The Effects of Arts Integration on Literacy Comprehension Achievement

Sara D. Tucker
University of South Carolina

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THE EFFECTS OF ARTS INTEGRATION ON LITERACY COMPREHENSION ACHIEVEMENT

by

Sara D. Tucker

Bachelor of Science
Charleston Southern University, 2005

Master of Education
Columbia College, 2007

Master of Education
Winthrop University, 2011

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Accepted by:
Kenneth Vogler, Major Professor
Susan Schramm-Pate, Committee Member
Richard Lussier, Committee Member
Vic Oglan, Committee Member
Cheryl L. Addy, Vice Provost and Dean of the Graduate School
Abstract

This study focused on the effects of arts-based instruction on student literacy achievement. The study sought to identify how incorporating arts into the reading classroom through arts-based interventions affected the literacy achievement of fifth-grade students who attended a school for science, technology, engineering, art, and mathematics (STEAM) located in South Carolina. One group of fifth-grade student-participants, consisting of 10 students, received arts-based interventions, focusing on literacy skills. Students met with the researcher three times a week to receive arts-based literacy interventions. Data collection included a pre assessment and post assessment of literacy skills, along with surveys of student-participants’ attitudes about the reading and literacy curriculum. Findings included an overall increase in assessment scores among 80% of the student participants who received arts-based interventions. From the study’s findings, the participant-researcher, along with the administration and teaching team, designed an action plan and shared reflections regarding arts-based curricular integration. The action plan focused on implementing arts based literacy interventions to all 5th grade students with the goal of increase student’s literacy achievement.
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Chapter 1: Introduction to Arts Integration Action Study

Introduction

Chapter One gives an introduction to the present action research study. The chapter will provide an introduction to arts integration and literacy achievement. The chapter also discusses the problem statement, statement of purpose, and rationale behind the present action research. The chapter will offer a brief introduction to the study, the background for the study, the participants, the question focus for the study, and the method by which the study was completed.

As teachers, we are always looking for unique ways to reach our students. Students today live in a world where there are many technological advances occurring on a daily basis. With such advances, students are exposed to many different things and can obtain information instantly. Students “live in a world enveloped by technologies and use technologies in their daily life” (Hsin, Li, & Tsai, 2014, p. 85). Students also have many talents and abilities that teachers can use to their advantage when it comes to educating students. Teachers must be able to tap into these abilities to serve as a motivational tool for their learning. Today’s students have different learning styles that require teachers to make accommodations to fit the students’ needs. One way to achieve this is through incorporating arts into the classroom, which allows students to use their natural talents and abilities to demonstrate their learning and understanding of content information, have choice in how they demonstrate their learning, take ownership of their learning, and be motivated to learn. Arts-based instruction serves as a method for
creating a differentiation of instruction to meet the needs of the diverse group of learners in today’s classrooms. Over the years, many different programs have entered into the education field. One of the most recent movements in education is the incorporation of arts in the content area classroom setting (Burnaford, Brown, Doherty, & McLaughlin, 2007). Our school recently made the move to bring more arts-based instruction into the content classroom, instead of only relegating such instruction to the related arts classrooms. Teachers were given the opportunity to attend preparation courses to learn how to effectively incorporate arts into the classroom to help with student achievement. This preparation not only allowed teachers to become familiar with the background of arts integration and how to effectively develop lessons that reached the students’ artistic abilities and engaged with multiple types of intelligence, but it also helped with their understanding of ideas and concepts being taught in the content area classroom. The implementation of arts integration can be beneficial for students because it allows for a positive and safe classroom environment where all students are actively engaged, can stimulate students’ thinking by allowing for opportunities for creativity and critical thinking, and can provide a variety of ways to learn (Appel, 2006).

Whether integrating arts-based instruction or making other changes, implementing a new curriculum or adding to the current curriculum can be overwhelming for educators; however, effective school leaders who have dedicated people contributing to such efforts can make a great difference amid such changes. School leaders are people who allow other people to use their strengths, talents, and abilities for the betterment of the school (Wallace Foundation, 2013). While the school principal is ultimately responsible for the workings of the school, effective school leaders understand that others
possess leadership qualities and give school faculty the opportunity to take on leadership roles. Effective school leaders build the leadership skills of those around them to help them become effective school leaders as well. According to the Wallace Foundation (2013), some characteristics of effective leaders within the school setting include people who create and shape a vision for all students to be academically successful, create a climate and culture that is hospitable to education, grow and develop leadership skills in others, improve the quality of instruction within classrooms, and manage the processes needed to foster school improvement. These characteristics help leaders move their schools in positive directions to help with the improvement of student achievement. The implementation of a program or change in curriculum can be a daunting task (Wallace Foundation, 2013), but effective school leaders can implement the changes needed to benefit their students. In the case of the presented study, the implementation of arts in the curriculum was a change that required strong leadership and support to effectively implement this shift for the benefit of the students.

**Problem Statement**

The ability to read and comprehend are both essential skills for people to be successful and productive citizens in today’s society. Bruner (2009) focused not only on the importance of reading but also on students’ lack of interest, motivation, and ability to read, which can greatly affect students’ literacy achievement. Every aspect of life requires reading as well as being able to understand and comprehend what has been read. Not being able to read is certainly problematic, but being able to read yet neither understanding nor comprehending what had been read is equally detrimental.
Unfortunately, according to Bruner, many students seem disinterested in reading, but often that occurs because of the kinds of reading that students are asked to do. Often, teachers pass out or assign reading assignments while students sit “discouraged, less than enthusiastic, and bored” (Bruner, 2009, p. 32). To students in this situation, reading can be seen as a tedious task that requires them to do something they do not like rather than do something for pleasure. With the current implementation of arts integration in many schools, many teachers are using arts-based lessons to bring the passion for reading back to students.

**Statement of Purpose**

No longer do students learn simply from sitting at a desk listening to the teacher lecture on different topics. No longer do students learn from participating in lessons where the teacher is the primary person doing the work and students are watching and observing. Students today are more hands-on learners, and they enjoy learning materials that employ methods that are comfortable for them. Howard Gardner’s (2011) ideas on multiple intelligence suggested that individuals pull from different forms of intelligence. Gardner studied human cognition and human intelligence, as it relates to a person’s capabilities and how they demonstrate those abilities (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.). Morgan (1992) discussed Gardner’s work and his concept known as “multiple intelligence,” which discussed seven different ways that students learn: visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, linguistic, and logical-mathematical. Morgan stated that students learn best through at least one of these methods of learning, with many students showing an affinity for multiple methods.
With students learning in so many different ways, teachers must understand the different methods of learning and work to develop lessons and activities that reach the different learning needs and methods of students. Considering Gardner and Morgan’s work, arts integration is important because, if implemented correctly, it can motivate reluctant readers and help increase student achievement by giving students alternatives and choices regarding how to display their understanding. Furthermore, it allows for more student interaction within the classroom and during lessons, which helps to keep students engaged in the lesson. With students possessing such diverse learning styles, it is important that teachers find different ways to reach all students. By incorporating the arts into the classroom curriculum, students can have alternative methods to demonstrate learning, and it allows them to use their strengths to display their understanding.

The purpose of this study was to examine the effect of arts-based instruction on student literacy achievement. By incorporating arts-based instruction through reading interventions, the hope is to increase student achievement through engaging, rigorous, and innovative instruction and activities. This study focused on the effective implementation of arts-based lessons and activities within reading interventions and the effect of these alternative lessons and activities on student reading achievement.

Rationale

Art can act as a universal language for students who cannot yet read, who may be emergent readers, or may be struggling with proficiency. Arts-based instruction can be a step toward using an alternative method to help students learn the necessary material. ELA can often be a difficult subject for students who are struggling or reluctant readers. As a fifth-grade ELA teacher, I spent a great amount of time developing ways to reach
these students to help with reading proficiency and achievement. With my school’s current move from being a STEM school to being a STEAM school, the school leadership emphasized incorporating more arts into the content area curriculum to help with student engagement and achievement. I became interested in finding ways to effectively incorporate the arts into my reading class in the hopes of viewing how effective arts-based lessons and opportunities could be for my students. I began to think about integrating arts into the ELA classroom and how it would be beneficial for my students. I then made the decision to learn more about arts integration and how its implementation could effectively help my students with reading proficiency and achievement.

After reviewing and understanding the importance of including arts in the content area curriculum, the focus of my study is on the effect of arts integration on reading proficiency. What role can integrating arts play in helping students with their reading proficiency? Reading proficiency involves many complex components. Students have to be able to decode and read words and then work to develop an understanding of what they have read (McCarty, 2007). Because reading contains so many steps and complex components, students have to be able to be critical thinkers, and including the arts in the learning process allows the development of critical thinking skills. The inclusion of the arts allows students to move beyond the recall and memorization stages of learning (Gullatt, 2008). Students are able to develop a deeper understanding of content by having to complete projects or activities rather than just repeating learned information. Furthermore, arts incorporation can serve as a motivating concept when it comes to instruction and learning (Gullatt, 2008). The arts allow students to engage with a hands-
on learning process. It also gives them a chance to showcase their natural abilities and talents and can serve as an alternative to traditional assignments or assessments.

Arts-based literacy instruction offers students many opportunities to display their learning via alternative methods. It also helps to make literature more meaningful for students. As discussed by Lynch (2007), the arts allow students to use their bodies to express their learning, as they use their “hands, bodies, and voices in meaningful ways” (p. 36). Additionally, when dealing with literature, students are able to demonstrate their learning via different methods. Gullatt (2008) described multiple ways to involve arts within a reading classroom, including asking students to act out scenes from the plot of a story, create visuals to display a story’s setting, or use music to describe the tone or mood of a story. While these types of activities bring in concepts from the arts, students must be able to comprehend the text in order to complete the assignments. These types of arts-based activities allow students to demonstrate their proficiency of the text in an unconventional way. Arts activities can serve as “effective learning tools as students become actively engaged in a learning project” (Gullatt, 2008, p. 18).

**Conceptual Framework**

For this study, my goal was to see if adding arts-based lessons and more opportunities for students to learn material and demonstrate learning through artistic measures would increase student achievement. Based on this goal, the study’s direction was to have a literacy intervention group that was presented material and engaged with artistic methods. Research by Lynch (2007) showed that arts-based literacy instruction offers students many opportunities to display their learning via methods that offer alternatives to traditional paper-and-pencil assessments. Arts integration also helps to
make literature more meaningful for students by allowing them to use their bodies to learn and express their learning (Lynch, 2007). Gullatt (2008) suggested that allowing students to act out scenes from the plot of the story, create visuals to display the setting, or use music to describe the tone or mood of the story are possible ways to include arts in a reading classroom and allow students to be active participants. By offering students these opportunities, they are able to demonstrate learning in a way that is comfortable for them. The arts activities can serve as “effective learning tools as students become actively engaged in a learning project” (Gullatt, 2008, p. 18).

