The Benefits And Barriers To Arts Integration: Arts Accessibility In Public Montessori

Heather Teems

Follow this and additional works at: https://dune.une.edu/theses

Part of the Art Education Commons, Curriculum and Instruction Commons, Educational Assessment, Evaluation, and Research Commons, Educational Leadership Commons, and the Educational Methods Commons

© 2021 Heather Teems
THE BENEFITS AND BARRIERS TO ARTS INTEGRATION:

ARTS ACCESSIBILITY IN PUBLIC MONTESSORI

By

Heather Teems

BFA University of South Carolina 1995
M.Ed. Lander University 2010

A DISSERTATION

Presented to the Affiliated Faculty of

The College of Graduate and Professional Studies at the University of New England

Submitted in Partial Fulfillment of Requirements

For the degree of Doctor of Education

Portland & Biddeford, Maine

April, 2021
Copyright by
Heather Teems
2021
THE BENEFITS AND BARRIERS TO ARTS INTEGRATION:
ARTS ACCESSIBILITY IN PUBLIC MONTESSORI

ABSTRACT

This mixed-method exploratory case study investigates the research question: To what extent do pre-K through eighth-grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum? Public Montessori teachers from five public-choice Montessori schools in a school district of the suburban and urban areas of southeastern South Carolina were invited to participate. The teachers in these public Montessori schools have varied levels of education and professional development experience with the arts in education. Some participants were general education teachers prior to becoming Montessori teachers due to the transition of traditional program elementary schools to Montessori schools. Survey questions addressed themes and subthemes related to integrating the arts with core curriculum subjects including math, history, science, English language arts, and social justice and humanities. The subthemes were also designed to delineate perceptions of experience or knowledge with visual arts, music, dance, poetry, drama, and theater. Data were gathered from the participant responses and a district program description, including professional development offerings. To analyze the data, the research question themes were coded by the field annotations: abilities, knowledge, resources, benefits, and barriers. The coding involved identifying patterns and similarities in the
teachers’ responses of their perceptions related to arts integration in their Montessori classrooms. The overall results indicated the teacher participants believe that students who exhibit excess energy would benefit from an increase in movement, collaboration, and music, as well as a significant increase in exposure to the arts. Largely, the teachers indicated feeling uncertain about integrating the arts into their Montessori classrooms due to barriers such as lack of resources, time, and professional development experience. Therefore, it is recommended that educational leaders create professional development opportunities through collaboration with the arts team at each school, the community arts professionals, and the district administration.

Key words: Arts integration, Montessori, arts-infused curriculum, Montessori art, creativity, arts education, creative curriculum, curriculum enhancement, curriculum extensions, public Montessori
University of New England

Doctor of Education
Educational Leadership

This dissertation was presented

by

Heather Teems

It was presented on
April 13, 2021
and approved by:

Heather Wilmot, Ed.D, Lead Advisor
University of New England

Darren Akerman, Ph.D., Secondary Advisor
University of New England

Denisse Santos, Ph.D., Affiliate Committee Member
Charleston County School District
# TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION...

- Statement of the Problem ................................................................. 3
- Purpose of the Study ........................................................................... 6
- Research Question ............................................................................... 7
- Conceptual Framework .................................................................... 8
- Assumptions, Limitations, and Scope .............................................. 9
- Rationale and Significance .................................................................. 10
- Definition of Terms ........................................................................... 11
- Background ......................................................................................... 13
- Conclusion .......................................................................................... 15

CHAPTER 2: REVIEW OF THE LITERATURE...

- Conceptual Framework ..................................................................... 16
- Theoretical Framework ..................................................................... 21
- Literature Review ............................................................................... 23
  - Arts Expression and Human Development .................................... 23
  - The Case for Arts in Education ....................................................... 25
  - How the Arts Got Left Behind ......................................................... 28
  - Justification for Arts Integration .................................................... 31
  - Teacher Challenges to Implementing Arts Integration .................... 32
- Conclusion .......................................................................................... 35

CHAPTER 3: METHODOLOGY................................................................. 37
Purpose and Rationale .................................................................................................................. 37
Research Questions and Design ................................................................................................... 38
Research Site and Scope of Setting .............................................................................................. 39
Participants .................................................................................................................................... 41
Participant Selection ..................................................................................................................... 42
Instrumentation and Data Collection ............................................................................................ 43
  Online Survey .............................................................................................................................. 45
  Interviews .................................................................................................................................... 46
Data Analysis ................................................................................................................................. 47
Limitations of the Research Design ............................................................................................... 47
  Credibility .................................................................................................................................... 48
  Member-Checking Procedures ...................................................................................................... 48
  Transferability ............................................................................................................................. 49
  Dependability ............................................................................................................................. 49
  Confirmability ............................................................................................................................. 50
  Reflexivity .................................................................................................................................... 50
Ethical Issues in the Study .............................................................................................................. 50
Conclusion and Summary .............................................................................................................. 51
CHAPTER 4: DATA ANALYSIS ...................................................................................................... 53
Research Question Investigated ................................................................................................... 53
Data Collection ............................................................................................................................... 54
Part 1: Description of Participants/Demographics/Experience ..................................................... 55
  Description of Roles ................................................................................................................... 57
Presentation of Results .................................................................................................................. 60

Part 2: Knowledge ...................................................................................................................... 60

Part 3: Resources ........................................................................................................................ 61

Part 4: Abilities ............................................................................................................................ 63

Part 5: Results by Certification Level ........................................................................................ 64

Abilities: Lower Elementary. ..................................................................................................... 72

Summary ........................................................................................................................................ 80

District Teacher Education Opportunities Program Description ............................................. 82

Montessori ..................................................................................................................................... 82

Visual and Performing Arts ........................................................................................................ 84

CHAPTER 5: CONCLUSION ......................................................................................................... 88

Research Findings ....................................................................................................................... 88

Recommendations for Action ..................................................................................................... 92

Recommendations for Further Study ........................................................................................... 95

Conclusion ..................................................................................................................................... 95

REFERENCES ............................................................................................................................... 98

APPENDIX A: CALL FOR PARTICIPANTS .................................................................................... 113

APPENDIX B: EMAIL TO PARTICIPANTS ................................................................................... 115

APPENDIX C: CONSENT FOR PARTICIPATION ......................................................................... 116

APPENDIX D: E-MAIL TO SCHEDULE INTERVIEW .................................................................. 121

APPENDIX E: DATA ....................................................................................................................... 122

APPENDIX F: EXPLORATORY CASE STUDY SURVEY QUESTIONS ....................................... 136

APPENDIX G: FOLLOW-UP INTERVIEW QUESTIONS .............................................................. 143
APPENDIX H: FOLLOW UP THANK YOU TO TEACHERS ..........................................................145

APPENDIX I: FOLLOW UP THANK YOU TO PRINCIPAL ......................................................146
LIST OF TABLES

Table 1: Research Questions and Data Sources .......................................................... 54
Table 2: Demographics of Participants ........................................................................ 57
Table 3: Knowledge: Descriptive Statistics (n = 13).................................................. 61
Table 4: Resources: Descriptive Statistics (n = 13)..................................................... 62
Table 5: Abilities: Descriptive Statistics (n = 13)......................................................... 63
Table 6: Knowledge by Early Childhood: Descriptive Statistics (n = 4)....................... 65
Table 7: Early Childhood Resources: Descriptive Statistics (n = 4)............................... 66
Table 8: Early Childhood Abilities: Descriptive Statistics (n = 4)................................. 68
Table 9: Knowledge by Lower Elementary: Descriptive Statistics (n = 3).................... 70
Table 10: Lower Elementary Resources: Descriptive Statistics (n = 3)....................... 71
Table 11: Lower Elementary Abilities: Descriptive Statistics (n = 3)............................ 72
Table 12: Knowledge by Upper Elementary: Descriptive Statistics (n = 4)................... 74
Table 13: Upper Elementary Resources: Descriptive Statistics (n = 4)....................... 76
Table 14: Upper Elementary Abilities: Descriptive Statistics (n = 4)............................ 77
LIST OF FIGURES

Figure 1: Triangulation Matrix.................................................................44
CHAPTER 1
INTRODUCTION

Many people express their emotions outward through creativity. People experience life circumstances through their senses (Öztürk, 2009), and the arts provide a means of expression and diverse interpretations of communication. Children can participate in music, drama, visual arts, and dance to expressively communicate. Furthermore, the arts enable children to develop a strong foundation for acquiring, processing, and applying information for conceptual learning (Gullatt, 2008).

Children have the potential and the open-mindedness to absorb information and ideas in different ways from multiple sources, such as parents, school leadership, community opportunities, and friends. School districts and the cultural community become the primary source for creative and academic development among children in low-income areas who are not adequately exposed to various artistic expression methods by their families (Radbourne, 2002). Leaders in public education should ensure that children in disadvantaged families have their physical, socioemotional, and academic needs addressed. In addition, teachers must receive resources, training, and support to provide safe and equitable educational environments and address the needs of their students in a way that includes arts programs. Shirley Brice Heath of Stanford University found that at-risk students who are actively engaged in the arts had improved self-esteem and confidence, took leadership roles, and improved their performance overall (Cornette, 2003).

Many elements of public education support all students with academics and life skills, such as communication techniques and managing stress; however, it is difficult to fund each area of a child’s education. Some school districts are involuntarily prioritizing supplemental funding
to provide reading resources and socioemotional support for families; such funding allows school districts to follow the national guidelines for the Read to Succeed (2014; as cited in SC Reads, n.d.) and the No Child Left Behind (NCLB; Hess & Petrilli, 2009) initiatives to ensure all children read at grade level. The Read to Succeed Act requires each school district to develop comprehensive annual reading proficiency plans for Pre-K–12th grade. Many funds are dedicated to teacher training and resources to ensure teachers are certified through this initiative. School districts have reassessed their budgets to provide access to training to fulfill these new initiatives; these budget reassessments typically cut out the arts first. Removing supplemental funding from arts programs in schools simultaneously removes teachers’ ability to provide diverse methods of teaching for distinct learners.

The arts provide continued support for reading and supplement and extend all other curriculum areas (Manner, 2002). The arts inspire growth in virtually any curriculum area, as well as promote analytical and critical thinking skills while addressing multiple learning styles and cultural or language barriers (Bellisario et al., 2012). Arts integration occurs through collaboration between the related arts teachers and the regular classroom teachers. Prior researchers have studied the effects of arts integration in schools (An et al., 2013; Van der Veen, 2012). Cowan and Albers (2006) similarly explored the development of literacy competencies through the use of drama, dance, music, and visual arts.

A possible transformative solution to the inequity of arts opportunities, particularly in public Montessori schools, is to bring the arts to students through the standard curriculum (Hall & Thompson, 2017). Making the arts more widely accessible for each child on a regular basis would enable students to further their methods of expression and conceptual knowledge (Cole, 2008). Integrating the arts with everyday curriculum results in increased levels of observational
inquiry among students and a more collaborative inclination for learning experiences (Rabkin & Redmond, 2006). Additionally, arts integration allows students to be involved in planning, practicing, making predictions, and experimenting, which are among the highly sought after life and career skills of the 21st century (Burdette, 2011). Integrating arts in the everyday curriculum can cultivate life skills, creativity, and collaboration. Much like Ogden et al. (2010), I believe that collaboration between generalist teachers, specialist teachers, artists, and school leadership will yield the highest benefit of equality in arts education for whole child development. However, in public Montessori schools where arts integration can be facilitated, little is known about teachers’ preparedness to implement arts integration practices.

This exploratory case study represents one urban school district in eastern South Carolina. This school district has five public Montessori schools, and teacher participants from these schools comprised the study’s sample. The arts in these Montessori schools are not prioritized; music, art, dance, drama, or instrumental teachers, if any, only teach part-time. Thus, students in these Montessori schools or in the district do not receive equitable access to the arts. In this case study, I aimed to collect data revealing the perceptions of knowledge and available resources for implementing consistent arts-integration activities in everyday teaching and learning in a Montessori classroom. The study findings demonstrate the need for further research into professional development opportunities for teachers to inspire transformational principles for providing equitable arts access for all students.

**Statement of the Problem**

Standardized curriculum expectations place emphasis on testing, literacy, and numeracy in the majority of public schools; thus, teachers are faced with time constrictions and inadequate resources to implement any complementary arts curriculum. Some schools do prioritize the
visual arts, physical education, and music, but often only on a part-time basis. Teacher allocations are shared among schools, and arts specialists must move from school to school to be work full-time. Furthermore, in some cases, not all the students have art because the art teacher may be only available a portion of the week.

Music education opportunities are decreased or eliminated when teacher allocations are spread out to decrease the funding for the arts. Peery and Peery (1987) posited that music and musical experiences reproduce behaviors that are necessary for human social communication. Music is so basic to human society that Margaret Mead (1972) stated music is a fundamental human need that bridges cultural diversity. In addition, music reinforces listening skills and builds mathematical concepts of patterning, problem solving, and abstract thinking (Donavan & Pascale, 2012). Alongside prehistoric cave wall painting, sounds and music are at the core of humans’ first forms of communication and storytelling. Art and music are grounded in symbolic and abstract intuition crucial to human communication and can be expressed through body language, movements, spoken sound, or the visual arts (Liberman & Trope, 2008). Teachers lack opportunities for reinforcing valuable means of communication when music and art programs are cut in schools. In addition to cutting art and music, drama and dance may not be offered either; however, schools can combine arts and general education as a unified program. These programs may be referred to as integrated arts, related arts, or multidisciplinary arts (Kindler, 1987).

Providing equitable access to the arts through alternate approaches may be an acceptable solution in school districts where priorities of arts education are devalued. Arts integration is an effective way to incorporate the arts into the everyday classroom (Robinson, 2013). Furthermore, incorporation of an arts integration method has been shown to facilitate positive changes in
school organizations, teacher planning, and differentiated instruction that instigates collaborative, inclusive, engaging, and student-centered environments (Robinson, 2013).

Arts education facilitates equity between children from a low-income background and those who have had enrichment experiences with music and art (Cooper, 2010). Public educators are responsible for ensuring that each child has equal access to comprehensive education, including accessibility to the arts (Rabkin & Redmond, 2006). For example, researchers in the field of arts education encourage equity through the arts by advising teachers to help students make connections between the subject area and the world outside the classroom walls (The College Board, 2012). Arts integration methods can (a) help students make these connections and (b) enable differentiated communication devices for children; however, teachers need proper resources and knowledge in successful implementation of arts integration to provide an equal, increased exposure of the arts for all students.

Two problems serve as the impetus for this study. The primary problem in most schools is the inability to provide every child equal access to valuable arts components on an everyday basis. A practical solution for providing access to the arts for all is through arts integration. The secondary problem is the lack of regular arts integration in public Montessori schools; therefore, the secondary consideration is, “What are the barriers in Montessori schools to consistent arts integration?”

Public Montessori schools share the same burden as traditional learning environments: the pressure to place emphasis on testing, literacy, and numeracy. However, Montessori schools are unique in that they have flexible curriculum scheduling opportunities. Thousands of small, private Montessori schools are scattered across the United States, and hundreds of public school options for a Montessori education have opened in America (NAMTA, 2020). Montessori
schools do not divide the day into reading, math, and science in the same way as traditional educational environments; rather, Montessori classrooms are filled with opportunities for exploration and movement during uninterrupted work cycles in the morning and in the afternoon. Montessori classrooms engage students with self-chosen activities to learn directed curriculum (Massey, 2007). In addition, teachers can use the large blocks of time to enhance the curriculum with arts-integrated methods, leading to the research question that steered this study: If Montessori schools have a flexible work cycle to be able to allow for creative curriculum implementation, what are the barriers that some teachers perceive to be for initiating more arts-inspired extensions into their work cycle?

**Purpose of the Study**

The purpose of this study was to explore Montessori public school teachers’ perceptions of their knowledge, experience, resources, and ability to implement arts into their general classroom curriculum. The impediments to effective integration of the arts are demonstrated in the collected data. The study data were gathered through interviews and surveys administered to Montessori teachers from five public Montessori schools in the same school district. All generalist teachers have a diverse level of background knowledge of fine arts and its application to a regular classroom setting (Oreck, 2006). Survey questions regarding arts integration implementation during uninterrupted work cycles illuminated the perceptions of the teacher participants.

Montessori training typically provides an overview of simple, practical life applications of music, movement, and art that can be taught in the Montessori classroom (American Montessori Society [AMS], n.d.). This training is provided to empower the teachers with a broad sense of the arts and enable them to instill a sense of curiosity in children through lessons’
extensions. During the Montessori training, the arts are presented in a distinctive, technical manner that allows children to be successful and expressive independently (Rose et al., 2012). Montessori teachers take on a role of a consultant and facilitator or guide (Rosvanova, 2003). Montessori teachers present materials and processes to the children in a way that inspires them to create independently and freely (Marshall, 2017).

General classroom teachers lack basic knowledge of the arts and lack an understanding of the relationship between art and learning and arts integration in particular (LaJavic, 2013). This lack of knowledge can be attributed to a limited amount of training on arts integration in preservice teacher education programs for general education. In this study, I aimed to determine the level of knowledge and experience with arts education and arts integration among classically trained Montessori teachers and general education teachers trained to teach Montessori.

I expected the study results to reveal that Montessori teachers have varied levels of arts integration experience, knowledge, resources, and ability. Few researchers have investigated teacher backgrounds and personal biases toward the arts among traditional and Montessori teachers or other factors that could impact teachers’ specific, consistent use of arts in the classroom (Oreck, 2006).

**Research Question**

Some school districts have devalued arts education due to funding reallocations and efforts to focus on standardized core curriculum. Arts integration provides an effective way to incorporate the arts into the everyday classroom (Robinson, 2013); however, in most schools, arts integration methods are not used consistently and effectively. The following research question guided my exploration of Montessori public school teachers’ perceptions of their knowledge, experience, resources, and ability to implement arts into their classroom curriculum:
RQ1. To what extent do pre-K through eighth-grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?

I used qualitative data from Montessori teachers’ surveys and interviews to establish the teachers’ personal positions on ability level, knowledge, and instructional processes related to their use of arts integration in their Montessori classrooms.

**Conceptual Framework**

This study establishes a conceptual framework that included my personal interest in integrating the arts and my point of view as the researcher and a Montessori community leader. Secondly, the topical information through the literature review revealed the benefits of arts integration and the practicality of providing arts integration knowledge for teachers. The review of the literature also established the characteristics of an arts-integrated curriculum that provides differentiated instruction possibilities with minimal impact on funding allocations. This type of arts-integrated curriculum will allow teachers to provide equitable arts access in public Montessori schools.

Thirdly, the conceptual framework conveys teacher participants’ various responses to research questions. These research questions relate to the capacity of effective arts integration in a Montessori classroom and transformational solutions used to provide arts accessibility consistently in public Montessori schools. The theoretical framework of this study is based on the arts integration model, which is used to create transformational approaches to creative curriculums that facilitate equitable arts opportunities for public Montessori teachers. To create change, transformational leaders must become strong role models for their followers and have moral values that are highly developed and determined with a strong sense of identity (Avolio &
The research presented through the literature review is provided from a relational perspective based on the thematic progress of arts education over time. Further researchers can implement professional development programs for Montessori teachers that help teachers independently and confidently apply learned practices, methods, and resources for arts integration throughout their own classroom work cycles.

**Assumptions, Limitations, and Scope**

Assumptions for this case study were established on a perception that an increase of arts integration methods, resources, and procedures will benefit equitable access to the arts in public Montessori schools. The literature review details the benefits of integrating the arts with other core content areas. The gap in the literature exhibits an inadequate presence of evidence pertaining to the existence of Montessori training that emphasizes arts integration, as well as specific preservice teacher training on integrating the arts into a general education environment.

