

**A Multiple Case Study Examining Elementary School Art, Music and Physical
Education Teachers' Perceptions, Attitudes and Beliefs Related to Interdisciplinary
Teaching Practice**

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K-12 public school reform in the United States over the last decade has increased educational accountability in reading and math and touted the importance of students' acquisition of a 21st century skill set. Non-tested content areas, such as art, music and physical education have struggled to maintain their position within the curriculum. In many cases, art, music and physical education teachers have been asked to integrate content from the tested content areas of reading and math or to engage in pedagogical approaches that foster 21st century skills like communication, collaboration, critical thinking, and creativity. This qualitative multiple case study examined both teacher and school principal perceptions, attitudes and beliefs regarding the role, practice and context of selected elementary art, music and physical education teachers in western Pennsylvania in supporting the current aims of public education. Purposeful sampling was used to select a total of 13 participants from three different western Pennsylvania public elementary school sites. Participants engaged in guided conversation interviews at each of the three sites. Additional data was collected during site visits, including teacher schedules, lesson plans, field notes, and other internal documents. Arts-based research methods were employed to analyze and present findings and conclusions. The findings of this qualitative multiple case study provide insight for consideration by school leaders, teachers, school board members, policy makers and administrators in establishing integrated art, music and physical education teacher

practice that provides students with opportunities for relevant 21st century learning across the curriculum. Conclusions drawn from this research suggest that many of participants often perceive their content areas to be regarded as subordinate in comparison to tested content areas within their elementary school contexts. Participants' interdisciplinary teaching practice was influenced by factors including: perceived curricular hierarchy, concerns with declining student creativity, awareness of school accountability requirements, self-efficacy, resources and principal support. Implications of this research suggest art, music and physical education teachers might explore new paradigms for integrated teaching practice, and that administrators and school leaders can support this effort by increasing the priority associated with these content areas to increase capacity and potential for student learning across the curriculum.

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PREFACE

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1.0 INTRODUCTION

1.1 VIGNETTE

Recent test scores in a small, rural, Title I western Pennsylvania Elementary School have indicated that there is a school-wide deficit in math. The principal is particularly concerned about the 4th grade scores. At her monthly faculty meeting, the principal convincingly states the need for everyone to incorporate math across the curriculum. She indicates that the low test scores reveal a need for more math exposure and uses the example that we should be incorporating math in all classes. “I need to see more differentiated instruction happening in math,” she says. “Our students should be learning in flexible groups, communicating their understanding of math concepts effectively and learning in collaboration with one another. Collaboration is a 21st century competency our students will need when they enter the workforce. I don’t care if it’s science class, or even gym class, this should be an issue that concerns us all. We have an obligation to teach our students to be proficient in math, and our entire school is going to be held accountable to make sure this happens.” The principal introduces a PowerPoint presentation she’s developed to support increased math performance. During her lead-in to the presentation, she suggests that teachers develop lessons that integrate math into their content area instruction. She then narrates a 12-slide presentation on best practices for flexible-group instruction and learning centers in math.

The sole physical education teacher in the elementary school, Mr. Weston has been teaching for 4 years. He considers the task the principal has just charged the entire staff to complete. He is receptive to the sense of urgency conveyed by his principal and endeavors to develop a lesson that ties in math. He doesn’t know much about the standardized math assessments, but thinks that if he can give his students a chance of doing better on the test by advancing their knowledge through relevant linked learning experiences in his classroom, it probably can’t hurt.

Mr. Weston experiences some initial frustration in that he has no other teachers in his content area he can collaborate with to develop integrated lessons. He is determined to give integrated teaching a try in his physical education class. He looks through his college textbooks, and searches for ways to teach math across the curriculum on the internet. He tries to talk to several 4th grade teachers to obtain information about what specific math content should be taught in his physical education class, but in consulting the master schedule he discovers they have no time to meet because the 4th grade teachers are on their preps while Mr. Weston teaches 4th grade. During his own prep period that week, Mr. Weston stops into the office to ask the

principal for additional clarification and direction, but the secretary tells him that the principal is in reading curriculum meeting with the 1st, 2nd and 3rd grade reading teachers.

Mr. Weston is not lacking in his willingness to try integrated teaching, and he eventually locates appropriate grade level math content and standards on his own and develops a few curricular connections he reinforces in several of his physical education classes through some highly simplified kinesthetic lessons based on the concepts of measurement and elapsed time. During his first few attempts with integrated teaching, Mr. Weston experiences some frustration and feels that teaching the math concepts seemed to be the primary focus. The students seem disappointed as well when they realized that math was taking precedence in their gym class.

Continuing to seek effective integrated practices through trial and error, Mr. Weston consistently begins and concludes each class with relevant math connections throughout the semester. Students are now engaging in various lessons which include activities like tracking their heart rates, collaborate in order to problem solve in teams, and using conventional sports rules and games to estimate units of measurement. He receives no feedback from his principal for his efforts, and the curricular connections that are delineated in his lesson plans are not validated. Mr. Weston starts to wonder if he is integrating effectively, and wishes he had additional training or support to continue to make contributions in the school-wide area of need through his content area.

During the next in-service day, the principal has taken the time to plan several professional development activities for many of the teachers within the school. All Kindergarten, 1st and 2nd grade classroom teachers attend a workshop on early childhood learning standards. The 3rd, 4th and 5th grade reading teachers are scheduled to attend a workshop that teaches them how to incorporate the technology component that came with the newly purchased reading series. The 3rd, 4th, and 5th grade math teachers will attend a presentation where a math coach offers strategies to increase active engagement and standards-based teaching in math class. Mr. Weston, the art teacher, and the music teacher are told to attend the reading series technology workshop with the 3rd, 4th and 5th grade reading teachers. The principal talks to Mr. Weston during one of the breaks on the in-service day and asks him to plan a school-wide pep rally for all students to celebrate an upcoming athletic event.

It's now the end of the semester, and Mr. Weston's physical education class has been cancelled three times for holiday events. On Wednesday morning, he is told that due to the holiday concert that he will not have use of the gymnasium, his classroom, for the rest of the week because of several performances and assemblies that will take precedence for the school. On this short notice, he is asked to temporarily relocate his class to another classroom. He is frustrated, because he feels he has finally arrived at an effective approach to integration. He had several engaging lessons planned for his students that integrated both physical education and math standards with equal regard for both content areas. The change of location with limited space has seriously compromised his instructional plans.

After the break, the principal receives word about recent test scores in both reading and math. Significant gains have occurred in math, with 4th grade math scores increasing nearly 15% since students were last assessed. She holds a faculty meeting, and shares the good news, publicly thanking the 4th grade teachers for their efforts and noting their effort to truly engage the students in order to make a difference in their math scores.

This vignette presents a common scenario in public elementary schools, where many teachers of art, music and physical education with good intentions are not provided with the training, support, or time to collaborate that is necessary to establish integrated 21st century learning experiences for students (Barry, 2008; Bresler, 1995; Graham, Wilkins, Westfall, Parker, Fraser & Tembo, 2002; Russell & Zembylas, 2009).

1.2 BACKGROUND

Art, music, and physical education, by nature of their disciplines, have the capacity to engage students in active learning experiences (Eisner, 1998, 2002; Marlett & Gordon, 2004). Each of these three content areas has a story of curricular evolution that is shaped by and responds to political, economic, and social eras and change (Burnaford, Aprill & Weiss, 2001; Spring, 2008; Wakeford, 2004). Increased educational accountability and a 21st century skill set defined by a rapidly-changing global market have influenced the state of art, music, and physical education programs in public elementary schools in the United States (Eisner, 2002, 2004; Ferrero, 2011; Friedman, 2007; Graham et al., 2002; Jacobs, 2010; Pink, 2006; Song 2011; St. Gerard, 2011; Wakeford, 2004; Zhao, 2009).

Because these content areas mirror contemporary context, the current focus on accountability in increased reading and math skills has certainly influenced the state of art, music and physical education (Graham et al., 2002). The national pressure to increase students' proficiency in reading and math has had both subtle and obvious effects on art, music and physical education teacher practice (National Center for Education Statistics, 2012). Many

school principals are responsible for making instructional decisions within their buildings. Principals commonly use assessment data to formulate school-wide instructional plans and corresponding professional development (Clinchy, 2007). The expectation for increased reading and math proficiency has led some school principals to make decisions at the local level that have unintended repercussions for content areas like art, music and physical education. Often these decisions involve reduced class time for students in these non-tested content areas, or broad school-wide initiatives aimed at supporting student learning in reading and mathematics (Graham et al., 2002).

The priorities of the principal that are based solely on reading and mathematics are likely to be met with contention by art, music and physical education teachers who experience heavy teaching loads (Barry, 2008; Smilan & Miraglia, 2009). Generally, art, music and physical education teachers have little training in teaching mathematics and reading (L. Barrett, personal communication, August 1, 2012; Marlett & Gordon, 2009). While they may feel confident teaching their own content area knowledge, they do not always regard themselves as specialists capable of adequately teaching reading and mathematics concepts, or may lack the understanding of how they might effectively merge other content area knowledge with their own (Marlett & Gordon, 2004; Russell & Zembylas, 2007). Because of the typical master schedule used in many elementary schools, whereby the art, music, and physical education teachers ultimately provide a preparation period for the regular classroom teachers by teaching their students while these teachers are relieved, ongoing training or time to collaborate with colleagues is rare. Similarly, principals who are responsible for analyzing school-wide data and initiating instructional decisions at the school level may recognize the importance of integrated teaching within the art,

music and physical education classrooms, but may lack the expertise to foster this approach to teaching (Barry, 2008; Stout, 2002).

Important areas of concern related to interdisciplinary teaching and learning include the following: a.) the responsibility and role of the elementary art, music and physical education teacher in providing 21st century integrated learning experiences for students (Bresler, 1995; Cone, Werner & Cone, 2009; Jacobs, 2010; Russell & Zembylas, 2009; Wiggins, 2001); b.) how the areas of focus for interdisciplinary teaching in elementary, art, music and physical education are determined; c.) how elementary art, music and physical education teachers and administrators perceive the role of art, music and physical education in relation to other content areas and content area teachers (Rikard, 2008); d.) the role of school leaders in determining instructional aims and supporting interdisciplinary teacher practice in elementary art, music and physical education (Barry, 2008; Strand, 2006); e.) the factors that encourage or inhibit interdisciplinary teaching practices in art, music and physical education classes (Hudson, 2011).

1.3 RESEARCH QUESTIONS

This qualitative multiple case study conducted in three elementary school sites investigated three essential research questions derived from the review of the literature. The literature review explored three themes: i.) art, music and physical education teachers' historical roles in public education, ii.) the nature of integrated teaching practice, iii.) the potential for "21st century" learning opportunities that exists in art, music and physical education. The research questions

were developed in response to the review of the literature. These three questions form a line of inquiry that will be examined in depth through this proposed study.

The data that will be collected to conduct this multiple case study will be analyzed to determine selected art, music and physical education teachers' and building principals' perceptions, attitudes and beliefs relative to their roles and interdisciplinary practice in public elementary schools. This study explores the following questions:

Q1: How are the roles of art, music and physical education teachers perceived by selected teachers and administrators within their public elementary school contexts?

Q2: How do selected elementary art, music and physical education public school teachers and building administrators perceive integrated teaching within their practice?

Q3: How has art, music and physical education teacher practice been influenced by the introduction of 21st century skills like collaboration, communication, creativity, critical thinking?

An understanding of how art, music and physical education (AMPE) teachers and building principals perceive the changes that have occurred in education over the last decade with regard to increased accountability is important to understanding beliefs of AMPE teachers and elementary principals about shared responsibility to support reading and mathematics instruction across the content areas. This study examines the role, perspectives, attitudes and beliefs of elementary AMPE teachers associated with an increased focus on reading and mathematics and integrated teaching practices. The perspective of the building principal, who perceives educational accountability from a different standpoint as an instructional leader is also valuable in understanding the types of support that exist with unfamiliar or increased instructional expectations for elementary AMPE teachers.

In learning how selected western Pennsylvania AMPE teachers and principals understand and experience integrated teaching practice, the priorities and factors associated with integrated AMPE teaching can be identified and analyzed. This multiple case study examines aspects of context, training, professional development, support, commitment and collaboration that influence interdisciplinary teaching practices in western Pennsylvania public elementary schools.