Participants

This study was quantitative in nature. The participants of this study were fifth-grade students at Fairfield Magnet School for Math and Science, a rural school located within the School District of Fairfield County. The school services grade CD4 to sixth grade and currently enrolls approximately 350 students. The school is located in Winnsboro, SC, which is a small, central town in Fairfield County. The study school is a choice school within the school district. Students must apply, and are then selected by lottery to attend the school. Students attend the school from all over the county, so a majority of the students live in the rural, outer sections of the county. Within the school setting, many of the students live in single-parent homes or live with relatives other than parents. Many of the students are considered “latchkey kids” since they come from single-parent homes and have parents who work multiple jobs or second or third shifts. There are several after-school programs offered by the school, as well as the Boys and Girls Club program, which offer options for parents who are unable to pick students up directly after school or for students who do not have places to go. The school has several
related arts classes that allow students to participate in the arts when they are in after-school care. Students can attend art, music, dance, and band classes on a weekly basis. The school currently offers many additional opportunities for students to display their artistic talents. The school has a band, orchestra, and drumline for the musical students. There is a dance team for grades CD4 through grade 3 and a team for grades 4 through 6, as well as boys’ and girls’ step teams for students interested in dance. The school also has a co-ed chorus and a male choir for students interested in singing and a drama club for students interested in acting. Students who are interested in visual art can join the art club, and students who have notable artistic abilities can be a part of the honors art program. The goal of this study is to bring in those different artistic interests and talents and incorporate them into the classroom setting to help with student achievement.

The study consisted of 10 fifth-grade students. These students had been identified as being below grade level in reading and in need of reading interventions based on results from the state assessment from the previous school year and Fountas and Pinnell testing completed at the beginning of the school year. The students in the study completed a multiple intelligence survey (Appendix C) at the beginning of the study to allow the researcher to have a clear understanding of the different ways in which the student-participants learned. All participants also completed a reading proficiency pre-assessment of literacy skills. During the course of the study, the group met during the school’s intervention period and received additional literacy instruction, which consisted of arts-based intervention lessons and activities. Students in the study group worked on literacy skills through art, music, dance, and movement. At the end of the study, students completed a post assessment of literacy skills. The purpose of the study was to see the
effects that the arts-integrated intervention had on students’ literacy skills through pre assessment and post assessment scores.

**Research Question**

What effect will the incorporation of arts-based literacy instruction within a STEAM school have on fifth-grade student achievement?

**Sources of Data Collection**

For this study, state assessment scores, along with scores from the Fountas and Pinnell reading assessment, were used to determine the participants of the study. Fountas and Pinnell is a reading assessment that determines the reading level of students. Students are classified at above grade level, on grade level, and below grade level based on the results of the assessment. Students worked individually with a teacher to read a story and answer proficiency questions to determine their reading level. After students were selected for the study, each participant completed a multiple intelligence survey (Appendix C) and reading interest inventory (Appendix B) to allow the participant-researcher the opportunity to understand the different strengths of the participants, and also the thoughts, attitudes, and interest level of each participant in terms of literacy. Furthermore, each participant completed a fifth-grade literacy skills pre assessment test. Participants completed arts-based literacy interventions throughout the course of the study. At the end of the study period, each participant completed the literacy skills post assessment.
Chapter 2: Literature Review of Current Arts Integration Movement

Introduction

Chapter Two of this Dissertation in Practice (DiP) is a literature review of the current arts integration movement in American public schools and the integration of arts in English Language Arts (ELA) and literacy. The literature involving the integration of music, dance, drama, visual art, and music was also reviewed to theoretically ground and historically contextualize this DiP. The identified problem of practice for this proposed action research study focused on ELA and its place within the current movement to incorporate arts into content area curricula. As a participant researcher and an ELA teacher in a school that has been identified as an arts-based school, I was interested in fifth-grade students’ reading scores and whether the integration of the arts within ELA instruction would increase their literacy assessment scores. This action research project took place in rural South Carolina with a population that has been identified as low socioeconomic class status (SES), as evidenced by 86% of students who qualify for reduced or free meals at school. This particular demographic was shown to have special needs and issues with literacy skills.

STEAM

Over the past few years, many different programs have entered into the education field. One of the most recent is STEAM, an acronym for science,
technology, engineering, arts, and mathematics. My school recently became a “STEAM school,” which means that, while the school covers all subject areas, there is a focus on science, technology, engineering, arts integration, and math (Yakman & Hyonyong, 2012). During the school day, students attend special classes geared towards the STEM concepts. With the move from STEM to STEAM, there was a shift in focus to incorporating the arts into all content area classrooms, not just the STEM-focused classes. I was selected to attend a preparation session to become “STEAM certified,” which means I am currently a certified STEAM teacher, having completed the preparations necessary to ensure that I understand how to effectively incorporate STEAM concepts into the classroom. STEAM enables classroom teachers to integrate the subject areas of science, technology, engineering, and mathematics (STEM), but with a focus on the arts. “Arts” are defined as the areas of music, visual art, drama, and dance, with “arts integration” focusing on the arts being actively taught in conjunction with core content subjects (Sorensen, 2010).

As an ELA teacher, I was constantly seeking ways to help my students not only develop a passion for reading, but also to fully comprehend what they were reading. I am also constantly looking for ways to help students who are struggling with reading proficiency, offering them strategies that can help with their proficiency. In my experience, hands-on learning and students’ active participation in the learning process are not only enjoyable for students but also help students with their learning and achievement. This action research project enabled me to do additional research on arts integration and how to use it to help my students with their reading proficiency and achievement. Integrating the arts with other areas of the curriculum offers me the chance
to include music, physical education, visual art, and drama in my ELA reading lessons, allowing for reluctant or disinterested students in ELA classes to have an opportunity to connect reading concepts with their different artistic talents and abilities.

**Purpose Statement**

The purpose of the present action research study is to examine the effect of arts-based interventions on literacy skills among fifth-grade students in a STEAM school located in South Carolina. Based on results from the South Carolina state assessment, students in the study showed a weakness in literacy skills. The study worked with students who were shown to be below grade level in reading based on the results of the state assessment as well as the Fountas and Pinnell reading assessment administered at the beginning of the year. Student participants received arts-focused reading interventions. By exposing these fifth-grade students to literacy through the use of arts-based instruction, the researcher sought to engage students in learning with the goal of increasing students’ literacy assessment scores.

**Problem Statement**

The identified problem of practice for this DiP involved the integration of an arts-based literacy program at Fairfield School for Math & Science (FMSMS), a STEAM school in South Carolina. Fairfield Magnet School was recently labeled a STEAM school, with a major focus on incorporating the arts into content area classrooms. As a teacher in the school, I conducted an action research project to determine if the integration of arts with literacy instruction enabled fifth-grade students to achieve a
higher score on the benchmark assessment. In particular, the fifth-grade students at this school have not been meeting the basic skills on the state-mandated standardized test for literacy, as evidenced by the state’s standardized test records (Appendix A). Because of such results, the school developed a goal to find strategies and interventions that could be used to increase student achievement. One of the strategies that was suggested was the integration of the arts into content area classroom lessons. For this study, the focus was on integrating arts into the literacy classroom. The hope was that by integrating arts into literacy lessons, there would be an increase for these fifth-grade students’ scores on the literacy assessment.

**Research Question**

The purpose statement and the problem statement for this DiP, as stated above, has given rise to the following research question: What effect will the incorporation of arts-based literacy instruction within a STEAM school have on fifth-grade student achievement?

**Evolution and Importance of Question**

As a fifth-grade ELA teacher, I was often faced with the task of finding ways to push reluctant readers to achieve literacy goals. Since our school evolved from a STEM to a STEAM school, incorporating arts into the content area curricula throughout the school, I became interested in finding ways to effectively incorporate the arts into ELA and literacy instruction with the hope of finding how effective these arts-based lessons and activities could be for students. I had the opportunity to go through the STEAM certification program during the summer of 2014. At the preparation, we discussed how
to incorporate arts into the current STEM curriculum. We completed many activities that integrated art into the curriculum, but many of the activities were based in math or science. Because I teach ELA, I began to think about how integrating arts into ELA would benefit my students. I decided that I wanted to know more about arts integration and how implementing this concept effectively could help with student achievement.

After considering this issue and developing this question, I believe that the concept is important because, if implemented correctly, this concept can work to motivate reluctant readers and increase student achievement by actively engaging students during literacy lessons.

**Importance of Literature Review**

A literature review is a report of the studies related to the selected topic of study that summarizes, evaluates, and describes the found literature (Boote & Beile, 2005). Reviewing literature allows the researcher to gain a great deal of knowledge by reading and studying literature related to the topic of study, increasing the researcher’s understanding of the topic and of pertinent information related to the topic. A literature review gives the researcher the opportunity to review other studies that have already been completed to gain information to help with the current research and study being completed. A literature review ensures that the researcher is aware of what is currently happening or has occurred in the field, serves as a foundation for the work the researcher is proposing, shows the significance of the work, and will lead the researcher into new knowledge about the topic of study (Hofstee, 2006).
Methodology

In order to effectively answer the research questions, the present action research study was a quantitative research design study. The study focused on the background and theories of arts integration and its role in student engagement and achievement as well as how arts integration in a reading classroom affects the reading achievement of students within that classroom setting. The quantitative design focused on comparing the pre assessment and post assessment scores of students who received arts-based literacy interventions.

Research Site

The present action research study was quantitative in nature. The participants of this study were fifth-grade students at Fairfield Magnet School for Math and Science (FMSMS), which is located in the School District of Fairfield County in the state of South Carolina. FMSMS services grades CD4 to sixth grade and currently enrolls approximately 350 students. FMSMS is located in Winnsboro, SC, which is a small, rural town in Fairfield County. FMSMS is a magnet school within the school district. Typically, students must apply and are chosen by lottery to attend the school. Recently, the acceptance criteria was changed, and all students who applied were admitted to the school. Because the school is a magnet school, students have to maintain a “C” average in content area classes in order to remain a student at the school. If students drop below a “C” average, the first time, students are placed on a one-year probationary period. At the end of the probationary period, if the student still has below a “C” average, the student must return to their home school for the next school year.
Fairfield County is predominantly rural, and within the school setting, many of the students live in single-parent homes or live with relatives other than parents. Many of the students are considered “latchkey” kids, since they come from single-parent/guardian homes and have parents or guardians who work multiple jobs. There are several after-school programs offered by the school, as well as a Boys and Girls Club, which provide options for parents and guardians who do not have a places for their children to go after school.

FMSMS currently offers many opportunities for students to display their artistic and, in particular, their musical, dance, and drama talents. The school has band, orchestra, and drumline for students interested in instrumental music. There is a dance team for grades CD4 through grade 3 and another team for grades 4 through 6, as well as step teams for students interested in dance. Additionally, the school also has a co-ed chorus and a male choir for students who are interested in choral music and a drama club for students who are interested in acting.

Participants

The present quantitative action research study consisted of 10 fifth-grade students. These students were shown to be below grade level in reading and did not meet literacy skills based on the South Carolina state assessment (see Appendix A). All students also were shown to be below grade level in reading based on the beginning-of-year Fountas and Pinnell reading assessment scores. At the beginning of the study, students completed multiple intelligence and learning styles surveys (see surveys in Appendix B and Appendix C) to enable me to have a clear understanding of students’ strengths and
weaknesses and preferred learning styles. Students also completed a literacy pre-assessment. Students received arts-based interventions during the study. At the end of the study, students completed a post assessment measuring literacy.