Additionally, assumptions of this study included that most of the Montessori teachers participating in this study were trained to use the Montessori pedagogy after many years of teaching in a traditional classroom; however, general teacher education programs provide varied amounts of arts exposure. Correspondingly, the condensed alternative Montessori training programs offered to traditional teachers may not have provided the same degree of arts education opportunities as other Montessori teacher education programs. Finally, it was assumed that the participating teachers were eager to explore and discuss the perceptions of their personal knowledge, resources, and abilities regarding arts education and arts integration.

Limitations of this study include a small population of teachers drawn from the five public Montessori schools in the same district. The small population is not generalizable, but the study results may be transferable to other populations. Montessori classrooms have flexibility
during the workday to freely implement arts-integrated activities. Traditional teachers in grade-level classes can apply arts-integration techniques over time with careful preparation of materials and time management. Therefore, the study results and further research components of this study may be transferred.

The scope of this case study is limited to the topical research and the participants from the public Montessori schools located in the urban or suburban area of a school district in the southeastern United States. The study scope demarcated the topical research, providing justification for arts integration as a viable solution to equitable arts access. The remainder of the scope of this case study relies on the participant interview and survey data, which will provide responses to the research question. The surveys were designed to gather baseline data regarding the teachers’ knowledge, experiences, resources, and abilities with arts integration. Moreover, the exploratory case study design enables the data to be analyzed for future research opportunities.

**Rationale and Significance**

Arts integration is a creative solution that allows teachers to effectively offer diversified teaching methods for students in schools where the arts may be underprioritized (Donovan & Pascale, 2004). A creative curriculum can ease the financial burden of school districts by providing access to the arts as an integrated curriculum component. When teacher allocations are limited for the related arts, providing Montessori teachers with adequate support, resources, and professional development will empower new opportunities for teaching and learning. Effective professional development would provide teachers with a variety of teaching methods for incorporating the arts into the everyday work cycle, thus enabling their students to receive equal
access to the arts. Equal access to the arts also helps teachers close the gap caused by socioeconomic differences by allowing all children access to artistic expression tools.

Kivunja (2015) theorized that the need for innovative creative thinking and problem solving must drive critical changes in how educators teach the next generation of students. Thus, I aimed to explore the perceptions teachers have about their ability to design a consistent, creative, and arts-integrated curriculum for their own classrooms.

Definition of Terms

Arts integration. Arts integration is the investigation of curricular content through artistic explorations. Arts integration provides an avenue for rigorous investigation, representation, expression, and reflection of both curricular content and the art form itself (Rabkin & Redmond, 2004, 2006)

General education. For the purpose of this study, a general education teacher is an elementary or middle-level teacher who is responsible for the education of the whole class curriculum. This responsibility includes all state-mandated curriculum requirements for the grade levels in that classroom. For example, the typical general education teacher teaches math, science, language arts, and/or social studies.

Interdisciplinary teaching methods. Interdisciplinary teaching methods refers to an approach to curriculum integration that generates an understanding of themes and ideas that intersect disciplines and connect different subjects with the real world.

Montessori. Maria Montessori was an Italian physician who created the auto-didactic teaching materials for the first “Montessori Children’s House” in Italy. Montessori’s method has become a highly esteemed educational philosophy used in all countries and is currently
increasing in schools in the United States. Montessori’s philosophy is based on multiage, student-centered teaching and learning.

**Multidisciplinary arts.** Multidisciplinary art combines different art forms in new and unusual ways and seeks new forms of expression.

**Multiage classroom.** Montessori classes are arranged in planes of development: ages 3–6 are in early childhood or primary, ages 6–9 are in the lower elementary classes, ages 9–12 are in upper elementary classes, and the adolescents are age 12–14.

**Read to Succeed.** Read to Succeed is South Carolina’s comprehensive reading reform policy enacted into law in June 2014 by Governor Nikki R. Haley. The intent of the Read to Succeed legislation was created to ensure that students are reading at grade level and are career and college ready by Grade 12 (SC Reads, n.d.).

**School district.** School districts are composed of elected officials on a school board and staff of administrators for a public school system. School districts are often comprised of several towns within a state. School districts determine the overall functionality and purposes of the area schools.

**Student.** In a Montessori school setting, a student is a child age 3–15.

**Teacher.** In this study, a teacher is a state-certified employee of the school district with a minimum of a 4-year college bachelor’s degree. The term teacher is used interchangeably with the term educator.

**Teacher-education programs.** Teacher-education programs as referenced in this document are relative to undergraduate and graduate programs that facilitate the certification process for a state-sponsored public educator. The American Montessori Society (AMS) and the
American Montessori Internationale (AMI) have accredited programs for Montessori teacher education.

**Background**

Sir Ken Robinson’s (2006) TED talk entitled “Do Schools Kill Creativity” encouraged many creative scholars to converse and debate while continuing to partially disregard research pertaining to arts education in U.S. schools. Robinson stated, “I believe this passionately: that we don’t grow into creativity, we grow out of it. Or rather, we get educated out of it” (06:26). Humans are born with an innate ability and desire to communicate through different means. Children communicate through sounds, visual expressions, and interpretive body movements. Yet, many adults have lost touch with the innate natural sense of creative expression. Schools should foster children’s continued creative growth through plentiful opportunities for music, movement, and visual arts education. These creative opportunities foster innovative communication abilities in each child so they do not “grow out” of creativity. As the debates and discussions about arts education in schools continue through the years, many scholars have made substantiated claims of a lack of prioritization for the arts and pushed for more arts in schools.

Historic events validate the essential components of the arts to facilitate the communication and expression of a society. Central evidence establishes the gradual absence or reduction of arts education in public schools at the beginning of the 21st century. This evidence of diminishing arts is based on the dramatic shift in the American education system to attempt to decrease the achievement gap between minorities and low-income children and their nonminority classmates. The U.S. educational system evolved to focus resources on literacy and math, standardize subjects, and increase testing capabilities. The arts were gradually cut as
priorities and funding for most of the arts curriculum in schools were reduced drastically. Cuts in arts funding have affected teacher recruitment, resources, and facilities.

In southeastern South Carolina, the priorities for arts education allow for part-time specialists to be in some schools but not all, and not every day. Most of the South Carolina state initiatives allow for art education standards to be consistent across the state; however, accessibility is based on district allocations and priority levels of the arts for each school. My experience has been that principal support, community resources, and district-level support determine the accessibility of the arts in each school. The importance of equitable arts access has been demonstrated through many cited documents presented in Chapter 2. Arts integration is the creative solution for fiscally conservative, sensible, logical, and accessible arts access for all children in all schools. Arts integration is an effective way to provide equitable arts access as well as provide creative opportunities for the economic future of society.

Educators in public Montessori schools have opportunities to increase their use of arts-integration methods. The flexible daily schedule in Montessori classrooms allows students to work at their own pace. In addition, Montessori teachers respect the interests of the children while instilling intrinsic motivation and a love of learning. Montessori students use the 3–4 hour block of time in the morning, typically termed the “morning work cycle,” for uninterrupted choice time. Each student has a work plan that must be completed by the end of this uninterrupted work cycle, but they can choose which activities they wish to complete to reach their goal.

Public Montessori teachers have a variable level of training with respect to arts education in South Carolina. Some of the teachers who participated in this study were traditional general education teachers first, whereas others were trained in Montessori first. I have determined that
each teacher’s level of experience, knowledge, and resources for implementing arts-integrated methods into the Montessori school day is vastly different. The focus of this study is to reveal the differences in Montessori teachers’ perceptions of their own knowledge, resources, and abilities in incorporating the arts into their classrooms.

**Conclusion**

Under recent budget limitations and increased priorities on testing goals, leadership teams that prioritize the arts through arts integration see a profoundly positive impact on students, school climate, and culture (Dehner, 2020). The importance of a well-rounded education is based on equitable access to all the arts. The concept of balancing access to the arts is based on the increase of an arts-integrated curriculum and the impact it can have on learning and teaching.

In the public Montessori schools examined in this case study, the teacher education programs offered varied access to arts education; thus, the Montessori teachers in these schools have different levels of experience and comfort with the arts. Teachers must have access to arts education resources and training to provide equal accessibility to the arts for all students. Arts integration is shown to be a viable solution to closing the gap in accessibility to the arts; therefore, the inquiry for this research focuses on teachers’ perceptions of implementing an arts-rich curriculum into the Montessori work cycle.

The study data delineate public Montessori teachers’ perceptions and attitudes towards arts integration. The data analysis revealed the barriers to implementation of consistent arts integration by public school Montessori teacher participants. The answer to the research question exhibits the needs for supplies and resources related to independent, confident, and consistent implementation of an arts-integrated curriculum.
CHAPTER 2
REVIEW OF THE LITERATURE

The literature review reveals the significance of arts education through a discussion of its history, the existing literature, debates, and research currently relevant to the field of arts education. In this chapter, arts education resources are explored with specific examination of the benefits of integrating the arts with traditional core curriculum to provide equal arts accessibility for all students. The review is organized in five layers: (a) arts expression and human development, (b) the case for arts in education, (c) how the arts got left behind, (d) justification for arts integration, and (d) the challenges teachers face with implementing arts integration.

Historical documentation has uncovered a gradual decrease in the priority of arts education funding throughout the public school system and identifies the reasons why many public schools have limited access to the arts for all students (National Education Association [NEA], 2019). The literature review demonstrates the lack of research on teacher training and professional development regarding arts-education preservice teacher training. Additionally, the literature review illustrates the benefits of arts integration for supporting student learning and development as a reason why equal access is needed. Increasing the scope of arts integration activities in the Montessori classroom would provide many opportunities for diversifying socioemotional and academic educational methods. The framework of arts integration within the literature review will provide justification for how the research will enable concise explanation of its benefits and barriers.

Conceptual Framework

My personal interest that stimulated this research was formed from a childhood surrounded by artistic opportunities while living in the suburbs of Washington D.C. The suburb
of Reston, Virginia is the location of the main headquarters for the National Art Educators Association (NAEA), providing proximity to arts educators and a creative community focused on promoting arts-based education. The NAEA (n.d.) vision statement claims that the NAEA harnesses the power of the visual arts, design, and media arts to educate and enrich the lives of all learners and communities, especially those who are members of historically marginalized groups, and serves as a catalyst for developing creative and culturally competent future generations. (para. 4)

Having been raised in a community with values such as these from the NAEA, I was able to benefit from a unique and inspiring educational experience. Thus, I am drawn to help ensure that all students have equal access to the arts.

Furthermore, I have witnessed routine displays of low priority levels for the arts through teaching in low-income areas as an adult. Indeed, research indicates that school districts have made budget cuts to the arts to focus on teaching to increase test results. For example, the NCLB Act, a federal law signed by George W. Bush in 2002 provided funding for extra educational assistance for children in high-poverty schools in return for improvements in their academic progress (Klein, 2015). The National Education Association (NEA) has reported that the resulting cuts to arts programs have fallen hardest on schools with high numbers of children from minority groups (Evans, 2008). The advent of NCLB and the increased focus on testing caused an organizational shift away from the arts. Teachers began spending immense time and energy following the expectations of their administrations to meet specific testing goals with students. Moreover, results of teacher-led instruction became more about assessments and scores than the social and emotional health of the children. Over time, the urban-centric NCLB model was understood to be less effective across the board, and the American standard education model
moved toward the Every Student Succeeds Act (ESSA), which President Obama signed into law on December 10, 2015. ESSA includes provisions that (a) help to ensure that all students successfully graduate high school and are career ready and (b) help low-performing schools to maintain accountability for ensuring levels of increased student success (U.S. Department of Education, n.d.).

ESSA led researchers to examine the reasons for low-performing schools and began to require educators to follow more of a humanist pedagogy, which included a slight increase in arts instruction over time. Humanist pedagogy proposes that people are free and creative beings who are capable of growth and self-actualization (Crain, 2016). Therefore, the ideal learning environment should cater to the whole child through their social, emotional, and cognitive needs (Duchesne & McMaugh, 2016). Education through a humanist point of view includes providing learners with access to multiple artistic methods of expression to inspire whole child education. Significant shifting of pedagogical methods over time requires leadership that empowers trust and innovation at the teacher and principal levels.

Avolio and Gibbons (1988) stated that, to create change, transformational leaders become strong role models for their followers and have moral values that are highly developed and which determine a strong sense of identity. Transformational leaders create a connection that increases motivation in both the leaders and the followers and uses this as philosophy of leadership (Northouse, 2016). The literature in this chapter is presented is from the relational perspective of transformational leaders and based on the thematic progress of arts education over time. This exploratory case study data introduced the gravity of the lack of teacher resources, time, and knowledge of arts-integration methods. Teachers are the change agents in the schools; they are the heart and vision. Teachers should be provided with training and resources to encourage
inspiration and the invention of their own creative curriculum. During his TED Talk “How to Escape Education’s Death Valley,” Robinson (2013) shared the vision and authentic appeal to impart awareness of the importance of consistent arts education:

> With organic systems, if the conditions are right, life is inevitable. It happens all the time. You take an area, a school, a district, you change the conditions, give people a different sense of possibility, a different set of expectations, a broader range of opportunities, you cherish and value the relationships between teachers and learners, you offer people the discretion to be creative and to innovate in what they do, and schools that were once bereft spring to life. Great leaders know that. The real role of leadership in education, and I think it's true at the national level, the state level, and the school level, is not and should not be command and control. The real role of leadership is climate control, creating a climate of possibility. And if you do that, people will rise to it and achieve things that you completely did not anticipate and couldn't have expected. (17:30)

It is difficult for a leader to establish expectations and goals related to student learning outcomes when availability of resources and teacher training are uneven and perceptions of ability levels of teachers are unknown. Teachers cannot be expected to implement creative extensions to curriculum in their classroom if they have not been properly prepared to do so. As a transformational leader myself, I aim to demonstrate the inequitable distribution of resources, knowledge, and ability with the arts through analysis of the data from the current study. Notification of any imbalances in training and resources are subsequently established through this study.

The goal of this study is to increase educators’ confidence regarding arts integration, which will enable more students to become more confident and creative adults. Through the
transformational leadership approach, the conceptual framework of the study focuses on ways to engage others through inspirational resources and to build trust with data that demonstrate the positive attributes of quality arts-integrated curriculum. During his TED talk entitled “How to Escape Education’s Death Valley,” Sir Ken Robinson (2013) quoted Benjamin Franklin, another inspirational leader:

There are three sorts of people in the world: Those who are immovable, people who don't get it, or don't want to do anything about it; there are people who are movable, people who see the need for change and are prepared to listen to it; and there are people who move, people who make things happen. And if we can encourage more people, that will be a movement. And if the movement is strong enough, that's, in the best sense of the word, a revolution. And that’s what we need. (18:24)

Transformational leaders are perceived as role models and change agents; they create a clear vision and empowered inspirational messages for followers (Northouse, 2016). Movers and shakers who can make things happen are needed to once again instill the value of a variety of arts in daily general education; doing so requires a movement, as Franklin outlines. Definitive explanations of why the arts should be incorporated in education are elucidated throughout this study. The current prominent authors cited in the research are transformational leaders, which benefits the overall purpose of the study.

The foundation for the topical research presented in this conceptual framework is based on many articles and artifacts, as well as ongoing current observational data and activities originating from integrating curriculum in the classroom. The apparent gap in the literature implies that teachers lack consistent professional development related to arts-integration strategies. The literature review provides an overview of current research on arts integration and
how this information has been investigated and documented, which can then inform future actions (Ravitch & Riggan, 2017).

**Theoretical Framework**

The theoretical framework of this study is based on the arts-integration model, which is used to transform curricula through an equitable, arts-accessible method of teaching. Integration of the arts is an interdisciplinary curriculum method to expand the process for children to learn. The basis for an arts-integration model for this study is rooted in Stiegelbauer’s (2008) definition that arts integration happens when an academic goal is set and the arts are used as a strategy to reach that goal. The framework of the subsequent literature review is inspired by a vision for change in arts education: to raise awareness regarding the value of integrating the arts with core curriculum for effective instruction of the whole child. Transformational change united with an arts-integration model as the theoretical framework imparts a solution for fiscally responsible and equally accessible arts through an integrated arts curriculum.

District support for decreasing consistent accessibility to the arts prompts creative solutions to a widespread problem. Arts integration is a viable solution to providing an equitable, diversified, creative curriculum to reach all types of learners and engage socioemotional deficiencies. An approach to teaching in which the students become capable of expressing themselves safely and demonstrating knowledge in a variety of ways enables a successful instructional avenue for low-performing schools. Empirical research has found that this approach, defined as arts integration, has great potential for improving student learning in multiple disciplines (Burnaford et al., 2007; Goff & Ludwig, 2013; Rabkin & Redmond, 2004).

In general, whether an educational environment is a traditional model or a Montessori model, arts-integration components can equally facilitate differentiation in a variety of curricula.
Ample empirical evidence supports the interconnection of the arts to everyday curricula to improve academic quality and enable equity (Rabalais, 2015). The sources cited in this literature review focus on the positive attributes of drama, fine arts, music, and dance education, which each contribute to students reaching their potential. Teachers who have the ability to capably deliver a core curriculum lesson in the everyday classroom with an arts-integrated emphasis provide further opportunities for assessing the student. Authentic, effective arts integration techniques involve a child creating something original and of value (Kennedy Center, n.d.-a). This creative process communicates the child’s ideas, feelings, points of view, and understanding of knowledge. When integration of the arts is effectual, the connections between the arts and the curriculum are clear and mutually reinforcing (Silverstein & Lane, 2010).

Interdisciplinary art education can include the same benefits as education defined as multicultural, global, community-based, intercultural, visual-cultural, or constructivist (Stokrocki, 2005). Arts integration also plays a beneficial role in arts fusion and science, technology, engineering, the arts, and mathematics (STEAM). The benefits of combining arts and other subjects work synonymously to bind concepts and create an interconnected vision for children that preserves a living curriculum (Stokrocki, 2005). The arts can be effectively used in the classroom with three different approaches: students learn through the arts, students learn directly with art materials and concepts, and students learn about the arts (Goldberg, 2016). Thus, teachers do not have to be specialists in art fields to engage students through artistic media. Teachers who act as guides can simply present the acceptable expressionistic methods to children and let them explore, reflect, and use critical-thinking skills to create.

An arts integration model can provide the tools for change, thus transforming the responsiveness of arts implementation. Efland (2002) viewed arts integration as a way to reflect
on the world as a larger, whole picture rather than treating art simply as an outlet of expression. Creative expression accelerates and deepens knowledge of the outside world within an expressionistic form.

**Literature Review**

The literature review demonstrates that many states, districts, and schools have systematically cut funds for the arts and reallocated those funds to reading programs and math interventions (Acuff et al., 2016). This apportionment is based on traditional beliefs by national and state-level leaders that allocating funds to a rote memorization style of teaching to the test helps children perform at higher levels academically; however, the unfortunate consequence is that the arts are deemed unnecessary and/or there are no funds leftover to support arts programs. Developing a system or program to use minimal funding that would increase equitable access to all the arts in the Montessori elementary curriculum is one resolution with transformative direction. This resolution must be grounded by first understanding, from a brief historical perspective, the connection between the arts and human expression and development.

**Arts Expression and Human Development**

Historical records dating back to the Paleolithic period reveal stories of early humans recorded through pictorial cave paintings (Prehistoric Art, n.d.). Visual arts painted on cave walls told of danger, new life, and nomadic tribes searching for shelter, food, and water. Simple patterns and visual imagery allowed early humans to communicate. Creative expression advanced and communication improved as human brains evolved; cave paintings transitioned to hieroglyphic symbols and then progressed to tablets and papyrus for mobility (Prehistoric Art, n.d.). Modes of expression grew more complex and humans were better able to share their ideas and stories. Alongside prehistoric cave wall paintings, sounds and music, as well as movement or
dance, were also at the core of humans’ first forms of relating and storytelling. Montessori (1967) argued that it is through this art that society can gain knowledge of prehistoric people.