Four specific 21st century skills will be the foci for this aspect of the study: collaboration, communication, creativity, and critical thinking (Partnership for 21st Century Skills, 2010). Through research that determines AMPE teachers' attitudes and beliefs with regard to 21st century pedagogy, the potential for resulting 21st century skills integration that supports active student engagement in AMPE classes will be illuminated. Specific approaches to and factors that support or impede AMPE 21st century skills integration will be examined through this research.

1.4 STATEMENT OF THE PROBLEM

My work is at the intersection of three related developments. Technological advancement has spurred a competitive global market, shedding light on the educational shortcomings of the United States (Friedman, 2007). Efforts to improve our educational system have resulted in increased public school accountability and high-stakes testing in reading and math through the authorization of the No Child Left Behind Act (2001). With an increase in reading and math accountability, other non-tested content areas, including art, music and physical education, have become marginalized in public education to make room for increased instructional focus in reading and mathematics (Graham et al., 2002).

As public elementary schools are held accountable to meeting adequate yearly progress for student proficiency in reading and math and non-tested content areas are pushed to the periphery of the curriculum; the teachers of non-tested content areas are sometimes asked to support instruction in reading and mathematics (Eisner, 2004; *Infusing the Arts into Literacy and Math*, 2012). One approach to teaching elementary art, music and physical education is to teach across the curricular connections, tying into reading and math. This interdisciplinary teaching can also serve to reinforce a 21st century skill set through active learning (Marlett & Gordon, 2004). The problem is that we know little about the attitudes, beliefs and perceptions of practicing AMPE teachers with regard to how they perceive their roles within their schools.

As depicted in the vignette, elementary art, music and physical education teachers typically teach a large number of students, have heavy workloads, experience isolation, sometimes travel among several schools, and are scheduled to teach during classroom teachers' planning and preparation time (Barry, 2008; Graham et al., 2002; Holman, 1999; Krueger, 2000; Prince, Schuermann, Guthrie, Withan, Milanowski & Thorn, 2008). As a result, art, music and physical education teachers often do not have access to classroom teachers' team meeting, planning and preparation time for the purpose of collaboration. These circumstances are challenging, and thus, efforts to plan and implement interdisciplinary lessons require commitment to this type of teaching, creativity, and collaboration (Barry, 2008). Because the success of implementation with interdisciplinary teaching in elementary art, music and physical education is influenced by a variety of factors based on the beliefs and attitudes of teachers, it is important to understand teachers' perceptions surrounding their roles and beliefs as they manifest in their practice (Russell & Zembylas, 2009).

1.5 PURPOSE

The purpose of this study is to determine teacher and administrator attitudes toward interdisciplinary teaching practice in art, music and physical education classrooms in purposefully selected elementary schools in western Pennsylvania. This study also seeks to analyze and interpret the perceptions, attitudes and beliefs of elementary school administrators and elementary art, music, and physical education teachers regarding their role in public schools in an era of increased educational accountability. This research will portray art, music and physical education teachers' views of their perceived roles, integrated teaching practices, and personal beliefs and experiences related to 21st century student learning. The findings of this study will aid school leaders, teacher leaders, teacher preparation programs and policy makers by providing them with information about how elementary art, music and physical education teachers perceive their current roles; their comfort level and experience with interdisciplinary teaching; and to what extent their content area expertise is utilized in elementary school settings to promote active, relevant 21st century learning. This research might then be useful in aiding elementary school administrators and school leaders in building capacity through integrated teaching practices among elementary art, music and physical education teachers (From Intuition to Action, 2012).

It is not the focus of this study to determine the most effective or specific ways to provide interdisciplinary learning experiences for students that focus on measurable cognitive gain. The more affective focus of this study will be to examine teachers' and administrators' attitudes and beliefs relative to the value and practice of interdisciplinary teaching and learning, and what

factors support or hinder art, music and physical education teacher efforts in interdisciplinary teaching practice.

1.6 CONCEPTUAL FRAMEWORK

This study will be situated upon theories and concepts associated with current interdisciplinary practices in K-12 public education. It is important to note that a review of the scholarly literature on arts education and physical education indicates a strong distinction between art/music education and physical education. However, in common school-wide practice this distinction is blurred. Elementary art, music and physical education teachers are commonly referred to as the “specials” teachers, share similar schedules in order to provide classroom teachers’ preparation periods, and may be subject to similar inclusion or exclusion with regard to school-wide initiatives. Additionally, no single approach to integrated teaching practice is universally accepted, and the inherent intent and corresponding components of various integrated teaching practices may be applicable and beneficial to many content areas. Physical education teachers are included in this study in order to examine their practice, perceptions and beliefs regarding their role and approaches to curricular integration under circumstances similar to those of the art and music teachers. This study may then be applicable and support similar work in other non-tested content areas, like computer, technology education, industrial arts, library, business, or family and consumer sciences.

My conceptual framework for this study will be primarily based on the work of Leora Bresler (1995) who offers four approaches to arts integration commonly found in schools: a.)

subservient, b.) coequal, c.) affective, and d.) social. Bresler's typology will be used as the framework for comparison among participants and cases through interviews with public elementary school principals and art, music, and physical education teachers in western Pennsylvania elementary schools. Bresler frames integration to explain how integrated practices can serve several purposes: being bent to fit the needs of another (often more dominant) content area; to offer connected learning that is truly equal, which regards both content areas standards thus preserving the integrity of both content areas; to create a certain mood or spark a loosely-related learning experience on a very basic level; or to function on a public relations level, catering to the needs of the school in the form of a showcase or performance. Data relevant to instances of integration and teacher roles will be situated within this framework.

A secondary component of this conceptual framework is derived from Russell and Zembylas (2007), who maintain that integrated teacher practice is tied to teachers' beliefs regarding the merit of curricular integration, preservation of curricular integrity, and self-efficacy, that is, teachers' confidence in their ability to engage in integrated teaching practices. By better understanding teachers' attitudes and beliefs with regard to what they perceive as their professional and pedagogical responsibilities and capabilities, we can learn how to establish contexts that support coequal school-wide curricular integration in elementary art, music and physical education in public schools that benefit the interests of AMPE teachers, school principals, and most importantly, students.

Barry (2008) provides a tertiary aspect of the conceptual framework for this study. She offers that the success of integrated teaching practice, which is quite common at the elementary level, is largely dependent on several factors which include: a long-term commitment to integration on the part of the teachers, but especially the principal; ongoing training; and regular

time dedicated for teachers' planning and collaboration. This research will explore and describe the presence and interplay of these three features in each elementary school site that is subject to investigation in this study.

This study will examine the relationships between art, music and physical education teachers' attitudes and beliefs, their perceptions and experience as it relates to integration, the presence of school-wide components necessary to support integration and the resulting experiences with integration as described by the school principal and art, music and physical education teachers (Barry, 2008; Bresler, 1995; Russell & Zembylas, 2007).

1.7 SIGNIFICANCE OF THE STUDY

Art, music and physical education offer many benefits to student engagement and active experiences that contribute to the development of the whole child (Barell, 2008; Dewey, 1934, 1938). Interdisciplinary teaching is a pedagogical approach that offers relevance, sustains student engagement, and promotes multifaceted conceptual understanding (Marlett & Gordon, 2004; Russell & Zembylas, 2009). As content areas, art, music and physical education possess potential to provide students with interdisciplinary learning connections (Barry, 2008; Marlett & Gordon, 2004; Strand, 2006). There are many forms of integrated and interdisciplinary teaching, many of which overlap and coexist (Bresler, 1995; Burnaford et al., 2001; Cone et al., 2009; Mathison & Freeman, 1998; Mohnson, 2011; Russell & Zembylas, 2007). Interdisciplinary learning in art, music and physical education may also engage pedagogy that concurrently fosters 21st century active learning skills students will need for success in global living, like collaboration,

communication, creativity, and critical thinking (Adams, 2011; Ferrero, 2011; Friedman, 2007; Hudson, 2011; Jacobs, 2010; Levine, 2010; Munson, 2011; Pink, 2006; Song, 2011; St. Gerard, 2011).

A significant amount of research currently exists on the benefits of interdisciplinary teaching and learning and the importance of teaching students 21st century skills (Barell, 2008; Barry, 2008; Jacobs, 2010; Mathison & Freeman, 1998; Russell & Zembylas, 2009). However, there is little empirical research on the actual effects of integrated instruction in relation to student learning (Wiggins, 2001). A great deal of research related to the nature and benefits of arts integration has also been conducted (Barry, 2008; Burnaford et al., 2001; Davis, 2008; Eisner, 1998; Rubin, 2011; Russell & Zembylas, 2009; Smilan & Miraglia, 2009; Winner & Hetland, 2007; Winslow, 1939). There is also educational research and literature that examines interdisciplinary teaching, particularly as a means of teaching 21st century collaboration and critical thinking skills in physical education (Ballinger & Deeney, 2006; Barell, 2003, 2008; Christie, 2000; Cone et al., 2009; Marlett & Gordon, 2004; Rikard, 2008). The effects of educational accountability with regard to marginalization of art, music, and physical education have also been researched, but to a lesser extent (Graham et al., 2002; Wilkins et al., 2003). Within the greater scope of educational studies, there is a considerable void in the existence of research that examines the realities and commonalities of the art, music, and physical education content areas and teachers in public elementary schools.

This qualitative multiple case study will provide a dynamic representation of the common experience of elementary art, music and physical education teachers in western Pennsylvania. This case study examines condition, perceptions and beliefs of elementary art, music and physical education teachers to better understand the pressures of public school accountability in

confluence with the prevalence of 21st century skills. This study will reveal the perceptions, attitudes, and beliefs of elementary art, music and physical education teachers relative to their professional roles in an era of increased accountability. The findings of this research will bring to light commonalities among the beliefs and experiences of elementary art, music and physical education teachers that might provide insight into better utilizing the content area expertise of specialist teachers to engage in integrated teaching practices in public elementary schools.

1.8 ARTIST STATEMENT: CURATING THE PROCESS

The following artist statement offers insight to my process as an arts-based researcher within this qualitative multiple case study that examines the experiences and beliefs related to professional roles, integration, and the influence of a 21st century pedagogy from the perspectives of elementary art, music and physical education teachers within three contemporary public school contexts. After experimenting with arts-based representation within my coursework at the University of Pittsburgh, I debated whether or not to include this method as part of my dissertation. Despite having an interest in this type of research, my experience with art-making has been more traditional. I am a former art teacher and exhibiting artist who discovered my love for architectural-style drawing and landscape painting early in my career. The art that was created for my dissertation is uncharacteristic of my usual choices for subject matter, but I enjoyed exploring this new style and allowing my approach to educationally relevant representations to emerge during this process.

I initially developed a purely textual dissertation proposal before allowing myself earnest consideration of arts-based representation within this dissertation. Despite the presentation of a textual dissertation proposal, images that represented elements of my conceptual framework had already developed for me during my review of the literature. When I read conceptual and theoretical explanations, I have always “seen” imagery that simplifies verbal complexity and frames my understanding. In my experience, repression of these images feels somewhat like a battle that results in frustration for me as a learner, but allowing them to materialize through art-making has marked productive instances of sustainable learning. I have discovered that when I develop these images on paper, my learning is more permanently reinforced. For me, engaging in this type of art and understanding enables me to both achieve and demonstrate synthesis within my learning.

1.8.1 Conceptual Blueprint

The sketches and final work for the conceptual framework were my first arts-based undertakings for this research. This inspiration came to me in the middle of the night. I had been contemplating Bresler (1995), Russell & Zembylas (2007), and Barry (2008) and was on the verge of understanding how they would fit together for my study when I awoke with images in my mind, of blueprints, a framework, and the interplay of these mechanisms. From this vision, I created quick sketches to capture my ideas, and over the next few weeks I developed two paintings that represented this concept. Once these images existed on paper, I realized I had to include them in my dissertation. It was then that I decided to fully embrace this approach as part

of my research, and I committed myself to the task of creating images that conveyed the significance of my study.

Only one of these initial conceptual framework paintings was selected for presentation within my dissertation. I then wove the selected artwork into my writing, first offering the larger blueprint painting to the reader to introduce the conceptual framework, and then placing smaller elements of this larger composition within the text to illustrate elements of the conceptual framework in greater detail as they were simultaneously situated and described in relation to my study. Each of these smaller elements is its own carefully developed composition, intended to exist as part of the larger painting as well as on its own as a smaller part of the greater framework. Though my imagery is not abstract, it is not entirely literal either. My intent as an artist is to suggest metaphoric representations that elicit various perceptions for my reader. I have done this by presenting images that may encourage multiple interpretations from my viewer but relate to the concepts I have examined within my research.