**Theory**

Within our school, there have been many discussions recently about the importance of visual arts in schools. When schools or districts are faced with major budget cuts, visual arts programs are often among the first programs downsized or eliminated. Many visual arts programs have already fallen victim to recent budgetary issues in schools and districts; however, visual arts programs play an essential role in school systems and their students. Miller and Hopper (2010) stated that “an art based environment helps to enhance creativity, independent thinking, cognitive development, and social skills” (p. 3). Being a participant and being exposed to visual arts within the school environment allows students to be exposed to different opportunities to develop skills to enhance their thinking, which can crossover into the classroom and other academic pursuits.

How can visual arts affect literacy proficiency and achievement? McCarty (2007) stated that visual arts incorporate all the types of intelligence theorized by Gardner, which gives students multiple opportunities to develop their cognitive abilities and demonstrate their learning. While it is widely acknowledged that students have different learning styles and multiple types of intelligence, our current education system often forces students to learn in a singular way and assesses students based on one kind of intelligence and learning. Thus, students with different artistic abilities and other talents are forced to
learn in environments that muffle their abilities and limit their opportunities to develop such talents to enhance their learning. Students who have these abilities or the types of intelligence that go unrecognized within the current system are often left behind, as teachers and curricula fail to tap into and engage these skills and talents (McCarty, 2007).

Even though the visual arts can play a major role in students’ learning and achievement, many schools and districts have not gotten on board with the benefits of visual arts and their effect on learning, and with the current age of accountability in schools, many people are reluctant to move to an integrated arts classroom or program. Mishook and Kornhaber (2006) stated that many in the education field feel pressure to ensure that their students are “test ready” and do not feel that they have the instructional time or resources to incorporate arts, instead feeling that they must focus completely on the tested areas. As Miller and Hopper (2010) discussed, many schools have not incorporated the arts into their curricula and, for schools that do have an integrated arts curriculum, the testing and assessments often do not reflect these curricular changes. State and end-of-year assessments are still in the format of paper-and-pencil or computerized tests. With these types of assessments, students with different learning styles and abilities are not able to use their strengths to display what they know. With the pressure that is placed on schools and teachers when it comes to test results, many schools and teachers have overlooked the importance and benefits of arts integration in exchange for ensuring that students are adequately prepared for these paper-and-pencil and computerized tests.

When we think of the different content areas taught in school, one of the difficult subjects for some students is reading. Some students have a difficult time with the actual
reading, while others struggle with proficiency. As students get older, they realize that they are no longer learning to read but have moved to the stage where they are reading to learn; at this stage, their reading is important for proficiency, not only in reading class but also in all content areas (DiCicco & Jordan, 2012). The quality of student learning becomes essential to their ability to read and understand what they are and have read (Miller & Hopper, 2010). Reading and reading proficiency become extremely imperative as the ability to read and comprehend becomes essential to understanding information and being successful in all content area subjects.

As studies increasingly showed the ways in which arts integration improved student learning and comprehension in multiple content areas, schools began to shift from a STEM to STEAM focus. Research has shown that arts integration allows students to process learning in ways that help them deepen their learning and improve their understanding (Hoyt, 1992). Different forms of art and expression allow students to display their learning and understanding of the content and offers teachers and students an alternative to the normal paper-and-pencil assessments to which so many students are accustomed.

Along with reviewing literature regarding incorporating arts into school curricula, for this study, it is important to consider the effects of arts integration on reading proficiency, in particular. Reading proficiency involves many complex components. According to McCarty (2007), students have to be able to decode and read words, then work to develop an understanding of what they have read, and because of this, students have to be able to be critical thinkers. The arts offer students the opportunity to develop those critical thinking skills: As Gullatt (2008) noted, including the arts in the learning
process allows students to move beyond the recall and memorization stages of learning; thus, students develop a deeper understanding of content by having to complete projects or activities rather than just repeating learned information. Gullat further suggested that the incorporation of the arts into school curricula can serve as a motivating factor for students when it comes to instruction and learning. Including arts in the classroom allows students to be more hands-on in the learning process and offers them a chance to showcase their abilities and talents, while providing alternatives to traditional assignments and assessments.

What is arts-based integration? Arts-based integration is defined as “an approach to teaching in which students construct and demonstrate understanding through an art form. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both” (Silverstein & Layne, 2010, p. 1.).

Arts integration works to create a blending of content area skills with skills from the arts to enhance learning and demonstrate acquired knowledge (“Why Arts Integration”, 2008).

Arts integration is more than just adding art into a few activities; instead, it offers a new approach to teaching that requires teachers to fully understand how arts integration can benefit students. Silverstein and Layne (2010) described this shift as changing how something is taught instead of changing what is taught. Many teachers have different approaches to teaching, from teacher-centered approaches to student-centered approaches; thus, when arts integration is considered as another approach to teaching, it can help with the effective integration.
As suggested by Silverstein and Layne (2010), the arts integration approach to teaching works to ensure that the learning process for students is active, collaborative, experimental, problem-solving, and reflective. Arts integration allows students to bring together all of these concepts within the learning process. The ideas and concepts of arts integration create a classroom environment in which learning is important and risks are welcomed and students are challenged to draw on their existing skills and prior knowledge, encounter authentic problems using hands-on, active learning, work together to enrich the learning and understanding of others, and engage in reflection about their learning (Silverstein & Layne, 2010).

Arts-based literacy instruction offers students many opportunities to display their learning via alternative methods and makes literature more meaningful for students. As noted in the previous chapter, Lynch (2007) noted that with arts-based literacy instruction, students are able to use their “hands, bodies, and voices in meaningful ways” (p. 36) to express their learning. In terms of studying literature, Gullatt (2008) described how asking students to act out scenes from the plot of a story, create visuals to display a story’s setting, or use music to describe the tone or mood of a story are possible ways to involve arts within a reading classroom. These types of activities bring in concepts from the arts, but in order to complete the activities, students have to comprehend the text. These types of arts-based activities allow students to demonstrate their understanding of the text in unconventional ways. Thus, arts activities can serve as “effective learning tools as students become actively engaged in a learning project” (Gullatt, 2008, p. 18).

When people hear or see arts integration, they may think of drawing or singing in the classroom, but for arts integration to be beneficial for students, teachers,
administrators, and students must engage with the arts in meaningful ways. According to Cornett (2006), while the arts can be seen as fun for students, meaningful integration occurs when the classroom becomes a place of diversity, creative problem-solving, risk-taking, experimentation, and learning (Cornett, 2006). Effective arts integration can change the climate and culture of a classroom. Lynch (2007) expanded on Cornett’s sentiments, noting that arts integration allows content to be viewed from different perspectives, creates a safe learning environment where risk-taking is welcomed, and demonstrates that learning can be enjoyable.

Why should schools and teachers consider arts integration in the classroom? According to the article “Why Arts Integration” (2008), arts integration is a highly effective approach to engaging and motivating students and can serve as a support to help with the improvement of academic achievement and social behavior. Students will also be exposed to an array of arts skills, which can serve as an entry point to introducing content area skills. Furthermore, arts integration also works to enliven the teaching and learning processes for students and teachers by allowing opportunities for imagination and creativity to flow (“Why Arts Integration”, 2008). Additionally, as Sloan (2009) stated, arts integration allows students to develop their creativity and problem-solving skills to prepare them for the future jobs and the world. More specifically, Crawford (2004) discussed the following six reasons why schools should consider arts integration and why it is beneficial for students: The arts (1) make content information more accessible, (2) encourage joyful and active learning, (3) help students create personal connections to the content, (4) encourage students to develop a greater understanding of abstract concepts, (5) stimulate higher-level thinking, and (6) build students’
collaborative skills. Thus, arts integration helps to develop well-rounded students by challenging them to use artistic skills to understand content and demonstrate what they have learned. Furthermore, according to Rinne, Gregory, Yarmolinskaya, and Hardiman (2011), arts integration offers a highly effective method for students to retain taught content by naturally encouraging them to participate in activities that they are likely to enjoy and engage in, thus activating long-term memory.

Importantly, the benefits of arts integration extend beyond a single classroom; as Ruppert (2006) stated, the skills that students learn through arts integration can be transferred to other aspects of the student’s life as well. Ruppert discussed the “ABCs” of the benefits of arts integration: academics, basic, and comprehensive. In terms of academics, the integration of arts in content areas helps students develop a variety of academic skills, including skills in reading, language, and mathematics. Students are also able to develop basic thinking and cognitive skills. In addition, the reasoning, perception, imagination, and problem-solving skills that come from arts integration can help students both academically and in real-world situations and can contribute to the development of complete and well-rounded individuals (Ruppert, 2006).

The literature makes clear the benefits of incorporating the arts in school curricula, but as previously stated, the arts must be correctly integrated in order to be effective. Gullatt (2008) states that there are four styles of arts integration in the classroom setting—the subservient approach, the co-equal cognitive integration approach, the affective approach, and the social integration approach. The subservient approach includes educators who use arts to “spice up” their lessons. Using the co-equal cognitive integration approach, educators involve the arts in content areas and require
students to use higher level thinking skills to gain a full understanding of the content covered. With the affective approach, educators do not simply include the arts as a complement to the curriculum, but instead, they fully immerse students in the arts along with the curriculum. Through the social integration approach, educators focus on performances, including school performances on content learned in class (Gullatt, 2008).

Not only is arts integration beneficial for students, but it can also be beneficial for teachers. Arts integration allows regular content teachers and arts teachers to collaborate to make meaningful experiences for their students. It allows classroom teachers to incorporate arts skills in their content classes and arts teachers to incorporate content material into arts classes (Lynch, 2007). With this incorporation across classrooms, students can gain a greater understanding of how different subjects work together instead of just thinking of each individual subject as its own entity.

In order to effectively transition into an effective arts-integrated school, there are many things that must be taking into consideration. According to Morris (2009), the first thing that must be done is to get everyone in the school on board with the transition and implementation and ensure that they are willing to put in the time and effort to effectively make the transition. Second, Morris stated that there should be a well-developed plan for the integration. School leaders, faculty, and staff must ask themselves, “What will be the focus of the arts integration?” In order to be effective, there has to be a plan. Third, there must be professional development and resources provided for teachers in order for them to be properly trained and understand the concept of integrating arts into the curriculum (Morris, 2009). It is imperative that teachers receive the proper preparation in order to effectively integrate arts into their classrooms. If the proper preparation is not received,
the shift to an arts-integrated curriculum will not be as effective as it could be. Finally, a school that is moving toward arts integration must have an administrator who serves as an instructional leader and provides the support and resources that teachers need (Morris, 2009). The instructional leader of the school must realize that arts integration is not a simple process and must take into consideration the stress and pressure it may place on teachers, especially since they might need additional assistance or support to create effective arts integrated classrooms.

Harloff (2011) completed a study that examined the effect of arts instruction on student achievement in ELA and math. The students used the integration of four forms of art: theater, dance, visual arts, and music and integrated these art forms into content classrooms. The study evaluated the effect of arts integration on fourth-grade urban students and their achievement in math and ELA and also focused on which art form had the highest impact on student achievement. ELA and math test scores were used as measurements for the study, and the study consisted of 39 elementary schools. Fourth-grade students in nine elementary schools had arts integration that consisted of visual arts, music, and one other art form. Students in two schools received dance integration and those in another two schools incorporated music, while three schools integrated visual art as their main art form focus. The remainder of the schools were considered the control group, having a visual arts and music teacher but no co-planned units or integration of the arts into the classroom content. The study concluded that arts integration had a positive effect on student achievement in ELA and mathematics. The integration of music had the greatest results in ELA, while visual arts integration had the greatest impact on mathematics. The results of the study showed that the integration of
the arts into content area classrooms positively affects students’ achievement in ELA and mathematics. It was also noted that while all forms of arts integration had a positive effect on student achievement, some art forms were more beneficial than others, and some art forms were more beneficial to certain content areas than others.

