a term, represent the four major arts categories: drama, music, visual art, and dance. Each of these categories hold specific content and techniques. This breadth of arts content can be challenging to many general education teachers. The need for more learning in arts content and pedagogy is one of the most often expressed wishes by classroom teachers participating in arts integration professional development (Oreck, 2004; Miller & Bogatova, 2019). The extensive nature of the arts, combined with the interdisciplinary aspect of arts integration creates a complex professional development experience. (Martin, 2019; Oreck, 2004). With the great amount of arts integration-related content that needs to be covered, it is uncertain to what extent this information is retained over time by classroom teachers. To better understand to what degree the learned content from the Arts in Every Classroom (AEC) arts integration professional development experience is retained, the following research questions were explored:

1. To what extent do classroom teachers retain and utilize arts integration content from their professional development experiences?
2. In what ways do the teachers who participated in arts integration training describe the experiences and content that continue to impact their current teaching practice?

Content retention was determined by the degree of confidence in new arts content and the frequency of its application reported through the Likert-type survey and the in-depth interviews. Additionally, it was viewed through the framework of andragogy, specifically, Malcolm Knowles' Six Assumptions of Andragogy (1980): self-concept, experience, readiness, orientation to learning, need to know, and intrinsic motivation. Andragogy, the learning process of adults, fosters learning experiences where adults feel they can succeed (Merriam, 2017b). Examining evidence of learning retention through this lens may help to identify supportive practices that boosts content retention in professional development experiences.

### **Research Paradigm and Design**

The research paradigm is an essential element in the process of educational research providing a foundation for the researcher's methodology (Poni, 2014). Through a set of beliefs and philosophical views, researchers approach, understand, and attempt to answer research questions (Denzin, 2008; Kuhn, 1970 ).

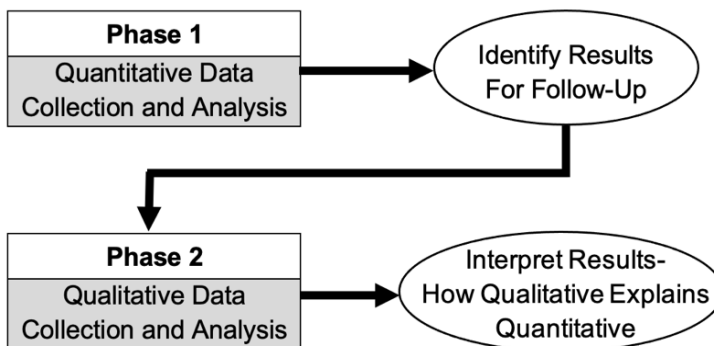
A pragmatist philosophy maintains that the thoughts and actions of humans are closely interrelated and cannot be separated. This paradigm recognizes that reality can be interpreted in multiple ways depending on context, additionally it is acknowledged that there can be both single and multiple views of reality. The pragmatist strives to solve a problem using the most appropriate philosophical and methodological approach to answer the research questions which may include using more than one type of research method (Kaushik & Walsh, 2019).

Considering this philosophy, a mixed methods approach was applied to help understand to what extent content learning from arts integration professional development is retained by classroom teachers. Mixed-methods designs utilize both quantitative and qualitative data gathering techniques in a single study. Combining quantitative and qualitative data has the potential to build a detailed picture of the examined phenomenon, offering insights that may not emerge using one type of data collection alone (Creswell & Guetterman, 2019). The type of mixed methods design utilized was the explanatory sequential design. Data gathering through quantitative means was the first method applied in the design, followed by qualitative data gathering (See Figure 1). The qualitative data was used to further interpret and explain the quantitative results (Creswell and Guetterman, 2019).

**Figure 1**

*Methodology Design*

**Explanatory Sequential Design (Two-Phase Design)**



*Note:* Adapted from Research Design: Qualitative, quantitative, and mixed methods approaches (Creswell & Creswell, 2018).

During the first phase of data gathering, quantitative data was collected using a Likert-type survey. This survey attempted to capture the frequency in which teachers used the arts and implemented arts integrated lessons and techniques learned during the Arts in Every Classroom (AEC) professional development experience. During the second phase, in-depth, semi-structured interviews were used to gather qualitative data to examine participants' perceptions and experiences in the use of arts integration content and techniques learned during the professional development experience. The data gathered from the interviews was used to further explain and clarify the results from the Likert-type surveys.

### **Participants and Sampling**

The participants were classroom teachers from the same midwestern state representing grade levels Kindergarten through grade 12. Instructional areas included general grade-level curriculum taught by elementary classroom teachers and subject-area specific teachers. Subject areas represented included math, science, social studies and art. The teachers had participated in arts integration professional development, AEC, during the years 2018-2020 through a large, urban, arts organization. The teachers invited to participate ranged from novice teachers with no more than two years of classroom experience to expert teachers with 20 or more years of experience. The schools where the teachers teach represent rural, suburban, and urban communities.

The AEC professional development experience consisted of large-group lectures followed by small-group workshops. Model arts integration lessons using academic content and standards were conducted by facilitators. Time was built in for questions

and reflections after the experience. All teachers who took part in the AEC program were invited to participate in the research, and all participation was voluntary. Teachers were asked to complete a Likert-type survey (see Appendix A) that attempted to measure to what extent teachers remembered and retained content from AEC. Teachers who had completed the survey had the option to participate in the subsequent interviews. Five teachers self-selected to take part in the individual, semi-structured interviews.

### **Data Collection Instruments**

To answer the research questions using a mixed-methods format, both quantitative and qualitative methods were utilized. The instrument used for the quantitative portion of the research was a Likert-type survey. This survey was constructed to identify to what extent and level of confidence teachers are implementing the arts integration content learned during the AEC professional development (see Appendix A). Significant to the use of the instrument is the determination of the instrument's validity; the evidence that shows the instrument can evaluate that which it is intended to measure (Creswell & Guetterman, 2019). This instrument was validated through face validity and content validity. Face validity is the degree to which a test appears to measure that which it claims to measure at face value. Content validity determines the degree to which a test demonstrates the use of significant subject matter for the evaluative purposes or measurement of a construct (Creswell & Guetterman, 2019).

Face validity was performed by classroom teachers who have utilized arts integration in their practice. These teachers were not participants in the AEC training but had participated in arts integration professional development in the past. To determine face validity, the survey was pilot-tested by the classroom teachers to ascertain the clarity of wording in the questions. The teachers were selected by convenience and contacted through email to request their participation. Content validity was established through a panel of experts in the field of arts integration to determine if the questions are representative of the subject matter content knowledge. Lawshe's Content Validity Index (1975) was used to provide a quantitative gauge to ascertain the validity of the instrument. This process measures the consensus between the panel members in respect to the essentiality of each survey item (Baghestani et al., 2017; Lawshe, 1975). To determine the Content Validity Ratio (CVR), Lawshe (1975) suggests gathering between five and ten experts. Each member of the group is given the survey questions and list of choices to determine to what extent each survey item is essential using the following scale as determined by Lawshe (1975). Is the skill (or knowledge) measured by this item:

- Essential
- Useful but not essential
- Not Necessary

Responses from the experts are gathered and for each item and the CVR is determined using the following formula (see Figure 2)

**Figure 2**

*Lawshe's Formula for Content Validity Ratio (Lawshe, 1975)*

$$CVR = \frac{n_e - (N/2)}{N/2}$$

*Note.* "n<sub>e</sub>" is the number of experts determining the test item is essential, N is the total number of participating experts.

The possible range of the CVR index is 0-1. Items that receive a ratio index of 0.78 or higher are determined to be essential and are retained in the survey. Items scoring less than a .78 should be eliminated from the survey (Gilbert & Prion, 2016). Results of the Lawshe test determined all 20 of the survey questions to be essential to the measurement of the content being examined.

The qualitative phase consisted of semi-structured, in-depth interviews. The interviews consisted of 19 questions that were delivered within approximately an hour-long interview timeframe. These questions were validated through a panel of arts integration experts to determine whether the questions are worded to most effectively garner data to inform the research questions. The interview questions (see Appendix B) were piloted to verify the interviews were able to be performed within the hour time parameter and to ensure a logical progression of question sequence with appropriate follow-up inquiry. Trustworthiness in the qualitative data helps to ensure credibility, transferability, confirmability, and dependability (Yin, 2019). This was accomplished through an external audit by an outside source, the use of thick, rich, description and the triangulation of interview and survey data (Yin, 2016).



### **Data Collection and Analysis Procedures**

The explanatory sequential design of this mixed methods research dictated that the quantitative data was to be collected first (Creswell and Guetterman, 2019). The Likert-type survey was sent to participants electronically using the Survey Monkey platform. The data gathered was examined using descriptive statistics. Descriptive statistics helped to develop an understanding of data through summarization and analysis. Likert survey data was assumed to be ordinal, meaning it is categorical having a discrete range and can be organized and examined using median and mode and frequency as determined by percentages (Fink, 2017).

The second phase of the explanatory sequential design utilized qualitative research to explain the results of the quantitative phase. To more fully understand the ways in which the results of the surveys represent the teachers' experiences, individual, semi-structured interviews were conducted with five of the participating teachers. Participating teachers self-selected to participate in the interviews. They were asked to describe the ways in which they utilized arts integration in their classrooms as well as their personal attitudes about the teaching model. The interviews consisted of 19 questions and took about an hour.

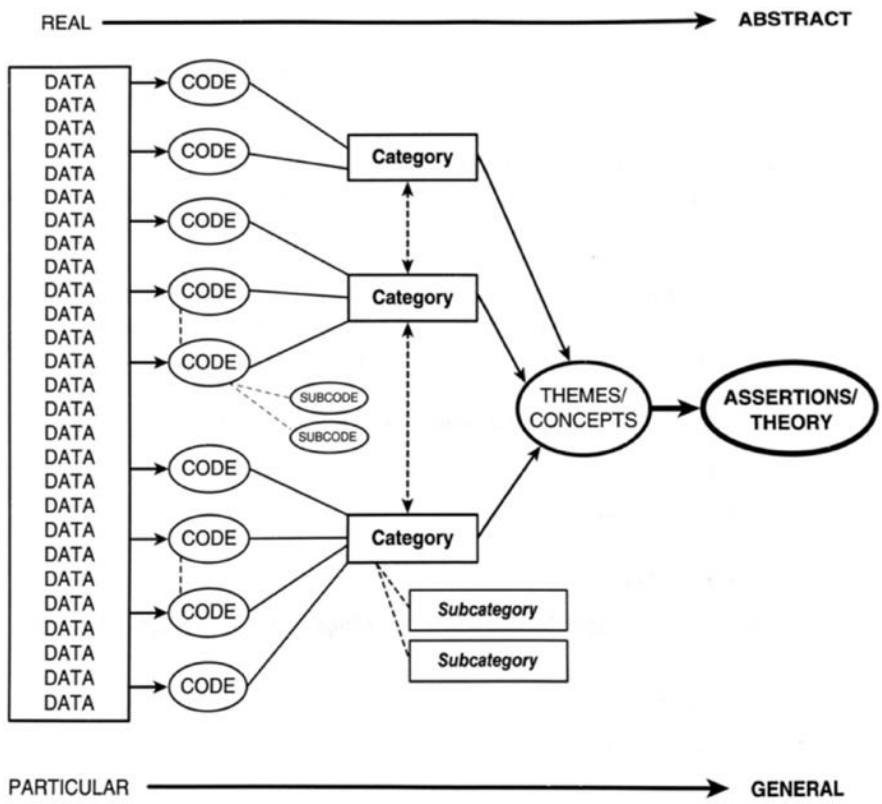
The process of qualitative analysis began with the preparation of the data. The transcripts were reviewed alongside the video to ascertain the accuracy of language. The transcripts were read multiple times to gain an initial understanding of each participant's responses and during these readings, analytic memoing was performed to document initial impressions and ideas regarding the data (Saldaña, 2016). When the

memoing was completed, an initial round of open, inductive coding was performed, and a codebook was created. This codebook was used as a guide to perform a second round open, inductive coding. Deductive coding was utilized in a third round of coding to view the data through the lens of Knowles' Six Assumptions of Andragogy (1980). Using the qualitative software, *Dedoose*, version 9.0.62, the identified codes and sub-codes were examined for patterns and organized into categories. From these categories themes began to emerge offering the opportunity to create assertions, as seen in Figure 3.