1.8.2 Visual Narrative

Through this research, I identified a disparity between some aspects of the literature and the realities of practice for art, music and physical education teachers. I hoped that my approach to arts-based/textual presentation of the findings and implications would help to bridge this divide, and in this way my research would contribute to the field. Once I allowed my mind to begin generating ways to represent various aspects of my conceptual framework, I considered how I could continue with this same approach as I moved into my data analysis phase. This musing was solidified when I arrived at each of the three sites, taking in the varied contexts for the first

time while jotting down observational field notes and getting to know each of the participants. I was so fully inspired by their narratives and was moved by a sense of obligation to create this art that presented a synthesis of the purpose of this research with the varied and personal implications as described by the participants. I sought to demonstrate the problem-solving power of application through the arts to convey concepts and meaning, as well as to bridge theory and practice.

During the interview process, I noted significant statements made by educators and began to construct schemas related to these statements. The arts-based research approach served a dual purpose by aiding me in the data analysis as well as offering an additional approach to presentation of the findings. I moved back and forth between the coding of data and the sketching and painting of images: a totem pole, a silo, the foundation of a statue, and an olive tree. I considered how these images could offer meaning and convey the findings and implications of the research. The creation of art that coincided with these themes allowed me to deepen my analysis of the data and offer a pictorial representation of the findings and implications to the reader. I wish to influence the perception of the viewer simply by offering images that can be construed through the eyes of the viewer/reader in tandem with my textual analysis.

1.8.3 Summary

My challenge through the incorporation of arts-based methods was to develop paintings as an aspect of my broader study while adequately representing the purpose, significance, research

questions, approach, findings and implications of this research. After embracing this method, I felt familiar with the elements that would be necessary within the creation of my artwork to address this challenge; this assisted me in aligning this method to co-exist with the more traditional qualitative methods that are also used in this research. The inclusion of arts-based educational research methods allowed me to construct a dynamic, aligned and whole dissertation that demonstrates an approach to problem solving, reflects my way of knowing as the researcher and invites the reader to engage in a detailed interpretation of my study.

1.9 DEFINITION OF TERMS

Building Administrators- The building principal who is the primary instructional leader and direct supervisor to teachers within a school.

21st Century Skills- The skills and competencies that are necessary to compete with other individuals and nations within the context of globalization. 21st Century competencies being examined for the purposes of this study are communication, collaboration, critical thinking, and creativity.

AMPE- An acronym that refers to art, music and physical education (Graham et al., 2002).

*Affective Integration-*Affective integration may complement the tested content area curriculum. Affective integration is aimed at altering mood, fostering an open-ended, less structured creative mindset and offering basic experiential AMPE exposure. There not a

significant amount of emphasis on AMPE standards with this integration style. This approach prompts candid AMPE response and involvement for students.

Coequal Integration- The ideal of Bresler's four integration classifications; this style elicits active student reflection and higher order critical thinking. The equal presence of AMPE standards and content coexists with equal importance in relation to the reading/mathematics standards being addressed through the integration (Bresler, 1995).

Educational Accountability- Comprises a set of issues associated with educational reform, high-stakes testing, and U.S. student preparation for success in the global economy.

Interdisciplinary/Integrated Learning –The simultaneous and mutual use of knowledge to support learning through two or more content areas.

*Social Integration-*This approach to integration complements the academic curriculum by fostering relationships to the greater school community through AMPE activities, performances and celebrations. Less emphasis is placed on the substance and standards of the AMPE learning, while greater emphasis is placed on showcasing students' performance or product for the good of the school.

Specialists- Any K-12 state certified content area teaching specialist; for the purpose of this study specialist refers to elementary art, music and physical education teachers.

Subservient Integration- The most common integration approach, where one content area serves to augment learning in another content area. The influence of basic academic skills and educational accountability in reading and mathematics is common in this integration style. Learning through subservient integration is more general, with one content area being of lesser importance in the merging of two content areas. Subservient integration activities may be highly simplified and superficial art, music or physical education experiences with basic levels of

application. Subservient learning activities may include art, music and physical education content but lack the depth and substance necessary to immerse students in the rich experiences necessary to cultivate authentic learning in art, music or physical education (Bresler, 1995).

2.0 REVIEW OF THE LITERATURE

The foci on 21st century skills and educational accountability have developed significantly in recent years. The demands of the global market and rapid technological developments have quickly evolved, and new approaches to teaching and learning in K-12 public education are being developed in order for United States students to remain competitive among their counterparts in other nations. Current education policy in the United States places a strong emphasis on student proficiency in the areas of reading and mathematics in an effort to produce a workforce capable of participating in the global market.

However, this intense focus on the reading and mathematics content areas may not be the most efficient or appropriate way to produce capable students (Clinchy, 2007). A comprehensive pedagogical approach that is developed with foresight and considers the anticipated needs of the future may support students' acquisition of a 21st century skill set (Jacobs, 2010; Pink, 2005). Rubin (2011) posits that these skills mirror the demands of the workplace; they include problem solving, innovation, adaptation, collaboration, motivation, productivity, and leadership. Many of these skills can be taught through a variety of non-tested content areas in ways that tested content areas cannot offer (Eisner, 1998; Graham et al. 2002; Rubin, 2011; St. Gerard, 2011). In public schools, arts education, music education, and physical education possess untapped potential for active learning that supports student learning in reading

and mathematics, the very content areas in which current policy requires students to obtain minimum levels of proficiency (Ferrero, 2011; Graham, 2002).

Arts education is a content area in K-12 education which encompasses music, visual art, dance, and theater. State and national standards have been developed to frame the learning associated with arts education. Visual arts and music are arts education courses commonly offered in comprehensive K-12 public school settings. Public magnet schools for the arts often offer a range of more specific arts courses as their school is developed around fostering arts skills at a higher level of rigor. This may include courses devoted solely to various forms of cultural dance, varieties of ceramics, various styles of printmaking, or diverse genres of music. This review of the literature and corresponding study will focus on the state of elementary art, music, and physical education in public western Pennsylvania schools where such a variety of arts-based courses are not readily offered and students are offered a much more general arts curriculum.

Physical education is commonly present in public schools. In Pennsylvania, physical education is mandated; public schools are obligated to offer physical education to students each year in elementary schools. At the secondary level, physical education must be provided to students as part of both their middle school and high school program (Pennsylvania State Board of Education, 2002). Physical education offers students active learning engagement in sports, recreation, health, and fitness. In many western Pennsylvania schools, the physical education curriculum does include dance; however, in some schools dance is instead considered a component of the arts. As mentioned with the arts magnet schools, highly specialized physical education courses are rarely offered in public elementary schools and students are typically offered a physical education curriculum designed to provide learning experiences that offer

exposure in various sports, lifelong fitness, and health (National Association for Sports and Physical Education, 2005).

In an informal survey of ten public elementary schools in western Pennsylvania, all schools offered music, art and physical education classes taught by content area specialists for all of their students. Typical western Pennsylvania elementary schools employ at least one art teacher, one music teacher, and one physical education teacher. This contextual data as it pertains to western Pennsylvania elementary schools is important because it supports the claim that these three content areas are frequently and simultaneously offered in public elementary schools. Because these three content areas are offered in most public elementary schools, it is logical to question whether these content area teachers' expertise is underutilized in promoting school improvement as measured through current school accountability indicators. Knowledge of the attitudes, beliefs and perceptions of teachers is essential to understanding if and how content area teachers expertise is being maximized to promote multidimensional learning in and through reading and mathematics; art, music or physical education; and communication, collaboration, creativity, and critical thinking (Barell, 2003, 2008; Feller, Gibbs-Griffith, D'Acquisto, Khourey-Bowers & Croley, 2007; Marlett & Gordon, 2004; Russell & Zembylas, 2007; Schmoker, 2011).

There is natural content area potential to teach a variety of skills and concepts through and across disciplines in schools (Fellar & Gibbs-Griffith, 2007; Mathison & Freeman, 1998; Munson, 2011; Schmoker, 2011). Art, music and physical education content areas are of specific interest as integration entry points because of their potential for promoting active learning experiences when students are engaged through application and relevance (Barell, 2008; Jacobs, 2010; Marlett & Gordon, 2004; Strand, 2006). This engagement holds potential to maintain students' interest as skills and concepts from other content areas are introduced and reinforced.

Interdisciplinary or integrated learning refers to learning experiences designed to teach concepts through the relevant overlap between and among content areas (Russell & Zembylas, 2007). Interdisciplinary learning in art, music and physical education serves an even greater purpose if learning can be presented with the intention of preparing students to prosper within the global context they will experience (Jacobs, 2010; Russell & Zembylas, 2007).

The extent to which students engage in learning experiences that include interdisciplinary, 21st century responsive teaching often depends on state policy, local curriculum, and teacher beliefs and attitudes (Munson, 2011; Russell & Zembylas, 2007). Individual art, music and physical education teachers' instructional approach and curricular delivery determine what students are or are not learning (Jones, 2007). Art, music and physical education teachers' feelings toward integrated teaching practice affects student learning (Jones, 2007; Russell & Zembylas, 2007). As Schmoker (2011) notes, "The actual curriculum an average child learns, in the same course and in the same school, varies tremendously from teacher to teacher; what you learn depends on what teacher you have" (p. 13).

The following literature review will examine: a.) the historical functions and evolution of the non-core content areas, specifically art, music and physical education, in K-12 public schools in the United States; b.) nature of interdisciplinary and integrated teaching and learning, and c.) the potential benefit of K-12 public education models that value interdisciplinary teaching and learning as a way of instilling 21st century skills. Several authors of the texts included as references in this dissertation were personally contacted during the review of the literature to provide dynamic clarification, shed light on tensions in the field, or to discuss emergent components of the conceptual framework. This discourse, cited as personal communication

throughout the literature review, was important as it helped to situate this multiple case study within the existing research.

2.1 THE HISTORICAL FUNCTION AND EVOLUTION OF ART, MUSIC AND PHYSICAL EDUCATION

In order to fully understand the current status of art, music and physical education within the curriculum, it is important to identify the inception and evolution of each of these content areas within the historical context and progression of public education in the United States. Thomas Jefferson is credited with proposing the United States public education system in 1779. The notion of free and fair public school was the basis for the democratic values that would one day come to define the United States. Jefferson believed students should be taught to read; he also believed an educated and literate population should be free to make their own political and personal judgments. Horace Mann, secretary of the Massachusetts Board of Education in the mid-1800s, believed that citizenship education was the responsibility of public school. His belief that a common education for all children would prevent revolution and political unrest formed the basis for the Common Schools Movement (Spring, 2008a; Spring 2008b). Mann believed that all public schools should offer a similar and equitable course of studies to students; common school education typically concluded with elementary school (then 8th grade) for most students (Jacobs, 2010). Through Jefferson's ideals and Mann's establishment, common public schools evolved and historically addressed three foundations: civic, economic, and personal education. Schools have endeavored to prepare students to be literate and responsible citizens who are

capable of assuming vocational or professional roles through their ability to cultivate individual skills, abilities and talents (Ferrero, 2011; Spring 2008a; Spring 2008b). The Common School Reform created a need for normal schools, which were institutions established to train elementary school teachers in instructional strategies and pedagogy. In 1844, Horace Mann called for the Massachusetts Board of Education to offer music and drawing in Massachusetts Public Schools (Burnaford et al., 2001; Efland, 1988, Wakeford, 2004). The Massachusetts Drawing Act of 1870 mandated that drawing be taught in common schools (Burnaford et al., 2001; Wakeford, 2004). The National Education Association (NEA) formed The Committee of Ten, which was comprised of a group of prolific educators, who convened to form the foundation for a standardized curricular framework for schools (Burnaford et al., 2001; Jacobs, 2010). The report that was generated by the NEA placed major emphasis on establishing a nationally standard curriculum in language, arithmetic, and science. The committee felt the arts curriculum should be designed locally; as a result art and music were scarcely mentioned. The exclusion of the arts in this report had a profound impact on art and music programs in public schools as they were already relegated as content areas further from the core of the curriculum, perhaps not worthy of inclusion in a national curricular framework. This subtle classification placed the arts in a category of lesser priority when regarded among language, arithmetic and science (Burnaford et al., 2001).