Visual art, movement and dance, and sound and music are all basic forms of communication. Not only is music a basic form of communication, but it also reinforces listening skills and builds mathematical concepts of patterning, problem solving, and abstract thinking vital to technological innovation (Donovan & Pascale, 2012). The mind and body connection through dance and movement provides avenues to increase fundamental motor skills and increasing confidence through body control and expressive movements promotes cognitive and physical development (KET Education, n.d.).

Bristol et al. (2013) summarized evolutionary uses of the arts as means of creative expression that eventually enabled humans to design and build homes, sanctuaries, and clothing, as well as to entertain and otherwise live a full life. In essence, from the beginning of humanity humans have used the arts for everyday survival. Thousands of years later, music and artistic expression remain essential in the grounding of symbolic communication (Liberman & Trope, 2008). It is this essentiality that has prompted modern progressive education theorists to consider the arts as vital for the well-being of children.

Expressionistic scholars view the arts as imperative for human growth and development. Scholars such as Emerson (1854/1990) and Thoreau (1854/1972) advocated for children to have access to the arts for free expression (Siegesmund, 1998). Together with Sigmund Freud (1930/1961), Emerson and Thoreau believed that artistic expression facilitates emotional release from the conscious and unconscious mind. Simply stated, free expression through art helps children cope with challenges and communicate authentically. The therapeutic nature of expression within the arts promotes mental health and contributes to an overall sense of individual
confidence (Lowenfeld, 1947). Therapy through expressionistic arts emerges from the senses through our experiences. Elliot Eisner (1994) shared the epistemological point of view that the arts are important because they refine the senses. These sensorial experiences engage and expand the conscious mind (Eisner, 1994). Similarly, Freud defined the conscious mind as containing all the thoughts, memories, feelings, and wishes of which we are aware at any given moment. The arts are an element of education and of life that can be used to express, understand, and preserve one’s memories, thoughts and feelings.

**The Case for Arts in Education**

In the late 1800s, groundbreaking Italian physician Maria Montessori came to believe that it is through the senses that the brain develops most efficiently (AMI, n.d.). In the early 20th century, Montessori—along with John Dewey and other scholars—began to argue that creativity should be fostered in school (Sawyer, 2015). In 1897, as part of her medical training, Montessori had worked in an urban asylum for children with medical, intellectual, and physical needs. While working with these children, Montessori developed a philosophy of education poignantly named “the Montessori philosophy” that met the children at their level and encouraged sensorial exploration (AMI, n.d.).

John Dewey was a professor of philosophy at various New England universities throughout his career. He was an experimentalist and believed that education and human growth occurred through experiences with the natural environment. Dewey and his wife Harriet opened an experimental primary school in Chicago founded on the principle of learning through doing. They also founded the New School for Social Research. Dewey (1902) once stated:
If I were asked to name the most needed of all reforms in the spirit of education I should say: “Cease conceiving of education as mere preparation for later life, and make of it the full meaning of the present life.”

Although they had many pedagogical differences, Montessori and Dewey shared a common belief that knowledge is acquired through the senses and hands-on experiences. During the early 1900s, the two doctors each created new schools based on their own research and philosophies. Sensorial and experiential education nurtured the idea that creativity is another foundational characteristic of a child’s growth. During this time, the progressive education movement emerged with emphasis on student creativity throughout the curriculum.

Sawyer (2015) explained that, after World War II, psychologists chose to emphasize that creativity has a permanent place in the comprehensive education and the adulthood of individuals in society. The cultural strains felt by Americans from the effects of World War II led to the conceptual interpretation of art. Simply, the art created during this time was meant to be viewed with more of a true feeling or appreciation of the meaning of the piece itself; in other words, interpreting art was based on the expressionistic intention of the artist. Therefore, the education movement followed the emotional impact of the changing era by solidifying the importance of the arts in education (Muscato, 2015).

Maslow (1959) believed that an expression of creativity was the demonstration of joy and satisfaction of the human spirit and that psychologically healthy people are the most creative. Maslow also developed a theory of psychological health grounded in the fulfillment of innate human needs. Maslow’s hierarchy of needs includes physiological needs, safety, love and belonging, esteem, and self-actualization (Hopper, 2020). Maslow posited that education cannot occur in the child unless these basic needs are met. The combined educational beliefs of
Montessori, Dewey, Sawyer, and Maslow highlighted that hands-on experiences, sensorial exploration, and the fulfillment of self-actualized needs hearten creative expression and growth of the conscious mind in the whole child.

Educators have advocated for arts in education for many decades. For instance, in the early 17th century, John Locke wrote “Some Thoughts Concerning Education,” which focused on a person being the product of their education. In the 18th century, Jean-Jacques Rousseau discussed experiential learning. Rudolf Steiner created Waldorf Schools, which emphasize the development of heart and hand through an arts-based pedagogy. Jean Piaget, John Dewey, and Montessori all agreed that hands-on experiential learning through the arts greatly benefit students by supporting well-rounded growth and development that allows students to reach their full potential of self-actualization (Cunanan, 2013).

Sawyer (2015) stated that many of today’s educators have parallel beliefs to the sentiments of Montessori and Dewey. Modern progressive educators feel that the arts should be included in education and embedded in all subject areas (Craft et al., 2001; Gardner, 2004). Moreover, creative learning promotes U.S. economic growth through the educational outcomes of today’s youth (Council on Competitiveness, 2005). Creative services are a growing demand in the U.S. job market within a creative economy; according to National Assembly of State Arts Agencies (NASAA; n.d.), artistic jobs contribute more to the national economy than construction, mining, utilities, insurance, and the hospitality industry. The income earning potential of creative activities and ideas is the definition of a creative economy (Howkins, 2013). As the global economy changes through technological advances, a need for creative and innovative critical thinkers becomes more pressing. More importantly, the United States faces complex problems to solve that will require effective communication and collaboration.
Regardless of ethnicity or language of origin, communication for children is grounded in the senses through sounds, visual art, and movement; therefore, these learning modalities should be a core component of the U.S. education system. In today’s creative economy, the arts should not be left behind or be used as a backup tool for education; rather, arts education should be a main component of education.

**How the Arts Got Left Behind**

The NCLB Act of 2001, in effect from 2002–2015, was a law that affected every public school in the United States. The NCLB Act maintained the objective of leveling the playing field for disadvantaged students, including minorities, students in poverty, English as a Second Language (ESL) students, and special education students (Lee, n.d.). The NCLB legislation forced underperforming schools to cut arts programming to devote funds and time to math, language arts, and test preparation (Acuff et al., 2016).

Recent U.S. history has demonstrated a gradual de-emphasis of the arts in the traditional systemic educational process. Robelen (2011) reported that, in the United States, fewer children from minority groups are getting access to arts education, whether at school or elsewhere. Robelen also reported that children from minority groups who lose equal access to the arts become less engaged in learning. Nationwide cuts in arts education from 2007–2008 caused many public school leadership teams to minimize their art programs and to instead direct their focus to subjects that prepared students for standardized testing (McArthur, 2014). For example, Rabkin and Hedberg (2011) asserted that, given the mandated urgency of assessment-based curriculum in public education, there is good reason to believe that the general decline in arts education programs since 1984 was also due to the resulting cuts in school-based arts instruction. However, Baker (2012) noted that withholding an arts education to designate more time for
standardized testing subjects does not improve test scores. Rather, decreased arts education actually correlates with lower test scores in some schools. In addition, Lee (2019) noted that the drastic elimination of the arts has led many students to a decline of socioemotional well-being. Meanwhile, studies have shown that access to arts education improves students’ psychological, social, and academic outcomes (Baker, 2012). Similarly, Richerme (2020) shared that the arts tend to provide an access point for students to think critically and assist students in becoming more well-balanced, socially capable adults.

NCLB was traded out for the implementation of the ESSA in December of 2015 by President Obama. The ESSA placed slightly more emphasis on a humanistic approach to education and prioritized the strengthening and accountability of underperforming schools (U.S. Department of Education, n.d.). In thinking about strengthening schools, many teachers have come to realize that cutting arts accessibility and focusing on standardized curriculum may not be in the best interest of the students, particularly low-income students. Yet, throughout many states in the U.S., districts and schools have continued to systematically cut funds for the arts, reallocating them to reading programs and math interventions (Acuff et al., 2016). This reallocation depletes funds for the vital arts instruction that has been shown to help children perform at higher levels academically.

According to Cohen (2016), a survey taken of the American public shows that an overwhelming majority of the adults surveyed agree that the arts are a necessary part of a well-rounded, whole child education. In December of 2015, Americans for the Arts surveyed 3,020 American adults on topics related to arts education and government arts funding, the personal benefits and wellbeing that come from engaging in the arts, and perceptions on arts education benefits to the community. Americans for the Arts (2018) completed a duplicate study through
Americans Speak Out About the Arts. The key findings of this study demonstrated that 91% of adults surveyed believe the arts are part of a well-rounded education for K–12 students. Nine in 10 people believed it was important for students to receive an education in the arts, including dance, media arts, music, theater, and visual arts. This remains true whether asked about elementary school (94%), middle school (94%), or high school (93%). The study revealed that 73% of the survey participants agreed that the arts help them to understand other cultures better. Quality of life benefits gained from the arts are not limited to wealthy people, level of education, race, or ethnicity, and 72% of those surveyed believe the arts unify communities.

Surveyed parents of all backgrounds and ethnicities agree that the arts should be made equally accessible for all children. Wolff and Fulton (2017) examined the fact that students who attend high-poverty schools have less access to weekly arts instruction with dedicated facilities and certified arts specialists than their more affluent peers. Simply stated, students who could benefit the most from high-quality arts programs have the least accessibility to them (Wolff & Fulton, 2017).

Lee (n.d.) explained that the years of standards-based reform initiatives tied to NCLB have led many teachers, professors, parents, and other stakeholders to question the efficacy of the public school system. Many of these stakeholders are from low-income urban areas and believe schools can improve and equity can be achieved by enhancing a student’s cognitive ability through creativity, curiosity, and social responsibility.

Woodworth et al.’s (2007) study of California’s arts programming demonstrates the decline in arts access within public education. Woodworth et al. found that 89% of K–12 schools failed to offer standard courses compliant within the scope and sequence of arts disciplines for the state. This failure of compliance was shown to be due to limited state funding leading to
inadequate resources and facilities. Similarly, Chappell and Cahnmann-Taylor (2013) noted that youth engagement in the arts has dropped since the 1980s. Furthermore, Rabkin and Hedberg (2011) found evidence that only 26% of Black American youth and 28% of Hispanic children participate in the arts, compared to 58% of White American children. Limited access to the arts deeply impacts minority groups already experiencing challenges due to language barriers, limited school budgets, and controlled curriculum directed to focus on specific skill development (Gándara, 2012; Ladson-Billings, 2009; Martinez-Wenzl et al., 2011). An overall decline in arts access in public education especially impacts the level of arts education provided to lower-income families and students from minority groups. Providing more arts opportunities in public education levels the playing field for all students to have equity in education.

Cuts to arts programs in schools comes at a time when the creativity and the modes of thinking that arts education enhances are needed most by students (Elias, 2005). Today’s children live as technology natives, which leads to more discussion on the need for well-rounded, creative educational opportunities for global success. Graduates need to navigate a competitive global economy and job market that places value on people with a talent for creative art applications, technology, and digital arts (Acuff et al., 2016).

**Justification for Arts Integration**

An efficient way to provide equal access to the arts and foster the needs of students in this growing global economy is through arts integration. The Kennedy Center (n.d.-a), a leader in national performing arts education policy and programs, defined arts integration as: “An approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process, which connects an art form to another subject area
and meets evolving objectives in both” (p. 1). Robinson (2010) stated that redesigning schools to teach creatively through integration of arts and curriculum can have a positive fiscal impact.

Arts integration techniques can be alternatively named. These techniques may be disguised as creative, cross-curricular components of core subjects, constructivism, or STEAM programs. The NAEA (2019) stipulated that “high-quality STEAM instruction is achieved through the use of STEAM curricula and the collaboration of non-arts educators with certified/licensed visual art educators and/or teaching artists, art museums, university art education programs, and community-based arts organizations” (p. 1). Arts-integrated schools are not intended for focusing on the arts; rather, they maintain an emphasis on inspiring higher-order thinking skills that students employ while constructing knowledge through the artistic medium (Barber, 2015).

Teacher Challenges to Implementing Arts Integration

Carney et al. (2016) described a project in which a drama professor, an early childhood teacher, and a visual arts teacher collaborated in creating an arts-infused curriculum. Carney et al. found that arts integration makes curriculum more accessible for underprivileged children because it activates the use of multiple pathways to engagement and motivation. Carney et al. also shared data that suggested student growth in achievement. Lackey (2016) further argued for educational policy that requires preservice educators to receive instruction in arts-infused curricular development and implementation processes. Educator instruction is the key and a lack thereof is one of the primary barriers to consistent, confident, quality arts-based lessons in the regular classroom.

Teachers need a conceptual toolkit for transforming teaching capabilities and enabling cumulative knowledge-building in students (Lilliedahl, 2018). Teacher-education programs can
be designed to fit the needs of the schools and districts with creative pathways to enable increased comfort levels with arts education for regular classroom teachers. When teachers understand that integration can bring the benefits of creative collaboration for both the teacher and the students, it becomes a partnership in education (Nelson, 2009). Teachers and students can collaborate with projects that make authentic connections between two or more curriculum areas and think outside the box with imagination and curiosity.

Many researchers have concluded that arts integration is an effective way to teach (Feland et al., 2016); however, training for general education teachers is limited in the area of the arts. Preservice general education teachers have had little to no art education; when they enter their art methods courses in teacher training, they do so with underdeveloped knowledge of art methodology (Dikert, 1995). Miragilia (2008) reported that preservice teachers tend to approach the art activities during teacher training with trepidation and frustration because they feel incapable. The attitudes they feel during this time result in ineffective implementation of any art in their classrooms.

Most teachers realize that today’s students may not stay attentive in long lessons; teachers understand they must develop more diverse experiences to maintain the attention and engagement of the class (Munoz-Luna & Jurado-Navas, 2016). Creative and engaging teaching techniques that use arts-integrated concepts and performance-style lesson introductions tend to keep students’ attention; however, some teachers shy away from the flagrant tactics of a performer to teach (Jarvis & Gouthro, 2015). Thus, it seems that more research is needed on creative ways to inspire teachers to seek innovative methods of confidently engaging and inspiring through the arts. Research has found that teachers who integrate the arts in their classroom activities change how their perception of how learning takes place and provide more
possibilities for methods of instruction (Maneen, 2016). Additionally, teachers who get enthusiastic about encouraging other teachers are more likely to participate in creative professional development activities that may lead to whole school reform (Connelly et al., 2016). Creative engagement through teacher collaboration facilitates reciprocal engagement among students who seem inattentive.

Most teachers agree that the positive impact on their students becomes apparent through in-depth planning and collaboration with colleagues. Yet, having consistent quality time to plan a creative curriculum feels inaccessible to teachers, especially when planning with the related arts teachers. Most elementary school schedules use art classes as the break time for the regular classroom teachers; art class is typically when classroom teachers get to plan together. Thus, classroom teachers do not get to plan and collaborate with the related arts teams because their classes are with the art teacher during planning time (Merritt, 2016).

Montessori teachers are provided with a somewhat different set of skills in preservice training in comparison to traditionally trained general education teachers. Maria Montessori believed that art is an integral part of everyday curriculum and should always be a choice (Montessori, 1964). Montessori (1964) stated:

If we try to think back to the dim and distant past, what is it that helps us reconstruct those times, and to picture the lives of those who lived in them? It is their art. It is thanks to the hand, the companion of the mind, that civilization has arisen. (p. 127)

Massey (2007) described three integral components of a Montessori school. First, students should maintain a 3-hour, uninterrupted work period. Second, multiage groupings of 3–6 years, 6–9 years, 9–12 years, and 12–15 years old should be established for diversity and flexibility of students’ independence and collaboration. The third integral component of a Montessori school
is to integrate specialty programs such as physical education, art, and music into the uninterrupted work period. These programs are part of the school day in public Montessori schools, but the students are pulled out of the classroom to attend these classes; thus, these students do not yet achieve Montessori’s vision of the arts being fully integrated into the curriculum. Massey’s three components provide a challenge for the impetus of this research and classroom teachers. The low emphasis on funding priorities for the arts in education eliminates the ability for many arts teachers to be present on campus every day because they are split between schools. Therefore, it becomes a scheduling challenge to ensure that the Montessori students receive the necessary uninterrupted work-cycle time and a special area class for reasonable artistic exploration. A creative solution to arts access must be explored to facilitate the Montessori philosophy and encourage creative exploration and artistic talent.

The gap in the literature became evident when searching for information about teacher training opportunities for public Montessori teachers to incorporate art in the classroom. In this eastern South Carolina school district, many of the public Montessori teachers were traditional general education teachers who were asked to adapt to a Montessori teaching style to transform their schools into Montessori programs. These teachers were given some Montessori overview and training over two summers. It is assumed that these teachers were not adequately prepared to consistently implement arts integration in the classrooms.

**Conclusion**

Education through the arts is essential for all because it promotes healthy development, improves academic success, creates equity across different social and economic groups, and aids students in developing the skills needed in the modern workplace. Integrated arts education lays the groundwork for students to learn in a way that leads to a self-actualized adult life. Arts
education also encourages flexibility and strengthens the ability to solve problems and communicate, learn new skills, and create and innovate; in other words, arts education helps students strive for excellence (Smith, 2009). The literature review established the historical presence and importance of the arts in education and the continued obligation to reintroduce the arts into everyday curriculum regardless of budget constraints. An arts-integrated curriculum can be supported and sustained by the leadership at the school and at the district level to ensure teachers have tools and professional development opportunities for success. The success of the educator’s knowledge and confidence with the arts can provide the students with consistent artistic opportunities to demonstrate knowledge and self-expression.

Successful teaching occurs when all learners are supported through various teaching techniques (Alber, 2015). History shows that the arts are important to the overall education of the whole child and important for humanity. Teacher education and continued support from leadership can improve the school community climate, raise teacher confidence, and lead to less teacher burnout and turnover (Miller & Bogatova, 2018). However, teachers who are given little to no resources or time to design creative instructional strategies cannot promote creative thinking for their students. In this study, I used a case study design to understand the collective deficits in arts-integration resources and techniques of teachers in the public Montessori schools. The goal of this study was to help fill the gap in the research and inform the creation of a well-organized and properly executed professional development program for arts integration. This exploratory case study research will present the perceptions of training, resources, and deductions that Montessori teachers have regarding implementation of arts-integrated methods in their classrooms.
CHAPTER 3

METHODOLOGY

The chosen method of design for this research was an exploratory case study using a mixed-method approach. This exploration of teacher’s perceptions of knowledge, resources, and ability to integrate the arts will determine recommendations for enabling equitable arts access in public Montessori schools. To provide equal accessibility to the arts, classroom teachers must be emboldened with the confidence, knowledge, and resources to independently sustain a complex, rich, arts integration element in their everyday core curriculum.

Defining the teachers’ perceptions through a mixed-method approach will provide various responses from data collection. Determining teachers’ level of knowledge, abilities and resources will expedite further research opportunities.

Purpose and Rationale

The purpose of this study was to gather necessary information through an exploratory case study to demonstrate educators’ perceptions of their knowledge, resources, and ability to implement arts integration in a Montessori public school setting. This exploratory case study used a mixed-methods design and was composed of surveys and optional follow-up interviews administered to Montessori teachers from five public Montessori schools in one district; however, it should be noted that the follow-up interviews were not completed due to a lack of interest in scheduling within the time allotted.