These assertions were used to re-examine the quantitative data considering the results from interviews to draw final conclusions.

**Figure 3**

*A Streamlined Codes to Theory Model for Qualitative Inquiry (Saldaña, 2016)*



### **Positionality and Reflexivity**

The data was analyzed through a pragmatist philosophy maintaining that thoughts and actions are closely interrelated and cannot be separated (Kaushik & Walsh, 2019). The positionality of the researcher was that of a female educator who specializes in arts integration. The researcher has expertise in multiple art forms, with a strong focus in theatre arts and music. Lastly, the researcher had a prior relationship with some of the participants having been one of the facilitators of the AEC professional development experience.

### **Ethical Considerations**

To ensure the anonymity of the participants, precautionary measures were utilized to protect the privacy of each of the participants. The identities of the participants were eliminated, and each survey was identified through a number. Pseudonyms were given to each interview participant. The name of the school and the community where the school is located was not identified. Attention was given to the time commitment for each participant. The Likert-type survey required ten to fifteen minutes to complete and for those teachers participating in the qualitative phase, no more than 70 minutes was used for the interviews. All participation was voluntary, and any participant had the option of withdrawing from the study at any time. All identifying information was kept secure and all data was stored on a password-protected computer. This data will be destroyed three years after the conclusion of the study.

## **Conclusion**

Arts integration is a complex teaching model; therefore it is beneficial for teachers to participate in professional development prior to attempting implementation. Arts integrated professional development experiences often have a large amount of content embedded, including arts content from all four genres and pedagogy for each art form. Developing an understanding of the information and experiences that were remembered and what factors affected the retention provided a foundation of knowledge to build subsequent training. Understanding what is retained and its connections to the Six Assumptions of Andragogy provides a framework to potentially strengthen future professional development experiences (Knowles, 1984; Saraniero et al., 2018). A mixed methods approach to investigate the research questions provided useful data to understand to what extent content retention from the AEC professional development occurred and in what ways this learning affected teachers' instructional practice (Creswell and Guetterman, 2019).

## **Chapter 4**

### **Findings**

Arts integration is a teaching model that uses an art form as a lens for students to examine and understand non-arts content. Research into the model has demonstrated benefits for both students and teachers (Bellisario et al., 2012; LaGarry & Richard, 2016). For the benefits of this model to be achieved, teachers must first be educated in the model's approach and methods. The arts integration model is complex as it incorporates strategies and techniques of the four major art forms: visual art, dance, drama, and music. Teacher professional development (PD) experiences can provide teachers with an abundance of arts content as well as specific strategies for integrating the arts into the non-arts subject matter (Burnaford, 2007; Duma & John F. Kennedy Center for the Arts, 2014). When presented with a large amount of information, teachers can be challenged with the processing and storing of new information (Brooks & Shell, 2006). Understanding what information from the professional learning experience is retained by teachers may offer insight into the betterment of future learning experiences.

The problem of arts integration PD content retention was examined using a mixed-methods research approach and examined through the lens of Knowles' Six Assumptions of Andragogy (1980). Quantitative and qualitative data was gathered in two stages using a sequential explanatory format (Creswell & Guetterman, 2019). This approach was selected due to its potential to offer deeper insights into the data than

would one approach alone (Molina-Azorin, 2016). The following questions were explored:

1. To what extent do classroom teachers retain and utilize arts integration content from their professional development experiences?
2. In what ways do the teachers who participated in arts integration training describe the experiences and content that continue to impact their current teaching practice?

A sample population of elementary and secondary classroom teachers who had attended the Arts in Every Classroom (AEC) PD between the years of 2018-2020 was identified. One hundred and five teachers from both public and charter schools throughout a midwestern state were represented in this sample. All members of the sample were invited to participate in the research and were sent the Arts Integration Content Retention (AICR) survey. Thirty-three teachers completed the survey and five teachers agreed to be interviewed (See Appendix C).

### **Data Description and Analysis**

#### ***Research Question 1: To what extent do classroom teachers retain and utilize arts integration content from their professional development experience?***

The AICR survey was designed to evaluate the experience of teachers who participated in the AEC PD workshops. An email invitation and the AICR survey was sent to the 105 participating teachers. Of the 105 invited, 41 teachers responded by accessing the survey. Eight surveys had only the demographics section completed and

were discarded; therefore 33 surveys were analyzed. The survey was organized into question groups based on the learning components of the PD:

- arts learning
- implementation of arts integration strategies
- use of arts to reinforce non-arts content
- arts integration lesson plan development.

During the workshops, teachers explored the arts content areas of drama, visual art, music, and dance/movement. The arts content was paired with arts integration teaching strategies through the observation of model lesson demonstrations. To perceive the lessons through the student point of view, teachers also participated in simulations of model lessons to help deepen the understanding of the teaching model. Teachers practiced the new knowledge by using new concepts in brainstorming and arts integrated lesson activities. Opportunities were also available for participating teachers to co-teach an arts integrated lesson with the support of an AEC faculty member. The Likert-type survey questions had a range of responses rated on an ordinal frequency scale ranging from the least to the highest frequency.

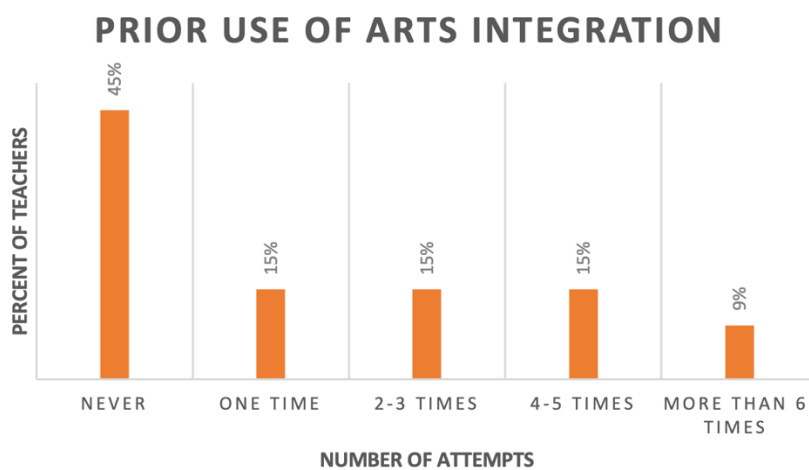
Teachers participating in the AEC came to the workshop with varying levels of prior arts experiences. Identifying prior experiences in the arts may help to more fully understand trends revealed within survey questions. Within this participant group 74% of the teachers reported to have engaged in one or more art forms in their lifetime. This includes taking lessons to learn an art form and/or participation in an art form for a hobby, enjoyment, or career purpose. Within the group of those who had previous

experience in an art form, the largest percentage experiences were in the visual arts with 48% of participants.

**Implementation of Arts Integration Strategies.** Teachers were asked to what extent they had implemented arts integration strategies before the PD (Figure 4).

**Figure 4**

*Prior Use of Arts Integration*

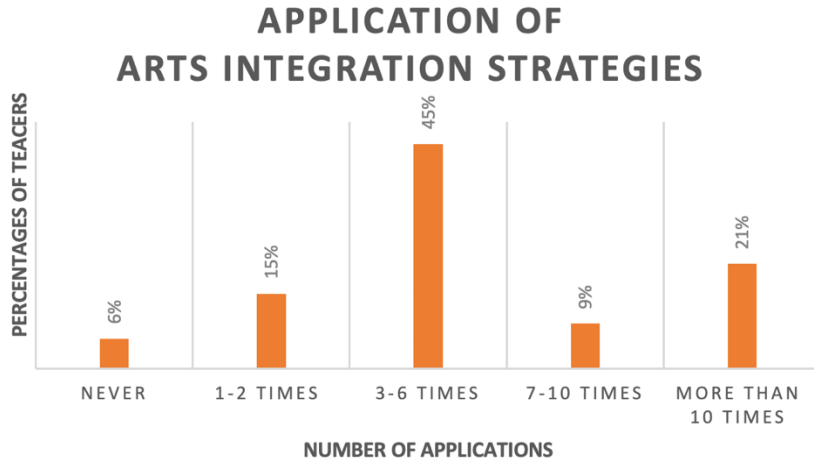


Of 33 teachers surveyed, 45% reported their use of arts integration prior to the PD as Never. 15% of teachers reported art integration usage in the following categories: One Time, 2-3 Times, and 4-5 Times. Nine percent of teachers reported using arts integration More than Six Times before the PD experience. Teachers were also asked to what extent they implemented arts integration strategies after the conclusion of the PD (Figure 5).

**Figure 5**

*Application of Arts Integration Strategies After PD*

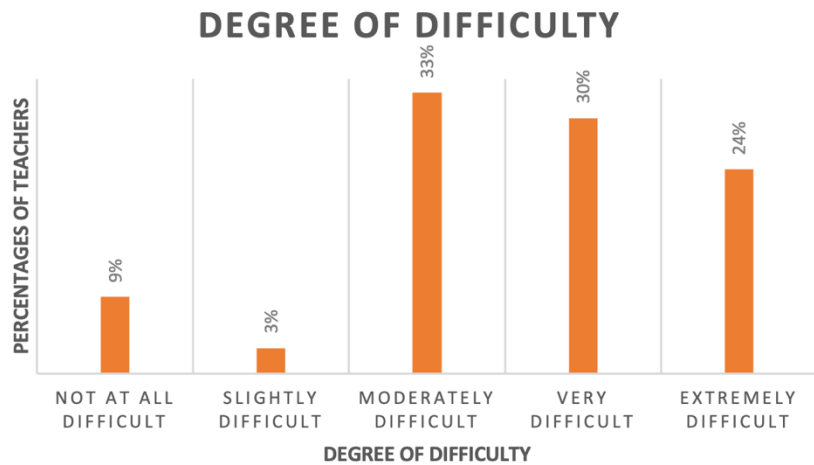




When reporting the frequency of arts integration usage after the PD, 45% of teachers reported they have implemented strategies from the PD Three to Six Times, and 21%, reported using arts integration strategies More than 10 Times. Survey item 12 asked to what extent the teachers felt successful when implementing arts integrated lessons. Forty five percent reported feeling Moderately Successful and 21% reported feeling Very Successful. Survey item 15 asked the level of difficulty in the implementation of arts integration (Figure 6)

**Figure 6**

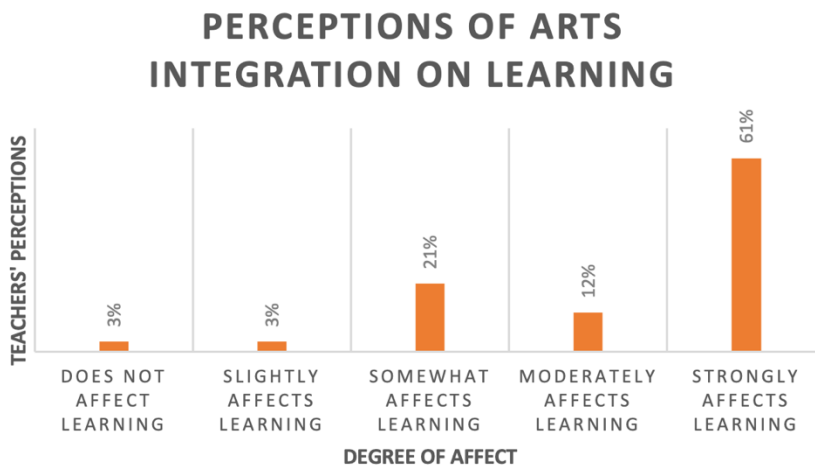
*Degree of Difficulty when Implementing Arts Integration*



The majority, 33% reported the teaching model to be Moderately Difficult and, 30% reporting the implementation of the teaching model to be Very Difficult. While there appeared to be an agreement regarding the challenging nature of the teaching model, the perception of the model's benefits to students revealed 61% of teachers reported the model to positively affect learning in the classroom (Figure 7).