Existing primary source document report cards used by various public schools from the late 19th and early 20th centuries include a range of content areas. It is evident that some of these unusual content areas, like agriculture and declamation are now extinct as national economic shifts mirrored curricular demands for students (Wakeford, 2004). Other commonly assessed courses, like orthography, drawing, and physiology would become the foundation for courses

still offered today in public school. Throughout the 20th century, the aforementioned courses evolved into the modern day course offerings, respectively handwriting, visual arts and physical education.

2.2 THE HISTORY OF ART EDUCATION

During the earliest years of public education, drawing and orthography were introduced and integrated into the regular education curriculum for their value as skills essential to manual trades and industrial design. A public school art curriculum was simultaneously sustained upon the study of art appreciation in relation to Victorian-era aesthetic ideals of beauty (Wakeford, 2004).

Art education was influenced nationally when the Paris Exposition of 1867 revealed that American textiles were substandard when compared to those produced in other nations (Burnaford et al., 2001; Efland, 1990; Wakeford, 2004). In an effort to compete with their countries' products, the Drawing Act of 1870 was passed in Massachusetts, which authorized industrial drawing instruction in common schools (Noblit, Corbett, Wilson & McKinney, 2009). Walter Smith, a renowned industrial draughtsman, introduced a model for industrial drawing to be taught in public schools. Smith was one of the first art educators to propose that drawing possessed interdisciplinary benefits, and touted the benefits of drawing in teaching creativity, acuity, science, math and history (Bolin, 2009; Burnaford et al., 2001; Efland, 1990; Wakeford, 2004).

Following World War I, traditional approaches to public education solely for industrial capability were challenged by John Dewey. Dewey's progressive educational philosophy was based upon the premise that student learning occurs through the synthesis of various personal and educational experiences (Dewey, 1934, 1938). Visual art as it exists today in K-12 public schools was born from the progressive educational beliefs and frameworks developed by Dewey and expounded upon by prominent art educator Viktor Lowenfeld, who proposed that because children's learning should be based upon experience, their art should be regarded as a reflection of their emotional, social, and aesthetic growth (Dewey, 1934, 1938; Lowenfeld, 1947).

Simultaneous to Dewey's contributions, Leon Winslow published *The Integrated School Art Program* in 1939, which situated art as an integral aspect of an entire learning experience. Winslow maintained that the arts were not a discreet or tertiary component of the curriculum and that experiences should not be "organized around a central core, such as social studies, history or science" and that "art should be integrated in the curriculum with whatever it is integrated with in life" (Winslow, 1939, p.37). Winslow offered a first glimpse at the concept of deliberate integration for the purpose of comprehensive and meaningful student learning. This idea was now born and would continue to evolve throughout the 20th century.

Art education continued to develop alongside other content area counterparts following World War II, with an interest in individual creativity and expression beginning to inform the approach to content area instruction. Some critics of art education argued that this new regard for aesthetic and personal preference in artistic development compromised rigor within the arts discipline.

Throughout the 1950s and early 1960s public education remained relatively conservative (Wakeford, 2004). Art education was most profoundly influenced by the progressive, democratic

education theory first introduced by Dewey and reinforced by Lowenfeld. Art education shifted from a disciplined industrial training in drawing to a less structured forum for student inquiry, experience, and self-expression (Burnaford et al., 2001). This transition from utilitarian design to what was regarded as superfluous expression compromised art education (Wakeford, 2004). This change irrevocably placed the arts into a category of aesthetic inconsequentiality and undermined past and future attempts to place the arts at the core of the academic curriculum (Burnaford et al., 2001; Eisner, 1998; Wakeford, 2004). Arts education continued to emerge during the latter part of the 20th century, with these divergent philosophies prevailing.

Public education in the United States came under scrutiny when *A Nation at Risk* (National Commission on Excellence in Education, 1983) revealed that the United States was in danger of falling behind other nations in math and literacy achievement. The report suggested that Americans' deficits in core content areas would soon result in profound economic repercussions for the United States. National concern for perceived core content areas disregarded the visual arts as a non-essential aspect of the curriculum (Wakeford, 2004).

In response to *A Nation at Risk*, various education reform initiatives that endeavored to increase the quality of education developed within the United States. One arts education reform initiative, the Discipline-Based Arts Education (DBAE) approach of the 1980s and 1990s was born from the idealistic "art for art's sake" perspective, which makes the argument that the arts should be important enough to stand alone in the curriculum, and that academic and cognitive value is inherent in the arts. The DBAE approach encompassed four major aspects of arts education: production, history and context, criticism and aesthetics (Delacruz & Dunn, 1996; Wakeford, 2004). Initially critiqued as being overly rigid in terms of structure, content and

pedagogy, DBAE evolved throughout the next decade, eventually endorsing a more child-centered approach to arts education (Delacruz & Dunn, 1996).

Some arts education advocates, working to refute the arts' reputation as content area of lesser priority, suggested an integrated approach to arts education. This approach emerged in response to this belief that the arts were a more subjective, superfluous component of the curriculum and therefore could be justified and retained if deemed essential to a broader, connected cognitive and curricular web (Allen, 1995; Csikszentmihalyi, 1996; Eisner, 1998; Allen 1995; Robinson, 1982, 2005, 2006; Wakeford, 2004).

2.3 THE HISTORY OF MUSIC EDUCATION

Another content area common to public schools is music education. Music education spurred from rote memorization and basic music appreciation through uniform approaches to musical instruction. In early American public schools, proper pronunciation of the English language could be reinforced through lyrics and music as an increasing influx of immigrants arrived in the United States during the Industrial Revolution.

Horace Mann believed that in providing children of all backgrounds to a common education taught by qualified teachers he could equalize their experience and access to society. In seeking to educate all children similarly, Mann believed that political unrest would be curtailed and positive participation in a democratic society could be fostered. Music was an aspect of the curriculum that resulted from Mann's Common Schools Movement of the 1830s (Wakeford, 2004).

Early American music education approaches were formal and intended to promote a broad understanding and appreciation for music (Noblit et al., 2009). Musician Lowell Mason was a notable contributor to music education in the late 19th century who believed in the educational value of music theory. Despite public resistance, Mason initiated vocal music in the first common schools in Boston in 1838.

In the early 20th century, the progressive contributions of John Dewey and Susanne Langer were integral to the development music education. Langer offered that music possessed the capability to communicate emotion through sound. Dewey's belief in children's abilities to learn through experience was introduced into music pedagogy. Students were challenged to learn complex patterns and complete rigorous exercises and applications in music; this was a departure from the traditional practice of teaching children through more simple, repetitious musical memorizations (Goble & McCarthy, 2002; Kimpton, 2000; Wakeford, 2004).

As the American population continued to grow, technology evolved and access to a variety of media in everyday life increased. The invention of the phonograph would be followed by radio broadcast. These advancements made music a more important part of American life, which in turn increased support for music education (Nelson & McGehee, 1963). In the post - World War I era, progressive advocates for the arts believed music, as a discipline, possessed a creativity and integrity that was essential to education. Students were encouraged to perform music as artists. Many public schools began offering choral and instrumental music programs to students (Wakeford, 2004). Throughout the latter part of the 20th century, schools sought to offer comprehensive learning experiences to students; music grew to become an integral aspect of rapidly expanding public education. As the American high school became commonplace in the late 1800s, larger, refined school music programs included formal instrumental and vocal

ensembles that were sources of community pride that reflected societal prosperity moving into the 20th century (Andrews & Cockerille, 1958; Spring 2008b).

In response to the increased educational accountability in recent years, proponents of music have touted musical performance as a powerful mode of learning that elicits candid student participation. Integration of music and core content areas is often proposed as a means of providing engaging and relevant educational opportunities for learners (Della Pietra et al., 2010; Feller et al., 2007). Music possesses natural connections to mathematics with regard to note value, fractions, patterns and various numeric concepts. Proponents of music integration believe that active education in and through the arts that can impact students' learning in other content areas (Wakeford, 2004).

2.4 THE HISTORY OF PHYSICAL EDUCATION

Physical education is another content area commonly included in K-12 public schools alongside art and music education. Though distinctly different as a content area, the commonality exists by the way in which art, music and physical education are situated in terms of educational priority and scheduling in public schools. Physical education, like art education and music education, is taught by a certified content area teacher in K-12 public education. Physical education curriculum includes fitness education and teaches students the benefit of physical activity for lifelong health and well-being (National Association for Sport and Physical Education, 2005). Physical education as a discipline stems from athletic principles developed and established by the ancient Greek Olympians thousands of years ago. The historical origins of physical education

are represented in four domains: physical education as a specific content area, study of the Olympic Games, exercise science, and competitive sports (Dauer & Pangrazi, 1989; Patterson, 2004). Hard work was a Puritan ideal for Early American settlers; farm labor, religion and a focus on fundamental academics comprised the experience of New England school children in the late 18th and early 19th centuries. As cities were established in the United States, industry and an easier daily life followed. Laborious activities such as farming and hunting became less essential to survival, and came to be regarded as recreational activities. A variety of traditional sports from other countries were introduced in the United States, including cricket, soccer, boxing, and archery (Dauer & Pangrazi, 1989).

Physical education was profoundly influenced by both the German and Swedish physical education models. In the late 1800s, the German practice of gymnastics and the Swedish approach to exercise were incorporated into many public schools in the United States (Dauer & Pangrazi, 1989). An outcome of the Common School Movement was an effort to offer more curricular consistency among various public schools (Wakeford, 2004).

Public school report cards in the late 19th and early 20th centuries often reflect a grade in physiology and also a teacher's assessment of a student's overall personal hygiene. These domains would eventually merge to form the Physical Education content area. During the Industrial Revolution, many parks and playgrounds were established throughout the United States to support Americans' health and well-being (Patterson, 2004).

During the World War I military draft, nearly 30% of Americans failed their physicals. This data was a catalyst for the restructuring of physical education in schools; in many states weekly physical education requirements were instated. During the early 1900s, physical education included both exercise and games to promote learning through enjoyable physical

activity. The economic and societal constraints of Great Depression hindered the growth of physical education programs in schools. Physical education was revitalized following an international comparative study in the early 1950s that determined American children were weaker and less flexible than European children. This study was the catalyst for the formation of the President's Council on Physical Fitness and Sports, aimed at encouraging a healthy, active lifestyle for all Americans. Physical fitness came to be perceived as an ongoing lifestyle rather than an isolated achievement (Kirchner, 1992). Physical Fitness Testing in public schools was initiated to encourage students' physical capability for daily activities, reduce health related problems, establish fitness for participation in recreational activity, and to increase awareness in physical education in order to promote physical education program development (Dauer & Pangrazi, 1989; Kirchner, 1992).

Throughout U.S. history, physical education has been influenced and redefined to reflect economic and social needs. Today, physical education encompasses knowledge derived from medical/health research, exercise science, and individual and team sports. These concepts are infused to provide students with framework of understanding physical well-being and healthy living (Jacobs, 2010; Marlett & Gordon, 2004; Patterson, 2004).

2.5 THE CURRENT STATE OF ART, MUSIC AND PHYSICAL EDUCATION

Art, music, and physical education are a few of the curricular areas commonly offered in public elementary schools that influence the comprehensive development of the whole child. Some research indicates that education in art, music, and physical education can benefit student

achievement (Graham et al., 2002; Ruppert, 2006; St. Gerard, 2011). Research by Moga, Burger, Hetland and Winner (2000) that contradicts this claim was published in the *Journal of Aesthetic Education*. A meta-analysis of ten studies was conducted, with seven indicating no causation between arts learning and academic improvement. This research found art to be extremely valuable to comprehensive learning, but maintained that it does not directly benefit non-arts student achievement or increased test scores (Winner & Hetland, 2007).

A review of the literature surrounding the history of art, music and physical education points to social, political and economic trends as major influences in the development of the content areas as we know them today (Efland, 1990; Spring, 2008a; Spring, 2008b; Wakeford, 2004). Educational accountability, an ever-present factor in public education, has varied in form since the inception of common schools in the United States. The most current form of educational accountability, known as No Child Left Behind (2001), has marginalized many non-tested content areas including art, music and physical education in public schools. These programs are often minimized or cut in order to focus on preparation for standardized testing in reading and mathematics (Center on Education Policy, 2007; Wilkins et al., 2003). Research available through ArtsEdSearch, an online collection of studies compiled by the Arts Education Partnership, cautions educators on arts education downgrades. The Arts Education Partnership's analysis of over 40 studies has resulted in three major recommendations for principals to consider: arts integration within the literacy curriculum, the relationship between the arts and student engagement, and the positive effects of integrated pedagogy within teacher practice (Arts Education Partnership, 2011).