Delivery of lessons and execution of assessment within a Montessori curriculum can be flexible and creative to better adjust to the method of learning. I expected the study results to show that Montessori teachers have different levels of confidence, knowledge, and resources regarding the implementation of an arts-integrated curriculum. The distinctive perceptions and
knowledge revealed during data collection showed that Montessori and general teacher education programs provide innumerable levels of arts education for teachers during preservice training. The study results offer justification that professional development and encouragement through resources and guidance will facilitate teachers’ ability to consistently create an arts-integrated curriculum for their own classrooms.

The literature review established credibility and justification for arts education and arts-integrated curriculums. This study in its entirety revealed the benefits and barriers of implementing consistent arts integration practices, resources, and methods into a Montessori daily curriculum that encompasses various subject areas. This case study also provides the information needed to justify further research.

**Research Questions and Design**

Montessori classrooms have the unique advantage of an open work cycle in the morning and the afternoon, a concept that allows for creative curriculum opportunities. Integrating arts into this open work cycle can provide equal accessibility of the arts for all students, particularly for students who attend schools where the arts are underprioritized; however, many Montessori teachers do not take advantage of their unique opportunity to integrate the arts. I hypothesized that the reason for the lack of arts integration in Montessori programs is due to a disproportion of teacher knowledge level, resources, experiences, and varying ability levels with the arts. Contrary to what some may think, each teacher must understand the basics of art integration to merge art concepts with other content (Nobori, 2012). During this exploratory case study, I used a mixed-methods design to provide teachers with an opportunity to explain where they need the most support with integrating the arts into their lessons. I gathered this insight in the form of online surveys and a brief district professional development description.
Merriam (2016) suggested that case studies can be historical, biographical, sociological, or psychological. Merriam also posited that case studies can be comparative through interviews and analysis of data. Thus, I used an exploratory case study method for this study. Participants were from different schools and training centers, had different experience levels and personal experiences values, and taught different grade levels. The data from the participants were compared and analyzed to address the following research question:

RQ1. To what extent do pre-K through eighth-grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?

Quantitative data were collected through individual online surveys where teachers offered feedback regarding their satisfaction level with their learning and instructional process and their level of experience with the arts in Montessori. The follow-up interview questions provided teachers an opportunity to provide more in-depth answers to previous questions. Responses to the survey questions also benefit future research by setting the foundation for professional development needs. The program description provided insight into the possibility of future professional development options.

**Research Site and Scope of Setting**

In the late 1970’s, there was a push to begin opening public Montessori schools in the United States. This push was due to courts ordering school systems to initiate voluntary desegregation programs (Wolff, 1998). Public Montessori schools were opened as “Magnet Schools” to attract families to racially diverse schools. The sites chosen for this study are from a school district in the suburbs of southeastern South Carolina.
Teachers from one Montessori choice school in each attendance zone in the district were invited to participate in this study. Each of these schools had been a failing traditional school previously and had been gradually converted to the Montessori method over a 7-year transition period. The five Montessori schools have a similar demographic position. I work at one of the schools; for the purposes of this study, specific demographic information of the site where I am employed served as a representation of all five schools.

The home-based site school where I am employed is a Montessori magnet school serving approximately 385 students in pre-K through eighth grade. This Montessori magnet school has gradually converted from a failing traditional neighborhood school to a thriving Montessori school over the past 7 years. This magnet school had a 45.1% poverty rating in 2019 and an overall school achievement rating of average (Public School Review, n.d.). Poverty ratings are designated by the U.S. Census Bureau based on children and families that receive public assistance (The Annie E. Casey Foundation Kids Count Data Center, n.d.). At the time of this study, the student to teacher ratio was 16.5 to 1.

At the time of this study, the current student population at the home-based site school was comprised of 69% White students, 25% Black students, and 3% Hispanic students (Public School Review, n.d.). In 2019, the free and reduced lunch rate was 100% and the school ranked as 710 out of 1142 schools in the state with 24%–29% math proficiency and 40%–44% reading and literacy proficiency. The rate of continuing contract teachers for 2019 was 66.7% (State Report Card, n.d.). The overall rating for parent and student satisfaction of the school environment, including social and physical satisfaction, was 84% (State Report Card, n.d.).

The school structure is maintained by grade level and support groups at the primary, lower elementary, upper elementary, administration, special area classes, and resource team.
levels. Montessori classes are grouped in multiage classrooms with teaching assistants to assist with classroom management. This school has six primary classes comprised of students age 3–6 with one lead teacher and one teaching assistant in each class. There are five lower-elementary classes comprised of students age 6–9 classes with one lead teacher and one teaching assistant. The school has four upper elementary classes comprised of students age 9–12, each with a lead teacher and teaching assistant. For the special area classes, the school employs one part-time music teacher, one part-time art teacher, one part-time physical education teacher, one full-time librarian, and one full-time computer teacher. There are also seven intervention, resource teachers; three are full-time, and the other four are part-time. The school employs one part-time school psychologist and a full-time behavioral management specialist. The school administration consists of a Montessori curriculum coach, a principal, and one guidance counselor, each often serving as director-in-charge, when necessary. The other four Montessori schools in this study mirror this demographic and staffing configuration.

Participants

The population of this case study was composed of Montessori teachers who hold different levels of training and certification. After earning a bachelor’s degree, public Montessori teachers can be trained through highly accredited teacher education programs specifically focused on the Montessori philosophy and proceed to teach in a public setting by becoming state certified through national certification testing and standards. This scenario provides the Montessori teacher a different perspective from their earned bachelor’s program knowledge.

A general education teacher in a public school system can be hired as a Montessori teacher and subsequently receive a supplemental follow-up certification in Montessori education. These Montessori teachers are usually traditionally trained general elementary education teachers
who are certified in Grades K–6 or Grades 6–8 and have completed condensed Montessori training for the age range they teach. General education teachers who receive supplemental Montessori training employ a different perspective than teachers who may have a bachelor’s degree in a subject area other than education.

The certified Montessori teachers can have certification in one, two, or all of the specified levels. These levels are early childhood (ages 3–6), lower elementary (ages 6–9), upper elementary (ages 9–12), or adolescent (ages 12–15). Teachers gain perceptions, knowledge, and ability through teacher education programs. It was my intent to analyze the teachers’ comments, answers, and other information to demonstrate the need for further study.

**Participant Selection**

I conducted nonprobability sampling from the available pool of potential teacher participants. Teachers in grades pre-K through eighth grade in each Montessori school in the county were offered the opportunity to participate. Nonprobability sampling involves the researcher providing each teacher opportunity to participate based on certification status; as such, I selected participants from among teachers who volunteered from the five Montessori schools in the district. In this study, I used convenience sampling, a type of nonprobability sampling. Convenience sampling uses participants who are easily accessible. In this case, the available participants from each of the local Montessori schools applied to participate, and all who applied were accepted. Teachers from any grade level between pre-K through eighth grade could apply. The principals from each Montessori school forwarded the recruitment letter (Appendix A) to engage teachers to volunteer in the study. The initial letter had attachments with the link to the survey and instructions for possible follow-up interview scheduling within a 2-week window. I e-mailed the volunteers who agreed to participate in the interview (Appendix B). I did not
conduct interviews with participants who failed to schedule a follow-up interview in the allotted 2-week time frame.

Participants who were solicited through the principal’s e-mail received the survey and informational letter. The forwarded e-mail contained a brief explanation of study and the University of New England (UNE) Consent to Participate (Appendix C). The e-mail included an attachment to the survey as well as my e-mail address. Participants were provided a 2-week window to complete the survey. Participants were asked to e-mail me to schedule an interview (Appendix D). Participants who agreed to interview were sent a Zoom link and asked to signify a time to meet virtually. I sent a follow-up e-mail 7 days after sending the initial recruitment e-mail. On Day 12, I sent a final reminder and I closed the survey and process on Day 14.

The Montessori teachers invited to participate had various backgrounds and experience in education. Some teachers had experience in general education in a traditional environment with minimal Montessori training, whereas others completed Montessori teacher education programs that provided more extensive integrated curriculum training. This sampling also included Montessori teachers who have an art, music, or dance education background and access to a Montessori teacher education program.

**Instrumentation and Data Collection**

The phenomenon studied in this exploratory case study was relative to a sampling of Montessori teachers who discussed their experiences, training, and resources related to confident and consistent implementation of arts-integrated techniques in their classrooms. The study data demonstrated a pattern of experience, available resources, training levels, and abilities that the teachers have with the arts. The data from the district program description complements further research by establishing what professional development programs are available and may be
necessary in the future. The data analysis (Appendix E) revealed teachers’ perceptions of available resources, consistent abilities, and acquired knowledge related to implementation of quality arts integration programs.

To analyze data (Appendix E), triangulation was used to validate information using Research Electronic Data Capture (REDCap) software from each survey. Triangulation involves exercising multiple sources of information and approaches to analyze data and establish credibility. The triangulation method involves a matrix of data (see Figure 1). I also coded the data to decipher common themes from the teacher responses and used the exploratory case study methodology to combine the findings and generate a conclusion from results.

**Figure 1**

*Triangulation Matrix*

I used REDCap to determine the most effective translation of data from surveys and interviews. REDCap is a secure web application for building and managing online surveys. REDCAP is the method provided by UNE to manage the surveys and questionnaires for data collection. Teachers who volunteered to participate signed a consent form and were directed to
the survey link. At the end of the survey, participants had an opportunity to sign up for an optional follow-up interview. Follow-up interviews were to take place on a Zoom video call and would have been recorded for transcription and returned to the participants for electronic acquiescence. The participants that agreed to do the follow up interview failed to schedule in the allotted time frame.

**Online Survey**

Upon demonstrating interest and agreeing to participate, the teachers received a letter and consent form. The willing participants were e-mailed the UNE Participant Consent Form, which enabled information about the study to be displayed and any imposed relevant participant questions to be answered (Appendix C). The survey was available (Appendix F) to the participant upon agreement. I forwarded the survey and letter to all lead teachers who e-mailed me directly. Some participants also received the link to the survey through their school principal, who forwarded a direct link. Participants had a 2-week window to complete the survey. After one week, the recruited survey participants who had not completed the survey received a reminder and one more week to complete the survey.

Survey questions and interviews were formatted to address teachers’ perceptions of their resources and knowledge regarding the implementation of arts-integrated activities in their Montessori classroom. The questions also differentiated the arts education experiences between teachers who completed preservice teacher education in general education programs and those who completed Montessori teacher education programs. I established survey questions based on the assumption that all Montessori teachers have variable levels of resources, knowledge, and abilities for arts integration. The data were stored confidentially on a private, password-protected computer.
Interviews

The willing participants were emailed the UNE participant consent form that enabled information about the study to be displayed and any imposed relevant participant questions to be answered. Participants who agreed to engage in the study were e-mailed the link to complete the online survey. Following the survey, the participants were sent an e-mail with an opportunity to schedule a virtual follow-up interview via a Zoom session or by phone. The participant letter to schedule the interview is found in Appendix D. The follow-up interview questions (Appendix G) allowed participants to elaborate on specific needs for future resources and professional development opportunities related to implementing an arts-integrated curriculum. The interview questions began with a discussion of participants’ personal background information and continued with open-ended questions structured to gather more in-depth examples of participants’ perceptions of resources, ability levels, and knowledge deficiencies (Appendix G).

For this study, the follow-up interviews never took place. The three teachers who signed up to participate failed to schedule a time to complete the interview within the allotted time.

The survey and interview questions addressed teachers’ immediate concerns and insecurities about the arts. Rev.com would have been used to transcribe interviews from recorded Zoom sessions. Recorded Zoom session transcriptions would have been organized, analyzed, and combined with the data from REDCap to identify similarities and differences.

After the survey data were collected, I began coding to analyze participants’ perceptions of their knowledge, resources, and abilities related to successful arts integration implementation. Teachers were sent an email via the principals to thank them for their participation (Appendix H). The data from follow-up interviews would have provided further details on the areas that
teachers feel they could benefit most from an increase in knowledge, resources, and ability. Principals were sent follow up letters to thank them for their participation (see Appendix I).

**Data Analysis**

Data were collected and organized using REDCap. Data generated from the surveys collected through REDCap were combined with the data from the district program description. Data were organized based on findings from related questions in the survey. The survey questions were designed with a Likert-type agreement scale that allowed for data analysis. The interview questions were structured in an open-ended fashion to allow for more in-depth conversation on teachers’ specific perceptions of their resource needs, ability levels, and current knowledge with arts integration (Appendix G); however, the interviews did not take place.

To analyze data from surveys, raw data were placed in bar graphs and pie charts to code and locate themes and patterns in responses. Data were deidentified and stored confidentially in Microsoft documents on a private, password-protected computer.

**Limitations of the Research Design**

The exploratory case study design may have limitations. In this study, these limitations include the sample size and the variation of participants’ experience and education levels. The estimated sample size was 15 teachers per school. The sample size was limited to the teachers from five public Montessori schools in one district. The case study limitations are addressed through a discussion of credibility, member-checking procedures, transferability, dependability, confirmability, and reflexivity. Limitations also included the lack of participation in follow-up interviews.
Credibility

To achieve credibility in this study, I reviewed a variety of sources such as peer reviewed articles, texts, and other related studies demonstrating the benefits and barriers to effective arts integration. Arts integration implementation articles with different research designs can be found at the Kennedy Center (n.d.-b) website. These resources discuss the benefits of implementing arts-integration techniques in schools. Many researchers have discussed (a) the need for more research among different demographic groups in different areas of the country and (b) the benefits of more accessibility of the arts in these different areas.

Member-Checking Procedures

Member-checking procedures help increase validity. Member checking is a process in which the researcher asks a group of the participants to check for accuracy in the statements (Creswell, 2015). In this study, the online surveys were automatically populated through the REDCap software. Before submission of the survey, the participants had the opportunity to review their information. After review, the participants were permitted to accept and submit the responses.

The Zoom interviews would have been transcribed through the Rev.com software application. Within 2 days of completion of the transcription, the interview comments would have been marked confidential and e-mailed to the participant as a PDF attachment for member checking. This PDF would have been attached to the follow-up interview thank you letter. Participants were given one week to authenticate the transcription and provide electronic acquiescence. Transcripts would be assumed correct if participants did not respond within the week.
Transferability

Each of the five Montessori schools are relatively small. Approximately 75 Montessori-certified teachers were employed total across all five schools. Findings from the small population size is not generalizable but are transferable to other schools. Montessori classrooms have flexibility during the workday to allow for arts-integrated activities to be implemented freely. Therefore, the study results can be used to inform future research. Transferring the results will enable multiple Montessori schools to benefit from the findings of this study, and perhaps inspire further research.

Leadership in traditional schools and future researchers could also take advantage of the study results. Further studies in this area could involve non-Montessori teachers as well. Transferability of this study encompasses both Montessori schools and traditional general education teachers. Arts integration can benefit all students, not just Montessori school children.

Due to the fact that the interviews did not take place, a program description was completed through the district professional development opportunities. This description provided the qualitative data necessary to demonstrate the options for arts-integrated training that are regularly available to teachers.

Dependability

The study findings will demonstrate dependability over time as the participants review and evaluate the findings. The participants’ evaluation will support the overall research document. The study findings will also facilitate support from other schools in the form of further research.
**Confirmability**

Merriam (2016) established a system for validity through peer review. This system encourages discussions among colleagues regarding the process of the study, congruency of the findings, and data interpretation. In the current study, confirmability was justified through the degree that this research study is regarded and confirmed by other researchers. Peer reviewing of the data will ensure the findings are congruent with how I had interpreted the data.

**Reflexivity**

I demonstrated reflexivity through self-reflection in regard to biases, theoretical orientation, and any relationship to the study that may affect the investigation (Merriam, 2016). Researchers must demonstrate trustworthiness to exemplify validity, credibility, and confirmability of the study (Patton, 2015). Trustworthiness is established alongside confirmability, and dependability, thorough thinking, reliability, and ethical stance concerning the methods and process throughout the length of the study (Patton, 2015). Promoting validity and establishing trustworthiness will be reinforced throughout while using member checking procedures, transferability availability, and confirmability from peers. My position and reflexivity maintained consistent relevance because interpretation and position of personal ethical boundaries and experience are the foundation of this research.

**Ethical Issues in the Study**

Case studies draw on qualitative methods containing multiple perspectives of educational ethnography. It is important to distinguish this exploratory case study from traditional qualitative research. This case study was an exploratory study that generated findings that may have negative implications on specific Montessori training or general teacher education programs. The participants reflected on perceptions of their own teacher education programs and community
resources, which could potentially demonstrate inadequacies to consistent education to the whole child in regard to facilitating any arts education.

John Dewey (1933) was an educational philosopher who described understanding as “the various parts of the information acquired are grasped in their relation to one another; a result that is attained only when acquisition is accompanied by constant reflection upon the meaning of what is studied” (p. 78–79). Reflection on experiences includes learning and applying new knowledge to future experiences (Honolulu Theater for Youth, 2020). To ensure that the data from the case study are used, I collected and analyzed the study data and sent the findings to the teachers to encourage further research.

Conclusion and Summary

Public Montessori teachers from this southeastern South Carolina school district had various levels of experience, resources, knowledge, and abilities with utilizing the arts in their classrooms. Montessori teachers may be trained through highly accredited teacher education programs specifically focused on the Montessori philosophy and proceed to teach in a public setting by becoming state certified through national certification testing and standards. Alternatively, Montessori teachers in public schools may also have a degree or certification in K–6 general elementary education, upper elementary general education, 6–8 grade education, or K–12 related arts before receiving supplemental Montessori training. Sometimes teachers are placed in a training program that is condensed and designed for traditional teachers who are transferring to a Montessori model. Supplemental Montessori training may not provide adequate experience with arts education or integration of arts and other curriculum areas.

Using REDCap software application, this case study used data collected through teacher surveys and a district program description to demonstrate teachers’ perceptions, resources,
abilities, and knowledge of arts integration in a Montessori classroom. The data and information assembled and provided to teachers for providing member checking provided opportunities for improvement, support, and further research. The research question addressed was: To what extent do pre-K through eighth-grade public Montessori teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?
CHAPTER 4
DATA ANALYSIS

This chapter outlines the demographics and description of participants for both the survey portion and the follow up interview sessions. The coding procedures used for Parts 1–3 of the data analysis are described later in this chapter, including a detailed discussion of the data analysis procedures used to address each subtheme.

This chapter also presents the study results. The results for Part 1 are presented first; Part 1 represents the perceptions of acquired knowledge of the participants. Parts 2–5 present with the data grouped by subthemes, followed by an explanation of overall participant responses. An analysis was run and discussed for each of the following themes: knowledge, resources, abilities, and experience and demographics. The chapter concludes with a summary of the quantitative and qualitative results. The summary of qualitative results includes a program description that demonstrates the availability of professional development and curriculum programs for educators with this southern school district. The qualitative analysis includes the district program description due to the fact that the follow-up interviews were never completed. The participants failed to schedule the follow-up interviews due to unforeseen circumstances.

Research Question Investigated

I used a mixed-method exploratory case study design to better understand the existing problem with arts accessibility in the Montessori classroom. The research question investigated was: “To what extent do pre-K through eighth-grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?” I chose the exploratory case study method based on the notion that not all data would be conclusive or lead to further research.
The significance of the study is based on the notion that arts integration is a creative solution to effectively offer diversified teaching methods to students in schools where the arts may be underprioritized. Therefore, the impetus of this method and study was to determine the barriers and benefits to arts integration in public Montessori to provide resources to teachers in the future.