**Figure 7**

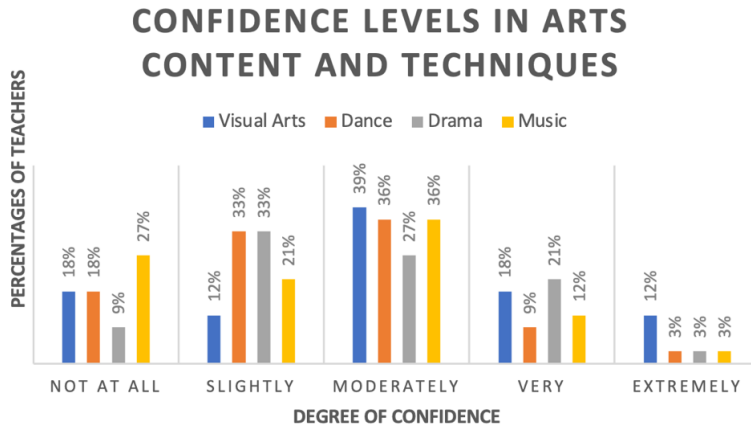
*Perception of Arts Integration to Positively Affect Student Learning*



**Confidence in the Arts and Use of Arts Content.** The Arts in Every Classroom professional development taught basic content and technique in the four major arts areas: visual art, drama, dance, and music. Using the AICR survey, teachers were asked to rate their current confidence level in the knowledge of the four art forms learned during the PD (Figure 8).

**Figure 8**

*Teachers' Confidence Levels in Arts Content and Techniques*

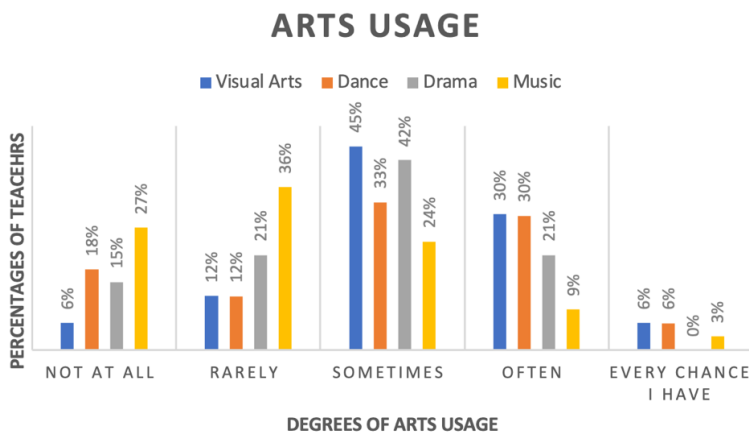


When reporting confidence levels, most responses were evident in the first three areas: Not at All, Slightly, and Moderately. Lower percentages of teachers reported Very confident or Extremely Confident. The highest report of confidence in the degree ranges was in the visual arts with 39% of teachers feeling moderately confident. Lowest reports of confidence in the degree ranges were reported were evident in Extremely. Three percent of teachers reported confidence in dance, drama, and music at this level.

In addition to knowledge confidence, teachers reported to what extent they use the art forms within the classroom setting (Figure 9).

**Figure 9**

*Arts Usage*



Forty five percent of teachers reported to have sometimes used visual art in their classrooms, Sometimes. Drama usage follows with 42%. This value in drama usage shows a slight increase from the drama confidence level seen in Figure 8. The respondents' music usage peaks at Rarely. This demonstrates a decrease from the music confidence levels indicated in Figure 7. Reports of art forms being used Every Chance I Have revealed low percentages similar to reports of confidence seen in Figure 7.

This data from the survey demonstrated that teachers have utilized content learned during the PD. Also revealed was a positive perception towards the use of arts integrated strategies. Forty eight percent of teachers reported prior experience in the visual arts and 45% reported using visual arts as the integrated art form when implementing the teaching model. When using the visual arts in an arts integrated lesson, 39% of teachers indicated a moderate perception of confidence. Drama and music strategies were implemented by 36% of teachers and a moderate perception of confidence was indicated by the teachers in both the art forms.

***Research Question 2. In what ways do the teachers who participated in arts integration training describe the experiences and content that continue to impact their current teaching practice?***

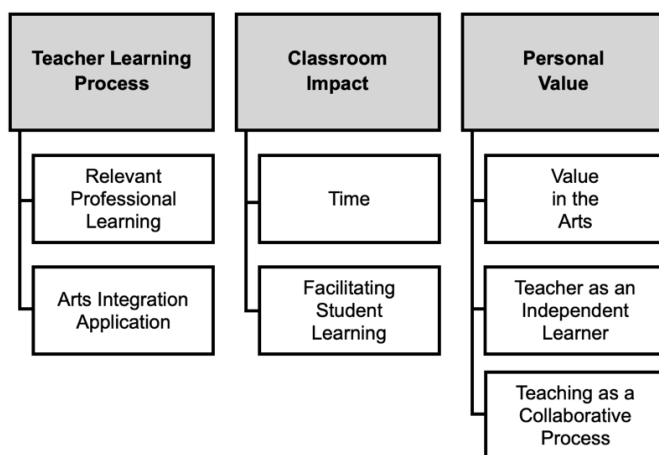
Qualitative data through in-depth interviews was gathered to potentially identify patterns between teacher professional development training and current classroom teaching practices (See Appendix B). All teachers participating in the AICR survey were invited to take part in the interview process. Of the 33 teachers who completed the

survey, five teachers agreed to be interviewed. Three of the five teachers taught elementary grade and two taught at the high school level (See Appendix C).

All interviews were recorded, transcribed, and checked for accuracy. Once they had been prepared, analytic memoing was performed to document impressions and ideas regarding the data as per Saldaña, 2016. An initial round of open, inductive coding was performed and a total of 64 codes were identified. A second round of coding using descriptive coding was used to analyze the codes and streamline them through the process of lumping, resulting in 55 codes. A third cycle of coding using a deductive approach was conducted with a focus on the theoretical framework. Codes were further consolidated to 37 codes (See Appendix D). Patterns began to develop, and the codes were organized into eight categories. From these categories, three themes emerged based on the research question and the theoretical framework (Figure 10):

**Figure 10**

*Themes and Categories*



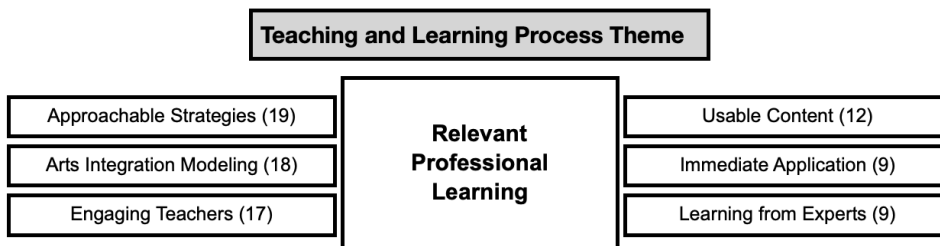
**Teacher Learning Process.** This theme consisted of the elements utilized in the acquisition of arts integration content and the implementation of the teaching model.

Within this theme two categories emerged, Relevant Professional Learning and Arts Integration Application. These categories contained information regarding the applicability of the AEC PD experience, as well as the ways in which the teachers applied the new learning into the classroom setting. Excerpts coded within these categories relate to learning that the teachers perceived as relevant with the potential to be easily applied in their classrooms at the discretion of the teachers.

***Relevant Professional Learning.*** Relevant Professional Learning was composed of the codes that applied to the professional development structures and content presented. Significant codes within this category were Engaging Teachers, Approachable Strategies, and Arts Integration Modeling (Figure 11).

**Figure 11**

*Teaching and Learning Process Theme: Relevant Professional Learning*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Approachable Strategies, exemplified by the ways in which teachers felt the learning was useful and accessible, offered the potential for immediate application into the classroom. Riley, a high school teacher said of the PD,

I think a lot of professional development that you go to, you think, yeah this is great, but what am I going to do with it, how am I gonna apply this? Sharing ideas

and ways to use the arts made it seem very realistic and very approachable for me, and that was very helpful. It made it seem very much worth my time.

Amy, an elementary teacher, corroborated Riley's feelings. "They had a lot of strategies, ways that you could bring it (arts integration) right to your classroom, and so I think the content of the programming was just really tight and intentional. It just kind of hooked me."

Arts Integration Modeling helped teachers visualize the ways in which they could use the arts in their classrooms. Patricia, an elementary teacher, said of the modeling, "If she hadn't modeled [the strategies] for me and then given me the chance to do it I wouldn't have stuck." Amy agreed that the modeling process clarified how the arts may impact students.

It really captivates you seeing those things, especially seeing them in practice because the facilitator came in and did demonstrations with students. It was really interesting to see it happening and what the potential benefits of it would be.

The code, Engaging Teachers demonstrated examples of the ways in which the PD encouraged teachers to become involved in the learning. Taylor, who teaches at the elementary level said, "It was high level engagement like right off the bat. We were in it right away." Mike, a high school teacher explained the ways in which the PD held meaning for him,

The [AEC] PD that I attended ranks up there with some of the best PD I've been in, and I've been in a lot of teacher PD. It ranked up there because I felt like it was relevant to what I wanted and needed. It pushed me out of my chair enough that

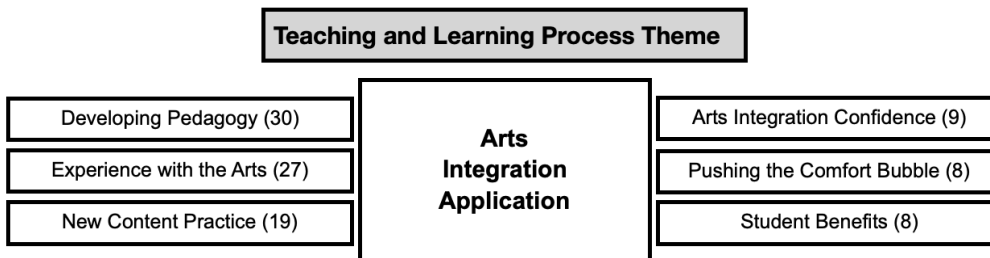
it got me engaged. It piqued my curiosity to get me to want to learn more. It was both engaging and fun.

He continued by recalling a session he attended using dance content, "We were using dance to teach the solar system... And I've got pictures of me, you know in this dance class, you know dancing around the room as a planet and it just makes me laugh."

**Arts Integration Application.** The category, Arts Integration Application, part of the Teacher Learning Process Theme, described the ways in which the teachers made sense of the new content and put it to use in their classrooms. Of the five codes within this category, Experience with the Arts and Developing Pedagogy held the greatest significance with the highest number of excerpts per code (Figure 12).

**Figure 12**

*Teaching and Learning Process Theme: Arts Integration Application*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Developing Pedagogy consisted of codes that characterized the ways in which the teachers sought to learn new instructional strategies. One example discussed by all the teachers was the facilitation of movement-based activities. The PD introduced kinesthetic learning strategies through drama and dance. For many teachers, using this style of instruction was new. Amy had observed that her students may benefit from



kinesthetic activities but prior to the PD, was unsure how to utilize movement in her classroom.

I know that kids need opportunities to move. I know that they thrive on that and so seeing ways of doing that and having that structure that I'm comfortable with is what I like about it (the PD). Before that, I mean, like none, none of my teaching, even learning about being a teacher in my master's degree taught me strategies like that.

Patricia found using movement in her classroom to be beneficial. "We can absolutely see that the content is reinforced through the [arts integration] work that we're doing with our students. When the students are able to learn kinesthetically it sticks a lot more than anything else that we're teaching."

The developing pedagogy codes also exemplified the trial-and-error process that occurs when learning to apply arts integration strategies into the classroom. All five teachers discussed the ways in which the implementation of arts integration strategies in their classrooms did not always go as planned. Many used these situations as learning experiences. Riley explains, "There's always going to be some part of it that works or some part of it that I can learn from. I know I'll do something better next time." Mike's statement supports Riley's thoughts when he described trying out an arts integration strategy, "Failure is okay, as long as we learn from it. If we learn from it, it's not really a failure."