No Child Left Behind (NCLB) designated the arts (which is generally interpreted to include music as well) as a core content area. Though physical education did not receive a core

designation, the content area is consistently maintained in many public schools due to state mandates developed in response to Public Law 108-265, which requires school wellness policies (Rikard, 2008).

Despite the arts' NCLB "core" designation, the arts are not a tested subject under NCLB. A 2007 study conducted by the Center for Education Policy examined the effects of No Child Left Behind, specifically how NCLB has shaped curriculum and instruction. In a study of 349 school districts, 62% reported increasing instructional time in elementary schools for tested subjects like Math and English/Language Arts. As a result of the increased instructional time for tested subjects, 44% of districts reported a reduction of instructional time in elementary schools for non-tested subjects like art, music, and physical education (Center for Education Policy, 2007). As a result of the NCLB testing and accountability measures, art, music and physical education have been marginalized; the original "core" designation of the arts is offered with some futility (Rikard, 2008). A report published by the National Center for Educational Statistics (2012) indicates that over the last decade, schools in the United States overall have made little progress in advancing a comprehensive and relevant arts curriculum. This report also reveals that students in high-poverty schools have even less access to quality arts education. In some high-poverty schools, the arts may be taught by a classroom teacher rather than an arts specialist, or eliminated altogether (National Center for Educational Statistics, 2012).

Arts advocates are vehement in their classification of the arts as core and do not perceive the arts as extra-curricular (C. Smilan, personal communication, November 14, 2011; Eisner, 1998, 2004). With respect to this tension in education, and due of the contention surrounding the NCLB core/non-core designation of the arts, I classify art (core), music (core), and physical education (non-core) content areas as AMPE when discussed as a group throughout this

literature review (Graham et al., 2002). This acronym is in no way a value judgment and is simply intended for practical utility in referencing these content areas.

This review of the literature examines the history and evolution of art, music and physical education in public schools in the United States. I will discuss and analyze these content areas together because of their similarities within their content area evolution and current position in most conventional public (non-magnet, non-charter) elementary schools. Though some arts education scholars caution against categorizing these three distinct content areas together, the specific condition of art, music and physical education in elementary schools is of particular interest because these three non-tested content areas are commonly and simultaneously present in elementary schools (C. Smilan, personal communication, November 14, 2011; Graham et al., 2002; G. Graham, personal communication, September 19, 2012; M. Raiber, personal communication, June 27, 2012). The widespread presence of art, music and physical education teachers and their classrooms in elementary schools results in a distinct and prevalent teacher and content area subculture which will be the population for this study (M. Raiber, personal communication, June 27, 2012).

Another commonality of these content areas in public elementary schools is their exceptionality, that is, that these teachers are often the sole teacher of their specific content within the school. Often as a result of being the singular AMPE teacher in an elementary school, these teachers serve a significantly large number of students on a weekly basis (Barry, 2008; Krueger, 2000; Smilan & Miraglia, 2009). Smaller schools that cannot sustain full-time AMPE teaching positions may use itinerant AMPE teachers, who travel between several schools, to serve their student population (Barry, 2008; Holman, 1999).

In most traditional elementary school schedules students typically attend AMPE classes during their regular classroom teachers' planning or preparation period. This common schedule structure diminishes AMPE teachers' access to the team planning and discourse necessary for integration that the classroom teachers are often afforded (G. Graham, personal communication, September 19, 2012; Krueger, 2000; Reeves, Emerick & Hirsch, 2006; Russell & Zembylas, 2007; Smilan & Miraglia, 2009). In order to accommodate various school schedule priorities, it is not unusual for art, music and physical education teachers to be given heavier or inconsistent teaching workloads (Barry, 2008; Krueger, 2000; Smilan & Miraglia, 2009).

2.6 ART FOR ART'S SAKE VS. INTEGRATION FOR SURVIVAL

Art, music and physical education teachers experience a similar threat to the priority placed on their programs as school-wide effort is focused on ensuring students achieve well on high-stakes tests in reading and math (Barry, 2008; Eisner, 1991; Graham et al., 2002; G. Graham, personal communication, September 19, 2012). As a result, the fidelity and school priority associated with these content area standards, curricula, programs and pedagogies are often compromised. The general vulnerability, minimization and marginalization of art, music and physical education are another set of commonalities shared among these three content areas (Center on Education Policy, 2007; Graham et al., 2002; Krueger, 2000; Stein, 2005).

This constant threat has resulted in a pronounced philosophical divide relative to curricular integration, specifically within the arts (Russell & Zembylas, 2009). This theoretical division has resulted in contradicting perspectives in public education. One perspective maintains

that the arts are an essential, core discipline that should stand alone in their own right. This “art for art’s sake” viewpoint identifies the art teacher as a highly trained professional with a wealth of knowledge in both art content and pedagogy. Winner and Hetland (2007) posit that art for art’s sake deems the arts as central for introducing and refining a unique skill set of “visual-spatial abilities, reflection, self-criticism, and the willingness to learn from mistakes” (para. 10). As part of this art education philosophy, the art teacher may also lead the planning and development of arts-based integrated learning experiences (Burnaford et al., 2001; Eisner, 2002; Russell & Zembylas, 2009; Smilan & Miraglia, 2009; Winner & Hetland, 2007).

A second perspective paints art as an essential component of comprehensive learning that has been shown to increase student achievement. Proponents of this belief view the arts as a way to provide valuable, useful, and life-enhancing learning opportunities for students that introduce or reinforce relevant, engaging, 21st century learning in other content areas (Barell, 2008; Choi & Piro, 2009; Feller et al., 2007; Ferrero, 2011; Morris, 2009; Munson, 2011; St. Gerard, 2011; Winslow, 1939). Flexibility and willingness to accommodate the demands of reading and math make this approach to arts education susceptible to scrutiny by the art for art’s sake proponents, but attractive to those affected by educational accountability and high-stakes testing. This philosophy imparts the arts as being available for a valuable means of learning in reading and math, and in doing so seeks to protect arts education from elimination (Choi & Piro, 2009; Russell & Zembylas, 2009).

With the present state of educational accountability and global demands these bifurcated perspectives may reconcile to the extent that they both see the arts as a critical educational component that promotes cognitive gain; the position and implementation of this component may

vary depending on the perspective but at the core of each is a belief that students benefit from the arts (Davis, 2008; Russell & Zembylas, 2009).

2.7 THE HISTORY OF INTERDISCIPLINARY LEARNING

Curricular integration, as it currently exists, grew from knowledge of child development, learning theory, and the aim of education to develop prosperous citizens (Cone et al., 2009). Many scholars have studied and defined varying classifications, levels, and continuums of interdisciplinary learning in education (Burnaford et al., 2001; Cone et al., 2009; Davis, 2008; Jacobs, 2010; Russell & Zembylas, 2007; Smilan & Miraglia, 2009; Winslow, 1939). Integration is a teaching strategy that can be used to engage students while revealing relationships between discrete content areas (Barell, 2008; Barry, 2008; Bresler, 1995; Christie, 2000; Mathison & Freeman, 1998; Russell & Zembylas, 2007; Wiggins, 2001).

There is a lack of consensus beyond basic fundamentals relative to the priorities and direction of public education in the United States (Eisner, 1998; Freidman, 2007). AMPE content areas as individual entities emerged during the early to mid-19th century in American public education, before eventually becoming commonplace as we see in today's K-12 public education. Integration, specifically in these content areas, has been present in different ways throughout the evolution of education.

The basic concept of curricular integration is historic; evident in the philosophy of Socrates and Plato (Eisner, 1998; Russell & Zembylas, 2007). Interdisciplinary inquiry in ancient Greece involved the contemplation of both the concrete evidence of sensory reality in comparison to

mathematical and rational abstraction to establish truths (Eisner, 1998). Centuries later, the Renaissance movement spanned the mathematics, science, arts, and humanities disciplines, revisiting and further developing the academic and intellectual ideals established by ancient Greek scholars and philosophers. In the early years of public education in the United States, teachers taught across the disciplines with little consistency in one-room school houses. Mann's "common school" reform eventually provided students with curricular consistency, well-trained teachers, and educational resources. The introduction of the common school would serve as an educational platform for a variety of content areas, making curricular integration possible (Spring, 2008a; Spring, 2008b).

Research and writing relative to curricular integration would be revisited much later by Dewey and in more recent years by Eisner as a valuable means of education reform (Dewey, 1939; Eisner, 1998; Russell & Zembylas, 2007). Dewey believed that a child's education was comprised of the synergy of personal experience and development. Through education, Dewey alleged that students could be prepared to analyze and evaluate their circumstances in order to participate within a democratic society (Cone et al., 2009; Dewey, 1938; Mathison & Freeman, 1998; Spring, 2009a; Spring 2009b; Tomlinson, 1999).

In the 1950s, the work of educational psychologist Benjamin Bloom divided learning into three domains: cognitive, affective, and psychomotor. Bloom's taxonomy introduced the importance of higher order thinking and learning for students. Bloom's theory was revised by Elliott Eisner in the 1990s in anticipation of 21st century proficiencies; this revision included creating as the highest application of learning and became a common component of curricular design in the 1990s. Applications for learning in the arts specifically lend themselves to higher order thinking processes (Eisner, 1994, 1998, 2002; Hetland et al., 2007).

Educational psychologist Howard Gardner (1993) also made significant progress with regard to the possibilities associated with integrated learning through his introduction of the educational theory of multiple intelligences. Gardner's student centered approach suggested that learners possess a variety of intelligences, which, among others include visual-spatial, bodily-kinesthetic, and musical-rhythmic intelligences. This theory suggests that students think and understand in many different ways, and student learning is affected by the multiple intelligences, individual learning styles and content area context (Tomlinson, 1999). Curricular integration, then, when used in conjunction with dynamic learning experiences and regard for various intelligences, possesses great potential in positively impacting student learning (Adkins & Gunzenhauser, 2005; Cone et al., 2009; Eisner, 1998, 2002, 2004; Tomlinson, 1999).

Embedded in Gardner's theory is a roadmap to multimodal approaches to teaching students through application based on specific intelligence. An integrated curriculum draws from the initial work of Winslow (1939) and the more recent contributions of Bloom and Gardner to seek connections between and among disciplines for the purpose of deepening student learning. Teachers who integrate learning for their students are providing access to various skills, media and methods while simultaneously fostering a sense of community for their learners (Burnaford, et al. 2001; Cone et al., 2009). Both purposeful and incidental curricular integration have been evident in public schools throughout the 19th and 20th centuries; interdisciplinary teaching and learning continues to be a benefit of many 21st century public schools (Harrison, 1983; Kimpton, 2000; Russell & Zembylas, 2007; Winslow, 1939).

2.8 CHARACTERISTICS OF INTERDISCIPLINARY TEACHING AND LEARNING

There are a plethora of terms that suggest instruction that merges two or more disciplines: cross-disciplinary, cross-curricular, interdisciplinary and correlated approaches are just a few (Lake, 1994; Mathison & Freeman, 1998; Russell & Zembylas, 2009). Nuances within their specific definitions vary throughout the literature; however, the notion of converging content as a means for student learning remains consistent. Eisner (1998) states:

What we ought to be developing in our schools is not simply a narrow array of literacy skills limited to a restrictive range of meaning systems, but a spectrum of literacies that will enable students to participate in, enjoy, and find meaning in the major forms through which meaning has been constituted. (p.12)

Interdisciplinary teaching practice draws upon multiple texts, which may include texts as they exist in various disciplines like historical primary documents, sculptures or melodies. This versatile literacy embodies students' ability to navigate, participate, apply and ultimately synthesize texts and meaning among two or more disciplines. Interdisciplinary education provides such an opportunity to establish relationships between and among content areas that allow students to link various understandings (Bresler, 1995; Cone et al., 2009; Lake, 1994; Mathison & Freeman, 1998; Russell & Zembylas, 2009; Senge, 2000; Stevenson & Deasy, 2005).