Bellisario, Donovan, and Prendergast (2013) also conducted research on the relevance of arts integration in the classroom setting, based on the perspectives of teachers. In the project, researchers used a mixed methods approach, beginning with a teacher survey, to gather teachers’ thoughts and views on the relevance and current practice of arts integration. Those surveyed were teachers who had been through Lesley University’s Integrated Teaching through the Arts Master's program. After the surveys were analyzed, 11 focus groups were developed to study the themes that were noted as a result of survey analysis. Researchers then used the focus groups to identify and observe nine teachers and classrooms. The project provided many findings as a result of the observations of teachers and students. First, the research showed that arts integration can lead to deep learning, an increase in student ownership, and more engagement with the content. Second, the results showed that arts integration allowed teachers to use a variety of strategies for assessment and student expression of understanding. It also showed that arts integration creates opportunities for learning to be relevant to students, for students to engage with activities that are creative and innovative, and for teachers to experience renewed commitment to their work. Thus, the project provided beneficial information on the positive effects of arts integration beyond student experiences.

The Integrated Teaching Through the Arts program through Lesley University is grounded in the concept that the arts and arts integration are important to learning and
that the inclusion of the arts will increase the use of innovative teaching practices, which are needed for diverse learners within classroom settings today (Bellisario, Donovan, and Prendergast, 2013). Teachers who participated in the surveys and observations noted that one of the important things they learned about arts integration was understanding theories regarding learning styles and multiple intelligence and recognizing the different learning styles and intelligence of the students. Understanding these learning styles and intelligence helped the teachers to fully comprehend the diverse ways that students learn and the artistic strengths they may have; furthermore, such understanding helped with the planning and implementing of activities that worked with the different learning styles and the multiple intelligence present in the classroom. As these teachers realized, when an educator truly understands this information about their students, they can develop a classroom climate and culture in which students are engaged and active in the learning process (Bellisario, Donovan, and Prendergast, 2013).

While academic content and skills are important for students’ success, in the 21st century, creativity, collaboration, and technological proficiency are important skills that students must possess. Arts integration not only enhances students’ knowledge and skills regarding particular classroom content and academic subjects, but it also fosters the creativity, critical thinking, collaboration, and broad perspectives that are needed for success in our technologically and globally diverse society (Bellisario, Donovan, and Prendergast, 2013).

The integration of arts affects both students and teachers. If they want to effectively integrate the arts into their classrooms, educators have to examine their teaching styles and be prepared to change (Bellisario, Donovan, and Prendergast, 2013).
Teachers in the Integrated Teaching Through the Arts research study stated that the integration of the arts helped them to become rejuvenated and to reconnect to their passion for teaching. Teachers also stated that receiving professional development allowed them to gain a greater understanding and appreciation for the arts and arts integration, which assisted them in more easily incorporating the arts into their curricula and classrooms.

As we move further into the 21st century, it is imperative that students are prepared for the world and the jobs that will be available to them. The STEM education movement, which promotes science, technology, engineering, and mathematics, has been identified as a national reform in education to help prepare students for the 21st century and its globalized society (Yakman & Hyonyong, 2012). Yet, while science, technology, engineering and mathematics are important skills, educators and researchers are increasingly realizing that students must also know how to be creative, critical thinkers, and team players. With its focus on science, technology, engineering, mathematics, and the arts, the STEAM education movement seeks to educate the whole learner and is closely related to constructivist theory, demonstrating the primary components of constructivism, including engagement, understanding, performance, reflection, and commitment (Yakman & Hyonyong, 2012). STEAM education has been promoted by Georgette Yakman, who was an educator and now serves as a researcher and studies the integration of arts in school curricula, traveling to different schools and districts conducting preparation sessions on STEAM implementation (Lodaya, 2013). Yakman described STEAM as an engaging, hands-on, and reality-based approach to learning that
allows the education, industry, and governmental fields, as well as the community, to work together in the education of children (Lodaya, 2013).

Kamen and Maeda (2012) stated that STEM education is critical for preparing students to be productive in today’s society, but STEM is missing the “secret sauce,” which is creativity. As an answer to that, STEAM education builds off of the STEM curriculum that has been implemented in many schools by adding opportunities for students to be creative, collaborate, and display their natural talents and abilities. The interdisciplinary approach to STEAM education helps students develop unique connections to content and increases students’ interest in learning (Lodaya 2013).

History

Arts education has been a part of public education for many years. The concept of arts in the school was introduced as preparation for employment in industrial fields through the teaching of drawing and drafting, though later it became associated with cultural activities (Heilig, Cole, & Aguilar, 2010). As the arts moved from a more upper-class activity to one that included middle-class citizens, arts education became popular within school settings. During the Great Depression and World War II, the prevalence of arts education began to decline due to many districts having to cut budgets from lack of funding, causing many schools to cut arts programs altogether (Heilig, Cole, & Aguilar, 2010). With the improvement of the economy during the 1950s, arts education began to grow, and many arts programs received the funding they had lost during the economic hardships of the previous decades. Arts programs continued to grow and flourish within schools and districts. With the installment of the No Child Left Behind Act of 2001, the era of accountability, and the focus shifting more toward language arts, reading, and
mathematics, many feared for the viability of arts education programs within schools (Heilig, Cole, & Aguilar, 2010). With so much of focus on language arts and mathematics, what room would be left for arts education? What role could arts education play in schools? According to Heilig, Cole, and Aguilar (2010), the era of accountability marked the “culmination of a movement from arts education that is driven solely by local pedagogical and curricular discourse to an environment in which educational standards defined at the state and federal levels influence the prominence and presence of the arts in school curriculum” (p. 139).

In the early 1900s, John Dewey began working on what later became known as progressive education, experimenting with a new approach to learning and developing a theory that explained the importance of authentic education, which gives students the opportunity to grow mentally, socially, and physically and allows them to have opportunities to express their creativity and become critical thinkers (Heilig, Cole, & Aguilar, 2010). Dewey was seen as a valuable representative of pedagogy and was highly regarded in the field of education (Ilica, 2016). Dewey believed that “every person is capable of being an artist, living an artful life of social interaction that benefits and thereby beautifies the world” (Goldblatt, 2006, p. 12). Dewey was a firm believer that the arts are an important part of people's lives and should be embraced, even in the school setting. From Dewey’s perspective, art exemplifies and promotes the qualities and characteristics that children should develop in order to be functional in society. As Heilig, Cole, and Aguilar (2010) noted, “Dewey believed that arts are indeed experience, and that access to arts education opens processes of inquiry that expand a child’s perception of the world and create venues for understanding and action” (p 137).
Dewey saw art and artistic opportunities as experiences that allow for inquiry, looking for and finding meanings, and developing connections (Goldblatt, 2006). These experiences allow students to use thinking skills through exploration and making connections. As Goldblatt (2006) stated, the role of the school is to strive to make improvements and work toward the advancement of the welfare of society, helping students to understand the “development of a larger life” (p. 22). A way for students to develop these concepts is through art curricula and art integration, which fosters moral, intellectual, and social skills and abilities.

Howard Gardner developed a theory known as the Multiple Intelligence Theory in 1983, which suggested that there are eight methods of learning and different ways that people interact with information and situations (Harloff, 2011). Gardner suggested that there are multiple intelligence that are activated when information is presented and that help people learn. These intelligence include musical, linguistic, mathematical, visual-spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist intelligence, but there may be many others that have not been identified (Harloff, 2011). Gardner’s theory focused the different strengths and intelligence that people use when learning information and noted that these strengths and intelligence should be taken into consideration when developing curricula, planning instructions and lessons, selecting coursework and activities, and developing assessments (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.).

This literature review focused on reviewing various literature on arts integration and its effect on student achievement. The review consisted of different articles and studies that promote arts integration and helped demonstrate the effects of arts integration.
on student achievement. This literature review allowed for the review of a variety of studies on arts integration with a goal of providing a greater understanding of the effects that the arts and the integration of arts can have on students.

Key Terms

Arts integration. An approach to teaching in which students create and demonstrate an understanding of learning through an art form that engages students in the creative process and connects art to other subjects and works to evolve the objectives of both (Silverstein & Layne, 2010)

Bodily-kinesthetic intelligence. Intelligence that uses one’s body to solve problems and to demonstrate learning and understanding through bodily movements (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.).

Fountas and Pinnell. Individual reading assessment given to students to determine reading level and needed instruction

Interpersonal intelligence. Intelligence that uses one’s capabilities to understand the motivations, intentions, and desires of others; those who are strong in interpersonal intelligence are often able to work well with others (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.)

Intrapersonal intelligence. Intelligence in which one works to understand oneself, develop an understanding of one’s own attitudes, motivations, and fears, and to recognize how they play into the learning process (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.)
Linguistic intelligence. Intelligence that involves written and spoken language, with students being able to express themselves either through written or oral opportunities (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.).

Logical-mathematical intelligence. The ability to analyze problems logically and carry out mathematical problems (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.).

Multiple Intelligence Theory. A theory developed by Howard Gardner that stated that individuals draw on different natural intelligence to solve problems in their learning (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.)

Musical intelligence. Using the performance, composition, and musical appreciation to enhance and demonstrate learning (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.)

Spatial intelligence. The ability to recognize and use patterns (“Howard Gardner’s Theory of Multiple Intelligence,” n.d.)

STEM. An acronym for science, technology, engineering, and mathematics; a multidisciplinary approach to teaching and curriculum development that focuses on those specific topics to create learning for a global society (Fioriello, 2011)

STEAM. An acronym for science, technology, engineering, arts, and mathematics; a flexible, interdisciplinary framework that promotes a natural approach to rigorous learning and promotes arts integration in both learning and assessment processes (“STEAM Education,” 2007)
Chapter 3: Methodology

Introduction

Chapter Three delineates the purpose of the study and the identified problem of practice (PoP) as well as the research question and the research design used to investigate an arts-based curricular intervention with fifth-grade students in English Language Arts at Fairfield Magnet School for Math and Science (FMSMS), a school for science, technology, engineering, art, and math (STEAM). The participant-researcher was an ELA teacher at the school and worked with a group of fifth-grade students to study the effects of arts-based reading interventions on student literacy achievement.

Background

Chapter Two of this dissertation in practice (DiP) focused on the current trend of arts-based integration in American public schools. When many people in the United States think of “arts instruction,” they focus on the artistic aspect (for example, visual arts classes) (McCarty, 2007). However, arts integration deals with many different artistic aspects and can include music (both vocal and instrumental), drama, dance, or engineering. All of these artistic aspects allow students to learn and express their learning in different ways that are comfortable to them (McCarty, 2007). Furthermore, visual arts education incorporates multiple intelligence, which give students a variety of opportunities to develop their cognitive, affective, and psychomotor abilities while
demonstrating their learning (Gardner, 2000). According to McCarty (2007), students learn differently and have different learning styles and multiple intelligence. In the current public education system in the United States, students are forced to learn in the same way and are assessed in a highly standardized manner. Students with diverse artistic abilities and talents are forced to learn in environments that stifle their abilities, and thus, they are often left behind as these gifts are not encouraged or tapped into (McCarthy, 2007).