The code, Experience with the Arts revealed the ways in which teachers felt past involvement in an art form helped to bridge a connection with the arts integration

content presented during the PD. Four of the five teachers interviewed did not perceive themselves as creative or proficient in arts, but even limited experience seemed to provide a structure from which to build new learning. Taylor explains, "Coming from someone who is not an arts person I'm very limited and feel kind of like I'm at ground zero here." While she did not consider herself an "arts person," she did participate in visual arts classes during high school. Prior experiences seemed to affect what PD content was more accessible to Taylor. She explained that before participating in the PD, she was most interested in learning about the drama strategies, but in the end, it was the visual arts content that resonated with her. "It's funny because I went into [AEC] wanting more of the drama, movement, and music side of it, but I feel like I understood more of the visual art. I feel more confident in that."

Mike was able to connect with the visual art content of the PD based on hobbies and personal interest. In his spare time, he enjoys carpentry and visiting art museums. He explained that he had previously utilized visual arts strategies in his classroom but was reluctant to use other art forms due to a lack of familiarity. He explains,

I feel pretty confident using visuals (artwork). On a scale of one to ten, I might put myself at about an eight because I still think there's room to improve on that... That's interesting as I'm sitting here thinking about it, I'm realizing I guess I'm more of a visual art person. I'm just more confident with the visual arts.

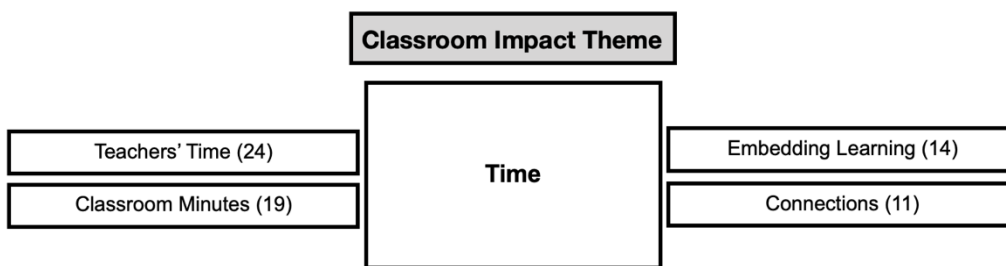
As a young person, Amy had a variety of short-lived theatre experiences. When presented with the theatre and drama content in the PD, she was able to understand the ways in which theatre strategies could benefit her classroom. She explained, "I think

the theatre-based strategies were the most memorable; the Actor's Toolbox and tableau. When I saw those, I was just like, 'Whoa this is something you could do in your classroom.'" Amy used words such as "confidence," and "memorable" when discussing the process of connecting the arts learning from the AEC to past arts experiences.

**Classroom Impact.** This theme demonstrates the ways in which the strategies presented in the AEC PD affected the classroom learning environment. The theme was supported by two categories: Time and Student Learning. The category, Time, represents the time available within the school day for educators to teach concepts as well as the value of the teachers' professional time. Student Learning as a category reveals the ways the implementation of arts integration strategies impact students' interactions with curricular concepts (Figure 13).

**Figure 13**

*Classroom Impact Theme: Time*



*Note:* Parenthetical numbers indicate code frequencies within the category.

**Time.** Significant codes within this category were labeled as Classroom Minutes and Teachers' Time. Within the Classroom Minutes code, methods in which arts integration affected educational minutes, both positively and negatively were discussed. A common element was the complicated nature of arts integration. Implementing this

teaching method requires the educator to identify a point of integration between the non-arts content and arts content and strategies which has the potential to overwhelm teachers new to the model (Buck & Snook, 2020). Teachers also discussed the conundrum of applying the teaching method to existing classroom structures. These elements consume instructional time as the teacher moves through the learning curve of arts integration application.

Patricia explained that after the PD she tried to implement arts integration strategies, but because of complexities, it became too time consuming to implement. "So, yes I definitely applied it, but then I started to fall off because it is more time consuming and it's complicated." She went on to say, "It's difficult to learn it and then teach it to students in a manner that they understand so I started to kind of lose my momentum with it." Amy had concerns regarding the placement of the arts integration strategies within the existing structure of her classroom. "I'm concerned about time in that I have this structure that I've already laid out for students. I'm trying to figure out where that line is and how we phase in and out of [arts integration strategies]."

While challenges to instructional time existed, there were also benefits to the model. Mike shared the advantages of using arts integration to add layers of content into his teaching with the hope of increasing the depth of the information the students acquire.

That we're so limited on time, so, if I can do a lesson that hits one thing and one thing well, okay, but if I can have it hit that one thing well plus hit a couple of other things, we've added a little more depth to what the kids have been

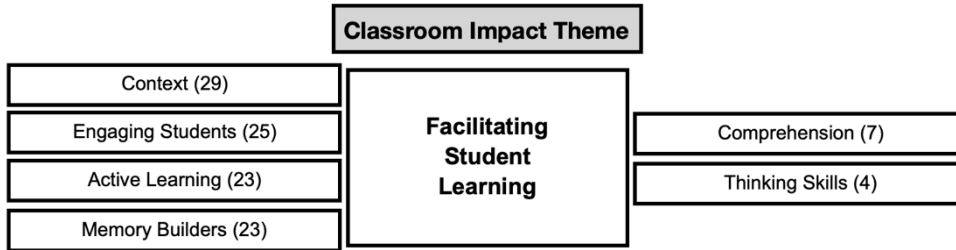
exposed to and, hopefully, will provide them with some more background knowledge.

Teachers' Time codes reveal the value teachers place on their own time and the way it is used. When using arts integration, both positives and negatives were identified. Amy explained that doing hands-on activity in puppet-making, while it was engaging for the students, required a great deal of her own time to plan. "That takes time, and it takes a lot of supplies and stuff so it's trying to figure out what the balances are. I would love to do the puppet making unit again, but I can't." In contrast, Mike felt spending his time learning arts integration was a positive, explaining that he was willing to focus his time on something that he felt was worthwhile. He felt arts integration to be a meaningful teaching model. "I will invest my time just trying to learn more and more about it."

***Facilitating Student Learning.*** This category falling under the Classroom Impact theme, focused on the ways in which the interviewed teachers observed arts integration affecting student learning in their classrooms. Three codes stand out as significant in this category: Context and Connections, Engaging Students, and Active Learning. All three codes address the ways in which the teachers perceive arts integration strategies to peak student interest and increase comprehension, helping to create a productive classroom environment (Figure 14).

#### **Figure 14**

*Classroom Impact Theme: Facilitating Student Learning*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Active learning codes described instances in which the creative process of arts integration utilized movement, collaboration, and discussion to foster increases in student participation. When arts integration strategies were used in his classroom, Mike observed, “There was lots of moving and talking and I felt like that was so beneficial.” He went on to say, “Instead of sitting passively they become participants in the learning in a physical way of speaking, you know. I think art gives us something we can explore together.” During the PD experience, Amy was impressed by a model arts integration lesson taught to lower elementary students. She noticed the ways in which the creative movement and discussion allowed for students to become more involved in their learning.

And then seeing [the strategies] in the primary room and thinking...they give the kids the opportunity to move around, and talk. I can see how they need that and when it's done in the right way it's, I think, it's really, really powerful.

Context as a code described ways the arts were used to help create connections and deepen student understanding of the academic content. Taylor described how she felt the arts were able to help her students develop insights into facial expression and

emotion when working on the literacy concepts of character. She partnered with another teacher to make character masks with her elementary level class.

I had already taught story elements and my kids knew what characters were, but the curriculum didn't really go in depth. So, we built masks, and it made it so much more meaningful. The kids would say, 'Oh my character has eyebrows that are facedown and so that means, like, showing the emotion of anger.' And so, it just made it that much deeper and more meaningful.

Similarly, support for art strategies deepening the learning experience can be seen in the following excerpt from Patricia in which she used pieces of visual art in her classroom to help support reading and writing skills:

Paintings and artwork helps [students] to make connections. Those connections were able to be made and engage students in what we're working on. Reading comprehension, I think, is starting to improve because I was able to use artwork. It definitely helped aid in comprehension.

The code, Engaging students, demonstrated a component of the interviews that all the teachers discussed. When applying the strategies acquired in the AEC PD, the teachers observed students increasing their effort in class. Riley commented, "I think that it's helped me reach other students that I just wasn't able to reach." Student engagement was observed by the teachers through higher levels of student participation and positive student feedback regarding the learning activities. This phenomenon was beneficial not only for the students, but also for teachers. It often provided a sense of satisfaction for the teachers knowing their work was positively

affecting their students. Taylor made a comment about her students' attitudes towards the mask-making. She noted,

Just the engagement I got out of them was through the roof. It gave my quiet, shy ones an opportunity to talk and they all felt like they had a part in it. It wasn't just my normal leaders leading the path. They thanked me and I felt like I'm actually teaching them something and they are actually taking something away from it. It's great.

Patricia expressed her satisfaction with the teaching model,

It's because we all want to teach our kids the best way possible. We want them to be engaged and we want them to retain what they're learning. I think arts integration does all of that, we just need that push to keep us going. I really think this is the best way to do it.

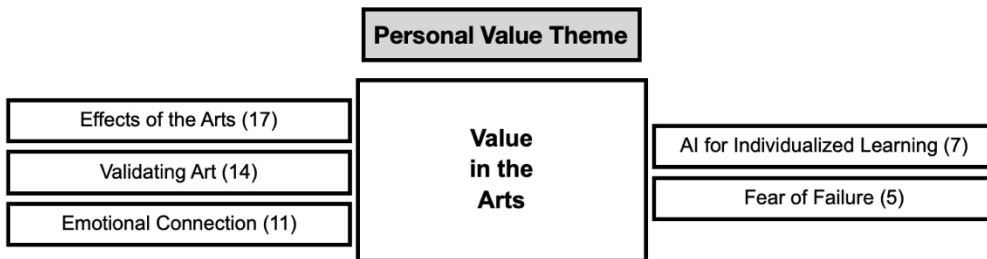
**Personal Value.** The final theme was Personal Value. Within this theme are excerpts coded from the interviews that demonstrate elements of teacher professional learning and learning application that hold personal meaning for the teachers. This theme held the largest number of codes and expressed the category. These codes were: Value in the Arts, Teacher as an Independent Learner, and Teaching as a Collaborative Process.

**Value in the Arts.** The teachers discussed the value they place in the arts as a useful way to connect with students, facilitate student learning and energize the classroom. Significant codes in this category were revealed to be The Effect of the Arts and Validating Art in the Classroom (Figure 15).



**Figure 15**

*Personal Value Theme: Value in the Arts*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Effects of the Arts as codes, reveal the ways in which the arts positively affect not only students but teachers as well. Mike explained, “I think using art in my classroom probably energized me more than other things. I am now more intentional about the images that I select and also it helps give me ideas of other avenues to reach kids.” Riley also felt energized by the potential the arts could bring into her classroom. “And then getting into it (arts integration), I was like wow, this is a whole new world! This is a whole new way of teaching, a whole way of reaching students. It was so intriguing to me.”

Within the codes, Validating Arts, teachers described the ways the arts can be a meaningful teaching tool. During the interviews the teachers explained the ways in which they perceived the value of integrating the arts into their classroom. Riley shared, “It (art) was something that piqued my interest and so I thought if that's something that I could bring to my students, then why not give it a shot.” Patricia shared, “There are many ways that reality is portrayed through artwork, imagine what they can see in

artwork if we can get them exposed to this. That was my Aha moment. How important the arts are to learning.” She continued,

I feel like it has given me the evidence that I need to say this works. I now have proof that the arts are not one more thing. It can be naturally integrated...you don't have to add any more to the day to do this and you're not losing anything else.

Believing that the arts are a meaningful and useful teaching tool is also supported by Mike. He says of arts integration, that experiencing an artform, such as live theater, has the potential to build more content retention than lessons taught in the classroom. He described using the Broadway musical, *Hamilton* as a way to help students understand context and implication of historical events.

The experience of exposing inner city kids to something like a Broadway musical that was a cultural phenomenon and one that was decidedly geared toward people of color and minorities like my kids are, is fantastic. It is my thought that the experience is far more valuable than a month's worth of other lessons.