Mathison and Freeman's (1998) integration typology analyzes interdisciplinary, integrated, and integrative instructional design and highlights the subtleties between them. Interdisciplinary instruction, the most straightforward and simplistic of these, refers to teacher-

facilitated instruction that crosses two or more disciplines, reinforcing fundamental concepts within various disciplines as a means for student learning. Integrated teaching is slightly more sophisticated in nature, often thematic and inquiry-based. Integrative teaching, the most highly developed of these pedagogical approaches, is constructed through student and teacher discourse and seeks to situate high-level learning within a global context (Mathison & Freeman, 1998). Bresler's (1995) typology describes similar distinctions, but focuses in greater detail on the content area value implied through the style of integration. Bresler's coequal integration style can be most closely aligned with Mathison and Freeman's integrated and integrative styles, whereby both content areas are proportionately valued and blended. Mathison and Freeman's typology provides greater detail in accurately describing the degree of depth achieved through the blended learning experience. The analysis of integration in this study will not only seek the level of distinction and depth as offered by Mathison and Freeman and Bresler, but will arrive at an analysis of integration style that regards inherent value as defined by Bresler.

2.9 POTENTIAL FLAWS AND DOWNFALLS OF INTERDISCIPLINARY TEACHING APPROACHES

Mathison and Freeman (1998) posit that education reform regards interdisciplinary and integrated learning as beneficial in teaching students to “synthesize discreet information and to connect such knowledge to the needs of everyday living” (p.2). Educators frequently embrace the perceived merit of interdisciplinary teaching without engaging in thorough analysis relative

to the downfalls of a discipline-discrete approach to teaching and learning (Mathison & Freeman, 1997).

Another concern is that interdisciplinary connections may be broad connections, sometimes too broad, and the depth with which content from each discipline is presented is compromised. One example of unsound interdisciplinary intent would be students counting repetitions of exercise in physical education, which would not constitute a rigorous mathematics connection. This is considered basic content linkage. Substantial interdisciplinary learning incorporates specific curricular concepts as outlined by grade level. Learning about athletic traditions from other countries in physical education is basic social studies content linkage; learning about athletics from a particular country and time period being studied in social studies is a solid interdisciplinary learning experience (Mohnsen, 2011).

School-wide resistance to serving the needs of reading and mathematics content areas can be a hurdle of contention in success with introducing interdisciplinary initiatives for AMPE teachers. An article by writer Sam Dillon (2010) published in the *New York Times* highlighted the narrative of a school-wide initiative to improve test scores. In Brockton High School in Brockton, Massachusetts, a school restructuring committee was instituted at the insistence of the principal in order to address academic shortcomings and a high drop-out rate. A common goal of the committee was a commitment to a school-wide focus, solely on reading, writing, and math skills. AMPE teachers met this new approach with some resistance, questioning their charge to teaching writing in classes like physical education. The committee maintained the importance of students' ability to read, write, speak and reason effectively. A framework to teach these essential literacy skills across the curriculum was developed collaboratively. This approach to teaching encouraged students to analyze and apply methodical thinking to their learning in every

content area and required a whole-school commitment in order to overcome natural teacher fear and resistance. For example, in physical education, the literacy work students engaged in focused on relevant class content, like heart rates and fitness. Because some teachers were pushed beyond their comfort level with regard to literacy integration, encouragement and collaboration by and among peers and teacher leaders were important factors for improving the quality of instruction (The Achievement Gap Initiative at Harvard University, 2009).

Students were taught to utilize step-by-step thinking in a variety of content areas through the high school's universal approach to writing. This writing framework offered unity among diverse content areas and allowed students to engage in relevant integrated learning opportunities. After a year of planning, alignment, and implementation of interdisciplinary teaching in the content areas that focused on reading, writing and mathematics, test scores were significantly higher (Dillon, 2010). The increase in student achievement at Brockton High School was analyzed and examined in the report *How High Schools Become Exemplary* published by The Achievement Gap at Harvard University in 2009. The success of this initiative was attributed to a long-term commitment by all constituents to improving the quality of instruction, accompanied by the unwavering support of the principal (The Achievement Gap Initiative at Harvard University, 2009; Dillon, 2010). Teachers formed professional learning communities around the effort, even creating additional planning time by meeting at school to collaborate on weekends. The power of this collective success, within the context of educational accountability united teachers in a common goal; they supported one another's practice and stifled any lingering teacher resistance (The Achievement Gap Initiative at Harvard University, 2009; Dillon, 2010).

2.10 ARTS INTEGRATION

Arts integration is a method of teaching that seeks to construct student learning through relationships between the arts and other content areas (Report of the Arts Education Partnership National Forum, 2002). Arts integration is a widely researched topic and focuses primarily on the value and advocacy for incorporating the arts with other K-12 content areas. There are varying philosophies and approaches associated with K-12 arts integration. Various applications of arts integration in K-12 setting are largely associated with availability of resources, location, leadership, and community beliefs (Adams, 2011; Arts Education Partnership, 2011; Burnaford et al., 2001; Davis, 2008; Della Pietra, 2010; Hudson, 2011; Morris, 2009; National Center for Educational Statistics, 2012; Russell & Zembylas, 2009).

With more specific regard to arts presence and integration in schools, Davis (2008) outlines nine configurations. Those categorized as arts-based, arts integration, and arts infused refer to varying degrees of interdisciplinary arts integration ranging from arts-originated content (arts-based) to arts for enrichment of content (arts-infused). Categories like arts expanded, arts-extra, and arts-cultura classify the arts as more of an extracurricular entity with inherent cultural value provided through partnerships with various arts organizations and museums. Davis' remaining categories, arts-included and aesthetic education are of particular interest as she describes them as discrete approaches to arts education. Arts-included refers to basic arts curriculum and instruction often present in traditional elementary school AMPE configurations that value AMPE the same as other classes (Davis, 2008). In this framework, the arts are positioned equally among students' other classes, generally scheduled around the classroom

teacher's preparation period (Smilan & Miraglia, 2009). Aesthetic education serves to augment students' ability to make meaning that enriches their experience as individuals (Davis, 2008).

Higher levels of integration beyond arts-included may realistically not be possible for public elementary schools due to basic fiscal constraints and scheduling logistics. However, tremendous potential for meaningful student engagement and learning exists in an elementary school model that merges the AMPE-included approach with learning through 21st century competencies, while providing AMPE teachers with ample training, ongoing support, and time for collaboration (Barry, 2008; Burton, Horowitz, & Abeles, 1999; Davis, 2008; Feller et al., 2007; G. Graham, personal communication, September 19, 2012; Jacobs, 2010; Morris, 2009).

2.11 CONCERNS OF ARTS ADVOCATES AND CONTENT AREA SPECIALISTS WITH REGARD TO INTERDISCIPLINARY TEACHING

Advocates of the arts, as well as physical education specialists, are more cautious that interdisciplinary qualities possessed by AMPE make them vulnerable to being packaged to fit whatever need public education currently deems essential, often taking a subservient role in relation to more dominant content areas (Davis, 1999; Barry, 2008; Bresler, 1999; G. Graham, personal communication, September 19, 2012; Smilan & Miraglia, 2009; Wiggins, 1997). Some arts proponents also rebuke interdisciplinary instruction that serves to teach core content in math, history, or writing because of the belief that a true focus on arts-based content is often compromised (Barry, 2008; Brewer, 2002; Davis, 2008; Russell & Zembylas, 2009). As Eisner (2004) states, "All too often the teacher becomes a handmaiden to the test whose scores provide

the basis on which teachers will be judged” (p.34). Davis (2008) posits that “the arts are important *not* because they make children perform better on tests, but because they provide children with arenas for learning beyond the tests, contexts for learning that help them to understand the broader educational landscape” (p.102).

While many arts advocates are reluctant to package the arts for the needs of public education, they acknowledge the many intellectual benefits of the arts, including increased skill in perception, expression, persistence, inquiry, reflection, engagement, ownership, critical judgment and collaboration (Bresler, 2005; Davis, 2008; Eisner, 2004; Russell & Zembylas, 2009; Winner & Hetland, 2007).

The benefits of rich learning in the content areas, which often include interdisciplinary approaches to teaching and learning, are fraught with controversy, specifically in the arts. The use of the arts to promote learning in other content areas has been heavily debated (Davis, 2008; Eisner, 1998; Russell & Zembylas, 2007; Rubin, 2011; Smilan & Miraglia, 2009; Winner & Hetland, 2007). Touting the arts as a surefire way to increase academic achievement is equally contentious. Winner and Hetland (2007) question whether the arts develop skills that can increase students’ performance on tests, but do maintain that certain “habits of mind” that are often associated with success in school can be learned through the arts. These habits include: persistence, expression, observing and analyzing complexity, envisioning, innovation, critical self-reflection, and the ability to make connections between learning in the arts and other aspects of life.

Winner and Hetland (2007) argue the need for studies that determine what specific skills are taught in arts classes and if what is being presented is truly learned if a correlation between arts and academic achievement is to be made. Consequently, in order to determine the potential

for 21st century skill set acquisition through elementary AMPE interdisciplinary teaching, a concise and universally accepted set of 21st century skills would need to be established, and elementary AMPE learning would need to be carefully studied to determine if students were acquiring proficiency of the aforementioned 21st century skill set through this instructional approach.

2.12 INTERDISCIPLINARY TEACHING IN PHYSICAL EDUCATION

With regard to interdisciplinary teaching in physical education, Cone et al. (2009) offer three possible models. In the connected model, physical education is the chief concentration and concepts from other content areas provide learning enhancement. The shared model is also interdisciplinary in nature and requires co-planning on the part of both teachers, and parallel learning may occur simultaneously or within a similar period of time in separate classrooms. The partnership model is the most sophisticated of these integrated approaches; the physical education teacher and classroom teacher collaborate in lesson planning and co-teach. In contrast to the arts, physical education is more comfortably viewed as possessing value as a conduit for teaching basic skills in other content areas (Christie, 2000; Rikard, 2008). Integration models developed for application stemming in other content areas (including the arts) are very similar with varying levels of integration that honor the integrity of the merged disciplines (Bresler, 1995; Cone et al., 2009; Davis, 2008; Mathison & Freeman, 1998). Contemporary research in physical education is at ease in posing the question, “How do we gain respect for the important work we do, which stretches across various disciplines?” (Rikard, 2008, p.5). Cone and Cone

(1998) suggest multifaceted integrated instructional design that requires the collaboration of the regular classroom teacher, the music teacher, and the physical education teacher to facilitate thematic student learning that merges democratic values, music, and physical education (dance). Gagen and Getchell (2008) offer elementary physical education as a valuable experience in teaching Newton's laws of motion in conjunction with movement science. While interdisciplinary learning in physical education can occur in a variety of ways; the benefit of this integrated learning for students may occur through thematic connections and real-world applications with regard to concepts like sports history, measurement of elapsed time or specific tolerance, tracking and charting heart rates or effective communication and collaboration among team members (Mohnsen, 2011; Patterson, 2004).

Many students who struggle in other content areas thrive in physical education. The same is true for other specific content areas like art and music (Ennis, 1991). Critical thinking strategies can be taught through physical education when students perceive their own success and enjoyment, and can begin to identify critical thinking connections as they are presented not only in physical education class, but across the curriculum (Marlett & Gordon, 2004). These thinking processes that may be fostered in physical education class may include decision-making, short term evaluation, body movement and awareness in relation to problem-solving, and metacognition (Ennis, 1991).

2.13 INTERDISCIPLINARY LEARNING AND EDUCATIONAL ACCOUNTABILITY

The changes of the 21st century have altered the demands of public education drastically (Ferraro, 2011; Munson, 2011). The historically accepted approach to public education that last transformed with great significance during the Industrial Revolution continues to change alongside economic and technological expansion (Levine, 2010). The simultaneous push for 21st century skills and increased test scores have affected curricular presentation and the prevalence of integration in public education. (Della Pietra et al., 2010; Munson, 2011; Russell & Zembylas, 2007). Technology has developed rapidly, resulting in a thriving global marketplace demanding of a 21st century skill set comprised of the competencies students will need to experience success as worldwide citizens; these capabilities include creativity, collaboration, critical thinking, communication, and teamwork (Christie, 2000; Hudson, 2011; Jacobs, 2010; Song, 2011; St. Gerard, 2011). There are multiple advocates with varied, sometimes conflicting perspectives regarding the purpose, value and importance of a 21st century curriculum that cultivates student learning through the content areas (Jacobs, 2010; Ferrero, 2011; Pink, 2006; Winner & Hetland, 2007).