**Purpose of the Study**

The purpose of the present Action Research study was to examine the effect of arts-based intervention on literacy skills among 10 students in a STEAM school in South Carolina. The student-participants are fifth-grade students, ranging in age from 10 to 11 years old, at Fairfield Magnet School for Math and Science, located in Fairfield County. Based on results from the South Carolina state assessment, the student-participants showed a weakness in terms of literacy skills. The study worked with students who were shown to be below grade level in reading based on the results of the state assessment as well as the Fountas and Pinnell reading assessment given at the beginning of the school year. The participant-researcher served as the primary researcher for the study. The participant-researcher investigated the effect that arts intervention in the classroom (including artistic opportunities through classroom instruction and student assessment) had on student achievement in literacy skills and reading proficiency. The goal of the participant-researcher was to use students’ abilities, talents, and interests to engage them in literacy activities, with the hope of increasing student literacy achievement, and to see if the integration of arts in ELA increased such achievement.
Statement of the Problem Practice

The identified problem of practice for the present action research study involved the integration of an arts-based literacy program at Fairfield Magnet School for Math and Science (FMSMS), a STEAM school in South Carolina. In particular, the fifth-grade students at this school have not been meeting the basic skills required by the state-mandated standardized test for literacy, as evidenced by the district’s standardized test records (Appendix A). The participant-researcher worked with English Language Arts teachers as well as arts teachers to implement integrated arts-based literacy interventions to this local and particular group of students in an effort to enable the students to increase their achievement on standardized assessments.

Researcher Objectives

This study contained several objectives that the researcher hoped to achieve as a result of this study. The first objective was to effectively implement arts-based interventions in the reading classroom to increase students’ literacy skills, as the effective integration of the arts has been shown to reduce achievement gaps and increase students’ educational achievement (Mississippi State University, 2013). The second objective was to increase active student engagement with literacy skills in order to increase literacy achievement. As Beers (n.d.) stated, many students find reading to be a very undesirable activity, which often leads them to become disconnected from reading or become non-readers or uninterested in reading, even if they are good readers or have the skills necessary to be good readers. Effectively incorporating the arts into the classroom allows students to take active roles in their learning and gives them the opportunity to be engaged in the classroom.
Research Design

To effectively answer these research questions, this study was a quantitative research design research study. The study focused on the background and theories of arts integration and their role in student engagement and achievement. The study focused on how arts-based interventions in a reading classroom affected the literacy achievement of a group of student-participants. The design compared students’ scores at the beginning and end of the study, comparing the results of students who received extensive arts-based interventions with those who did not receive arts-based instruction.

Variables

When conducting this quantitative research design study, there were many variables that needed to be taken into consideration. All of the students in the study were in the same grade level and attended the same school. All students were receiving arts-based literacy interventions from the same teacher. The dependent variable present in the study was the achievement of students in reading proficiency. The students’ scores were analyzed to see if there was an increase in literacy achievement after receiving arts-based interventions.

Quantitative Purpose Statement

The purpose of this study is to examine the effects of arts-based interventions on fifth-grade literacy achievement.
Quantitative Research Question

What effect will the incorporation of arts-based interventions have on fifth-grade student achievement in ELA, focusing on literacy skills and proficiency, as measured by the district’s pre assessment and post assessment regarding reading achievement?

Hypothesis

Fifth-grade students who receive arts-based interventions in literacy skills will show an increase in literacy achievement, as measured by the pre assessment and post assessment of literacy skills.
Chapter 4: Findings and Interpretation

Introduction

Chapter Four focuses on the data collected as a result of this study. The study focused on the effects of arts-based literacy interventions on student literacy achievement. The student-participants of the study were a group of students who were identified as reading below grade level and requiring additional assistance and reading interventions to improve their literacy skills. Students received literacy interventions that consisted of arts-based activities. This chapter analyzes the data collected to determine the effects of arts-based interventions on student literacy achievement.

Problem of Practice

At the time of the study, many students in Fairfield Magnet School for Math and Science lacked necessary literacy skills. Because of this, many interventions were implemented to help with student achievement and improving student literacy skills, with a focus on reading proficiency. One of these interventions was incorporating arts-based interventions for fifth-grade students. The participant-researcher examined the impact of arts-based interventions in the literacy classroom on student achievement of fifth-grade students. The participant-researcher studied whether the incorporation of arts in the classroom, including artistic opportunities through classroom instruction and student assessment, played a role in student achievement in literacy skills and proficiency. The
goal was to use students’ abilities, talents, and interests to engage them in learning and allow them to display their learning in creative ways.

**Justification of Problem of Practice**

Literacy skills are an essential part of students’ success in school settings and in life. The ability to read and comprehend are essential skills for people to be successful and productive citizens. According to the article “Why Literacy Matters” (2006), “literacy skills are fundamental to informed decision-making, personal empowerment, active and passive participation in local and global social community” (p. 135). Every aspect of life requires literacy skills and the ability able to understand, comprehend, and effectively use these skills. As educators, we recognize the importance of literacy skills, including both the ability to read and the ability to comprehend what one has read; thus, many of us are working to equip students with the skills necessary to improve their literacy. Unfortunately, as previously noted, many students are not interested in reading or see it as a tedious task that they are required to do instead of something they do for pleasure (Bruner, 2009). With the current implementation of arts-based instruction in schools, many teachers are using arts-based lessons to fuel students’ passion for reading while simultaneously improving their literacy.

**Research Question**

The problem of practice above has given rise to the following research question: What effect will the incorporation of arts-based lessons within a STEAM school have on fifth-grade student literacy achievement?
**Overview of Methodology**

A quantitative research approach was used for this action research project. Numerical data was collected for analysis. Data collected consisted of the pre assessment and post assessment scores of literacy tests (Appendix D). Data collected was analyzed to determine the effects of arts-based interventions on student literacy achievement. A group of fifth-grade students were used for this action research project, and student-participants received arts-based interventions and were encouraged to use their talents to demonstrate their learning through arts-based assignments and activities. This study focused on the effects of arts-based instruction on students’ literacy achievement. The participant-researcher identified the effects of the incorporation of the arts into the reading classroom on student reading, learning, and achievement by reviewing the pre assessment and post assessment scores of the student-participants. The scores were analyzed to determine if arts-based interventions had an effect on student reading achievement.

**Purpose of Action Research**

Art can be seen as a universal language for students struggling with literacy skills, including both emergent readers and those struggling with proficiency. The arts have the potential to make reading come alive for struggling students and to offer alternative methods to help students learn the needed material (Cramer, 2014). ELA can often be a difficult subject for students who are struggling or reluctant readers. After viewing and understanding the importance of incorporating arts into the curriculum, the focus of this study is on the effects of arts integration and its efficacy as an intervention to improve literacy proficiency. Reading proficiency involves many complex components, and
because reading contains so many steps, students have to be strong critical thinkers. The arts offer students the opportunity to enhance critical thinking and imagination (Cramer, 2014). Including the arts in the learning process allows students to move beyond the recall and memorization stages of learning and encourages them to develop a deeper understanding of content by challenging them to complete projects or activities rather than simply repeating learned information. Arts incorporation can serve as a motivating concept when it comes to instruction and learning. The arts allow students to be more hands-on in the learning process while also offering them a chance to showcase their natural abilities and talents and serving as an alternative to traditional assignments and assessments.

As previously discussed, arts-based literacy instruction provides students many opportunities to display their learning via alternative methods. It also helps to make literature more meaningful for students. As noted previously, Lynch argued that through arts-based literacy instruction, students are able to use their “hands, bodies, and voices in meaningful ways” (p. 36) to express their learning. These types of activities bring in the arts concepts, but importantly, students must comprehend the text in order to complete such assignments, allowing students to demonstrate their literacy proficiency in unconventional ways.

**Findings of the Study**

**Data collection sources.** During this action research study, data was collected through quantitative methods. Students were given a pre assessment and post assessment measuring literacy skills. The data from the assessment was analyzed. At the beginning of the study, all students were given a reading interest inventory (Appendix B) to gain a
better understanding of their thoughts and views on reading. Students in the arts intervention group also received a multiple intelligence survey (Appendix C) to gain a greater understanding of students’ intelligence, which helped when developing interventions for the arts-based intervention group. Students in both classes completed a pre assessment and post assessment of literacy skills, which consisted of 25 questions regarding literacy proficiency and reading skills. The assessment contained only skills that were taught during the study period. Students in the study group received arts-based interventions and instructions. Data was also collected from students’ preassessments and post assessments, and reflections on the scores and student achievement were kept as a part of the reflection process (Appendix D).

**Data collection ethics.** Ethical standards and treatment of participants plays a crucial role when conducting research (Merle, 2014). Prior to beginning the research study, information was shared with parents, including a description of the study (Appendix E). Permission forms (Appendix F) were distributed for parents to allow their students to participate in the study. Opt-out forms (Appendix G) were available for parents who chose not to have their student be a part of the study. Confidentiality was also a critical aspect of the study. Since data collection consisted of students’ pre assessment and post assessment benchmark test scores, data was collected using a confidential system. At the beginning of the study, participants were assigned a number. All participant information dealing with the study was labeled with the assigned number and not the participant’s name. Only the participant-researcher knew the correlation between the participants and assigned numbers. The collected data was kept in a secure location, which was only be accessible by the participant-researcher.
Data collection reflection. The purpose of this study was to offer an additional intervention for students struggling with literacy skills and to see if this intervention was helpful for student achievement. As a school, one of the issues that we noticed was a need for additional support in literacy. The results of this study were shared with district and school administration, teachers, and parents, with the hope that arts-based interventions can serve as an additional tool for improving students’ literacy skills. By sharing the results with others, strategies learned during the study can be used to improve literacy skills and offer a basis for developing additional strategies and interventions to help with student achievement.

Interpretations of results of the study. Students for this study were selected based on the beginning-of-the-year Fountas and Pinnell scores. Fountas and Pinnell is a reading assessment that gives the reading level of students. Students are tested on their reading ability as well as their proficiency in understanding what they have read. In the Fountas and Pinnell assessment, for fifth-grade students to be considered on grade level, they would have to score on a T, U, or V. Students scoring O and P are considered to be on a third-grade reading level, while students scoring Q, R, and S are considered to be on a fourth-grade reading level. All students in the study group were in fifth grade but tested below fifth-grade reading level (see Table 4.1). These students were identified as students who needed extra assistance with reading to ensure that they are reading on grade level by the end of the school year.
Table 4.1: Fountas and Pinnell Beginning-of-Year Reading Scores

<table>
<thead>
<tr>
<th>Test Scores</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>4</td>
</tr>
<tr>
<td>P</td>
<td>2</td>
</tr>
<tr>
<td>Q</td>
<td>1</td>
</tr>
<tr>
<td>R</td>
<td>1</td>
</tr>
<tr>
<td>S</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: All students were tested during the first three weeks of school.