**Data Collection**

For data collection, the research question was broken down into subthemes. The four subthemes were based on participants’ knowledge, resources, abilities and experience with integrating the arts into their Montessori classroom. Arts integration includes incorporating visual arts, music, theater or drama, poetry, and dance or movement. The survey questions were designed to delineate the perceptions of each participant in terms of their level of experience, access to resources, content knowledge, and abilities with regard to the aforementioned components of the arts. Table 1 demonstrates the itemization of the research question subthemes and the data sources by page number and section.

**Table 1**

*Research Questions and Data Sources*

<table>
<thead>
<tr>
<th>Experience/demographics</th>
<th>Part 1, Questions 3–6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Part 2, Questions 7–11</td>
</tr>
<tr>
<td>Resources</td>
<td>Part 3, Questions 12–21</td>
</tr>
<tr>
<td>Abilities</td>
<td>Part 4, Questions 22–32</td>
</tr>
<tr>
<td>Results by certification level</td>
<td>Part 5</td>
</tr>
</tbody>
</table>
Part 1: Description of Participants/Demographics/Experience

Volunteer participants were employed at one of five public Montessori schools in the southeast urban area of South Carolina (Table 1). All teachers are referred to by teacher number (tn). A total of four (n = 4) early childhood teachers participated in the study. One of the two early childhood teachers had 5–10 years’ experience, two had 10–15 years of experience, and one with 25 or more years of experience. The early childhood teachers are identified as tn-1, tn-6, tn-7, and tn-13. A total of three (n = 3) lower elementary teachers participated in the study. Two lower elementary teachers had been teaching for 10–15 years and one had been teaching for 25 or more years. The lower elementary teachers are identified as tn-4, tn-8, and tn-10. A total of four (n = 4) upper elementary teachers participated in the study. One upper elementary teacher had been teaching for 5–10 years and three had been teaching for 10–15 years. The upper elementary teachers are identified as tn-2, tn-5, tn-9, and tn-12. A total of two (n = 2) adolescent teachers participated in the study. One adolescent teacher had been teaching for 5–10 years and the other had been teaching for 5–15 years. Adolescent teachers are identified as tn-3 and tn-11. Teachers’ years of experience could include any teaching experience, whether in a private or public setting. The level of experience questions did not delineate any fluctuation in age level taught.

Participants were composed of certified Montessori teachers from early childhood (ages 3–6), lower elementary (ages 6–9), upper elementary (ages 9–12), and adolescent (ages 12–15) levels. The teachers were Montessori certified through either initial certification or alternative certification methods. Teacher participants who were certified through an alternative Montessori certification process were initially certified in general education. Teachers who were initially certified in Montessori and subsequently hired to teach with this southeastern South Carolina
school district were provided an undisclosed alternative path to state certification provided they held a bachelor’s degree.

Thirteen teachers participated in this study out of an estimated 75 possible certified in each school at every level combined. The low teacher participant level may be due to teachers being overworked or too busy to complete the survey within the allotted 2-week time period. From the 13 teachers surveyed, 10 were certified through a general education program prior to receiving alternative, supplemental Montessori training to lead a Montessori multiage classroom. The teachers who were initially certified through general education programs included two early childhood teachers (tn-1 and tn-6), three lower elementary teachers (tn-4, tn-8, and tn-10), three upper elementary teachers (tn-2, tn-5, tn-9, and tn-12), and two adolescent teachers (tn-3 and tn-11). Two of the teachers surveyed stated that they received Montessori training prior to being hired as a public Montessori teacher and were subsequently alternatively certified to teach in a public school. These two teachers were both early childhood teachers (tn-7 and tn-13). One upper elementary teacher (tn-9) shared that they were initially certified through an undisclosed bachelor’s program and became alternatively certified to teach Montessori in a South Carolina public school.

All nine general education certified teachers had earned master’s degrees. Of the three remaining Montessori certified teachers, each had a bachelor’s degree only. Of the general education teachers who were certified to teach at grade level K–6 before they became Montessori certified teachers, two taught students aged 3–6, three taught students aged 6–9, four taught students aged 9–12, and two taught students aged 12–15. The two early childhood teachers were among the alternatively state-certified teachers who received Montessori training first or a bachelor’s degree in an unidentified area. The teachers who held master’s degrees included one
early childhood teacher (tn-1), four upper elementary teachers (tn-2, tn-5, tn-9, and tn-12), both adolescent teachers, and all three lower elementary teachers. Of the three teachers who were alternatively certified in Montessori prior to state certification, one had a master’s degree (tn-9).

The experience level of the teachers varied between 5 and over 25 years of experience. Four teachers had been teaching for 5–10 years, seven teachers had been teaching for 10–15 years, and two teachers had been teaching 25 or more years. Table 2 details the demographics of all 13 participants.

**Table 2**

*Demographics of Participants*

<table>
<thead>
<tr>
<th>Experience</th>
<th>Early childhood (n = 4)</th>
<th>Lower elementary. (n = 3)</th>
<th>Upper elementary. (n = 4)</th>
<th>Adolescents (n = 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5–10 years</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10–15 years</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>25 years</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initial cert</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education (GE)</td>
</tr>
<tr>
<td>M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
</tr>
<tr>
<td>B</td>
</tr>
</tbody>
</table>

*Description of Roles*

Roles of the participants are determined by the level they teach. Teachers at each level of Montessori certification are certified to teach all areas of the curriculum using Montessori materials. General education teachers are first trained and certified through their undergraduate
program, which is based on their level of study (typically K–6), and then subsequently trained with Montessori materials. General education teachers are trained to teach traditional methods and a standard-based curriculum. The teachers who are initially certified by their undergraduate program for certification in elementary education taught traditionally first and later transferred to a Montessori classroom where they learned the Montessori materials and methods in a supplemental training program.

Montessori teachers who have become certified first by an accredited Montessori training program are trained through the Montessori materials. Montessori training programs vary in accreditation standards; therefore, the requirements for certification may vary. It is unknown where any of the participants received their Montessori training. Montessori teachers who are first certified in Montessori and hired subsequently for this southeastern South Carolina school district must have a bachelor’s degree of any kind and have passed the two educator state-approved exams.

At each Montessori certification level, the teacher maintains the role of the provider of the general education requirements equal to that of any traditional elementary education teacher. At the early childhood level, the teacher is responsible for all curriculum areas for pre-K and kindergarten-based South Carolina state standards. Study participants at the early childhood level had a bachelor’s degree and Montessori certification. Two of the four participants had a general education certificate as well. Therefore, out of the four early childhood educators who participated, half had a traditional general education background.

At the lower elementary level, the teacher is responsible for teaching all curriculum areas required by South Carolina state standards for Grades 1–3. Each of the three lower elementary study participants held a general education certificate and a Montessori certificate obtained after
the general education. Earning a general elementary education certificate enables a South Carolina certified teacher to teach any grade level between K–6. Teachers who earn a Montessori certificate for the lower elementary level can only teach Grades 1–3. Two of the lower elementary study participants held a master’s degree and the third held a bachelor’s degree. At the upper elementary level, the teacher is accountable for all general education requirements based on South Carolina state standards for Grades 4–6. Out of the four upper elementary study participants, three of them had a general elementary education certification applying to Grades K–6 grades prior to obtaining the supplemental Montessori certification. One upper elementary teacher had an undisclosed alternate pathway to certification. All of the upper elementary teachers held a master’s degree. To become certified in Montessori at the upper elementary level, teachers must complete lower and upper elementary certification and training. Typically, this is a 2- to 3-year process including at least two summers of intensive training. The opportunities for upper elementary trained Montessori teachers with general education certificates are much more extensive because these teachers have the flexibility to teach more grade levels in both the Montessori method and traditional teaching methods.

Adolescent teachers are unique in that they must be certified to teach one or more core curriculum subjects, such as math, science, English, and cultural or earth studies, as well as complete a supplemental adolescent Montessori certification at the middle-school level. The adolescent training for Montessori certification typically takes place over a 2- to 3-year period to include summer and school year intensives. Typically, adolescent teachers share roles and responsibilities because they have split certifications. The students will have a home room teacher but change teachers for the specific content knowledge based on the teacher’s certification area. Both adolescent teachers who participated in this study initially earned a
master’s degree in their undisclosed field of certification and secondarily earned the Montessori certification.

Presentation of Results

Part 2: Knowledge

As shown in Table 1, the responses collected from the Survey Questions 7–11 are based on the overall perceptions of each participant in regard to their knowledge of arts integration obtained from professional development or teacher education programs. The objective of this section is to determine how teachers feel their teacher education program prepared them for teaching any and all aspects of the arts in their classrooms.

Most teachers reported that they did not feel that the teacher preparation program prepared them with adequate knowledge of the arts to be able to provide an arts-integrated curriculum (see Table 3). The majority of these teachers noted that they disagreed with this item \(n = 7\), one teacher agreed, and five responded neutrally. For visual arts the majority of teachers \(n = 8\) disagreed that they were trained. For dance, eight participants \(n = 8\) disagreed that they had training. For music, seven participants \(n = 7\) disagreed or strongly disagreed that they had any training, and nine \(n = 9\) disagreed or strongly disagreed in being trained in drama or theater.
Table 3

Knowledge: Descriptive Statistics (n = 13)

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students.</td>
<td>0</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8. I have received training or professional development related to visual arts.</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>9. I have received training or professional development related dance.</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10. I have received training or professional development related music.</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>11. I have received training or professional development related drama/theater.</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

Part 3: Resources

The next section examined teacher responses to a series of items designed to gather their perceptions related to resources. Survey Questions 12–21 delineated the perceptions of teacher participants with regard to their access to proper resources to be able to provide arts education opportunities in their Montessori classroom. These resources could include materials, physical space, and professional development program availability.

Overall, resource teachers were more evenly split between agreeing and not agreeing that they had sufficient resources (Table 4). For example, five teachers noted that they did not have enough resources (n = 5, strongly disagree and disagree combined) and seven teachers (n = 4 agree, n = 4 strongly agree) said that they did have enough resources. More specifically, only four teachers (tn-1, tn-2, tn-6, and tn-13) reported having adequate resources for integrating visual arts and only three (tn-3, tn-11, and tn-13) reported having a space that was conducive to theatre productions and having the students move around. Despite this, 100% (n = 13) of participants noted that their students would benefit from increased exposure to the arts due to
increased amounts of energy ($n = 12$, agree and strongly agree combined). Time was seen as a barrier to integrating arts ($n = 12$, agree). Other barriers included the need for more preservice training ($n = 11$, agree), and physical space ($n = 11$, agree). In the area of administrators’ support for integrating the arts, the majority of teachers believed their administrator was not a barrier to this process ($n = 5$ disagree and $n = 5$ were neutral).

**Table 4**

*Resources: Descriptive Statistics ($n = 13$)*

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I have sufficient art materials to allow my students to create, such as, paint. Scissors, glue, colored pencils, markers, and large paper.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>13. I have adequate resources and materials to effectively integrate visual arts into the classroom.</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>14. I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>15. My students would benefit from an increase in exposure to the arts.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>16. My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>17. Available time is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>18. Resources are a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Sufficient arts education pre-service teacher training is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>20. Administrative support is a barrier to creating an integrated arts program.</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>21. Classroom physical space is a barrier to creating an integrated arts program is the agreement statement in question number.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.
Part 4: Abilities

The responses collected from Survey Questions 22–32 demonstrate the perceived ability levels of teacher participants in respect to consistently delivering the different aspects of the arts into their everyday Montessori curriculum (Table 5). Overall, the majority of teachers reported that they did not integrate the arts into various curriculums. For example, only two teachers (tn-1 and tn-3) noted that they integrated arts in English language arts, whereby none of the teachers (n = 0) integrated arts into mathematics. Five teachers said that they integrated arts into history (tn-3, tn-5, tn-6, tn-8, and tn-13), three teachers said they integrated arts into social justice or humanities (tn-7, tn-9, and tn-13), and four teachers said they integrated the arts into science (tn-1, tn-5, tn-7, and tn-9). Overall, teachers integrated visual arts often, with eight teachers agreeing. Four teachers had integrated drama (tn-3, tn-9, tn-12, and tn-13) into their classes, four had integrated poetry (tn-3, tn-9, tn-12, and tn-13), three integrated music theory (tn-3, tn-5, and tn-13), and one had integrated dance (tn-13). Despite this, only two teachers (tn-9 and tn-13) purported that they felt confident enough to create and integrate arts curriculum into their current classes.

Table 5
Abilities: Descriptive Statistics (n = 13)

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I consistently integrate the arts into the English Language Arts curriculum.</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>23. I consistently integrate the arts into the Mathematics curriculum.</td>
<td>0</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24. I consistently integrate the arts into the history curriculum.</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Item</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>25. I consistently integrate the arts into the Social Justice/Humanities curriculum.</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>26. I consistently integrate arts into the Science curriculum.</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>27. I have incorporated music and music theory into my curriculum.</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>28. I have incorporated dance/movement into my curriculum.</td>
<td>0</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>29. I have incorporated poetry into my curriculum.</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>30. I have incorporated Visual Arts into my curriculum.</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>31. I have incorporated drama/improvisation into my curriculum.</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>32. I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.*

**Part 5: Results by Certification Level**

**Early Childhood.** This section discusses the results in the early childhood certification level.

**Knowledge: Early Childhood.** Throughout most Montessori training programs at the early childhood level, teachers are provided courses in music theory, visual arts, arts education, and movement as it relates to children and their gross motor development. Question 7, as it was directed to the early childhood teachers, stated: “I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students.” The early childhood teachers equally disagreed and agreed with this statement (Table 6). Question 8 stated: “I have received training or professional development related to visual arts.” Three of the four (*tn*-7, *tn*-6, and *tn*-13) teachers disagreed with this statement and one remained neutral (*tn*-1).
Table 6

Knowledge by Early Childhood: Descriptive Statistics (n = 4)

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students.</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>8. I have received training or professional development related to visual arts.</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. I have received training or professional development related dance.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10. I have received training or professional development related music.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>11. I have received training or professional development related drama/theater.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

Question 9 stated: “I have received training or professional development related to dance.” Of the four teachers at the early childhood level, three disagreed (tn-1, tn-6, and tn-7) and one agreed strongly (tn-13). Question 10 stated: “I have received training or professional development related to music.” Two early childhood teachers disagreed (tn-6 and tn-7), one agreed (tn-13), and one stayed neutral (tn-1). Question 11 stated: “I have received training or professional development related to drama/theater.” Three teachers (tn-1, tn-6, and tn-7) did not feel they had any drama or theater training to prepare them to teach and one teacher agreed (tn-13).

Resources: Early Childhood. An early childhood Montessori classroom should have an art area stocked with leveled art activities, reproductions of master art works, and supplies the children can use to create within a controlled manner. Question 12 stated: “I have sufficient art materials to allow my students to create, such as, paint, scissors, glue, colored pencils, markers, and large paper.” Each of the early childhood teachers agreed that they do have sufficient materials. Each of the early childhood teacher also agreed to Question 13, which stated: “I have
adequate resources and materials to effectively integrate visual arts into the classroom” (Table 7).

**Table 7**

*Early Childhood Resources: Descriptive Statistics (n = 4)*

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I have sufficient art materials to allow my students to create, such as, paint. Scissors, glue, colored pencils, markers, and large paper.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>13. I have adequate resources and materials to effectively integrate visual arts into the classroom.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>14. I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>15. My students would benefit from an increase in exposure to the arts.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>16. My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>17. Available time is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>18. Resources are a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19. Sufficient arts education pre-service teacher training is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>20. Administrative support is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21. Classroom physical space is a barrier to creating an integrated arts program is the agreement statement in question number.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

Question 14 stated: “I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.” The teachers were split on this response, possibly because classroom sizes can differ as well as the number of children inside the classroom. Two teachers disagreed (*tn*-1 and *tn*-7), one agreed (*tn*-13), and one was neutral (*tn*-6). All of the early childhood teachers (*tn*-1, *tn*-6, *tn*-7, and *tn*-13) agreed that their students
would benefit from an increased exposure to the arts and agreed that their students demonstrated excessive amounts of energy that would also benefit from movement, collaboration and music (see Table 7, Questions 15 and 16).

Regarding barriers to resources, Question 17 stated: “Available time is a barrier to creating an integrated arts program.” Three of the four teachers (tn-1, tn-7, and tn-13) agreed that time is a barrier and one stayed neutral (tn-6). In regard to resources being a barrier, Question 18 stated: “Resources are a barrier to creating an integrated arts program.” The early childhood teachers were split in their responses with one in agreement (tn-13), one in disagreement (tn-7), and two remaining neutral (tn-1 and tn-6). All four teachers at the early childhood level (tn-1, tn-6, tn-7, and tn-13) believed that sufficient arts education preservice teacher training is a barrier to creating an integrated arts program (Table 7, Question 19).

The survey responses indicated that administrative support does not affect early childhood teachers’ creation of an integrated curriculum. Question 20 stated: “Administrative support is a barrier to creating an integrated arts program.” One teacher disagreed (tn-7) and three remained neutral (tn-1, tn-6, and tn-13) or unaffected either way. Question 21 stated: “Classroom physical space is a barrier to creating an integrated arts program.” Three of the four teachers (tn-1, tn-6, and tn-7) indicated that physical space is a barrier and one remained neutral (tn-13).

**Abilities: Early Childhood.** Questions 22–32 are statements related to confidence and abilities to consistently integrate the curriculum with the arts and bring the arts into the classroom. Question 22 stated: “I consistently integrate the arts into the English Language Arts curriculum” (Table 8). Early childhood teachers were split on this response, with one teacher disagreeing (tn-6), one agreeing (tn-1), and two remaining neutral (tn-7 and tn-13). Question 23
stated: “I consistently integrate the arts into the mathematics curriculum.” All four teachers disagreed with this statement.

Table 8

_Early Childhood Abilities: Descriptive Statistics (n = 4)_

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I consistently integrate the arts into the English Language Arts curriculum.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>23. I consistently integrate the arts into the mathematics curriculum.</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24. I consistently integrate the arts into the history curriculum.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>25. I consistently integrate the arts into the Social Justice/Humanities curriculum.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>26. I consistently integrate arts into the science curriculum.</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>27. I have incorporated music and music theory into my curriculum.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>28. I have incorporated dance/movement into my curriculum.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>29. I have incorporated poetry into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>30. I have incorporated Visual Arts into my curriculum.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>31. I have incorporated drama/improvisation into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>32. I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

_Note._ SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

The history curriculum in an early childhood Montessori classroom consists of literature and cultural studies that may encompass geography and related simple history. Question 24 stated: “I consistently integrate the arts into the history curriculum.” One teacher (tn-6) disagreed with this statement, two agreed (tn-7 and tn-13), and one was neutral. The split response was the same for Question 25 about integrating social justice and humanities with the arts in the early childhood class.
Question 26 stated: “I consistently integrate arts into the science curriculum.” One teacher disagreed (tn-6), two agreed (tn-1 and tn-7), and one stayed neutral (tn-13). Question 27 stated: “I have incorporated music and music theory into my curriculum.” Two teachers disagreed (tn-6 and tn-7), one teacher agreed (tn-13), and one was neutral (tn-1). Question 28 stated: “I have incorporated dance/movement into my curriculum.” Two teachers disagreed (tn-6 and tn-7), one agreed (tn-13), and one stayed neutral (tn-1). Question 29 stated: “I have incorporated poetry into my curriculum.” Three teachers disagreed (tn-1, tn-6, and tn-7) and one agreed with this statement. Question 30 stated: “I have incorporated visual arts into my curriculum.” The teachers all agreed with their ability to incorporate visual arts into their classroom. Question 31 stated: “I have incorporated drama/improvisation into my curriculum.” Three teachers disagreed (tn-1, tn-6, and tn-7) and one agreed. Lastly, Question 32 stated: “I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.” Three of the teachers (tn-1, tn-6, and tn-7) stated they were not confident integrating the arts and one felt that they were confident (tn-13). The early childhood teachers surveyed upheld a perception that there was an insufficient amount of teacher training for implementation of any arts-integrated activities. Early childhood teachers also indicated that lack of physical space, resources, and time were barriers as well.