An advantage of art, music and physical education is that these content areas possess the potential to simultaneously offer their own content area standards, in combination with standards-based concepts in reading and math, alongside 21st century skills through creative approaches to curricular integration that result in active learning for students with the ability for real-life application (Adams, 2011; Arts Opportunity Gap, 2012; Bresler, 1995; Barry, 2008; Cone et al., 2009; Della Pietra et al., 2010; Ennis, 1991; Feller et al., 2007; Ferrero, 2011;

Hudson, 2011; Jacobs, 2010; Monson, 2011; Morris, 2009; Pink, 2006; Ritchhart & Perkins, 2008; Song, 2011; Williams, 2008).

However, Munson (2011) cautions that the 21st century skills movement can jeopardize meaningful student learning if skills such as innovation and media navigation are taught in a way that is unrelated or insignificant. There is also concern that various concepts might be taught incorrectly by a teacher who is not an expert in certain content area knowledge (Barry, 2008; L. Barrett, personal communication, July 1, 2012). Content areas such as arts, music and physical education can be merged with 21st century skills if they intrinsically possess the content area relevance and significance necessary to promote meaningful learning that may align skills necessary for career with preparation (Arts Opportunity Gap, 2012; Davis, 2008; Graham et al., 2002; Lorimer, 2009; Senge, 2000; St. Gerard, 2011).

A major implication of globalization is that United States workers now compete with other nations for employment. A young student aspiring to become an engineer in western Pennsylvania may now compete with students in India and China for the same job. (Friedman, 2007; Levine, 2010). This reality has increased accountability in K-12 public education, resulting in an era of high-stakes testing with student achievement scrutiny influencing education at the national, state, district and classroom teacher levels (Graham et al., 2002; Munson, 2011). Art, music and physical education programs benefit the education of the whole child. These content areas have been further compromised in schools as high-stakes test accountability has increased in the 21st century (Graham et al., 2002; Eisner, 2004; Munson, 2011).

As a result of the pressures associated with individual teacher accountability, teaching practices have become increasingly disjointed. Students are not generally encouraged to see how smaller learned concepts are part of a larger body of knowledge. Students are, by default,

utilizing short-term memory because they are not enabled or encouraged to situate these small bits of learning within a greater understanding (Eisner, 1998).

Another impact of educational accountability stems from the emphasis on testing, which undermines the value of the aesthetic in learning (Munson, 2011). This preoccupation with testing, specifically preparation for content tested through multiple choice answers, hinders opportunities for AMPE cross-curricular integration in K-12 public schools (Cone et al., 2009; Eisner, 1998; Russell & Zembylas, 2007). Accountability, and consequently testing, continues to dictate the path of education, yet research tells us there is long-term, sustainable value in the way that students learn in and through AMPE (Cone et al., 2009; Eisner, 1998, 2004; Graham et al., 2002; Lorimer, 2009; Marlett & Gordon, 2004; Pink, 2006).

An educational approach that fosters cognitive gain and the democratic participation necessary is delineated by Russell and Zembylas (2007) in their literature review. Arts integration, a more specific approach to incorporating arts within the curriculum provides students “access to broader meanings in life” which is the basis for a “world-class education that is often talked about, but rarely experienced” (p. 288). In recent years, national curriculum reform efforts in advancing mathematics, science, and language arts have indicated the importance of cross-curricular integration (Russell & Zembylas, 2007).

Russell and Zembylas (2007) posit that learned curriculum and success of integrated teaching is dependent on the attitude and belief of the teacher. A belief in the value of integrated practice, preservation of curricular integrity, and teacher self-efficacy are important to the success of curricular integration (Russell & Zembylas, 2007). A 2010 study by Della Pietra, Bidner and Devaney determined that attitudes and beliefs of pre-service teachers toward music integration were related to their undergraduate coursework relative to music. Pre-service

elementary classroom teachers who had completed college level music fundamentals course felt comfortable integrating music in their classrooms (Della Pietra et al., 2010). There is reason for concern that this integration approach is likely to be subservient (Bresler, 1995). However, mutually supportive collaborative lesson design that occurs between elementary classroom teachers and music teachers may serve to maximize the expertise of each teacher, increase capacity for interdisciplinary learning and improve the status of music education within the elementary school curriculum (Della Pietra et al., 2010). This reasoning may also be applied to both physical education and art education, with each content area teacher's interdisciplinary teaching efforts being championed within their elementary school site through ongoing training, support, and time for collaboration (Barry, 2008; Morris, 2009; Russell & Zembylas, 2007).

2.14 DEFINING 21ST CENTURY SKILLS

21st century skills refer to those skills necessary to compete with other individuals and nations within the context of globalization and technological advancement. The 21st century skill set is still relatively new, and continues to evolve in response global economic and market needs. In her 2010 publication, *Curriculum 21*, Heidi Hayes Jacobs describes 21st century curriculum as an ongoing journey and highlights the irony of curriculum development best practice, which suggests developing curriculum backward with the end in mind. The skills necessary for life throughout the 21st century are progressive and open-ended. With technology expanding at an exponential rate, the skills and competencies students will require to be successful throughout the 21st century are difficult to predict. It is a daunting task to propose the “end” we envision for our

students in order to develop and refine a relevant, aligned, and suitable curriculum (Jacobs, 2010).

Despite the challenge of predicting 21st century proficiencies, various frameworks have been developed to articulate this specific skill set. The Partnership for 21st Century Skills is an organization comprised of economic, educational, and political organizations that have convened with the intent of delineating the skill set necessary for 21st century success. These 21st century qualifications include:

- mastery of core subjects (including language arts, math, arts and humanities)
- 21st century themes (global awareness, technology literacy, health literacy, civic and entrepreneurial literacy)
- media and technology literacy and skills

When these skills are presented to students through rich learning experiences, 21st century competencies can be developed simultaneously alongside achievement tested core competencies. Embedded in purposefully designed interdisciplinary learning experiences are opportunities to acquire 21st century competencies that are both relevant and engaging for students (Feller et al., 2007; Nathan, 2012; Zhao, 2009).

Jacobs (2010) finds merit in critical collaborative audits of status quo curricula, group analysis of existing curricula, conducted with the intention of introducing new approaches and concepts and focusing on comprehensive opportunities for integration. Jacobs suggests that it is positive to question existing instructional structures and approaches in search of interdisciplinary learning experiences that are inherent and robust, and able to attend to the needs of the 21st century.

In his publication *A Whole New Mind*, Daniel Pink (2005) frames these robust competencies, which he coins r-directed skills. These skills are those functions and capabilities that are managed by the right brain. R-directed skills include cognitive and contemplative capabilities that are meaningful, emotive, metaphorical, creative, and aesthetic. Pink suggests that these r-directed skills, in contrast to more logical l-directed skills, will benefit student as we move further into what he terms the Conceptual Age. In this age, graduates wishing to compete globally will find success in their ability to innovate, create, and produce ideas and products that are “high-concept” and “high touch” (p.2). Pink outlines six such sensibilities that he predicts will be revered throughout the conceptual age:

- Design- creating highly aesthetic products that evoke emotional response
- Symphony- regard for the entirety of an initiative; being able to simultaneously guide and encourage all aspects to function in tandem with the skill of an orchestra conductor
- Empathy- regard for human emotion that solicits passionate response
- Play- attention to enjoyment and recreation surrounding basic essence
- Meaning- respect for the needs of personal fulfillment

Though these sensibilities are somewhat abstract in nature, they might be addressed through approaches to education that value them as engaging and relevant means to 21st century learning that encompasses and integrates both core and AMPE content areas. Pink (2009) offers that fulfillment, prosperity and productivity in the 21st century might be achieved by honoring the intrinsic human need for purpose, mastery, and autonomy. A quest for independent work that serves a greater purpose, allowing us to showcase our talents and strengths will promote progress

in the 21st century. As these virtues will be necessary for our students, they may also be important to contemporary professional development of AMPE teachers in order to navigate the educational landscape of the 21st century to best teach our students.

The Partnership for 21st Century Skills (2010) also touts the importance of meaning, citing fluency in the arts as a means for student to generate, evaluate and select creative ideas for the purpose of achieving and obtaining personal meaning. The curricular map developed by the Partnership for 21st Century Skills aligns all aspects of Information, Media and Technology Literacy with active learning in AMPE. Application of active AMPE learning provides an educational platform for students to collaboratively engage, imagine, judge and explain in order to solve problems (Lorimer, 2009; Nathan, 2012).

Friedman (2007) posits that one of the emergent middle level jobs in the global economy is a synthesizer. Teaching students to identify connections between and across disciplines, in addition to disciplinary expertise, is an educational priority. Innovation and creativity are present when someone with a mastery of one or more fields can use one to advance knowledge with regard to the other. This synthesis of art, science, literature and innovation was represented in the Renaissance, where Leonardo da Vinci integrated a variety fields to advance society through such integration. In advancing education we will need to support robust learning in math and science, while also taking measures to preserve liberal arts learning that connects literature, music and history to maintain a platform for innovation.

2.15 ACTIVE AND GLOBAL LEARNING IN THE 21ST CENTURY

In addition to the need for innovators in the 21st century, students will also require the ability to work collectively and learn from one another (Partnership for 21st Century Skills, 2011). In previous decades, students attended one room school houses, and eventually neighborhood schools that were parts of school districts (Spring, 2008b). Students had to physically visit libraries and institutions of learning as the only means for retrieving information and engaging in the learning process. Currently, most students can access information twenty four hours a day using technology (Jacobs, 2010). The notion of a conventional school as a physical space for learning is evolving; students can learn independently at any time (Laufenberg, 2010). What schools still provide is the benefit of a common location where students can learn simultaneously and collaboratively among their peers. In an era where cyber learning models challenge conventional public education, the traditional school context is still at an advantage being a place where students physically congregate. Such a setting is rich with opportunities for students to learn with and from each other, engaging in authentic, student-centered, experiential and project-based learning (Laufenberg, 2010).

Because the AMPE content areas inherently possess active learning opportunities, students can develop the ability to engage in and receive criticism relative to product or performance in AMPE; this ability to deeply understand various perspectives is a critical to the development of a conative skill set necessary for 21st century living (Barell, 2008; Marzano & Heflebower, 2011). By connecting personal interactions with AMPE learning students benefit from deeper awareness and understanding they can employ to navigate individual context (Barell, 2008; Marlett & Gordon, 2004; Marzano & Heflebower, 2011).

Proponents of 21st century skills maintain that communication, collaboration, creativity, and critical thinking, known also as “the four C’s” are the major competencies that prepare students from the United States to compete globally, and further, that developing strengths in 21st century skills will ensure the United States does not fall further behind educationally and economically (Freidman, 2007; Jacobs, 2010; Partnership for 21st Century Skills, 2010; Pink, 2006; Levine, 2010; Zhao, 2009). In the research that follows this review of the literature, communication, collaboration, creativity, and critical thinking will be considered 21st century skills. This definition evolved from a review of the literature; many related but more abstract sub-competencies fall under these four major 21st century competencies (Adams, 2011; Ferrero, 2011; Friedman, 2007; Hudson, 2011; Jacobs, 2010; Levine, 2010; Marlett & Gordon, 2004; Munson, 2011; Pink, 2006; Song, 2011; St. Gerard, 2011; Wagner, 2012).

2.16 21ST CENTURY CURRICULUM DESIGN

Jacobs’ view that “form follows function” is vital to the development of 21st century learning experiences in elementary AMPE (2002, p. 61). Jacobs goes on to suggest that curricular and instructional design have much to learn from basic architectural design. As an architect works with his or her client to determine the needs of the consumer and the function of the physical space, as educators we should consider the specific the needs of the children these educational experiences will serve before establishing the appearance of the overall structure for learning. Through this inquiry, appropriate “forms” for learning will materialize, resulting in an “upgraded” blueprint for learning. These learning blueprints are of greater quality when the

development and implementation of curricula strategically includes and regards the highly specialized talent of teachers. Elementary AMPE teachers possess specialized talent as highly qualified experts of content and pedagogy for their respective disciplines. 21st century-oriented curricular “upgrading” requires interface of interdisciplinary connections and 21st century competencies for the purpose of devising meaningful student learning opportunities (Jacobs, 2010, p.30).