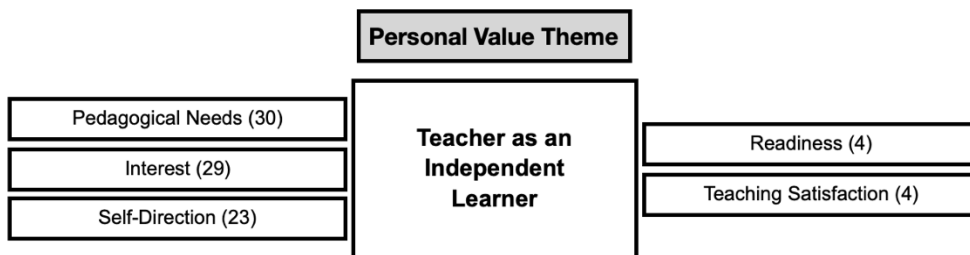
Mike went on to say, “The arts affect people, people are moved by the arts...they are part of being a human and I just think the arts just work.”

***Teacher as an Independent Learner.*** The category, Teacher as an Independent Learner, was located within the theme, Personal Value. During the interviews the teachers recounted the reasons why they decided to attend the AEC PD. The PD. Many factors affected the teachers' choices to attend the PD, but two specific elements were

shown to be significant. These were coded as Interest and Pedagogical Needs (Figure 16).

**Figure 16**

*Personal Value Theme: Teacher as an Independent Learner*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Mike clearly stated his feelings about PD. "I like to pick my own PD. I generally do not find the district provided PD to be anything more than a waste of my time. I've always been that person that... wants to pursue my own path." Riley echoes Mike's sentiment, "The teachers that were in there, we were all volunteers, weren't volunteered." Riley felt this element of choice seemed to help create a positive energy. She continued, "And so you know, everybody was excited for the opportunity."

"Attending the PD was a choice," Patricia explains, "I wasn't forced to do it...It's the PDs where we had autonomy are the ones that I really remember." She continues, "If I have the choice to choose from sessions, I am more apt to sign up for something I have experience with, like tableaus because that's the area that I would like to continue learning about." This quote from Patricia describes not only her desire to continue learning in a specific area, but also exemplifies the desire to build on familiar concepts. Amy reiterated the value in learning choice, "When I started it was my choice. I was

interested in the programming..." She continued by explaining the reason why she attended, "One of the sessions was really intriguing to me because of the arts and science integration."

Pedagogical Needs were interview excerpts whereby teachers explained their decisions to attend the PD based on their needs and interests to augment their current pedagogical practices. Taylor explained, "I am a kinesthetic learner, that's kind of what drove me to arts integration." Taylor's perception of her own learning style was something that moved her to try the PD. Additionally, she noticed her students' had trouble sitting still and wanted to find a way to address it. Mike was interested in finding new teaching tools with which to engage his students. "I wanted to find some different tools to use to appeal to my students... either hands on visual. Some way of just kind of engaging students and I was hoping, I could do that through art."

Riley was searching for a way to broaden her teaching skills and viewed the AEC PD as a way to do that.

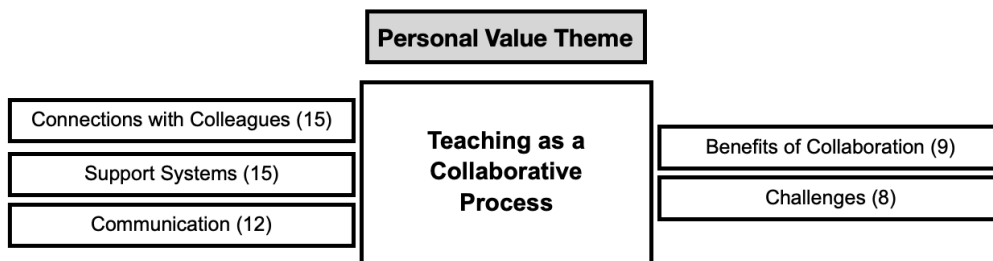
I have been really trying this year to speak to teachers and other departments and speak to teachers in other subjects...to just kind of broaden my experience and dynamics and things like that, and so I just thought that [the AEC PD] would be an opportunity and to approach it in something completely different..

The need for new strategies to engage students prompted Mike to attend the training. "I wanted to find some different tools to use to appeal to my students. I was hoping to find some way of, you know, either hands on visual or whatever, some way of engaging students, and I was hoping I could do that through art."

**Teaching as a Collaborative Process.** The final category in the Personal Value theme was Teaching as a Collaborative Process. Within this category, teachers discussed the ways in which the AEC PD helped to forge relationships with other teachers to increase collaboration, foster support systems and build community within the school environment. Two significant codes that emerged were Creating Connections with Colleagues and Support Systems (Figure 17).

**Figure 17**

*Personal Value Theme: Teaching as a Collaborative Process*



*Note:* Parenthetical numbers indicate code frequencies within the category.

Connections with Colleagues codes describe the ways in which using arts integration helped to create connections with other teachers. They described strengthening the relationships with other teachers in their building as well as forging relationships with colleagues outside of their buildings. This appeared to be a meaningful outcome of the PD experience for interviewed teachers. One aspect of the relationship-building that seemed to be helpful was the opportunity to share subject area and grade level strategies that differed from their own. Riley, as a secondary teacher, described working with elementary teachers as “eye-opening.” She elaborated, “They provided a very different perspective and even they gave me ideas, and I was able

to give the same back to them.” From Riley’s perspective, the give and take between teachers helped to increase the value of the experience, “Everybody was very willing to participate, and I think that that made it (the PD experience) very enriching and just very powerful.”

Developing the relationships between building colleagues was a positive outcome of the PD experience for Amy. She described it as, “so rewarding.” She elaborated, “I really enjoyed doing it, I liked connecting with my colleagues, finding ways that we could work together.” She explained that this is something she would like to continue in the future. She explained, “I’m looking forward to maybe reaching back out to those teachers and saying, ‘Hey can we do this again?’” When asked why the connection with others in her building held importance for her, she explained, “It’s really nice to build those relationships. I think it makes a really stronger school community rather than us hanging out in our separate worlds. So that was really successful. I enjoyed that.”

The code, Support Systems, was composed of excerpts that demonstrated the teachers’ want for supplemental assistance when integrating arts strategies in their classrooms. During the interview process it was shown that the teachers felt an increased sense of confidence using arts integration when assisted by another teacher. The types of support varied for the teachers. For some it was a collaboration with the arts specialist in the building or a co-teaching experience with a colleague who had also participated in the training. For others it was having a teaching artist or one of PD facilitators serving as a guest teacher in their classrooms. Mike explains, “Well, one of

the key things to be honest, that attracted me to the PD was that as a result of going through the training, a teaching artist was going to come to my classroom and help me out." He continued, "Having an artist come and take over and show me some things in the classroom...getting the kids up and out of their seats. It was great." While Mike showed confidence using images of paintings and other pieces of art as a way to deepen student understanding, he did not demonstrate that level of confidence when describing the practical application of art forms (students making original art or participating in dance or music activities) and wanted supplemental help implementing these art forms.

Mike was not alone in feeling the need for support. Riley took advantage of an opportunity to create and implement an arts integration lesson in her classroom with the help of a PD facilitator.

I started looking at my lessons and said, 'Okay, I think this lesson is approachable from an arts integration perspective.' We got together and spent 30-45 minutes developing a lesson and then she actually had the time where she could come to my classroom and teach with me...that was invaluable because I don't think I would have had the confidence, to be honest, to just go for it the first time.

When asked if she had tried any arts integrated lessons on her own Riley responded, "I will say it was very overwhelming. Just because there was a lot of information in the beginning...and I have found this comfort level of doing it with [the facilitator]." Riley explained that she could try it on her own with some extra coaching.

I would probably meet with her and ask her to make me a script or tell me some of the technical things, because there were a lot of technical things that she knew about the artist and about the painting that I would never have known.

Once the teachers were back in their classrooms and trying out the teaching strategies, they discovered a need to have someone available as a resource. Patricia was able to email her facilitators. "There were times when I needed to know something a bit more in depth. It was through email that I got the support and was able to ask [the facilitator] questions." Taylor and Amy would have preferred to have a resource in their buildings whom they could go to with questions and concerns. Amy explained having a resource person in her building would be a help with questions, but could also facilitate teaching partnerships, further supporting the idea of connecting with colleagues within the school building.

I wish I had someone in my district that I could go to, you know, like my curriculum coordinator, but an arts integration coordinator. I think that would be invaluable, honestly because it would be somebody who you know, and who could help you hook up with people who are already interested in doing that (arts integration).

Taylor also felt that an added support person would be beneficial. "I think arts integration is great, but I wish there was an arts integration position for the district that I could talk to. Having that person is like having an instructional coach, and I would absolutely use them."



**Conclusion**

Data emerged from the Likert-type surveys to indicate a positive perception of arts integration as well as an increased use of the instructional model. When implementing the teaching model, teachers revealed a propensity towards the utilization of the visual arts followed by drama and music. During the interview process, three themes developed from the data: Teacher Learning Process, Classroom Impact, and Personal Value. These themes characterized the ways in which the experiences and content from the AEC PD affected the participants' current teaching practice. Areas of significance included the teachers' personal interest in the instructional model as well as the observed impact of arts integration on student engagement.

## Chapter 5

### Discussion

Humans have had a deep relationship with the arts. (Eisner, 2014; Martin, 2016). Art forms such as drawing, dance, re-enactments, and music were early forms of expression that allowed humans to express and make meaning of their world. Throughout time the arts have provided a mode of expression beyond written and spoken language fostering communication and collaboration (Dewey, 1934; Milbrath & Lightfoot, 2010). When applied in the classroom, the arts have the potential to greatly benefit the education process (Eisner, 2014; Martin 2016). Arts integration is a teaching model in which the arts are paired with academic learning content to achieve learning objectives in both areas fostering increased engagement and content retention in both the arts and non-arts subject areas. (Burnaford et al., 2007; Miller & Bogotova, 2019). The model is complex, requiring not only the understanding of the strategies, but also knowledge of an art form and its application in an interdisciplinary context.

When utilizing arts in the classroom, the most frequent form of arts utilization is not arts integration, rather it is an augmentation of the academic content through the use of an art form. This is often termed, arts enhancement. Arts enhanced learning uses the arts to support academic learning. (Bresler, 1995; Russell-Bowie, 2009). Arts enhancement is most often used to help develop student interest or illustrate the non-arts content. While arts enhancement is a valuable tool for learning, the arts are not assessed and students are not provided with the background and techniques of the art structure used (Goering & Strayhorn 2016; Madden et al., 2022). Consistent within the

literature is the view that arts integration is a process in which the arts and non-arts content are paired into a mutually supportive relationship. This relationship is described as the co-equal model by Bresler (1995) and by Rabkin and Redmond (2004) who refer to it as, "arts for learning's sake" (pg. 8). This co-equal approach to design uses learning objectives in both content areas as students demonstrate new understanding through the art form (Carpenter & Gandara, 2018; Duma & The Kennedy Center for Performing Arts, 2014).

To successfully teach the arts integration model, content in both the arts and the pedagogical strategies should be provided (Buck & Snook, 2020). When presented with an abundance of content, accommodating new information can become a challenge due to the relatively short time available during PD (Brooks & Shell, 2006). Research has shown at the conclusion of arts integration professional development, teachers remain uncertain about their abilities to implement and connect the arts to classroom learning (Carpenter & Gandara, 2018). Examining current arts integration PD with the purpose of identifying to what extent teachers can retain and utilize the PD content may help to increase best practices in this area of teacher education and instructional application.

An explanatory sequential mixed methods approach was used to answer the following research questions:

1. To what extent do classroom teachers retain and utilize arts integration content from their professional development experiences?

2. In what ways do the teachers who participated in arts integration training describe the experiences and content that continue to impact their current teaching practice?

Quantitative data was collected through the Likert-type survey, Arts Integration Content Retention (AICR), and qualitative data was collected through in-depth semi-structured interviews. The teacher participants were a sample of convenience from both elementary and secondary public, private, and charter schools from the same midwestern state. All teachers had previously participated in at least one iteration of the Arts in Every Classroom (AEC) arts integration professional development experience between the years 2018-2020. Content retention was determined by the degree of confidence in new arts content and the frequency of its application reported through the Likert-type survey and the in-depth interviews.