**Lower Elementary.** This section discusses the results in the lower elementary certification level.

**Knowledge: Lower Elementary.** Questions 7–11 were related to the perceptions of the knowledge base teachers have gained through professional development or teacher training to be able to teach with the arts in their classrooms. When answering Question 7, two lower elementary teachers disagreed (tn-8 and tn-10) and one was neutral (tn-4). When answering
Question 8, all three disagreed and felt they had not enough visual arts training. Dance is another professional development opportunity that seems to be rare; all three lower elementary teachers did not feel they had any training with dance (Table 9, Question 9).

Table 9

Knowledge by Lower Elementary: Descriptive Statistics (n = 3)

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I feel my teacher education program provided me with adequate</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>knowledge of the arts to be able to provide an arts integrated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>curriculum to my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I have received training or professional development related to</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>visual arts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I have received training or professional development related to</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>dance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I have received training or professional development related</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>music.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I have received training or professional development related</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>drama /theater.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree

Participants responses to Question 10 were equally split; one strongly disagreed \((tn-10)\), one agreed \((tn-4)\), and one stayed neutral \((tn-1)\). The responses to Question 11 were also equally split; one teacher agreed \((tn-4)\), one disagreed \((tn-10)\), and one stayed neutral \((tn-8)\).

Resources: Lower Elementary. Question 12 stated: “I have sufficient art materials to allow my students to create, such as, paint. scissors, glue, colored pencils, markers, and large paper.” Of the lower elementary teachers, two strongly disagreed \((tn-4 \text{ and } tn-8)\) and one stayed neutral \((tn-10; \text{ Table 10})\).

Item 13 related to having adequate resources and materials to effectively integrate visual arts into the classroom. Two teachers strongly disagreed \((tn-4 \text{ and } tn-8)\) with this statement and one remained neutral \((tn-10)\).
### Table 10

**Lower Elementary Resources: Descriptive Statistics (n = 3)**

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I have sufficient art materials to allow my students to create, such as, paint. Scissors, glue, colored pencils, markers, and large paper.</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>13. I have adequate resources and materials to effectively integrate visual arts into the classroom.</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14. I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15. My students would benefit from an increase in exposure to the arts.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>16. My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>17. Available time is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>18. Resources are a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>19. Sufficient arts education preservice teacher training is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>20. Administrative support is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>21. Classroom physical space is a barrier to creating an integrated arts program is the agreement statement in question number.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree*

All three teachers disagreed with Question 14, thus indicating that they do not have adequate space to facilitate movement for theatrical interpretations and improvisations. All of the lower elementary teachers agreed that the students would benefit from an increase in exposure to the arts and that their students demonstrate an excessive amount of energy that would also benefit from movement, collaboration and music (Table 10, Questions 15 and 16).

Question 17 stated: “Available time is a barrier to creating an integrated arts program and this is agreed upon by all their lower elementary teachers.” Each of the lower elementary
teachers felt that resources were a barrier to creating an integrated arts program. Resources can be materials, professional development time, and space to create and move. All teachers agreed with Question 19, thus indicated that teachers felt they have not had sufficient arts integration training. In response to Question 20, two teachers agreed (tn-4 and tn-10) and one disagreed (tn-8) that administrative support is a barrier to creating an integrated arts program. All three lower elementary teachers agreed that classroom physical space is a barrier to creating an integrated arts program.

**Abilities: Lower Elementary.** In a lower elementary Montessori classroom, there can be many opportunities to use the arts to extend curriculum and allow children to demonstrate knowledge in a variety of creative ways. Questions 22–32 demarcated the perceptions that each lower elementary teacher feels about active and consistent arts integration efforts in their classroom. Teachers either felt that they do integrate specific arts areas or that they do not. Beginning with English language arts, Question 22 stated: “I consistently integrate the arts into the English Language Arts curriculum.” Two teachers disagreed (tn-4 and tn-8) and one stayed neutral (tn-10). All three teachers disagreed with Question 23, which asks about teachers’ arts integration in mathematics classes (Table 11).

**Table 11**

*Lower Elementary Abilities: Descriptive Statistics (n = 3)*

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I consistently integrate the arts into the English language arts curriculum.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23. I consistently integrate the arts into the mathematics curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Item</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>----</td>
</tr>
<tr>
<td>24. I consistently integrate the arts into the history curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25. I consistently integrate the arts into the social justice/humanities curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26. I consistently integrate arts into the science curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>27. I have incorporated music and music theory into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>28. I have incorporated dance/movement into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>29. I have incorporated poetry into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>30. I have incorporated visual arts into my curriculum.</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>31. I have incorporated drama/improvisation into my curriculum.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>32. I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

All three teachers disagreed with Question 24, which stated: “I consistently integrate the arts into the history curriculum.” Similarly, in response to Question 25, all three teachers disagreed that they integrate arts into social justice lessons. All three lower elementary teachers also disagreed that they integrate science with the arts.

Question 27 was related to incorporating music and music theory into the Montessori curriculum. None of the lower elementary teachers surveyed incorporate music or music theory into their classrooms. Questions 28–31 were related to incorporating dance and movement, poetry, drama and improvisation, and visual arts into the Montessori classroom work cycle. Out of each of these elements, only visual art got one agreement (tn=4). In other words, only one of the three lower elementary teachers had incorporated visual arts. All of the other arts were not incorporated at all by the lower elementary teachers. All teachers disagreed on having consistently incorporated drama, dance, or poetry into the classroom. All three lower elementary
teachers disagreed with Question 32: “I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.”

**Upper Elementary.** This section discusses the results in the upper elementary certification level.

**Knowledge: Upper Elementary.** Questions 7–11 relate to how the upper elementary teachers feel their teacher training prepared them to use arts integration in their classrooms. Question 7 stated: “I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students.” Teachers’ responses were divided; two teachers disagreed (tn-5 and tn-12), one agreed (tn-2), and one remained neutral (tn-9). Having training in the visual arts is not required at the upper elementary level; therefore, all four teachers disagreed with Question 8: “I have received training or professional development related to visual arts.” Similarly, dance is not a required course in the elementary education training or the Montessori training, resulting in the unanimous disagreement to Question 9: “I have received training or professional development related to dance” (Table 12).

**Table 12**

*Knowledge by Upper Elementary: Descriptive Statistics (n = 4)*

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8. I have received training or professional development related to visual arts.</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. I have received training or professional development related dance.</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
In response to Question 10, three teachers disagreed (tn-2, tn-9, and tn-12) and one felt she had received training in music (tn-5). In response to Question 11, one teacher agreed (tn-9) that they had professional development related to drama or theater and three disagreed (tn-2, tn-5, and tn-12).

**Resources: Upper Elementary.** Question 12 stated: “I have sufficient art materials to allow my students to create, such as, paint, scissors, glue, colored pencils, markers, and large paper.” Out of four teachers surveyed, two agreed (tn-2 and tn-5), and two disagreed (tn-9 and tn-12). Similarly, Question 13 stated: “I have adequate resources and materials to effectively integrate visual arts into the classroom.” Teachers had similar responses were similar; one teacher (tn-2) agreed that they integrate arts in the classroom, two disagreed (tn-9 and tn-12), and one remained neutral (tn-5).

Physical space is imperative, especially in an upper elementary classroom where the physical size of the children necessitates more room space. All four teachers disagreed with Question 14: “I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.” The unanimous round of responses continued with Questions 15 and 16. All four teachers agreed that their students would benefit from an increase in exposure to the arts and agreed that their students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.

Similar to Question 17 responses made by lower elementary and early childhood teachers, upper elementary teachers all agreed that time is a barrier to creating an integrated arts
program. In response to Question 18, three of the upper elementary teachers agreed ($tn$-5, $tn$-9, $tn$-12) that resources were a barrier and one stayed neutral ($tn$-2). Three teachers stated that sufficient arts education preservice teacher training was a barrier to creating an integrated arts program ($tn$-2, $tn$-5, $tn$-12) and one teacher stayed neutral ($tn$-9; see Table 13, Question 19).

Question 20 stated: “Administrative support is a barrier to creating an integrated arts program.” Three of the teachers disagreed ($tn$-2, $tn$-5, $tn$-9) with this statement and one remained neutral ($tn$-12). In response to Question 21, all four upper elementary teachers agreed that classroom physical space is definitely a barrier to creating an integrated arts program in their classrooms (Table 13).

**Table 13**

*Upper Elementary Resources: Descriptive Statistics ($n = 4$)*

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. I have sufficient art materials to allow my students to create, such as, paint. Scissors, glue, colored pencils, markers, and large paper.</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>13. I have adequate resources and materials to effectively integrate visual arts into the classroom.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>14. I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15. My students would benefit from an increase in exposure to the arts.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>16. My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>17. Available time is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>18. Resources are a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>19. Sufficient arts education preservice teacher training is a barrier to creating an integrated arts program.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
Administrative support is a barrier to creating an integrated arts program.

Classroom physical space is a barrier to creating an integrated arts program is the agreement statement in question number.

Note: SD = Strongly Disagree, D = Disagree, N=Neutral, A=Agree and SA=Strongly Agree

Abilities: Upper Elementary. Questions 22–32 demonstrate the comfort level the upper elementary teachers have with consistent arts integration as it is associated with each subtheme (Table 14). Question 22 stated: “I consistently integrate the arts into the English Language Arts curriculum.” Three upper elementary teachers disagreed with this statement and one remained neutral.

Table 14

Upper Elementary Abilities: Descriptive Statistics (n = 4)

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I consistently integrate the arts into the English language arts curriculum.</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23. I consistently integrate the arts into the mathematics curriculum.</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24. I consistently integrate the arts into the history curriculum.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25. I consistently integrate the arts into the social justice/humanities curriculum.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>26. I consistently integrate arts into the science curriculum.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>27. I have incorporated music and music theory into my curriculum,</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>28. I have incorporated dance/movement into my curriculum.</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>29. I have incorporated poetry into my curriculum.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>30. I have incorporated visual arts into my curriculum</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
31. I have incorporated drama/improvisation into my curriculum  

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. I have incorporated drama/improvisation into my curriculum</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>32. I feel confident with my abilities to create and implement arts integrated curriculum into my classroom</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree.

Item 23 stated: “I consistently integrate the arts into the mathematics curriculum.” Three teachers disagreed and one stayed neutral. In response to Question 24 and Question 25, two teachers disagreed (tn-2 and tn-9), one agreed (tn-5), and one stayed neutral (tn-12). Typically, if the teachers do not use the arts for history, they will not use arts in the social justice category either. Two teachers agreed (tn-5 and tn-9) and two stayed neutral (tn-2 and tn-12) in response to Question 25, thus indicating that half of the teachers consistently integrate arts into the science curriculum.

Question 27 stated: “I have incorporated music and music theory into my curriculum.” Two teachers disagreed (tn-2 and tn-9), one agreed (tn-5), and one stayed neutral (tn-12). All four teachers disagreed with Question 28, which stated: “I have incorporated dance/movement into my curriculum.” Item 29 stated: “I have incorporated poetry into my curriculum.” Of the teachers surveyed, two agreed (tn-9 and tn-12) that they have used poetry in their classroom and two stayed neutral (tn-2 and tn-5). In response to Question 30, one teacher disagreed (tn-2), two agreed (tn-9 and tn-12), and one remained neutral (tn-5). Two teachers agreed (tn-9 and tn-12) and two stayed neutral in response to Question 31, which stated: “I have incorporated drama/improvisation into my curriculum.”

Question 32 stated: “I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.” Three teachers disagreed (tn-2, tn-5, and tn-12) with this statement and one agreed (tn-9). According to this data, the upper elementary teachers
overall were not confident with integrating the arts due to the fact that they have low resources, support, and training.

**Adolescents.** This section discusses the results in the adolescents’ certification level.

**Knowledge: Adolescents.** The knowledge base for the teachers of adolescent students can be broad and very specific at the same time. Having only two participants at this level leaves a small amount of data, but still demonstrates the lack of arts training. In the knowledge section (Questions 7–11), one teacher remained neutral (tn-3) and the other disagreed (tn-11) with the statement that their teacher education program provided them with tools to use arts integration methods in their classrooms. Both of the teachers stated that they had some visual arts training and one of them had dance training or professional development related to dance (tn-11). The other two questions related to having music, drama, and theater professional development. These responses were also split in half, with one teacher agreeing (tn-3) to both and one disagreeing (tn-11) to both.

**Resources: Adolescents.** Items 12–14 relate to materials in the classroom and space to be able to move around and perform or use improvisation to teach. Both teachers felt they did have enough space to move about in the classroom. The teachers were equally split on having enough materials and supplies to be able to provide arts integration lessons and allow the students to use art materials independently.

Similar to the upper elementary, lower elementary, and early childhood teachers, the adolescent teachers felt that their students would benefit from an increase in exposure to the arts. The adolescent teachers also felt that their students exhibited excessive amounts of energy that would benefit from more movement, collaboration, and music education. In the survey items 17–21, the teachers were asked agreement statements about the barriers to arts integration. Both
teachers strongly agreed that time, resources, and a lack of sufficient preservice teacher training were all barriers to creating an arts-integrated program. One teacher agreed that administrative support is a barrier (tn-3) and one remained neutral (tn-11). One teacher agreed (tn-3) that physical space in the classroom is a barrier and one disagreed (tn-11). Previously in the resources question, both teachers stated they had adequate space.

**Abilities: Adolescents.** Questions 22–32 addressed teachers’ feelings about consistently incorporating the arts and integrating the core curriculum with the various aspects of the arts. One participant (tn-3) indicated that they consistently integrate the arts into math, social justice or humanities and science, whereas while the other (tn-3) remained neutral.

One of the teachers (tn-3) stated that they had indeed incorporated music and music theory, visual arts, and drama into their curriculum, whereas the other had not (tn-11). Neither adolescent teachers had incorporated dance or movement into their curriculum. Both teachers had used poetry in their curriculum. Lastly, Question 32 stated: “I feel confident with my abilities to create and implement arts integrated curriculum into my classroom.” One of the teachers disagreed (tn-11) and one remained neutral (tn-3).

**Summary**

The focus of this study was to answer the research question: “How do teachers in a pre-K through 8th grade public Montessori school perceive their knowledge, resources, experience, and abilities for implementing arts into their general classroom curriculum?” I recruited participants from five public Montessori schools in a southeastern South Carolina school urban district. Out of a possible 75 certified teachers, 13 completed the survey. The teachers ranged in experience level from 5–25 or more years of experience. Four teacher participants had bachelor’s degrees and nine had master’s degrees. Approximately 10 of the teachers had been certified as a general
education teacher and taught in a traditional classroom prior to receiving Montessori certification. In contrast, three had received Montessori training before they were hired to teach in a public school classroom. The teaching certification levels that the participants held varied relatively equally.

Teacher preparation programs and ongoing professional development are still very much needed to adequately prepare teachers to integrate the arts into their various curriculums. For example, only one teacher reported being prepared to integrate the arts into the curriculum through their teacher education program. More specifically, it appears that only about a third of the teachers had received professional development on how to integrate visual arts and music (four teachers agreed), followed by drama or theater (three agreed), and lastly, dance (only one teacher agreed). Certainly, this provides clear evidence that teachers need ongoing professional development for integrating all art types.

Teachers will not be able to implement the arts into their curriculum successfully without the proper resources. More than half of the teachers agreed or strongly agreed that they had enough resources (i.e., paper, scissors, materials); however, only about a third (four teachers) agreed that they had ample room and space for conducting activities that would integrate the arts. All 13 teachers agreed that their students would benefit from integrating the arts and that excessive energy students often had would be well matched to movement and music (12 agreed or strongly agreed). Although they saw the clear benefits of integrating the arts, teachers also noted barriers, with time being the greatest barrier of them all (12 teachers agreed), followed by the physical space of the classroom (11 agreed) and teacher preparation programs not including arts integration into their courses (11 agreed). In addition to time, classroom size and preparation
programs were also noted as barriers along with the school administrator (only two teachers agreed).

Along with knowledge and resources, teachers also need the ability and confidence to integrate arts into the curriculum. Unfortunately, only two teachers noted that they felt confident enough to integrate arts into their curriculum. Across the content areas, more teachers noted that they integrated the arts into science (four agreed) than any other area. This was followed by English language arts, history, and social justice or humanities, all with three teachers agreeing. The content area where teachers did not integrate the arts was mathematics. As far as the type of art that is integrated into the curriculum, the visual arts were integrated more than any other, with eight teachers agreeing. This was followed by drama (four agreed), history, social justice and humanities, and poetry (all three agreed). Dance had the lowest integration (only one teacher agreed).

**District Teacher Education Opportunities Program Description**

**Montessori**

The South Carolina school district currently uses three separate training facilities to train Montessori teachers. Training is provided at the cost of the district after the teacher is hired to work within the district and a principal has chosen that person for their school. The three training sites include Seacoast Center for Education for the early childhood training, Gulf Coast Center for Montessori Education for lower elementary and upper elementary, and Houston Montessori Training Center for the adolescent portion. All three of these training facilities are Montessori Accreditation Council for Teacher Education (MACTE) accredited. The MACTE, founded in 1995, accredits certification programs that have prepared competent, caring, and qualified
professional Montessori educators and maintain the capacity to monitor and improve their program’s quality.

The program offered to the district early childhood teachers through Seacoast Center for Education is based on these core components: (a) educational philosophy, (b) child development, (c) the practical life, math, sensorial and language curriculums, and (d) classroom leadership and cultural studies. In the cultural studies curriculum, there is a submodule including music, art and movement for the early childhood classroom. All of these components are integrated but lengths of time and instruction by the teacher educator may vary. I did not locate specific requirements by MACTE regarding the components of teacher training needed to become accredited as an early childhood training site.

Gulf Coast Center for Montessori Education does not provide a detailed explanation of course components for teacher certification. However, I assumed through the website information, that the curriculum includes math, language, geography, science, and an overview of the history of art and music. The curriculum may include a small introduction to basic arts concepts to provide experience with art materials and create extensions for the Montessori materials. There is no evidence that Gulf Coast Center provides any arts education relates to arts integration knowledge; however, the center does maintain accreditation standards for highly effective Montessori teachers.

Houston Montessori Training Center is also MACTE accredited and provides supplemental training for the adolescent teachers. These teachers hold a middle-school-level teaching degree before they begin training in either math and science or English language arts and geography/history. The program course components for the Secondary I/II (ages 12 to 18 adolescent training) includes (a) Montessori philosophy, (b) adolescent psychology, (c)
classroom leadership, (d) curriculum design and implementation, (e) communication and partnerships with families, and (f) a year-long project. This Montessori training does not include any course in the arts or arts integration.

**Visual and Performing Arts**

The visual and performing arts department through this participating district provides training and professional development opportunities all year long for increasing effective teaching practices. The schedule of professional development is offered in an online format that applies credits toward the recertification process. It is necessary for teachers to become recertified every 5 years; to become recertified, teachers typically need approximately 100 credit points or graduate credits that equate. Most professional development offerings on the online platform provide a range of credits based on the length of the course. The online platform that has been used over the past 3 years has changed; thus, I did not have access to courses offered prior to 2020.

The professional development opportunities and trainings offered through the district in 2020 into 2021 are listed below:

- Artistically Gifted and Talented Process Training: 1 hour training, available all school year.
- The Arts of Education FLEX Curriculum Training for K–12 Visual Art Teachers: August 4, 2020, 10 a.m.–12 p.m.
- Visual and Performing Arts Department Orientation: 1 hour training, available all school year.
- Strings Teachers/Orchestra Directors Annual Professional Development: 1 hour training, available all school year.
• K–12 Dance Teachers Fall Annual Meetings: August 12, 2020, 10–11:30 a.m.