At the beginning of the study, each student was given an interest inventory to allow the participant-researcher to gain a greater understanding of the reading interests of the student-participants. After completing the inventory, students in the arts intervention group completed the multiple intelligence inventory, which allowed the participant-researcher to gain a greater understanding of the students’ strengths in the arts. Based on the results of the reading interest inventory, it was noted that no students indicated that they do not like to read. Out of the 10 students surveyed, 6 students indicated that they liked to read, while 4 students chose the option of “sort of,” explaining that reading can be “boring” and that they don’t like it sometimes because they wish they could read better. Students read an average of 15 to 20 minutes per day and 25 to 30 minutes a week. All students stated that they often check out books from the school library. When asked about the genres students enjoy, most students indicated books in a series, science fiction, and sports as their top responses. Out of the 10 students surveyed, only 3 students indicated that they read the newspaper and 5 students indicated that they liked to read magazines or have a magazine subscription that they read often. Most students enjoyed some form of sports, music, or art-related activities as their favorite hobbies. All students enjoyed reading aloud or having someone to read to them.
Students also completed a multiple intelligence survey to help the participant-researcher determine their multiple intelligence strengths. It was noted that 2 students were shown to be strong in the visual-spatial intelligence, 3 students in bodily-kinesthetic, 3 in musical, and 2 in interpersonal. No students surveyed were shown to have the highest strength in intrapersonal, linguistic, or logical-mathematical. The information from the multiple intelligence survey gave the participant-researcher an insight into the gifts and strengths of the students to help with the development of arts-based interventions.

Students also completed a pre assessment and post assessment during the study. Table 4.2 below shows the results of the assessment scores for each group of students.

Table 4.2: Data Collection Table—Arts Integrated Group

<table>
<thead>
<tr>
<th>Student Number</th>
<th>Multiple Intelligence</th>
<th>Preassessment Score</th>
<th>Postassessment Score</th>
<th>Change from Pre to Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 101</td>
<td>Interpersonal</td>
<td>28</td>
<td>44</td>
<td>+16</td>
</tr>
<tr>
<td>Student 102</td>
<td>Bodily-Kinesthetic</td>
<td>36</td>
<td>48</td>
<td>+12</td>
</tr>
<tr>
<td>Student 103</td>
<td>Interpersonal</td>
<td>52</td>
<td>60</td>
<td>+8</td>
</tr>
<tr>
<td>Student 104</td>
<td>Visual-Spatial</td>
<td>48</td>
<td>32</td>
<td>-16</td>
</tr>
<tr>
<td>Student 105</td>
<td>Musical</td>
<td>48</td>
<td>72</td>
<td>+24</td>
</tr>
<tr>
<td>Student 106</td>
<td>Bodily-Kinesthetic</td>
<td>36</td>
<td>44</td>
<td>+8</td>
</tr>
<tr>
<td>Student 107</td>
<td>Bodily-Kinesthetic</td>
<td>32</td>
<td>36</td>
<td>+4</td>
</tr>
<tr>
<td>Student 108</td>
<td>Visual-Spatial</td>
<td>44</td>
<td>48</td>
<td>+4</td>
</tr>
<tr>
<td>Student 109</td>
<td>Musical</td>
<td>44</td>
<td>60</td>
<td>+16</td>
</tr>
<tr>
<td>Students 110</td>
<td>Musical</td>
<td>72</td>
<td>40</td>
<td>-32</td>
</tr>
</tbody>
</table>
Based on the information in the table above, it was noted that there was an increase in student achievement. Eight out of the 10 students in the group showed some improvement between the pre assessment and post assessment. Students averaged a 4- to 22-point increase, with an average increase of 11.25 points. Two out of the 10 students showed a decrease in achievement between the pre assessment and post assessment. These students averaged between a 16- and 32-point decrease, with an average decrease of 24 points. Based on the data collected, the student with the highest increase and the student with the largest decrease in their scores were students whose strongest intelligence was musical. Student 110 completed the post assessment at a different time than the rest of the participants, as this student was not present on the post assessment testing day. Student 102 was late on the post assessment testing day and began the assessment after the other students. Overall, there was an increase in student achievement, as indicated by the pre assessment and post assessment results.

**Conclusion**

This study focused on the effects of arts-based literacy interventions on literacy achievement. The study consisted of a group of fifth-grade students who were considered below reading level for their grade. Arts-based interventions were implemented as an additional resource for literacy instruction. Students completed a reading interest inventory so the participant-researcher could gain background knowledge on the students’ thoughts and attitudes regarding reading. They also completed a multiple intelligence survey to help the participant-researcher develop of intervention activities. Students completed a pre assessment and post assessment. Based on the data collected, there was an overall increase in literacy achievement after arts-based interventions were
added to the curriculum, but the increase was not significant. However, students showed improvement on the literacy assessment after receiving arts-based literacy interventions.
Chapter 5: Summary and Discussion

Introduction

Chapter Five will provide an overview of the entire study, including the data collected, study results, and future implications that can and may come about as a result of this study and its results. The chapter will also explore major points of discussion that arose from this study and its results.

Focus of the Study

The action research study’s focus was on arts-based interventions and literacy skills. The focus was to study the effects of arts-based integration on literacy skills achievement. Surveys were completed by student-participants to determine their attitudes on literacy and reading and their strongest type of intelligence and learning style. Students also completed reading interest inventories to allow the participant-researcher to understand the current reading interest level of students. Students completed a pre assessment of literacy skills. The pre assessment gave the teacher-researcher a baseline to understand students’ current achievement level of literacy skills. The study group received arts-based reading interventions and student-participants were encouraged to use their talents to demonstrate their learning through arts-based assignments and activities. Literacy lessons were given and focused on integrating art, music, drama, or movement. Each lesson focused on a different literacy skill that was present on the pre assessment.
Students used the arts to demonstrate their learning and as a method of taking ownership of their learning. The literacy lessons were arts-integrated and the assignments the students produced were developed to allow each student to demonstrate their understanding of the taught skill through an arts-integrated approach. This study focused on the effects of arts-based instruction on students’ reading achievement. The teacher-researcher identified the effects of the incorporation of arts into the reading classroom on student reading, learning, and achievement by reviewing pre assessment and post assessment scores of the arts-based literacy interventions. The scores were analyzed to determine if arts-based interventions have an effect on student reading achievement.

**Overview of the Study**

The purpose of this study was to examine the effectiveness of arts-based instruction on student reading achievement. What effect can integrating arts into literacy instruction have on student literacy achievement? By incorporating arts-based instruction, the teacher-researcher hoped to increase student achievement through engaging, rigorous, and innovative arts-based interventions. This study focused on the effective implementation of arts-based interventions and the effect of these interventions and activities on student literacy achievement.

The study was completed using a group of fifth-grade student-participants who were identified as below grade level based on the previous year’s state assessment and the district’s Fountas and Pinnell testing completed at the beginning of the year. These students were chosen to receive extra assistance to help with literacy achievement. The participant-researcher worked to provide arts-based literacy interventions to the participants with the hopes of increasing the literacy achievement. At the beginning of
the study, each participant in the study group was given a pre assessment of literacy skills. During the course of the study, the group met to receive additional literacy instruction with an arts-infused focus. The activities and lessons completed during the course of the study were all arts-based activities and lessons. Participants in the study group worked on literacy skills through art, music, dance, and movement. Participants were able to use art, music, and dance as a way to demonstrate their learning of literacy skills. At the end of the study, students completed the post assessment of literacy skills.

**Summary of the Study**

This study consisted of 10 fifth-grade students who had been identified as low-level readers based on their beginning-of-year Fountas and Pinnell reading level scores and who were designated as needing extra assistance with reading and literacy skills based on these scores. During the study, these 10 students received an additional 30 minutes of reading instruction three times a week. The instruction provided during this intervention period was arts-based instruction, and all literacy activities provided during this intervention period contained some sort of art component.

At the beginning of the study, all student-participants were given a reading interest inventory. The participant-researcher used this inventory to gain information about the interest level of the student-participants. The inventory offered a background into the students’ thoughts on reading, how much reading they participate in on a daily and weekly basis, and the type of access to reading materials that students currently have and use. It also allowed the participant-researcher to learn the student-participants’ likes and dislikes, which aided the development of activities during the intervention. Student-participants also completed a multiple intelligence survey. This survey allowed the
participant-researcher to gain an understanding of the strongest type of intelligence of each study participant and also served as background information for developing intervention activities.

After completing the initial surveys, students then completed a pre assessment on literacy skills (Appendix B). The pre assessment was developed from the district’s assessment test bank. The assessment covered different literacy skills that current fifth-grade readers would need to know to be successful in terms of literacy. After completing the pre assessment, the students participated in 45 minutes of literacy intervention instruction three times each week. The literacy instruction was geared towards the skills tested in the pre assessment, and no literacy skills that were not on the pre assessment were taught during the intervention period. Participants worked on their literacy skills by completing activities that contained some type of arts-based component (art, music, or movement). Participants received these arts-based interventions in addition to their normal classroom literacy instruction.

At the end of the study period, participants completed a post assessment of literacy skills (Appendix B). The preassessments and postassessments were the same assessment and were used to see if students’ literacy skills had improved after receiving arts-based interventions. Based on the findings of the study, although there was not a significant increase in scores, students showed an increase between the pre assessment and post assessment. Overall, 8 out of the 10 students who participated in the study showed an increase from their pre assessment to their post assessment scores. There was an increase in score between 4 and 22 points, with an average of an 11.25-point increase overall. There were 2 students who showed a decrease in scores from their pre
assessment to their post assessment. These students’ scores decreased by 16 and 32 points, respectively, with an average of a 24-point decrease.

Discussion of Major Points

This study revealed several major points regarding the importance and usefulness of arts integration in schools and classrooms. Reif and Grant (2010) stated that the arts represent a connection between creative and analytical thought and help to provide highly successful methods for conveying academic ideas in an engaging manner and that learning, communicating, and questioning working together with the arts helps create a classroom environment where students and teachers are excited about learning and engaged in the learning process. Arts integration also encourages students to express themselves. As Reif and Grant suggested, humans have always had the need to express themselves, and the need for humans, especially children, to express themselves works well with arts integration because the arts allows students to express their learning in a culturally responsive way. Arts in the classroom can serve as the outlet for expression that students need.

While arts integration creates a space for students to express themselves, it also increases student engagement, which is critical to student success. When students are actively engaged, they become an active part of the lesson instead of simply sitting and listening; thus, they are more focused on the information presented in the classroom and better able to retain more information (Taylor & Parsons, 2011). Especially in subjects like literacy and reading, which students often see as “boring,” student engagement is necessary to encourage more interaction and exploration, which leads to higher achievement (Taylor & Parsons, 2011).
Furthermore, the study found that allowing students to display their learning in a way that is comfortable for them helps them to take pride and ownership in their learning. Based on my observations during the study, when students presented their learning through songs that they created or art pieces that they worked on, they were excited about what they had made. They were energized about their learning, and they took pride in successfully having learned the taught information. Additionally, they took pride and ownership in the items that they created to display what they had learned and were excited to share that learning with others.

Another point taken from observations during the study was that arts integration encouraged students to participate in class who were normally not involved in class or who would normally not participate. It allowed them to build their confidence about themselves and develop more positive attitudes about their ability to learn. The students who participated in this study already had low literacy skills, so their confidence in themselves was not at a high level in terms of reading. By allowing reading and literacy to be seen as something that they are capable of doing well, arts integration in the literacy classroom allowed their confidence to grow and helped them to understand that they can be successful in reading and literacy skills. Thus, because the arts-integrated curriculum pushed them to think differently about themselves and their learning, these students were able to break out of their shells and see learning in a different light.