### **Summary of Findings**

***Research Question 1: To what extent do elementary classroom teachers retain and utilize arts integration content from their professional development experiences?***

Teachers were surveyed to learn what, if any, prior involvement with arts integration were experienced before attending teacher professional development (PD) with the majority reporting never having used this type of instructional model. Results from the survey indicated an increase in the use of the arts integration teaching model with most teachers reporting to feel moderately successful. After attending the PD, nearly half of teachers reported having implemented arts integrated lessons three or

more times over a two-year period. Utilizing arts integration more than once suggests elements of the PD were retained and applied by most teachers.

Arts content usage and confidence appears to be focused on the visual arts with some elements of drama, dance, and music. Nearly half of the teachers reported to feel moderately confident in their understanding of the visual art content and techniques and slightly less reported to feel moderately confident with dance and music. Visual arts content integrated into classroom curriculum was reported to be utilized by nearly half the teachers. When reporting prior arts experiences, nearly half of the surveyed teachers reported to have had past involvement in the visual arts and one fourth reported to have experience in multiple art forms. This suggests that past experiences in the arts may have positively affected the content retention and utilization.

***Research Question 2: In what ways do the teachers who participate in arts integration training describe the experiences and content that continue to impact their current teaching practice?***

In the explanatory sequential design, the qualitative data is used to deepen the insight gleaned from the quantitative data (Creswell & Guetterman, 2019). The data from the AICR survey suggested that teachers were applying the learned content to a moderate degree and utilized the areas of art in which the teachers appeared to hold prior knowledge or experiences. Data from the survey revealed nearly half of the teachers reported prior experience solely in the visual arts, but one fourth reported prior experience in more than one arts area. These areas were not defined through the survey, but information regarding multiple art forms emerged through the interviews.

Three of the five teachers, Riley, Amy, and Mike reported having experience in more than one art form. Riley described high school experiences in theatre and visual arts and Amy reported professional experience in the visual arts as well as childhood experiences in both theatre and music. Mike described using the visual arts as a hobby and recalled previous career experience in broadcasting before he went into the teaching profession. Patricia indicated to have prior experience in the visual arts only, and Taylor reported no prior experience in the arts.

As indicated in the survey data, teachers who participated in the AEC PD showed an increased use of arts integration lessons in their classrooms. The qualitative data demonstrated that through the PD, the teachers developed an increased understanding of the instructional model. Three of the five interviewed teachers reported to have little or no understanding of the arts integration process prior to the PD. The remaining two teachers mistakenly viewed the instructional model as arts enhancement, rather than arts integration. Riley had previously heard of arts integration but confused it with arts enhancement... "I had the mindset that arts integration was arts enhancement... And I did not know the difference between the two at all." The teachers were surprised to learn of the need to implement art standards and assessment when utilizing this teaching model. Taylor remarked, "Honestly...I had never looked at arts standards, ever. It was a different perspective and I'm like, 'Oh I should probably do that if I'm trying to integrate art.'" This data indicated teachers gained an understanding of those components necessary to achieve the co-equal model of arts integration.

When asked about which type of arts integrated lessons were implemented, the data revealed three of the five teachers focused on the visual arts exclusively. The remaining two teachers utilized the visual arts but also created drama-based lessons. The drama-based lessons applied an active learning approach in which the students collaborated and used movement to express concepts. Mike, a high school ESL and Social Studies teacher, incorporated Reader's Theatre scripts (stories adapted into a script format) focused on historical events to help create context around the academic content as well as give the students an opportunity to practice pronunciation and vocal expression into their English language speaking skills. Patricia, an elementary teacher, described using tableau, a drama strategy in which students use their bodies to create frozen images to show an event or action through body and facial expression. While she felt successful in implementing this drama strategy, she did not maintain this type of teaching due to its level of difficulty in planning and implementation.

The data demonstrated teachers had a predilection towards implementing visual arts in their arts integrated lessons through direct instruction. Much of the work in the visual arts was incorporated through the analysis of professional works of art and connecting the art work to the academic content. The teachers identified opportunities for the students to view and discuss paintings using the elements of art (line, shape, space, color, value, texture) to help create context for the academic subject area. While not incorporating hands-on activities, the lessons exemplified the co-equal arts integration model with learning objectives in both the arts and non-arts content.

When the teachers described the lessons they implemented independently, they recalled using direct instruction. This pattern appeared to shift when the opportunity to co-teach with a partner was available. With the support of a co-teacher, original student artmaking was incorporated into the arts integration lessons. To increase student engagement and understanding of literacy concepts, Taylor described a hands-on lesson incorporating visual arts strategies. This lesson was supported by an AEC faculty member who helped Taylor design and implement the lesson with her students. Amy partnered with another teacher in her building to create puppets as a way for students to enhance their understanding of story characters.

While most teachers felt some success with the implementation of their lessons, many felt a level of difficulty with the implementation of the teaching model. Teachers did not feel they had acquired enough of a skill set in arts areas such as music, dance and drawing to confidently apply the instructional model into their classrooms. They agreed that further assistance in the form of a mentor or coach may help further develop their confidence and skills after the conclusion of the PD.

Data from the interviews revealed that teachers had an increased understanding in the levels of arts integration and can recognize the need to apply arts standards and learning objectives into the co-equal model of arts integration as proposed by Bresler (1995). When integrating arts content, the forms most often described were the visual arts and drama. Data revealed that there may be a reluctance for teachers to use hands-on techniques when integrating the visual arts on their own and appeared more confident using a direct instruction approach with the art form. Teachers described



using hands-on visual arts techniques only in co-teaching situations. The teachers agreed that their self-perceptions of confidence with the model required additional support to foster increased competence in arts integration implementation.

### **Limitations**

Limitations to the cogency of this work were identified. This included results based on a small population and a sample of convenience. The sample population was of teachers who had all attended the AEC professional development workshops between the years 2018-2020. All teachers were from the same midwestern state. Email invitations were sent three times to increase the pool of participants and a gift card was offered as an incentive. One hundred five survey invitations were sent out and 41 teachers responded. Eight surveys had to be discarded due to their lack of completion leaving the sample size at 33 teachers.

An additional limitation was the researcher's role as a facilitator in the AEC professional development during the two-year span. This may have caused the participants to be biased in their responses both on the survey and in the interviews. Unintentional bias may have occurred by the researcher. To help eliminate this bias, a prepared introduction was used with each interview and a colleague served as an external audit to help ensure the researcher's findings were supported by the data.

A limitation was the several iterations of the AEC PD experience during the years 2018-2020 that involved multiple offerings of the PD by new facilitators over the two-year time period. Teaching styles differed among facilitators providing variation in the

way content was presented. This variation in presentation style may have affected the content retention of the teacher participants.

The Covid-19 pandemic presented the final limitation, specifically for those teachers participating in the PD during the 2019-2020 school year. As schools began teaching virtually, many teachers were forced to learn new methods of instruction. This new learning process took precedence over the learning acquired during the AEC PD, potentially preventing the teachers' ability to practice and retain arts integration content (Chan et al., 2021).

### **Delimitations**

The mixed-methods research design was selected to deepen the understanding of the data, offering insight that may not have emerged from the use of one type data collection alone (Creswell & Guetterman, 2019). The utilization of mixed methods may impede the generalizability of the research due to the context dependent nature of the qualitative data. Generalizability in mixed methods is a topic that continues to be discussed and evaluated by research scholars (Osbeck & Antczak, 2021; Polit & Tanto, 2010). Additionally, the survey instrument was developed by the researcher. While the survey was piloted for clarity and validated using Lawshe's Content Validity Ratio (1975), there may have been embedded bias. Finally, qualitative data gathering was through one-on-one interviews only. Focus groups, classroom observations and document analysis were not used.

### **Implications for Practice**

PD is an important element in the continuum needed to produce and maintain skilled educators. It can offer teachers the opportunities to explore, collaborate, and reflect. Providing teachers with opportunities for growth helps to promote the development of rich learning experiences for students (Darling-Hammond et al., 2017). When designing PD, the teacher should be viewed as a working professional with prior knowledge and experiences in the field, therefore the needs of the adult learner should be taken into consideration (Chaipidech et al., 2022; Gregson & Sturko, 2007). Knowles identified a set of six assumptions relating to the needs of adult learners (Knowles, 1980). Data from the surveys and the interviews were viewed through this lens and four of the six assumptions appeared to play a role: experience, self-concept, readiness, and, orientation to learning. Identification of these assumptions emerged from the AICR survey as well as within the interviews.

Adults have a range of prior learning and life experiences that can be built upon during the learning process. According to Knowles (1980), utilizing the prior life and learning experiences provide beneficial resources on which to build new learning. It was made evident through the survey and interviews that many teachers came to the AEC PD with prior visual arts experiences. Also evident were the more prevalent experiences in drama and music. The visual arts, followed by drama were the arts form receiving the highest percentages of usage and confidence. This may be linked to the reported arts prior experience. According to Knowles, past learning and life experiences can be utilized to scaffold new knowledge (Knowles, 1980). This phenomenon may have helped

to foster an increased confidence and usage of the visual arts. Data from the interviews support this idea. When describing the ways in which arts integration was implemented in the classroom the two art forms most mentioned were the visual arts and drama.

Areas of the retained learning content from the AEC PD was consistent with Knowles' assumptions of self-concept, readiness, and orientation to learning and were reflected within the three themes derived from the interviews: Personal Value, Teacher Learning Process, and Classroom Impact. Personal Value contained codes consistent with the self-direction assumption described by Knowles (1980). Teachers described options to develop their own interests as well as opportunities to manage their own learning within the parameters of the professional development content. These elements helped to create meaningful learning experiences as well as develop peer collaboration opportunities. This perception of the need for this learning corresponds with the opportunities to pursue independent learning choices.

Teacher Learning Process and Classroom Impact included codes relating to readiness to learn and orientation to learning (Knowles, 1980). Teachers attended the PD with the intention of learning new and relevant strategies to help engage students and increase academic content comprehension through art. The teachers described the new learning from the PD occurring at a time in their career when the PD content was significant and relevant. This apparent need is consistent with readiness to learn, in which the learner seeks new educational experiences to expand career knowledge (Knowles, 1980).

The teachers described elements of the PD that helped to resolve issues in their classrooms such as the limited instructional time and using drama and dance strategies to satisfy the students' need for movement. Through the interviews they were clear in their appreciation for PD content that could be applied immediately. Providing learning opportunities that are easily applied and that can help improve work or personal situations is consistent with the assumption of orientation to learning described by Knowles (1980).

Based on the findings, it appears that utilizing these assumptions when developing future professional development experience may help increase the potential for teachers to retain the content introduced in the training. These findings are consistent with research in the field (Gregson & Sturko, 2007). Providing opportunities for teachers to suggest topics and allowing for opportunities for teachers to direct their own learning based on interest and needs help guide PD content that is relevant (McCauley et al., 2017). Identifying prior knowledge and skills may help facilitators to create a foundation during the PD that builds upon teachers' professional knowledge and experience (Novitasari et al., 2018). Finally, creating strategies that can be applied immediately to the classroom, thus potentially increasing the likelihood of content application and retention (Chaipidech et al., 2022; Gregson & Sturko, 2007).

### **Recommendations for Future Research**

Professional development has the potential to increase the use of the arts integration model and more research on the topic should be explored to identify best practices. Results demonstrate that professional development content that is both

meaningful and relevant to the participants will aid in both its retention and utilization.

It is described in the literature that involving the participants in topic development holds significance (Purwati et al., 2022). Research into arts integration PD in which teachers are invited to be a part of the planning may help increase relevancy and personal meaning for teachers.

Results also demonstrated low to moderate levels of confidence in all four arts areas. The AEC professional development focused on all four major areas of art, covering more breadth than depth. Future research into deepening the focus of one arts area, its content, application techniques, and integration strategies may help increase the confidence of teachers when applying the arts content to the teaching model.