• K–12 Theatre Teachers Fall Annual Meeting: August 12, 2020, 11:30 a.m.–1:00 p.m.

• K–5 General Music Teacher/Piano Teachers Fall Annual Meeting: August 12, 2020, 1–2:30 p.m.

• K–5 Visual Art Teachers Fall Annual Meeting: August 12, 2020, 2:30–4 p.m.

• 612 Band/Steel Drum Teachers Fall Annual Meeting: August 13, 2020, 10–11:30 a.m.

• K–12 Strings Teachers Fall Annual Meeting: August 13, 2020, 11:30 a.m.–1 p.m.

• 6–12 Chorus Teachers Fall Annual Meeting: August 13, 2020, 1–2:30 p.m.

• 6–12 Visual Art Teachers Fall Annual Meeting: August 13, 2:30–4 p.m.


• Distinguished Arts Program Grant Writing Seminar: Once per month, October–April, 2 hours each.


• Arts Integration Professional Development: Art and Social Justice: November 7, 2020, 2 hours.

• Fine Arts Professional Development (Gibbes Museum): November 14, 2020, 2 hours.

• South Carolina Art Education Association Annual Conference: November 22, 2020.

• The Midwest Clinic: December 16–18, 2020.
• FLEX Curriculum Update Professional Development: January 5, 2021, 2 hours.
• Lowcountry Orff-Schulwerk Professional Development: January 23, 2021, 2 hours.

Thirteen of the courses listed above were specific to the field of dance, music, chorus, theater, or visual arts. Furthermore, only one arts integration course was offered in 2018, 2019, 2020, and thus far in 2021. The arts integration course in 2018 and 2019 was offered to all general education teachers by the Visual and Performing Arts department. This course provided 60 credit hours towards recertification and occurred over a span of 2 weeks in the summer.

The southeastern county where the study took place is a culturally rich area. For example, the local museum (The Gibbes), the performance venue (The Gaillard), and the Halsey Museum at the local university each have an excellent director of education who works to provide the community with arts integration workshops and professional development opportunities both in-person and online. During the COVID-19 pandemic, each of these venues ramped up their offerings and provided principals with virtual opportunities for teachers and students, complete with lesson plans. The pandemic also caused a disruption in many professional development courses and many courses were restructured to take place virtually. The arts-integration course that was offered in 2018 was supposed to be offered in 2020 but was canceled due to the nature of the course conflicting with the COVID-19 ramifications. The course was designed for collaboration, movement, and hands-on arts activities for the teachers to get a full experience of what they could provide in their classrooms to students. When the government buildings were shut down and no one could meet in person, the class was not rescheduled. The course has since
been reconfigured and will hopefully be offered as a virtual version or in-person again in the future.

Each of the teacher trainings, virtual lessons, or workshops have been evaluated by the provider through satisfaction surveys. The directors of education at The Gibbes, The Gaillard and The Halsey all inquire through e-mail and surveys to ask what educators would like to see for programming and if educators would attend professional development and any other offerings. The district administration also sends out follow-up surveys to better develop the programs. The follow-up surveys provide teachers an opportunity to offer ideas for future professional development opportunities. As an art educator and a Montessorian, it is my hope that more arts-integration programs will become available to all general education teachers, whether they are traditional or Montessori. The current collaboration between the cultural arts centers in the city and the school district offer great promise for increasing arts accessibility for all children in the future.
CHAPTER 5

CONCLUSION

The purpose of this mixed methods exploratory case study was to identify public Montessori teachers’ perceptions of how their professional knowledge, experiences, and resources affect their ability to integrate art into their general classroom curriculum. This chapter includes major findings on the benefits of arts integration in public elementary schools and the barriers teachers report that prevent them from feeling confident implementing art lessons in their classrooms. This discussion includes teacher motivations, connections to the Montessori philosophy of teaching, and benefits teachers experience due to increased time for professional development and access to resources for Montessori teachers. The chapter concludes with recommendations of further study and a brief summary.

Data collected through survey responses from Montessori teachers and teacher education program descriptions established teachers’ ability level, learning, and instructional processes of arts integration within Montessori classrooms. The significant themes that developed from the research study include barriers to consistent arts integration in Montessori classrooms and the professed benefits of implementing equal access to the arts through curriculum integration.

Research Findings

Due to standardized curriculum expectations that emphasize testing, literacy, and numeracy in public schools, many teachers lack time and resources to implement complementary arts curricula. To increase exposure to the arts equally for all students, teachers require proper resources and training to successfully implement an arts integration program. Robinson (2019) stated that the incorporation of an arts-integration method facilitates positive changes in school organizations, teacher planning, and differentiated instruction that instigates collaborative,
inclusive, and engaging student-centered environments. Students engaged with artistic learning methods begin to love learning and are consistently more physically and mentally present in school. Similarly, Rabalais (2015) found that the interconnection of the arts to everyday curriculum improves academic quality and enables equity in education.

Just after the first Montessori school opened in 1907, a progressive education movement emerged with emphasis on student creativity (Sawyer, 2015). Maria Montessori, John Dewey, and other scholars and psychologists argued that creativity has a permanent place in education and adulthood of individuals in society. Montessori classrooms integrate the arts to support other academic learning processes; the arts are at the core of the ancient human need for communication. Music, visual arts, dance, and theater were well-documented communication sources through history. The design of Montessori learning environments supports children’s abilities to engage in conceptual learning through repeated opportunities to internalize and express knowledge, comprehension, and meaningful interpretation (Montessori daoshi, n.d.).

Montessori teachers should find opportunities to integrate the arts using materials such as the geometry cabinet, geometric solids or metal insets for form and design drawing, or art history lessons. Other examples of arts integration in a Montessori classroom include (a) children learning a dance related to their cultural studies; (b) reciting literature, plays, and poetry through theatre; and (c) improvisational activities that increase literacy skills. Teachers can also incorporate music into everyday activities via composer studies, genre exploration, and beat, pattern, and rhythm practice to increase cognitive brain function and concentration ability. There are many different ways an integrated arts curriculum can align with the Montessori work cycle if teachers have a basic understanding of the importance of visual art, dance, and theater. Montessori schools prepare the whole child and inspire creative independent thinkers. For
instance, the President’s Committee on the Arts and the Humanities (PCAH; 2011) conducted a literature review that revealed arts education strategies and arts integration methods engaged students in the learning process by inspiring skills such as critical thinking, collaboration, creativity, and communication.

Results of the present study revealed the barriers to consistent implementation of arts-integrated methods of teaching in a public Montessori classroom. The study’s findings validated the claim that Montessori teachers perceive that students who exhibit excessive energy may benefit from increased movement, collaboration, and arts accessibility. Oreck (2004) found that teachers generally believe that arts experiences are valuable for students regardless of their own personal knowledge or experiences in the arts. Resources (e.g., classroom physical space, time, and art education preservice teacher training) are common barriers to arts integration in Montessori classrooms. Data from Montessori teachers in the current study revealed that 76.9% did not feel confident independently extending core curriculum via arts integration techniques. Teachers who receive professional development, institutional support, and classroom resources would be better equipped to integrate the arts, which would also increase their enjoyment of teaching (Oreck, 2004).

Data from surveys and program description documents for professional development programs revealed that 76.9% of participants were traditional general education teachers prior to receiving Montessori training. Of these teachers, 69.2% had master’s degrees and 53.8% had between 10 and 15 years of teaching experience. I only included the higher percentages on the agreement scale to simplify the findings.

The Montessori teachers who participated in the current study reported that professional development, dance, music, and drama educational opportunities were unavailable during their
Montessori training or preservice general education teacher training. The decoding process of data analysis eliminated the perception that administrators were barriers to effective arts integrated teaching practices because most teachers indicated they were either neutral, disagreed, or agreed with the statement. Most Montessori teachers dictate how they manage their classroom curriculum if they have the knowledge, abilities, and resources to be successful. Moreover, many teachers plan curriculum, and administrators only interfere if there is a reason to do so.

Survey results indicated that teachers’ perceptions of their ability to integrate the arts into the Montessori curriculum varied on the agreement scale. Of the teachers, 53.8% disagreed with the statement that they consistently integrate the arts into their curriculum. Subthemes within the data revealed that 84.6% of teachers struggled to integrate art with math. When asked if they felt they had the ability to consistently include dance or movement into their Montessori curriculum, 84.6% of teachers disagreed.

The agreement scale outliers are as follows: (a) 61.6% of teachers did not feel they could integrate music or music theory and (b) 61.5% agreed that they infuse some visual arts into their core curriculum. Every part of the curriculum can have a visual aspect to it (i.e., students can use images for curriculum enhancement; Donovan & Pascale, 2012). Of the teachers, 47.2% disagreed that they integrate the arts into topics such as history, science, and social justice; therefore, more than half of the participants felt capable of integrating visual art with these subjects. The data collected aligns with the work of Braund (2015), who stated teachers often effectively explore history, science, and social justice curricula while integrating visual arts and dance and movement.
Recommendations for Action

The research findings demonstrated contribute new understandings of specific barriers to arts integration in public Montessori programs. Findings from the data collected demonstrate that 12 of the 13 teachers agreed that available time was a barrier to creating an arts-integrated curriculum. Eleven of the 13 teachers agreed that preservice teacher training and professional development were a barrier to arts integration implementation. In addition, nine teachers felt they did not have enough resources to effectively integrate the arts. Administrative support is consistent or not a barrier. Thus, I recommend that administrators evaluate the resources that are available to teachers at each of the Montessori schools. Specifically, administrators must determine whether resources meet teachers’ needs. Does each teacher have access to a consistent collection of art materials that are appropriate for Montessori classroom implementation? Do each of the Montessori schools have a full-time art and music teacher and do they have time to collaborate with other teachers? In schools with full-time art and music teachers, do they share resources with general education teachers? Following a materials and resource evaluation for each school, I recommend providing equal access to all arts materials for all teachers and ensuring proper use of the materials through training and professional development.

All schools do not have the same priorities regarding materials and resources for teachers. Participants in professional development programs learn about new resources and materials and how to use them. Professional development for Montessori teachers should include working with specialists in music, dance and movement, drama, and improvisation. Specifically, art and music teachers can provide fun and collaborative ways to engage other teachers with arts integration techniques. Recommendations for creating this type of professional development program are based on the perceptions of the teachers surveyed. The teachers’ perceptions of knowledge
provided through teacher-education programs demarcated an overall disagreement of being provided any arts training. Dance, visual arts, drama, and music are all included in the category of the arts; thus, teacher training should include all these aspects to be fully integrated. This type of training could take place during a multiday teacher retreat or as continuing education via digital content. A creativity workshop designed as a retreat for teachers could engage, inspire, and excite teachers to tap into their creative sides. Furthermore, teacher participation in professional development directly affects successful implementation of new learning techniques; the more teachers become involved in the professional development experience, the higher the occurrence of transfer to classroom practice (Joyce & Showers, 1995).

Teachers thrive when they feel supported and have the necessary tools to implement innovative teaching ideas. Delivering a retreat experience that supports academic, social, and emotional growth may increase teachers’ confidence in teaching what they are learning. Sharing such an experience with fellow teachers may help create a sense of community and acceptance. Connelly et al. (2016) posited that teachers who get enthusiastic about encouraging other teachers are more likely to participate in creative professional development activities that may lead to whole school reform. The excitement that a teacher feels is evident in their instructional practices, and student engagement improves when teachers share new learning activities. Over time, arts integration techniques evolve. There may be a natural, innate creativity in the classroom that inspires teachers to keep generating new lessons based on concepts they learn during a retreat.

Art and music teachers could collaborate to design a retreat and recruit other local arts professionals be a part of the process. Museum educators, dance professionals, visual artists, scientists, astronomers, and farmers could participate. The retreat would require creation of a
schedule to address themes and standards aligned with grade levels during planning. The event could be a conference for each school or all schools combined, depending in the available space.

Evaluation of necessary materials and resources in the present study may inform planning of the retreat. After learning new techniques, teachers would not be able to implement arts-integrated activities in their classrooms without the necessary resources (e.g., basic art materials, technological tools, online resources, musical instruments, props, and scripts for dramatic interpretations of standard based curriculum). Funding for materials and resources may require assurances that teachers will actively participate in training to use them. In my experience as a teacher educator, most teachers repeat new classroom activities that they physically completed and clearly understood. The nature of the retreat could inspire teachers to learn more from their colleagues and local artists. If teachers love what they learned and experienced, they will inspire students to continue a love learning.

Digital content files provide consistent access to continuing education. Recordings of each workshop at the retreat could be available to teachers who want to earn professional development credits when time allows. Organization of such online courses for all Montessori and general education teachers could be by subject area (e.g., a class to introduce methods to teach geometry concepts to elementary school students through visual arts and movement or teaching literary structures through drama and improvisation). Teachers can integrate arts into each component of the curriculum in accordance with state standards. Providing online digital content that adapts and grows with technology will provide help teachers find time to become more proficient with arts-integration techniques.
Recommendations for Further Study

Future studies should engage teachers who participate in professional development retreats to (a) determine whether teachers implement the activities and lessons they learned into their classrooms and (b) follow teachers’ progress as students complete new activities. Much like an action research project, teachers could initiate lessons based on predetermined criteria and standard-based curriculum and collect pre and posttest data regarding arts integration. This action research study could potentially address questions such as: Did arts integrated activities increase students’ conceptual knowledge? Did students exhibit joy and a love of learning while creating art? Did any students become inspired to recreate the same activities with other curriculum components? Did integrating the arts into teaching practices improve equal access to the arts for all children?

Arts teachers could provide consistent support to general education teachers participating in the action research at their own schools. Schools could designate a time for collaborative team meetings to generate new ideas and provide feedback regarding the implementation of arts integration in classrooms. Arts teachers could also observe and reflect on general education classroom activities and environments prior to the collaborative team meeting. The present recommendation for action and further research is one way to minimize perceived barriers to consistent, confident arts integration in Montessori classrooms. This and future research may demonstrate the benefits of arts integration.

Conclusion

The results of this study revealed themes related to barriers and benefits to arts integration in a Montessori classroom. The data addressed the research question:
RQ1. To what extent do pre-K through eighth grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?

Teachers increase their knowledge through experience and training. Teachers who participated in the present study did not receive adequate instruction to confidently integrate the arts (i.e., drama, visual arts, dance, or music) into their lessons. Specifically, teacher training programs did not provide adequate professional development to teachers.

Teacher education programs differ in ways that are sometimes unknown. The current study did not include collection of data regarding which training centers participants attended; however, all district-supported training centers have an accelerated program timeline for fast certification of teachers in public schools. These programs provide a brief overview of the arts for basic knowledge. Each teacher participant had state certification, which requires a minimum of a bachelor’s degree. However, the current study did not include collection of data regarding the focus on teachers’ undergraduate education. Of the 76.9% of participants who stated they have a general education degree, it is unknown what college or university they attended or whether they had any training in the arts. The data suggest teachers did not have adequate training in the arts prior to teaching.

Data demonstrated that participants have access to resources and materials for visual arts implementation in the classroom but fail to consistently use them. Resources include physical space, which may be limited and should be the subject of evaluation for future planning of arts activities. Arts integration is beneficial because it increases equal access to the arts for all students through collaboration and movement, which may be ideal for more energetic students. The teachers who participated in the current study unanimously agreed that they believe students
would benefit from increased access to the arts and that energetic students would benefit from arts activities. However, participants reported that they lack the time, knowledge, and confidence to incorporate the arts into their lessons. Following a resource evaluation, I suggest creating supportive and inspiring professional development programs both in-person and online to increase knowledge of teachers hoping to effectively integrate their curriculum and the arts.
REFERENCES


Barber, S. (2015, November 25). Arts integration or arts and crafts? Arts integration is a gateway for engagement, motivation, and creativity as students use critical thinking skills to learn content through relevant and individualized projects. Edutopia. https://www.edutopia.org/blog/arts-integration-or-arts-and-crafts-susan-barber


Donovan, L., & Pascale, L. (2012). *Integrating the arts across content areas*. Shell Education.


Evans, K. (2008, December 1). *Arts and Smarts: At a time when educators are preoccupied with standards, testing, and the bottom line, some researchers suggest the arts can boost students’ test scores; others aren’t convinced. Karin Evans asks, what are the arts good for?* Greater Good Magazine. https://greatergood.berkeley.edu/article/item/arts_smarts


https://www.wolftrap.org/education/institute_for_early_learning_through_the_arts/~/media/8db86a897dbb4d228943e0e3cea04aeb.ashx


http://www.artsintegrationpd.org/reflection/

Hopper, E. (2020). Maslow’s Hierarchy of needs explained. Retrieved from


Lee, L. (2019, November 8). *Transforming a school through arts integration: Structuring a school around the arts can help students excel academically and develop social and emotional skills*. Edutopia. https://www.edutopia.org/article/transforming-school-through-arts-integration


Lowenfeld, V. (1947). *Creative and mental growth*. Macmillian


Martinez-Wenzl, M., Perez, K., & Gandara, P. (2011). *Is Arizona’s Approach to educating its English learners superior to other forms of instruction?* The Civil Rights Project/Proyecto Derechos Civiles. https://escholarship.org/uc/item/7d36h5m8


https://doi.org/10.5430/ijhe.v5n4p52


https://doi.org/10.1080/10632913.2013.826050


https://www.bestmastersineducation.com/12-quotes-by-sir-ken-robinson-on-creativity/


https://doi.org/10.1037/a0024460


APPENDIX A: CALL FOR PARTICIPANTS

Dear Montessori Administrators,

Thank you for inspiring your communities to generate caring, intriguing and child-centered learning environments. In addition to my responsibilities as the Art Director at Murray LaSaine Montessori and a teacher educator with Seacoast Center for Education, I am a doctoral student in the University of New England’s Educational Leadership program. I am conducting a research program titled: *The Benefits and Barriers to Arts Integration: Arts Accessibility in Public Montessori*. In an effort to assist teachers with variation of curriculum extensions, and to compliment the current Montessori curriculum with distinctive artistic methods, I would like to invite all Montessori certified teachers to participate in this study.

The survey data should define perceptions of arts integration in a Montessori classroom. The findings of the data collected in combination with current available research on arts integration techniques and methods will enable more thorough options for teachers to be able to integrate the arts throughout the curriculum.

Thank you in advance for forwarding this email with the attached letter to participants and survey link to teachers to encourage participation in this initial survey. The survey and instructions for interview scheduling are attached in a letter addressed to Teacher Participants. There will be a two week time frame to complete the survey or interview. I will follow up with you in an email on day 7 and day 12 as a reminder for the participants.

Sincerely,

Heather Teems, M.Ed.

Montessori Art Director
*Teachers who are willing to participate, please email contact information to:

hteems@une.edu
Dear Montessori Teachers,

Thank you for inspiring your students and community through your leadership. My name is Heather Teems and I am the Art Director at Murray LaSaine Montessori and a teacher educator with Seacoast Center for Education. Currently enrolled in the University of New England’s Educational Leadership program, I am conducting a research program titled: *The Benefits and Barriers to Arts Integration: Arts Accessibility in Public Montessori.* In an effort to assist teachers with variation of curriculum extensions, and complement the current Montessori curriculum with distinctive artistic methods.

The following survey is designed to demonstrate through the data collection, the perceptions, knowledge, and resources available for Montessori teachers to create arts integrated lessons for their students. This data will enable creative solutions for confident arts integration implementation by the teachers and teaching assistants in the Montessori classroom in the future. Following the survey there will be an option for a follow-up interview that will procure further details.

If you have any questions do not hesitate to contact me.