Literacy shares many characteristics with art, in that they both relate to self-expression and communication (Sorensen, 2010). Integrating the arts into the literacy classroom offers a relationship that can enhance both students’ literary and artistic skills. Arts integration allows classrooms to be lively places in which students engage actively.
with classroom content, collaborate with their peers and teachers, create and exchange ideas, turn their thinking and into action, and share their work with others (Zhou & Brown, 2015).

There is a pressing need for a way to engage students and work to ensure that they are developing the literacy skills needed to be successful. Zhou and Brown (2015) stated that today’s world has shifted from an age of information to an age of conception and that schools must morph to fit the needs of today’s students. By integrating arts into their curricula, schools can foster students’ creative capacities and cultivate the ideas of society’s future inventors, entrepreneurs, and business owners, among other professions; simultaneously, art-integrated schools and programs can contribute to students’ development as they grow into well-rounded adults with the skills needed to be successful in the 21st century (Zhou & Brown, 2015).

Many people think of art as being just painting or drawing; however, the integration of the arts into a curriculum can include any type of arts-based activity. According to Reif and Grant (2010), arts integration includes lessons or activities that deal with content area information but use drawing, painting, movement, drama, music, chants, sculpture, or assemblage to convey information or display learning. With arts integration covering many different aspects, it can easily be implemented to match the strengths and talents of individual students. The different aspects can also appeal to the strengths and talents of teachers, making them more comfortable with integrating arts into their own classrooms.
Key Questions

As with the implementation of any new program, the first and main question that arises is “Why?” In terms of this particular study, a number of questions come to the forefront, including the following: Why should this program be implemented? What is the value of this program for students? In the case of this study, why should arts be integrated into educational and classroom settings? According to Zhou and Brown (2015), arts integration should be implemented because it allows students to become active participants in the learning process, as opposed to being passive recipients. As educators and researchers find out more about different learning styles and multiple intelligence, it is no longer enough for students to just sit, listen to, and watch their teachers. Students today are more hands-on, artistic, and movement-oriented than in the past, and capitalizing on these strengths, talents, and abilities can be useful in the classroom when it comes to students learning and achieving. Arts integration can reach students of different backgrounds and cultures, all while offering students an opportunity to bring their own personal experiences, views, and opinions into the classroom and their learning (Zhou & Brown 2015).

As a result of the study, there have been a number of key questions that have arisen about implementing the arts in classroom curricula: First, how do schools train and work with teachers to effectively integrate arts into the classroom curriculum? Many classroom teachers feel that they are not qualified to integrate art into the classroom because they are not certified in a subject related to the arts; others may not feel comfortable with their own artistic abilities to effectively integrate the arts into their classrooms. According to Sorenson (2010), these issues can be addressed by giving
educators opportunities to build their confidence in art by working on their own artistic skills through classes or professional development opportunities. Additionally, content area teachers can develop a relationship with arts-based teachers to improve their art skills and abilities or to gain ideas of how arts-based activities can be integrated into the classroom (Sorenson, 2010).

As with the implementation of any new program within the schools, funding is always a major issue. The second set of questions that arose as a result of the study have to do with funding: How can schools afford to effectively implement arts-based instruction in every classroom? Where will supplies be purchased for arts-based classroom activities? Funding limitations can cause a major issues for schools looking to implement arts integration. Sorenson (2010) stated that with so much of schools’ money and resources dedicated to ensuring that students are prepared for standardized testing, the question of funding plays a major role in the implementation of anything new in the school. However, arts integration does not have to be expensive, especially since many of the materials needed for effective arts integration are currently found in schools. In other words, materials do not have to be elaborate or expensive for effective arts integration (Sorenson, 2010).

The third question that arose from this study regards shifting the attitudes that many people have toward the arts: How can we get teachers to see arts integration as a reliable source for student achievement and not as something that is simply cute or a time-filler? LaJevic (2013) stated that because art projects have been used as decoration through education, it has led to the devaluation of arts integration. Because of this common use of art in schools, many in education have been given the idea that art should primarily be
used as a decoration and cannot play a substantial role in education and learning. LaJevic also stated that many teachers do not understand the difference between arts and crafts, leading to them to fail to incorporate art into their classrooms or not seeing the arts as a viable part of education. For the arts to be seen as a concept worth exploring in education, the attitudes that educators have toward the arts have to change. Educators have to understand the value of this tool for student achievement and see the pressing need for this change in the education field. In order for people to see the relevance of the arts-integrated classrooms, teachers and administrators must acknowledge the possibilities and complexities of teaching and learning through the arts while shifting their mindsets to recognize the value of arts integration and its place in education (LaJevic, 2013).

**Action Plan: Implications of the Findings**

After conducting the research and analyzing the findings of the study, the participant-researcher shared the findings with school administration and teachers to provide an additional source of interventions for student learning and achievement. Based on the data from the study, the participant-researcher recommended that the school continue to implement arts-based instruction to help with literacy achievement. Thus, in the upcoming school year, the school plans to implement arts-based interventions in all fifth-grade classes, beginning in September. During the summer, the participant-researcher will work with the arts integration trainer to provide professional development for effective arts integration for fifth-grade teachers. Teachers will participate in arts integration for professional development during the professional
development days for teachers at the beginning of the school year. Additionally, during the summer, the researcher will meet with the administration to discuss the materials needed for fifth-grade teachers to effectively implement arts-based literacy interventions. The participant-researcher will work with administration to purchase basic arts supplies so that materials are ready for use at the start of the school year. Additionally, advance purchase of materials will allow the participant-researcher and teachers to be aware of what is available as they plan their new arts-integrated curricula.

Beginning in August, the participant-researcher will work with the fifth-grade teachers to help them increase their comfort levels for integrating arts into the classroom. The participant-researcher will have the teachers complete a survey about their perceptions of arts integration to better understand their attitudes and concerns regarding arts integration and to be able to provide information to an arts integration trainer for professional development purposes.

Once the new school year begins, the participant-researcher will work with the teachers to gain information on the students. The participant-researcher will administer the reading interest inventory and multiple intelligence assessment to the students. Once all the data from the surveys have been collected, the participant-researcher will meet with the fifth-grade teachers to discuss students’ perceptions of reading along with the artistic strengths and abilities of the students. This information will help the participant-researcher and teachers when developing interventions for students.

Starting in September, at the beginning of each nine-week period, the researcher will meet with the fifth-grade teachers and related arts teachers to develop an arts-based literacy curriculum that will be used during the intervention. The participant-researcher,
along with the teachers, will review the district’s pacing guide and current curriculum map. The group will review curriculum requirements for each nine-week period to develop a guide to help with arts integration. The related arts teachers will work with the classroom teachers to offer art ideas that can be implemented with the literacy skills that will be covered during the following nine weeks. Beginning the week of September 11th, students will receive arts-based literacy interventions three times per week during the school’s designated intervention time period. The participant-researcher, along with the other fifth-grade teachers, will meet weekly to develop lessons and activities for literacy interventions.

The participant-researcher will provide continual arts-integrated support to the teachers. Since the school is a STEAM school with a focus on arts integration, the participant-researcher will contact other STEAM schools to arrange for the fifth-grade teachers to visit and see arts integration in action. The participant-researcher will schedule a visit during the beginning portion of the school year to allow teachers to apply what they see and learn to their classrooms. The participant-researcher will also arrange for teachers to visit another STEAM school during the second semester to again view effective arts integration in practice.

**Suggestions for Future Research**

When conducting future research on the effects of arts integration and arts-based interventions on student achievement, one suggestion would be to conduct the study for a longer period of time. With the time frame given for the study, there was some increase in student achievement, but if the study had been conducted over a longer period of time,
the increase in achievement might have been different. What would the outcome of the study have been if there was more time to work with the participants on arts-based literacy interventions?

Another suggestion would be to include additional classes for comparison purposes. This would help with determining if it was solely the arts-based interventions that led to an increase in student achievement. By including additional classes in the study, the research could show if arts-based interventions produced a greater increase in student achievement than classes receiving more traditional literacy interventions. For future research, two classes could be used, with one class receiving arts-based instruction and the other class receiving traditional literacy interventions. Thus, the results could be compared to see the effects of arts-based instruction.

For this particular study, teachers’ thoughts and views regarding arts integration were not obtained, but for future research, it would be interesting to study such attitudes (i.e., How do teachers currently feel about arts integration? What is their comfort level regarding integrating the arts into their classrooms?). Because teachers’ views play a critical role in the efficacy of implementing new ideas and concepts in the classroom, understanding their attitudes about the arts and arts integration could help administrators and researchers understand and the barriers to implementing an arts-integrated curriculum.

**Educational Change**

Educators face changes every day, from the implementation of new state-mandated curriculum to the pressures of high-stakes assessments, and as many people do,
they may look at change negatively, without giving the change an opportunity to be implemented and proven as effective or ineffective. According to Yılmaz and Kılıçoğlu (2013), changes in education are met with opposition because of many factors, including selective perception of the change, habit on the part of educators, inconvenience or loss of freedom, the economic implications of the change, feeling secure with what has happened in the past, the fear of the unknown, and potential threat to one’s power. Yet, educators must strive to overcome these causes for resistance. As Yılmaz and Kılıçoğlu noted, for educators to embrace change, there must be effective communication about the change, the educator has to feel involved in the change, and the school must provide effective facilitation and support throughout the change. Educators have to feel involved, informed, and that their voices are heard. They have to know that they are being supported and that the change is effectively monitored and facilitated. Once educators embrace changes like integrating the arts into their classrooms, they can help create learning environments that are about and serve the best interest of their students.

Conclusion

Literacy skills are a fundamental part of students’ success—both in the classroom and beyond. Literacy skills help students gain tools that help them to engage in learning, and develop the skills in thinking and expressing that lead to self-confidence and personal identity. Literacy is critical in every subject, right across the curriculum, in enabling and shaping social interactions, promoting cultures, and laying the foundations for lifelong learning. (Bozsik, 2015, p. 5)
Students are equipped with many talents and abilities that teachers can use to their advantage to help with literacy achievement. Additionally, because of the many learning styles present in educational settings, it is crucial for educators to identify these different learning styles in students and incorporate their strengths to meet the needs of all students (Graham, Garton, & Gowdf, 2001). Incorporating the arts into classroom interventions can allow students to use their strengths, gifts, and talents to demonstrate learning while taking pride in and ownership of their learning and increasing their achievement in a variety of subjects.

For this project, I wanted to study the effect of arts-based interventions on literacy achievement. First, I worked to better understand the students, both on an artistic level and a literacy level. I then worked to incorporate arts-based interventions to provide students with arts-based literacy lessons, with the purpose of discovering if arts-based interventions improved students’ literacy skills achievements. The research found in this study showed the benefits of integrating arts into content area classes. After conducting the research, it was noted that students who receiving arts-based literacy interventions showed an increase in literacy proficiency, which supported the research found on arts integration.
References


“Howard Gardner’s theory of multiple intelligence.” (n.d.). *Northern Illinois University, Faculty Development and Instructional Design Center, 1*-9.