Findings suggested that increased support after the conclusion of their professional development would be beneficial for the increased utilization of the teaching model. Examining the effects of increased support put in place after the conclusion of the PD may be an area for further study.

A high percentage of teachers coming into the AEC PD reported having prior experiences in the visual arts. Survey data showed that teachers tended to slightly favor the use of and have confidence in the visual arts when implementing arts integration strategies. This pattern extended to the interviews in which the arts integration experiences described tended to focus on the visual arts. Examining the relationship between prior arts experiences and arts integration confidence may be beneficial area of study to add to the existing body of knowledge on this instructional model.

## Conclusions

According to Eisner, the arts allow us to express ideas through sound, movement, images and language. Utilizing the arts in the classroom can potentially foster creativity, engagement, and facilitate communication with others (Edelen, 2020; Heller, 2017). Applying the arts through arts integrated teaching is one way to help bring these benefits into the classroom but for this instructional model to be successful, it is necessary that the teaching strategies taught in the training must be retained and utilized.

Both the quantitative and qualitative data provided evidence that teachers understood the ways in which to utilize the teaching model. Evidence was obtained to demonstrate increased usage of arts integration by the teacher-participants following the AEC PD. The art forms primarily utilized were the visual arts and drama. The data suggests teachers may have retained elements of content and arts strategies related to these art forms. Also revealed in the data was a pattern demonstrating past experiences in an art form may have played a part in the increased the utilization in the type of arts integrated into the classroom. All findings were viewed through the lens of Knowles' Six Assumptions of Andragogy (1980) and four of the six themes appeared to be present within the data: experience, self-direction, readiness to learn, and orientation to learning.

These results demonstrated through this work may help to improve the efficacy of current arts integration professional development practices. While arts integration

has potential to develop positive and lasting learning experiences, a continued focus in this area of research is necessary to help disseminate best practices for the future.



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**Appendix A**

University of Missouri-St. Louis  
College of Education

**ARTS EDUCATION QUESTIONNAIRE AND SURVEY****Part 1. General Information**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Preferred email address: \_\_\_\_\_

What role(s) do you currently hold at your school? \_\_\_\_\_

What grade level(s) do you currently teach? \_\_\_\_\_

What subject(s) do you currently teach? \_\_\_\_\_

Is your school:

- Public
- Private
- Charter

In what type of community is your school located?

- Urban
- Suburban
- Rural

Optional Demographic Information:

Ethnicity (select one or more)

- Hispanic or Latinx
- American Indian or Alaskan Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- Middle Eastern
- White
- I prefer not to say

Gender

- Male
- Female
- Non-Binary

- If you would like the opportunity, we invite you to share more about your gender identity below \_\_\_\_\_ (fill in the blank)
- I prefer not to say

**Pt. 2. Description of Study and Informed Consent**

1. You are invited to participate in a voluntary research study conducted by Roxane McWilliams under the supervision of Dr. Charles Granger. The purpose of this research is to study to what extent content from arts integrated professional development is retained over time by classroom teachers.
2. a) Your participation will involve the following:
  - Completion of an online survey with questions about how often, to what extent and your comfort level regarding the use the arts and arts integration in your classroom
  - An optional interview with the investigator, including questions about your use and perceptions of the arts integrated professional development experience and arts integration.
  - All interviews will be and conducted on Zoom and recorded for transcription.
  - Your identity and personal information will remain confidential in the report of findings from this research.

All teachers involved in the Arts Integration professional development will be invited to complete the survey and up to six participants will be selected to be interviewed.

b) The amount of time involved in your participation will be approximately ten minutes for the survey and approximately one hour for those selected to be interviewed. Each survey respondent will be entered into a random drawing to receive a \$25 Amazon gift card as an incentive. Each interview participant will receive an additional \$40 Amazon gift card as an incentive.

3. There are minimal risks involved in this study. While your participation in this research may cause inconvenience, it is anticipated that your participation should not cause you any harm.
4. There is a risk regarding the loss of confidentiality, but the researcher will take multiple precautionary measures to protect the identity of the participants. Participants will be asked to provide their name and email address on the surveys in order for the researcher to contact them regarding interview selection, gift card distribution, or in the event they would like to withdraw their data from the study. All identifying data will be removed from the surveys and a random numeric code will be provided. A separate list with codes and identifying data matchups will be stored on a password protected computer. Subjects who participate in the Zoom interviews will be given a pseudonym to protect their identity. Survey data and video and transcriptions from the Zoom interviews will be stored on a password-protected

computer and an external hard-drive which will be kept in a locked file cabinet. The identities of the participants will not be revealed in any presentation or publication of this study. All identifiable data will be destroyed at the conclusion of this study. De-identified data will be destroyed after the three-year time limit. Participation in this research may cause inconvenience, but no physical or mental harm will occur.

5. There are no direct benefits for you participating in this study, however your participation will shed insight into the effectiveness of professional development and ways to increase its relevance for participants.
6. Your participation in this research is voluntary and you may choose not to participate in this research study or withdraw your consent at any time. If you choose to withdraw from the study, you may contact the investigator, Roxane McWilliams: rmm6dw@umsystem.edu. You may choose not to answer any questions that you do not want to answer. You will not be penalized in any way should you choose not to participate or to withdraw.
7. Roxane McWilliams will do everything possible to protect your privacy. As part of this effort, your identity will not be revealed in any publication that may result from this study. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection) that could lead to disclosure of your data as well as any other information collected by the researcher.
8. If you have any questions or concerns regarding this study, or if any problems arise, you may contact me or the faculty advisor (Dr. Charles Granger: grangerch@umsl.edu). You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research at 314-516-5897.

By checking the box below, you are verifying that you have read the description of the study and informed consent and that you agree to participate. You also understand that your participation in this study is strictly voluntary and you may withdraw at any time. Please answer the following questions honestly and to the best of your ability. Questions pertaining to the arts refer to any disciplines related to visual art, drama, music, and dance.

- I have read the study description and informed consent and agree to participate

### **Part 3. Survey Questions**

*Directions: There are no right or wrong responses to the items in this questionnaire. Please circle the number that most closely represents your feelings, attitude, or understanding of each question. Questions pertaining to the arts refer to any disciplines*

*related to visual art, drama, music, and dance.*

1. To what degree do you feel confident in your knowledge and techniques of using visual art (painting, drawing, working with clay, etc.) in your class?
  1. I do not feel confident in my knowledge of visual art at all
  2. I feel slightly confident in my knowledge of visual art
  3. I feel moderately confident in my knowledge of visual art
  4. I feel very confident in my knowledge of visual art
  5. I feel extremely confident in my knowledge of visual art
  
2. To what degree do you feel confident in your knowledge of using basic elements of movement and dance (use of levels in space, quick or slow movement, etc.) in your class?
  1. I do not feel confident in my knowledge of dance and movement at all
  2. I feel slightly confident in my knowledge of dance and movement
  3. I feel moderately confident in my knowledge of dance and movement
  4. I feel very confident in my knowledge of dance and movement
  5. I feel extremely confident in my knowledge of dance and movement
  
3. To what degree do you feel confident in your knowledge of using basic elements of drama (pantomime, tableau/frozen images, role play, etc.) in your class?
  1. I do not feel at all confident in my knowledge of drama
  2. I feel slightly confident in my knowledge of drama
  3. I feel moderately confident in my knowledge of drama
  4. I feel very confident in my knowledge of drama
  5. I feel extremely confident in my knowledge of drama
  
4. To what degree do you feel confident in your knowledge of the using basic elements of music (singing, instrumentation, rhythm patterns, etc.) in your class?
  1. I do not feel at all confident in my knowledge of music
  2. I feel slightly confident in my knowledge of music
  3. I feel moderately confident in my knowledge of music
  4. I feel very confident in my knowledge of music
  5. I feel extremely confident in my knowledge of music
  
5. How often have you used examples of visual art to support teaching another subject area?
  1. I never use examples of visual art to support teaching another subject area
  2. I rarely use examples of visual art to support teaching another subject area
  3. I sometimes use examples of visual art to support teaching another subject area
  4. I often will use examples of visual art to support teaching another subject area

5. I use examples of visual art to support another subject area every chance I have
6. How often have you used examples of drama to support teaching another subject area?
  1. I never use examples of drama to support teaching another subject area
  2. I rarely use examples of drama to support teaching another subject area
  3. I sometimes use examples of drama to support teaching another subject area
  4. I often will use examples of drama to support teaching another subject area
  5. I use examples of drama to support the teaching of another subject area every chance I have
7. How often have you used examples of music to support teaching another subject area?
  1. I never use examples of music to support another subject area
  2. I rarely use examples of music to support another subject area
  3. I sometimes use examples of music to support another subject area
  4. I often will use examples of music to support another subject area
  5. I use music to support other subject areas every chance I have
8. How often have you used examples of dance or creative movement to support teaching another subject area?
  1. I never use examples of dance or creative movement to support teaching another subject area
  2. I rarely use examples of dance or creative movement to support teaching another subject area
  3. I sometimes use examples of dance or creative movement to support teaching another subject area
  4. I often will use examples of dance or creative movement to support teaching another subject area
  5. I use dance or creative movement to support the teaching another subject area every chance I have
9. To what extent do you feel confident using arts strategies, such as pantomime, watercolor, creative movement, etc. in your classroom?
  1. I do not feel at all confident using arts strategies in my classroom
  2. I feel slightly confident using arts strategies in my classroom
  3. I feel moderately confident using arts strategies in my classroom
  4. I feel very confident using arts strategies in my classroom
  5. I feel extremely confident using the arts in my classroom
10. To what extent have you used a previously developed arts integration lesson (lessons you might find online on sites like Teachers Pay Teachers, Think360, Kennedy Center, etc.) with your class?

1. I have not used any arts integrated lessons
  2. I have used previously developed arts integrated lessons a few times
  3. I have used previously developed arts integrated lessons at least once a month
  4. I have used previously developed arts integrated lessons at least every few weeks
  5. I have found a way to incorporate previously developed arts integrated lessons almost on daily basis
11. To what degree have you attempted to plan your own original arts integrated lesson?
1. I have not planned an original arts integrated lesson
  2. I have planned one original arts integrated lesson
  3. I have planned two or three original arts integrated lessons
  4. I have planned four or five original arts integrated lessons
  5. I have planned six or more original arts integrated lessons
12. To what degree do you believe you have been successful implementing an original or previously developed arts integrated lesson with your students?
1. I have not implemented an arts integrated lesson with my students
  2. I have not been successful or only slightly successful
  3. I have been moderately successful
  4. I have been very successful
  5. I have been extremely successful
13. To what degree do you feel you have the knowledge to reinforce other academic content (math, reading, science, social studies) through an art form?
1. I do not feel that I have sufficient knowledge to reinforce other academic content through an art form
  2. I feel slightly comfortable reinforcing other academic content through an art form
  3. I feel moderately comfortable reinforcing other academic content through an art form
  4. I feel very comfortable reinforcing other academic content through an art form
  5. I feel extremely comfortable reinforcing other academic content through an art form
14. To what degree do you feel comfortable assessing student learning through an art form?
1. I do not feel comfortable assessing student learning through an art form at all
  2. I feel slightly comfortable assessing student learning through an art form
  3. I feel moderately comfortable assessing student learning through an art form
  4. I feel very comfortable assessing student learning through an art form
  5. I feel extremely comfortable assessing student learning through an art form