Sincerely,

Heather Teems M.Ed.
Montessori Art Director
hteems@une.edu

*Link to survey: REDCap*
APPENDIX C: CONSENT FOR PARTICIPATION

Version 8.22.18

UNIVERSITY OF NEW ENGLAND

CONSENT FOR PARTICIPATION IN RESEARCH

Project Title: THE BENEFITS AND BARRIERS TO ARTS INTEGRATION: ARTS ACCESSIBILITY IN PUBLIC MONTESSORI

Principal Investigator(s): Heather Teem M.Ed.: Doctoral Candidate at the University of New England

Introduction: Thank you for considering participation in this study. This study will examine the research question: To what extent do pre-K through 8th grade public Montessori school teachers perceive that their professional knowledge and abilities, experiences and resources impact their capacity to integrate arts into their general classroom curriculum? Qualitative data will be collected based on surveys and interviews from Montessori teachers, to establish the personal position in the ability level, learning and instructional processes with reference to the use of arts integration within their Montessori classrooms.

The Charleston County School District is neither conducting, nor sponsoring this research.

- Please read this form. You may also request that the form is read to you. The purpose of this form is to give you information about this research study, and if you choose to participate, document that choice.

- You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this research study being done?
This research study is being designed to delineate teachers’ perceptions of their own resource availability, knowledge and ability level to implement arts integrated curriculum in their classrooms.

Who will be in this study?

- Participants in this study will be certified Charleston County School District Montessori teachers.

What will I be asked to do?

- Participants will be asked to answer survey questions pertaining to teacher perceptions surrounding abilities, resources and knowledge of arts integration implementation in public Montessori schools.

What are the possible risks of taking part in this study?

- There are limited foreseeable risks or hazards for participation in this study. Yet, subjects may internalize some questions. This could cause mild or moderate emotional distress if they evoke thoughts or feelings from a stressful event or situation.

What are the possible benefits of taking part in this study?

- There will be no direct benefits for subjects to participate in this study. Yet, this study may benefit CCSD students, teachers and administration by demonstrating areas for professional development or support in order to increase arts accessibility to all students through arts integration methods and techniques. Future research may enable an increase in resources, and professional development opportunities for the implementation of effective arts integration in Montessori public programs.
What will it cost me?

- The participation in this study is at no cost to you.

How will my privacy be protected?

- No identifying information will be published. Participant names will be encrypted with values and school names will be replaced with pseudonyms. All information will be stored on a private, password encrypted computer.

- How will my data be kept confidential? Any identifying information will be encrypted with values and pseudonyms. All information will be stored on a private, password encrypted computer.

- All study documentation will be stored for 1 year after the completion of the study. After 1 year, hard copy documents will be cross-shredded. Electronic documents and audio digital recordings will be permanently deleted. This process of storing and destroying data is communicated to participants through the consent form.

What are my rights as a research participant?

- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University.

- Your decision to participate will not affect your relationship with .

- You may skip or refuse to answer any question for any reason.

- If you choose not to participate there is no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.
• You are free to withdraw from this research study at any time, for any reason.
• If you choose to withdraw from the research there will be no penalty to you and you will not lose any benefits that you are otherwise entitled to receive.
• You will be informed of any significant findings developed during the course of the research that may affect your willingness to participate in the research.
• If you sustain an injury while participating in this study, your participation may be ended.

What other options do I have?

• You may choose not to participate.
• Following the survey you may agree to participate in an optional follow up interview.
  The follow up interview will procure details for arts integration resources, and professional development opportunities. Details will be provided at the end of the survey to participate.

Whom may I contact with questions?

• The researcher conducting this study is Heather Teems, M.Ed.
• For more information regarding this study, please contact: Heather Teems, hteems@une.edu.
• If you choose to participate in this research study and believe you may have suffered a research related injury, please contact: Dr. Heather Wilmot, hwilmot@une.edu.
• If you have any questions or concerns about your rights as a research subject, you may call Mary Bachman DeSilva, Sc.D., Chair of the UNE Institutional Review Board at (207) 221-4567 or irb@une.edu.
Will I receive a copy of this consent form?

- You will be given a copy of this consent form.

Participant’s Statement

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant’s signature or legally authorized representative Date

Printed name

Researcher’s Statement

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher’s signature Date

Printed name
APPENDIX D: E-MAIL TO SCHEDULE INTERVIEW

Dear Montessori research participants,

Thank you for your willingness to participate in this study to address the question “To what extent do pre-K through eighth-grade public Montessori teachers perceive that their professional knowledge and abilities, experiences, and resources impact their capacity to integrate arts into their general classroom curriculum?”

In order to create best practices, enable effective resources, and implement consistent professional development opportunities for teachers a follow up interview is available.

Please send an email hteems@une.edu to schedule your phone or ZOOM call interview within one week of completion of the survey. Attached is an example of the questions you will be asked. Following the interview, a transcription placed in a word document will be provided for your electronic acquiescence.

Thank you,

Heather Teems
hteeems@une.edu
APPENDIX E: DATA

All data (all records and fields)
CONFIDENTIALITY. This confidential online survey is being conducted through the website REDCap, an independent internet service company. You may find out more about this website, if you wish, at https://redcap.une.edu/redcap/ No identifying information about you is being collected. In order to protect the anonymity of your responses, no IP addresses, email addressed, or identifying information will be collected. REDCap uses industry-standard security methods to protect data transmission and storage. Survey data will be stored only on a password-protected computer. All individual answers will be presented in a summary form in any papers, books, talks, posts or stories resulting from this study. The data set may be shared with other researchers, but your identity will not be known. Checking "YES" means that you understand the information, that any questions that you may have about this study have been answered, and that you are eligible and voluntarily agree to participate. FURTHER INFORMATION. If you have any questions, or would like additional information about this study, please contact hteems@une.edu (consent)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>1</td>
</tr>
</tbody>
</table>

Counts/frequency: Yes (13, 100.0%), No (0, 0.0%)

What Montessori grade levels do you currently teach? (levels)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Early Childhood, ages 3-6 (4, 30.8%), Lower Elementary, ages 6-9 (3, 23.1%), Upper Elementary, ages 9-12 (4, 30.8%), Adolescent, ages 12-15 (2, 15.4%)

What area is your initial teaching certification in? (certification)
Counts/frequency: General Education (10, 76.9%), Montessori (2, 15.4%), Other (1, 7.7%)

What is your highest level of education? (education)

Counts/frequency: Bachelors (4, 30.8%), Masters (9, 69.2%), Advanced Degree (0, 0.0%), Doctorate (0, 0.0%)

What number of years have you been teaching? (experience)

Counts/frequency: 5-10 years (4, 30.8%), 10-15 years (7, 53.8%), 25 or more years (2, 15.4%)
I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students. *(teacher_education)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (7, 53.8%), Neutral (5, 38.5%), Agree (1, 7.7%), Strongly Agree (0, 0.0%)

I have received training or professional development related to visual arts. *(pd_visual_arts)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (8, 61.5%), Neutral (1, 7.7%), Agree (4, 30.8%), Strongly Agree (0, 0.0%)

I have received training or professional development related to dance. *(pd_dance)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>
I have received training or professional development related to music.  (*pd_music*)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (7, 53.8%), Disagree (4, 30.8%), Neutral (0, 0.0%), Agree (1, 7.7%), Strongly Agree (1, 7.7%)

I have received training or professional development related to drama/theater.  (*pd_drama_theater*)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>5</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (2, 15.4%), Disagree (5, 38.5%), Neutral (2, 15.4%), Agree (4, 30.8%), Strongly Agree (0, 0.0%)

I have sufficient art materials to allow my students to create such as, paint, scissors, glue, colored pencils, markers, large paper.  (*classroom_materials*)
I have adequate resources and materials to effectively integrate visual arts into the classroom. *(materials_visual_art)*

Counts/frequency: Strongly Disagree (3, 23.1%), Disagree (2, 15.4%), Neutral (1, 7.7%), Agree (4, 30.8%), Strongly Agree (3, 23.1%)

I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom. *(materials_drama)*

Counts/frequency: Strongly Disagree (2, 15.4%), Disagree (2, 15.4%), Neutral (5, 38.5%), Agree (4, 30.8%), Strongly Agree (0, 0.0%)
Counts/frequency: Strongly Disagree (6, 46.2%), Disagree (3, 23.1%), Neutral (1, 7.7%), Agree (3, 23.1%), Strongly Agree (0, 0.0%)

My students would benefit from an increase in exposure to the arts. *(student_benefits)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>2</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (0, 0.0%), Neutral (0, 0.0%), Agree (4, 30.8%), Strongly Agree (9, 69.2%)

My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music. *(student_energy)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (0, 0.0%), Neutral (1, 7.7%), Agree (8, 61.5%), Strongly Agree (4, 30.8%)
Available time is a barrier to creating an integrated arts program. *(barriers_time)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (0, 0.0%), Neutral (1, 7.7%), Agree (6, 46.2%), Strongly Agree (6, 46.2%)

Resources are a barrier to creating an integrated arts program. *(barriers_resources)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (1, 7.7%), Neutral (3, 23.1%), Agree (4, 30.8%), Strongly Agree (5, 38.5%)

Sufficient arts education pre-service teacher training is a barrier to creating an integrated arts program. *(barriers_teacher_training)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>
Administrative support is a barrier to creating an integrated arts program. (barriers_administration)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Classroom physical space is a barrier to creating an integrated arts program. (barriers_physical_space)

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (0, 0.0%), Neutral (2, 15.4%), Agree (10, 76.9%), Strongly Agree (1, 7.7%)

Counts/frequency: Strongly Disagree (2, 15.4%), Disagree (3, 23.1%), Neutral (5, 38.5%), Agree (2, 15.4%), Strongly Agree (1, 7.7%)

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (1, 7.7%), Neutral (1, 7.7%), Agree (7, 53.8%), Strongly Agree (4, 30.8%)
I consistently integrate arts into the English Language Arts curriculum. *(la_integration)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>3</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (7, 53.8%), Neutral (4, 30.8%), Agree (2, 15.4%), Strongly Agree (0, 0.0%)

I consistently integrate arts into the Mathematics curriculum. *(math_integration)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>2</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (11, 84.6%), Neutral (2, 15.4%), Agree (0, 0.0%), Strongly Agree (0, 0.0%)

I consistently integrate arts into the History curriculum. *(history_integration)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>5</td>
</tr>
</tbody>
</table>
Counts/frequency: Strongly Disagree (1, 7.7%), Disagree (5, 38.5%), Neutral (2, 15.4%), Agree (4, 30.8%), Strongly Agree (1, 7.7%)

**I consistently integrate arts into the Social Justice/Humanities curriculum.** *(social_injustice)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (6, 46.2%), Neutral (4, 30.8%), Agree (2, 15.4%), Strongly Agree (1, 7.7%)

**I consistently integrate arts into the Science curriculum.** *(science_integration)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1 (7.7%)</td>
<td>5</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (1, 8.3%), Disagree (4, 33.3%), Neutral (3, 25.0%), Agree (3, 25.0%), Strongly Agree (1, 8.3%)
I have incorporated Music and Music theory into my curriculum. *(music_experience)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (2, 15.4%), Disagree (6, 46.2%), Neutral (2, 15.4%), Agree (3, 23.1%), Strongly Agree (0, 0.0%)

I have incorporated Interpretive Dance/Movement into my curriculum. *(dance_experience)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (3, 23.1%), Disagree (8, 61.5%), Neutral (1, 7.7%), Agree (1, 7.7%), Strongly Agree (0, 0.0%)

I have incorporated Interpretive Poetry into my curriculum. *(poetry_experience)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>
Counts/frequency: Strongly Disagree (0, 0.0%), Disagree (6, 46.2%), Neutral (3, 23.1%), Agree (3, 23.1%), Strongly Agree (1, 7.7%)

**I have incorporated Visual Arts into my curriculum.** *(visual_arts_experience)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (1, 7.7%), Disagree (6, 46.2%), Neutral (2, 15.4%), Agree (4, 30.8%), Strongly Agree (0, 0.0%)

**I have incorporated Drama / Improvisation into my curriculum.** *(drama_experience)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>
I feel confident with my abilities to create and implement arts-integrated curriculum into my classroom. *(confidence)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>4</td>
</tr>
</tbody>
</table>

Counts/frequency: Strongly Disagree (1, 7.7%), Disagree (9, 69.2%), Neutral (1, 7.7%), Agree (2, 15.4%), Strongly Agree (0, 0.0%)

If you would like to participate in a more in-depth follow up interview to further explore receiving assistance and resources for arts integration in your classroom, please indicate below by typing your email address.

_______________________________________________ You will be contacted to schedule an interview via ZOOM within a week of receiving this consent.

Thank you. *(follow_up_contact)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>10 (76.9%)</td>
</tr>
</tbody>
</table>

Complete? *(arts_in_montessori_survey_complete)*

<table>
<thead>
<tr>
<th>Total Count (N)</th>
<th>Missing*</th>
<th>Unique</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0 (0.0%)</td>
<td>1</td>
</tr>
</tbody>
</table>

Counts/frequency: Incomplete (0, 0.0%), Unverified (0, 0.0%), Complete (13, 100.0%)
* Note: Values listed as 'Missing' may include records with a Missing Data Code (if Missing Data Codes are defined).
APPENDIX F: EXPLORATORY CASE STUDY SURVEY QUESTIONS

CONSENT. Checking “YES” means that you understand the information, that any questions that you may have about this study have been answered, and that you are eligible and voluntarily agree to participate.

Yes/No

CONFIDENTIALITY. This confidential online survey is being conducted through the website REDCap, an independent internet service company. You may find out more about this website, if you wish, at https://redcap.une.edu/redcap/ No identifying information about you is being collected. In order to protect the anonymity of your responses, no IP addresses, email addressed, or identifying information will be collected. REDCap uses industry-standard security methods to protect data transmission and storage. Survey data will be stored only on a password-protected computer. All individual answers will be presented in a summary form in any papers, books, talks, posts or stories resulting from this study. The data set may be shared with other researchers, but your identity will not be known.

FURTHER INFORMATION. If you have any questions, or would like additional information about this study, please contact Hteems@une.edu

Survey Questions:

Demographics

1. What Montessori grade levels do you lead?

2. Is your initial certification in Montessori or General Elementary Education?
   Circle 1- General Education
   Montessori

3. What is your highest level of education? Bachelors, or graduate level?
Knowledge

1. I feel my teacher education program provided me with adequate knowledge of the arts to be able to provide an arts integrated curriculum to my students?

   Strongly
   Disagree  Disagree  Neutral  Agree  Strongly Agree

2. I have received training or professional development related to visual arts.

   Strongly
   Disagree  Disagree  Neutral  Agree  Strongly Agree

3. I have received training or professional development related to dance.

   Strongly
   Disagree  Disagree  Neutral  Agree  Strongly Agree

4. I have received training or professional development related to music.

   Strongly
   Disagree  Disagree  Neutral  Agree  Strongly Agree

5. I have received training or professional development related to drama/theater.

   Strongly
   Disagree  Disagree  Neutral  Agree  Strongly Agree
Resources

1. I have sufficient art materials to allow my students to create such as, paint, scissors, glue, colored pencils, markers, large paper?

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. I have adequate resources and materials to effectively integrate visual arts into the classroom.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. I have adequate space to facilitate movement and theatrical interpretations or improvisation into my classroom.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. My students would benefit from an increase in exposure to the arts?

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. My students demonstrate an excessive amount of energy that may benefit from movement, collaboration, and music.
6. Available time is a barrier to creating an integrated arts program.

7. Resources are a barrier to creating an integrated arts program.

8. Sufficient arts education pre-service teacher training is a barrier to creating an integrated arts program.

9. Administrative support is a barrier to creating an integrated arts program.

10. Classroom physical space is a barrier to creating an integrated arts program.
Abilities

1. I consistently integrate arts into the English Language Arts curriculum.

2. I consistently integrate arts into the Mathematics curriculum.

3. I consistently integrate arts into the Science curriculum.

4. I consistently integrate arts into the History curriculum.

5. I consistently integrate arts into the Social Justice/Humanities curriculum.
6. I have incorporated Music and Music theory into my curriculum.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. I have incorporated Interpretive Dance/Movement into my curriculum.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. I have incorporated Interpretive Poetry into my curriculum.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. I have incorporated Interpretive Visual Arts into my curriculum.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. I have incorporated Interpretive Drama / Improvisation into my curriculum.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

11. I feel confident with my abilities to create and implement arts-integrated curriculum into my classroom?

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
APPENDIX G: FOLLOW-UP INTERVIEW QUESTIONS

Researcher- Thank you for participating in the survey and agreeing to have a post-survey interview. You may stop this interview at any time. The interview will be recorded and saved onto a password protected personal computer. The recording will be transcribed and emailed to you within 1 week for review and approval. Any survey data, transcriptions and recordings will be stored for 1 year on a private password protected computer and subsequently destroyed.

1. Where do you teach currently?

2. What grade levels do you serve currently?

3. Prior to teaching have you had any experience with the arts for example, did you take any dance, music, art or drama classes during your childhood years? Did the community and schools you lived in throughout your life prioritize the arts? Did your family have any artistic abilities? Describe your fondest memory of the arts as a child.

4. Do you have a designated art area in your classroom or the space to provide an art area? If you have an art area, what materials do you have and is this space adequate for students to independently collect their materials? Do you students use this area? Why or why not?

5. Do you have a designated science area in your classroom with materials that are provided to the students to inspire inquisitive creativity and experimentation? Do the students use this area, why or why not?

6. Tell me about any artistic abilities you have to incorporate into your lessons, for example any visual art skills, musical abilities, dance experience, theater
techniques knowledge? Were these acquired through training and coursework or simply over time and interest?

7. What resources, training, assistance would you need to start implementing more arts-infused activities into your classroom?

8. Have you experienced a time during your teaching career where you have witnessed arts-infused methods of teaching proliferating conceptual knowledge? What was the concept being taught and how was art integrated into the lesson?

9. What area of your curriculum would you feel could use some arts integration extensions to help conceptual knowledge? Is this an area of the curriculum that the children on average struggle to understand or remember?

10. Would you be interested in a professional development opportunity which would provide consistent support for integrating music, visual art, drama and improvisation and movement into your classroom? Which of these do you feel you would feel the most comfortable teaching independently?

11. Would you be interested in a professional to come into your classroom as a guest visiting artist to facilitate an integrated arts lesson? Which of the arts do you feel you would need an outside artist professional to assist you in your classroom, drama, dance, visual art, or music?
APPENDIX H: FOLLOW UP THANK YOU TO TEACHERS

Dear Montessori teacher participants,

Thank you for joining the research about arts integration and the Montessori classroom. I’m so excited to use your survey answers to build my research. In order to create best practices, enable effective resources, and implement consistent professional development opportunities for teachers a follow up interview is available. If you are interested in a virtual interview via ZOOM, please send an email hteems@une.edu to schedule the interview within 1 week of completion of the survey. Attached is an example of the questions you will be asked. Following the interview, a transcription placed in a word document will be provided for your electronic acquiescence. All survey data, recordings and transcriptions will be stored for 1 year in a private password protected computer, subsequently destroyed.

Sincerely,

Heather Teems
APPENDIX I: FOLLOW UP THANK YOU TO PRINCIPAL

Dear Principal,

Thank you for your willingness to allow your staff to participate in my study on the teacher's perceptions of personal knowledge, abilities and resources for successfully integrating the arts into the Montessori work cycle.

Qualitative and quantitative results were very helpful to enable collaboration to implement an increase in useful professional development opportunities.

If you have any questions or concerns, please contact me. Again, thank you for your time and effort that made this research study possible.

Sincerely,

Heather Teems M.Ed
Doctoral candidate
School of Education
University of New England