Appendix A: State ELA Testing Results 2016 (Schoolwide)

2016 SC Ready ELA

Meets/Exceeds 41%

- Does Not Meet/Approaches
- Meets/Exceeds

Does Not Meet/Approaches 59%

Figure A.1: State ELA Testing Results 2016 (Schoolwide)
Appendix B: Reading Interest Survey

1. Do you like to read? YES NO SORT OF
   If you circled “SORT OF”, explain:
   ________________________________________________________________
   ________________________________________________________________

2. How much time do you spend reading?
   _____ minutes per day; _____ minutes per week

3. What are some of the books you have read lately?

4. What is/are your favorite book(s)?

5. Do you ever get books from the school library? YES, NO

6. What are some books you would like to own?

7. Circle the genres/types of reading material you like or might like best.

<table>
<thead>
<tr>
<th>history</th>
<th>travel</th>
<th>Plays</th>
<th>Sports</th>
<th>science fiction</th>
</tr>
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<tr>
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<td>detective stories</td>
<td>war stories</td>
<td>art</td>
</tr>
<tr>
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<td>supernatural stories</td>
<td>Cars</td>
<td>Novels</td>
<td>biography</td>
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<tr>
<td>nonfiction</td>
<td>humor</td>
<td>Folktales</td>
<td>how-to-do-it books</td>
<td>mysteries</td>
</tr>
</tbody>
</table>

8. Do you like to read the newspaper? YES, NO

9. Do you have a favorite magazine and what is it?

10. Do you have a subscription to any magazines and what are they?

11. What are your hobbies and interests?

12. Do you enjoy having someone read aloud to you? YES, NO

13. Tell me anything else that you would like to say about yourself and your experience with reading:
Appendix C: Multiple Intelligence Survey

Complete each section by placing a “1” next to each statement you feel best describes you. If you do not feel the statement represents you, leave the space blank. Total the column in each section when you are done.

Section 1

<table>
<thead>
<tr>
<th></th>
<th>1. I enjoy putting things into categories by common traits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. I like to take care of the environment</td>
</tr>
<tr>
<td></td>
<td>3. I enjoy hiking and camping</td>
</tr>
<tr>
<td></td>
<td>4. I think it is important to take care of our parks and forests</td>
</tr>
<tr>
<td></td>
<td>5. Animals are important in my life</td>
</tr>
<tr>
<td></td>
<td>6. I recycle at home</td>
</tr>
<tr>
<td></td>
<td>7. I enjoy science</td>
</tr>
<tr>
<td></td>
<td>8. I like to be outdoors</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total for section 1</strong></td>
</tr>
</tbody>
</table>

Section 2

<table>
<thead>
<tr>
<th></th>
<th>1. I can easily see patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. I focus in on noise and sounds</td>
</tr>
<tr>
<td></td>
<td>3. I can dance to the beat of music easily</td>
</tr>
<tr>
<td></td>
<td>4. I like playing instruments</td>
</tr>
<tr>
<td></td>
<td>5. I remember things by putting them in a rhyme</td>
</tr>
<tr>
<td></td>
<td>6. I enjoy many kinds of music</td>
</tr>
<tr>
<td></td>
<td>7. Remembering song lyrics is easy for me</td>
</tr>
<tr>
<td></td>
<td>8. I like to sing or hum tunes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total for section 2</strong></td>
</tr>
</tbody>
</table>

Section 3

<table>
<thead>
<tr>
<th></th>
<th>1. I keep things neat and orderly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Step by step directions are a big help for me</td>
</tr>
<tr>
<td></td>
<td>3. Solving problems comes easy to me</td>
</tr>
<tr>
<td></td>
<td>4. I can complete calculations easy in my head</td>
</tr>
<tr>
<td></td>
<td>5. I enjoy working on a computer</td>
</tr>
<tr>
<td></td>
<td>6. Puzzles requiring problem solving are fun</td>
</tr>
<tr>
<td></td>
<td>7. Structure helps me be successful</td>
</tr>
<tr>
<td></td>
<td>8. I feel satisfied when things make sense</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total for section 3</strong></td>
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</tbody>
</table>
Section 4

<table>
<thead>
<tr>
<th></th>
<th>I enjoy discussing questions about life</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Religion is important to me</td>
</tr>
<tr>
<td></td>
<td>I enjoy looking at art</td>
</tr>
<tr>
<td></td>
<td>I like to participate in relaxation and meditation activities</td>
</tr>
<tr>
<td></td>
<td>I like visiting breathtaking sites in nature</td>
</tr>
<tr>
<td></td>
<td>Learning new things is easier when I understand they are important</td>
</tr>
<tr>
<td></td>
<td>I wonder if there are other forms of intelligent life in the universe</td>
</tr>
<tr>
<td></td>
<td>I like to study history and other cultures</td>
</tr>
<tr>
<td></td>
<td>Total for section 4</td>
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</tbody>
</table>

Section 5

<table>
<thead>
<tr>
<th></th>
<th>I learn best through interacting with others (cooperative groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The more people around the happier I am</td>
</tr>
<tr>
<td></td>
<td>I learn best with study groups</td>
</tr>
<tr>
<td></td>
<td>I enjoy chatting with friends on the internet</td>
</tr>
<tr>
<td></td>
<td>I like to watch television and listen to radio talk shows</td>
</tr>
<tr>
<td></td>
<td>I am a “team player”</td>
</tr>
<tr>
<td></td>
<td>I have lots of friends</td>
</tr>
<tr>
<td></td>
<td>I like to join clubs and participate in extracurricular activities</td>
</tr>
<tr>
<td></td>
<td>Total for section 5</td>
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</tbody>
</table>

Section 6

<table>
<thead>
<tr>
<th></th>
<th>I enjoy making things with my hands</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sitting still for a long time is difficult for me</td>
</tr>
<tr>
<td></td>
<td>I enjoy outdoor games and sports</td>
</tr>
<tr>
<td></td>
<td>I enjoy nonverbal communication like sign language</td>
</tr>
<tr>
<td></td>
<td>I believe it is important to exercise</td>
</tr>
<tr>
<td></td>
<td>Arts and crafts are fun</td>
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<tr>
<td></td>
<td>I like working with tools</td>
</tr>
<tr>
<td></td>
<td>I learn by doing</td>
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<td></td>
<td>Total for section 6</td>
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</tbody>
</table>
### Section 7

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>I enjoy reading all kinds of materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Taking notes helps me remember and understand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I like to write my friends letters and emails</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is easy for me to explain my ideas to others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I keep a journal</td>
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</tr>
<tr>
<td></td>
<td>I like word puzzles, crosswords, and word jumbles</td>
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<tr>
<td></td>
<td>I write for pleasure</td>
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</tr>
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<td></td>
<td>I like to speak in front of a group</td>
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### Section 8

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<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>I learn best when I have an emotional attachment to the subject</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fairness is important to me</td>
<td></td>
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<tr>
<td></td>
<td>My attitude affects how I learn</td>
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<tr>
<td></td>
<td>I believe acceptance of differences among people are important in life</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working alone is productive for me</td>
<td></td>
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<tr>
<td></td>
<td>I need to know why I should do something before I do it</td>
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<tr>
<td></td>
<td>When I believe in something, I will give 100% effort to it</td>
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<tr>
<td></td>
<td>I like being involved in causes that help others</td>
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### Section 9

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td></td>
<td>I can imagine ideas in my mind</td>
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<tr>
<td></td>
<td>I like rearranging rooms</td>
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<tr>
<td></td>
<td>I enjoy creating art using different types of media</td>
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<tr>
<td></td>
<td>I remember well when using graphic organizers</td>
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<tr>
<td></td>
<td>I like to organize data in charts and graphs</td>
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</tr>
<tr>
<td></td>
<td>I can recall things in mental pictures</td>
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<tr>
<td></td>
<td>I am good at reading maps</td>
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<tr>
<td></td>
<td>Music videos are stimulating</td>
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Adapted from
http://www.kerstens.org/alicia/planning10/Multiple%20Intelligences%20Inventory.pdf
## Appendix D: Data Collection Form

<table>
<thead>
<tr>
<th>Student Number</th>
<th>pre assessment Score</th>
<th>post assessment Score</th>
<th>Change from Pre to Post</th>
<th>Teacher Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>
Appendix E: Researcher Project/Study Information Sheet

The Effects of Arts Integration of Students Literacy Proficiency

Researcher: Sara D. Tucker

The information below explains the project and what will be involved as a part of the research project.

What is this study about?
Reading and reading proficiency is important when it comes to a child’s education. As a teacher, my goal is to ensure that students contain the necessary skills to be fluent readers, while being able to understand and comprehend the reading. The research will allow me to look at arts integration to study its effects on reading skills and proficiency.

How will your child be involved?
Your child will be working within a small intervention group and learning will not be affected in any way. All information obtained during the study will remain anonymous. All data collected will be safely stored and results will be seen by others, but no names will be included in the results.

What do I do next?
If you wish to allow your child to be involved in this research project, please return the project permission form. If you do not wish to have your child involved in this research project, please complete the attached form. Please note that students may withdraw from the research study at any time without consequences or penalties.

Thank you very much for your time.
Appendix F: Parent Permission Form

Dear Parent:

I am a graduate student in the College of Education at the University of South Carolina. I am currently working on my dissertation, completing a study on the effects of arts integration on student reading proficiency.

Your child's participation will involve studying how arts integration helps with achievement by collecting pre and post study data. Your child’s participation in this study is voluntary. If you or your child chooses not to participate or to withdraw from the study at any time, there will be no penalty and it will not affect your child’s classroom grade, treatment from researcher, or classroom learning. The results of the research study may be published and findings from the study will be shared with the school, but your child’s name will not be used in any of the shared information.

While the goal of the research is to see an increase in student’s reading proficiency, the research conducted and the findings obtained from the study may have direct benefit to your child, and it is possible that the information obtained may help with future classroom instruction and creative and alternative ways to help with student achievement and reading proficiency. If you have any questions concerning this research study or your child's participation in the study, please call me at (803) 635-4810 or email me at tuckers4@email.sc.edu.

Sincerely,
Sara D. Tucker, Researcher

I give consent for my child ______________________ to participate in the above study.
Parent's Name (print): ______________________________________________________
Parent's Signature: ______________________________________________________
(Date) ___________________________
Appendix G: Parent Opt-Out Form

Dear Parent/Guardian,

I am writing to inform you about research I am conducting as part of my Doctoral program and dissertation requirements at the University of South Carolina, Columbia.

I am interested in studying how the integration of art interventions will help with student achievement, with the focus on reading proficiency. The study will focus on reading skills and using arts based lessons with the teaching and learning of these skills.

I have talked with your child’s school and explained the purpose of the study. The school has agreed to allow the study within the school setting. Please read the information below. You will notice that this research and information obtained will be confidential and no personal information will be shared or released. My hope is that you will agree to your child being a part of this research study.

After reviewing the information, if you would prefer that your child not participate in this research study, please sign and return the form below. If you have any questions concerning this research study or your child's participation in the study, please call me at (803) 635-4810 or email me at tuckers4@email.sc.edu.

Yours sincerely,

Sara D. Tucker, Researcher

PARENT OPT-OUT FORM

I have read the information about the study and reviewed the concepts of this research study.

☐ I am not willing to allow my child to take part in the study. I have made the decision to have my student opt-out of the research study.

Name of child: ________________________________________________________

School: ________________________________________________________________

Signature of parent/guardian: _____________________________________________

Date: ________________________________