15. How difficult do you feel it is to implement an arts integrated lesson in your classroom?
1. It is not all at difficult for me to implement an arts integrated lesson
  2. It is only slightly difficult for me to implement an arts integrated lesson
  3. It is moderately difficult for me to implement an arts integrated lesson
  4. It is very difficult for me to implement an arts integrated lesson
  5. It is extremely difficult for me to implement an arts integrated lesson
16. To what extent do you feel using arts integration has the potential to positively affect student learning in your classroom?
1. Arts integration does not positively affect student learning at all
  2. Arts integration slightly affects student learning in a positive way
  3. Arts integration somewhat affects student learning in a positive way
  4. Arts integration moderately affects student learning in a positive way
  5. Arts integration strongly affects student learning in a positive way
17. Before participating in the arts integration professional development did you have prior experience with or knowledge about one or more art forms (lessons, hobbies, college classes or career experience) Please check all that apply.
- Visual Arts
  - Theater/Drama
  - Music
  - Dance
  - I have had no previous experience
18. Were you able to utilize any of the arts integrated strategies presented in the professional development in your classroom?
1. I was not able to utilize any of the arts integration strategies in my classroom
  2. I have been able to utilize arts integration strategies once or twice since the professional development, but they are not something I often think of using
  3. I have been able to utilize arts integration strategies 3-6 times since the professional development
  4. I have been able to utilize arts integration strategies 7-10 times since the professional development
  5. I have been able to utilize arts integration strategies more than 10 times since the professional development
19. Have there been times when you have had an idea for an arts integrated lesson, but for whatever reason, was not able to implement it in your classroom?
1. I have not had any ideas for arts integrated lessons
  2. I have had 1 or 2 ideas for arts integrated lessons
  3. I have had 3-5 ideas for arts integrated lessons
  4. I have 6-8 ideas for arts integrated lessons

5. I have had more than 8 ideas for arts integrated lessons
- 
20. What was your level of experience implementing arts integration strategies before you attended the professional development?
    1. I did not have any experience implementing arts integration strategies prior to the professional development
    2. I had implemented arts integration strategies at least one time prior to the professional development
    3. I had implemented arts integration strategies 2-3 times prior to the professional development
    4. I had implemented arts integration strategies 4-6 times prior to the professional development
    5. I had implemented arts integration strategies more than 6 times prior to the professional development

#### **Part 4. Optional Interview Participation**

Part of this study includes interviews to learn more about your experiences and perceptions of the Missouri Arts Council professional development and arts integration. Respondents who are interviewed will each receive a \$40 Amazon gift card. Interviews will take place at a mutually agreed upon date and time and will be recorded for later analysis. All participants in our study will remain confidential as reported in our findings and all data will be kept confidential on password-protected computers. All recordings obtained will be destroyed at the conclusion of the study. I do not anticipate any harm or inconvenience to participants. All participation is voluntary and participants may withdraw from the study at any time. Your participation would be highly appreciated. Would you consider being willing to be interviewed?

- Yes
- No

If you selected "yes" above, please provide additional information.

1. What is the best day and time to reach you? \_\_\_\_\_
2. What email address would you prefer we use to contact you? \_\_\_\_\_

## Appendix B

### Semi-Structured Interview Questions

#### Interview Questions

##### Section I: General information

1. What grade level do you currently teach?
2. How long have you been teaching?
3. How would you describe your approach to teaching?
4. Do you have prior experience with any particular art form(s) either in your teaching practice or as a hobby? If so, please describe.

##### Section II: The AEC professional development experience

5. How would you describe the AEC professional development experience?
6. How did the model lesson demos during AEC professional development affect your understanding of arts integration?
7. In what ways did the reflection after the both model lessons demos and your own arts integrated lesson affect your insight into the arts integration process?
8. Please describe any experiences in developing and teaching your arts integration lessons.
9. What part or parts of the AEC experience were the most memorable? Why do you think they made an impression on you?
10. Are there strategies or parts of strategies that from the AEC experience that you currently use or would like to use in your classroom? If so, please describe.
11. In what ways do you believe the AEC training affected your teaching practice?
12. In what ways did the AEC training shape your view of arts integration?

##### Section III: Your views on arts integration

13. How would you describe arts integration?
14. How would you describe your level of confidence when using arts integration? Do you have more confidence with one art form than another? Why or why not?
15. To what extent have you formally (as in an arts integrated lesson) or informally (adding the arts as a way to engage students) added the arts into your classroom?
16. What are the reasons that you would consider using an arts integrated lesson with your students?
17. What challenges have you experienced implementing arts integration?
18. What successes have you experienced using arts integration?
19. What else would you like to share to ensure that it is part of the study?

## Appendix C

### Participant Demographics

#### Sample Population Demographics (n=33)

Gender	Race	Grade Level	School Type	School Community
30 Female 2 Male 1 Prefer not to say	26 White 4 Black 2 Asian 1 Mixed Race	25 Elementary 3 Middle School 5 High School	30 Public 3 Charter	13 Urban 13 Suburban 7 Rural

#### Interview Participants (n=5)

Pseudonym	Grade Level	Subject Area	Years of Experience
Amy	Elementary	Art K-5	12
Mike	Secondary	History	30
Patricia	Elementary	3 <sup>rd</sup> Grade	9
Riley	Secondary	Math	4
Taylor	Elementary	2 <sup>nd</sup> Grade	3

## Appendix D

### Interview Codebook

CODE	DEFINITION	MODEL QUOTE
Active Learning	Learning through a kinesthetic modality	"Content where students are able to learn kinesthetically sticks a lot more than anything else that we're teaching." Patricia
AI for Individualized learning	Using arts integration as a way to differentiate learning for students	"I am now more intentional about the images that I select and it also at least gave me some tips and ideas on using kind of other avenues to reach kids because everybody's different." Mike
AI Modeling	Arts integration experts model the process through a demonstrated lesson	"It really captivates you seeing those things, especially seeing them in practice because the facilitator came in and did demonstrations with students. It was really interesting to see it happening and what the potential benefits of it would be." Amy
Approachable Strategies	Strategies delivered in the PD in a clear manner, facilitating application	"There were really concrete steps for how to teach students to create tableau. And these are things that teachers don't know how to teach their kids without having that really concrete step by step approach." Amy
Arts Integration Confidence	The extent of confidence in the arts integration model	"On my team, I feel like I'm the most competent person in [arts integration] because I have had exposure to it." Taylor
Benefits of Collaboration	Arts integration promoting the collaborative process for teachers or students	"I liked connecting with my with my colleagues, finding ways that we could work together." Amy
Challenges	Challenges found when implementing arts integration	"Last year was such a strange school year...I think things have just changed so much and I'm trying to be flexible." Mike

Classroom Minutes	Time available to teach a concept	"I'm concerned about time in that I have this structure that I've already laid out for students. I'm trying to figure out where that line is and how we phase in and out of it (arts integration strategies)." Amy
Communication	Arts integration promoting increased communication for teachers or students	"After I went through the professional development, I started reaching out to people to gather resources and ideas." Patricia
Comprehension	Using arts integration to build understanding	"I'm actually teaching them something that they are actually taking something away from. It's great." Taylor
Connections	Quick links to other subject areas	"I try to use pieces of art that are relevant to the lesson that helps us learn the lesson. If I can find the right picture like it makes it so much easier, is that picture speaks for itself." Mike
Connections with Colleagues	Arts integration promoting the development of community within a classroom or school building	"Because this was a district wide PD that we had a choice to do... It's getting us collaboratively talking and having connections through the district." Taylor
Context	Arts integration fosters frame of reference for non-arts content	"We were doing story elements and...we got to build a masks it made it so much more meaningful." Taylor
Developing Pedagogy	Adapting AI processes into current teaching style and practice	"And then getting into it (arts integration), I was like wow, this is a whole new world! This is a whole new way of teaching, a whole way of reaching students. It was so intriguing to me." Riley
Effects of the Arts	The positive effects of using the arts in the classroom	"I'm working with English learners so the visual arts definitely help. It helps them to visualize to see to understand, even if they don't know the words for it." Mike

Embedding Learning	The ability to teach multiple content areas using arts integrated strategies	"We can try to work on multiple content areas at the same time, and I wanted to explore reading and art, because I started to come across research that says students can learn to read through critically analyzing art." Patricia
Emotional Connection	Emotional response stimulated through an arts experience	"If I get to actually act something out...I actually getting emotional about it...because it made it personal. Right, it's so personal and it's actually showing the emotions through the tableaux that makes them think." Patricia
Engaging students	Fostering student interest in content through arts integrated lessons	"Any lesson that provides for time for student discovery... I think that incorporating the arts allows students to create or discover." Riley
Engaging Teachers	Fostering teacher interest in teaching content through arts integrated lessons	"I would say that the PD...piqued my curiosity to get me to want to learn more so it was both kind of it was it was engaging and fun." Mike
Experiences with the Arts	Acknowledging prior teaching or arts experiences	"I did some I did some music lessons as a kid... But then in high school, I actually was very interested in theater and I did some stage managing I senior year I did some acting." Riley
Fear of Failure	The consequences of not continuing the struggle of learning	"I am very limited in creativity and it made no sense in my mind" Taylor
Immediate Application	Offering opportunity to apply new learning immediately	"It's fun to go to a PD that's something totally out of my box. But gives me something I can take right into my classroom tomorrow and use, so I found it really satisfying." Mike
Interest	Teachers' personal interests as a motivating factor to attend PD	"It was so interesting. All the all the presenters were really interesting and engaging professionals. They had a lot of strategies, ways that you could bring it right to your classroom." Amy

Learning from Experts	Learning art integration strategies from experts in the field	"I think the content of the programming was just really tight and really intentional. I think that that made a huge difference, it just kind of hooked me." Amy
Memory Builders	Utilization of arts integrated learning cultivates memorable experiences	"If they get to act something out, they can get emotional. It's actually showing the emotions through the tableaux that makes them think." Patricia
New Content Practice	The need to practice arts integration strategies	" I think that there's a lot of benefit to those (theatre strategies) but I'm out of practice since it's been a while since I had that training. And I feel like it's absolutely a muscle that needs to be exercised. If you don't do it, it's not going to come as naturally and it's not going to have that flow that you would like to have in a classroom." Amy
Student Benefits	Benefits to students from the use of arts integration	"Because we all want to do we all want to teach our kids have the best way possible, and then we want them to be engaged and we want them to retain what they're learning. I think arts integration does all of that, we just need that push to keep us going and giving us a resource that does that I really think is the best way to do it." Patricia
Pedagogical Needs	Augmenting current pedagogy as motivating factor to attend PD	"I wanted to find some different tools to use to appeal to my students just again I was hoping to find some way of you know either hands on visual. Some way of just kind of engaging students and I was hoping, I could do that through art." Mike
Pushing comfort bubble	Stretching outside of the comfort zone	"And they put me in this thing about dance I'm like, 'Oh wow that's way out of my realm.'" Mike
Readiness	Teachers are at a point in their teaching experiences to see the benefit of arts integration	"Yeah I think it came at a sweet spot where I am now because I am currently just searching for kind of that fulfillment, and so I think that was very helpful." Riley



Self-Direction	Teachers able to guide their own professional learning	I like to pick my own PD. I generally do not find the district provided PD to be anything more than a waste of my time...I want to pursue my own path. yeah so. Whenever I've been asked you know how can we improve PD, my answer has always been give teachers a choice, let us design our own PD." Mike
Support Systems	Availability of ongoing assistance to help facilitate development of teachers' arts integration practice	"Well, one of the key things to be honest, that attracted me to the to the PD was also the fact that I knew that as a result of going through the summer, training, a teaching artist is going to come to my classroom and help me out...Having an artist come and take over and show me some things in the classroom..." Mike
Teachers' Time	The feeling that teacher time is being used to appropriately; not wasted time	"I don't remember how many times that this is like at a school where I used to teach the administrators love to have a sit through yet another PD where some expert would lecture to us about brain research and oh my gosh I don't care about brain research anymore, to give me something that I can use tomorrow in my classroom." Mike
Teaching Satisfaction	Utilizing arts integration fulfills a need	"I think it helped me a lot with targeted instruction and then you know minimal, but productive words and phrases. I have tried to kind of adopt that with my day to day atmosphere. To be concise. Concise and interesting." Riley
Thinking Skills	Utilizing arts integration develops students thinking skills	"I keep saying iconic art or notable art or just interesting art helps add some depth to their education that they might not get with some other activity I could do in class." Mike
Usable Content	Providing content examples in the PD that teacher can apply into their classroom curriculum	"I was so excited about this. After we got started, I was able to pull in some of the strategies that we've learned in the PD into the curriculum." Patricia

Validating Art	Endorsing the use of the arts as a teaching tool	"I feel like it has given me the evidence that I need to say this works. I now have proof that the arts are not one more thing. It can be naturally integrated...you don't have to add any more to the day to do this and you're not losing anything else." Patricia
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