2.17 APPLICATIONS FOR 21ST CENTURY AMPE LEARNING

With regard to interdisciplinary teaching that tenders value for the 21st century, elementary AMPE content areas possess infinite prospects. AMPE are content areas that intrinsically offer opportunities for active application to learning (Hetland et al., 2007; Marlett & Gordon, 2004). A functional and traditional art curriculum seeks to engage students in both the creation and response to art. A 21st century art curriculum engages students in the creation of art, possibly utilizing technology to create global perspective and collaborative opportunities for students (Choi & Piro, 2009). In aesthetic and critical response to art, a 21st century curriculum honors the great classical traditions of art while allowing students to engage in global discourse within an international context (Choi & Piro, 2009).

The classic artistic tradition of calligraphy inspired the development of the computer type fonts we commonly use today. Steve Jobs’ experience with success in innovation with Apple involved his appreciation for the beauty and history of traditional calligraphy he used to inspire the various typefaces he would design for the Macintosh computer. Jobs’ exposure to the art of

calligraphy in a course at Reed College provided him with the background knowledge in calligraphy arts, style and spacing he eventually used to develop many varieties of typeface for the Macintosh computer that was eventually adopted by Windows. Jobs' innovation transcended disciplinary boundaries as he achieved synthesis in his work, allowing the arts to make an important contribution to the field of technology (Friedman, 2007).

As illustrated through Jobs' originality, a 21st century curriculum need not insist upon a distinction between reading, writing, art and technology media. Great potential for a multidimensional curriculum exists with the current advancement in technology. Because literacy in the 21st century is an ever-evolving concept, widely available media tools with limitless sensory possibilities continue to develop. Literacy today requires students to be adept in their ability to amalgamate reading, writing, social media, the arts, blogs, and websites through their understanding and creativity (Ohler, 2009). Contemporary arts education has served to impart skills and knowledge in both creating and responding to the arts (Wakeford, 2004). With regard to the critical and aesthetic response in arts education in 21st century learning, students must learn to critically interpret media messages and conversely to express themselves via multimedia (Partnership for 21st Century Skills, 2010).

Students can refine their ability to seek personal fulfillment by learning how to identify and interpret meaning through the arts as well as working to experience mastery, which Pink (2005, 2009) highlights as ideals that are important to 21st century living. All learning in the arts need not focus on technology; there is underscored value in the subtlety of authentic hands-on production of art using a variety of intricate materials and processes for original creativity (Eisner, 1998, 2002, 2004; Jacobs, 2010; Pink, 2006). Authentic learning that reinforces various

perspectives might also occur through an alloy or collage of traditional and 21st century literacy and media (Ohler, 2009).

Twenty-first century learning through the arts offers limitless possibilities to use technology as a tool for music theory and performance. Both technology and the global context it creates, allow original 21st century scores and music to materialize and be performed and enjoyed across the world. Students living in the 21st century have unique forums that allow them to engage in the arts both locally and virtually; these experiences become a foundation for navigating various media, and ultimately contribute to 21st century media literacy for students. This ability to both create and traverse through the arts contributes to active, aesthetic and meaningful lifelong learning and existence (Adams, 2011; Burton et al., 1999; Hudson, 2011; Jacobs, 2010; Levine, 2010; Pink, 2006; Stevenson & Deasy, 2005).

Considering the marginalization of the arts within the curriculum, it would seem reasonable that arts advocates might see 21st century skills as an important entry point for arts integration. In their 2009 article *Expanding Arts Education in a Digital Age*, Haeryun Choi and Joseph Piro suggest tethering the arts to 21st century skills as a sometimes controversial but seemingly logical approach to reinforcing curricular indispensability.

While offering education relative to healthy habits and recreation, physical education might also be “upgraded” to serve in teaching both science concepts and the corresponding vocabulary associated with personal physical fitness (Jacobs, 2010, p.30). Greater developments in technology allow students greater access to opportunities with an expansive diversity of local and global sports. In addition to increased access, both virtual and immediate, students can engage in authentic application of 21st century learning that involves collaboration and teamwork through physical education (Ballinger & Deeney, 2006; Christie, 2000; Cone et al., 2009; Jacobs,

2010; Pink; 2006). Additionally, Pink's (2006) r-directed sensibility of play, suggested as an essential component of well-being prosperity for 21st century living, is inherent in both the recreational and healthy living goal of physical education.

While both 21st century and interdisciplinary teaching and learning will continue to evolve and gain momentum, current instructional initiatives that encourage cross-curricular approaches to elementary AMPE in public education are often the result of localized effort influenced by leadership, funding, community values, and academic priorities (Adkins & Gunzenhauser, 2005; Hudson, 2011). School districts, school administrators, and teachers may implement interdisciplinary, 21st century AMPE locally in response to the needs they perceive and project within their specific learning contexts (Barell, 2008; Center for Education Policy, 2007; Graham et al., 2002). In western Pennsylvania school districts, other variables such socioeconomic status, district size, staffing, resources and location impact elementary AMPE programs as well. More affluent school districts often possess the greater fiscal resources necessary to ensure stronger elementary AMPE programs.

2.18 CONCLUSIONS

After examining the evolution of AMPE in public education, the nature of interdisciplinary learning, and the value of 21st century skills instruction, I have developed a line of qualitative inquiry that examines teacher and principal beliefs surrounding potential that exists for linked learning opportunities in AMPE to foster capabilities students will need in order to be successful as global citizens. Elementary AMPE teachers who either embrace or avoid interdisciplinary, 21st

century responsive teaching are of particular interest due to their common scheduling constraints and non-tested status. For the purposes of this study, the similarities associated with the traditional role of elementary AMPE teachers will be used as the basis and binding concept of the research (Stake, 2006). It has been dually noted that the “core” classification of arts is a tension in educational research and that the arts are often diminished or molded to fit the needs of tested content areas such as math and language arts (C. Smilan, personal communication, November 14, 2011). Physical education is commonly subject to similar scheduling constraints, and its level of marginalization as a non-tested content area is often dependent on state mandates for curricular inclusion (Graham et al., 2002).

Nationally, NCLB non-tested content areas are subject to controversy because teachers of tested content areas often perceive that they are held less accountable without testing data that indicates overall effectiveness of teaching (Prince et al., 2008). In response to this concern at a state level, programs like Adopt-an-Anchor are suggested by the Pennsylvania State Department of Education to teach students specific content area in non-tested content areas (Pennsylvania Department of Education, 2004). This simple program is a tool that can be implemented in any public school setting throughout the state as a way to increase alignment among all content areas. Rationale provided for this program by the Pennsylvania Department of Education advertise it as a way to share teacher workload and maximize instructional time for Pennsylvania System of School Assessment (PSSA) test preparation. It is important to note that the goal of this instructional approach is to present Pennsylvania reading and mathematics eligible content, with AMPE standards being regarded as secondary in this program. In this model, AMPE are presented as a forum for student exposure to important math and reading content that students will be assessed on using the PSSA. Situated within Bresler’s (1995) Typology, Adopt-an-

Anchor promotes a subservient level of integration, where the art, music and physical education content areas serve as a conduit for Pennsylvania PSSA eligible content in reading and math.

Other varieties of localized district level efforts and philosophies of integrated AMPE are present to varying extents throughout school districts, individual schools, and classrooms in the state of Pennsylvania. This study closely examines such local efforts and determines what factors affect the instructional practice of AMPE with regard to integration and 21st century responsive pedagogy in three elementary school settings in western Pennsylvania. This research provides a detailed perspective of the elementary school AMPE teacher experience, and determines common variables that either encourage or impede efforts and beliefs related to school-wide academic goals, interdisciplinary teaching and the importance of imparting 21st century skills.

The results of this research will provide shed light on factors that affect elementary AMPE teachers, and may consequently influence their instructional programs and student learning. The knowledge gleaned through this research might then be used to develop best practices that support 21st century AMPE interdisciplinary instructional practice in public elementary schools.

3.0 METHODOLOGY

3.1 PROBLEM STATEMENT

The United States repeatedly ranks behind other countries in reading and math achievement, and the current push for 21st century skills acquisition has been proposed in an effort to enable K-12 students in the United States to compete with their international counterparts (Friedman, 2007; Jacobs, 2010; Levine, 2010; Partnership for 21st Century Skills, 2012) . K-12 public education is currently situated in an era of increased educational accountability with regard to student achievement in reading and math (Clinchy, 2007; Munson, 2011; No Child Left Behind, 2001). The current heightened concern for student achievement, coupled with dwindling funds to support public schools has created a complex national crisis in public education. Under No Child Left Behind (2001), content areas designated as “core” remain untested and are consequently discounted as being integral to student achievement. Consequently, the integrity and importance of content areas like art, music, and physical education are diminished in public schools (Graham et al., 2002; G. Graham, personal communication, September 19, 2012; Munson, 2011; Prince et al., 2008; Postman, 1995; Robinson, 2008; C. Smilan, personal communication, November 14, 2011). Teachers of non-tested content areas, like art, music and physical education may be asked to incorporate strategies for teaching across the curriculum and integrating reading and/or mathematics into their content area pedagogy (Bresler, 1995; Dillon, 2010; G. Graham, personal

communication, September 19, 2012; Pennsylvania Department of Education, 2004). Simultaneously, teachers are also being encouraged to implement best practices with pedagogical approaches in all content areas that allow for 21st Century skills acquisition (Ballinger & Deeney, 2006; Jacobs, 2010; Pink, 2005).

If we understand how the experience of the art, music and physical education teacher has changed in public schools over time as educational accountability has increased, we can answer a more important question: how might art, music and physical education and public education be mutually supportive in offering integrated learning experiences across content areas with the goal of producing well-rounded students who are able to create, collaborate, and communicate (Della Pietra et al., 2010; Jacobs, 2010; Marlett & Gordon, 2004; Pink, 2006; Robinson, 2008; Postman, 1995)?

3.2 RESEARCH QUESTIONS



Figure 1. Research Questions

The painting in Figure 1 aligns with the articulation of the following research questions used to guide this study and examine the experiences and beliefs of elementary art, music, and physical education teachers in three western Pennsylvania elementary school settings.

Q1: How are the roles of art, music and physical education teachers perceived by selected teachers and administrators within their public elementary school contexts?

Q2: How do selected elementary art, music and physical education public school teachers and building administrators perceive integrated teaching within their practice?

Q3: How has art, music and physical education teacher practice been influenced by the introduction of 21st century skills like collaboration, communication, creativity, critical thinking?

3.3 RESEARCH METHODS AND DESIGN

This qualitative multiple case study begins with a simple vignette that illustrates the perceived role of an elementary physical education teacher who is attempting to incorporate math content into his physical education class as a result of an accountability-based need for additional mathematics instruction. Stake (1995) indicates that an entry vignette is one possible recommended introduction to case study research. This multiple case study goes on to provide a comprehensive and rich contextual account of the contemporary role, experiences, and attitudes and beliefs of public elementary school art, music, and physical education teachers. In the latter stages of this multiple case study, elementary AMPE teachers' perceptions, contextual data, and

emergent themes were also examined and presented within this research through several mixed media pieces of visual art developed by the researcher, a former art teacher.

Qualitative inquiry, more specifically a case study design, was selected as a research approach that is appropriate to exploring subjective aspects of a problem associated with personal meaning, belief, and experience (Creswell, 2007; Patton, 2002; Stake, 2006; Yin, 2009). Art, music, and physical education teachers in public schools typically share similar experiences through scheduling, workload, and status as non-tested content areas in public schools (Graham et al., 2002, Krueger, 2000; Reeves, Emerick & Hirsch, 2006; Smilan & Miraglia, 2009). These content areas are also similar in that each offers active application and possesses opportunity for 21st century approaches to learning for students that allow students to create, innovate, and collaborate (Eisner, 1998; Rubin, 2011; St. Gerard, 2011). The common experience of AMPE teachers creates a shared circumstance to be studied within individual schools and potentially among schools (Creswell, 2007; Graham et al., 2002; M. Raiber, personal communication, June 27, 2012; Prince et al., 2008; Stake, 2006; Wilkins et al., 2003). A multiple case study design allows for research within individual cases, as well as across cases (Stake, 2006; Yin, 2009).

I view the individual accounts of teachers in different settings existing under similar professional circumstances as the quintain, or target, for the inquiry (Stake, 2006). In this research, the quintain is a representation of the current role of elementary art, music and physical education teachers in a variety of public elementary schools in western Pennsylvania. When a quintain is examined as it exists in several different settings, the importance of the context to the quintain at various sites becomes significant. The researcher has an obligation to accurately depict the unique context and situation of each individual case in order to draw valid conclusions about the phenomenon as it interacts with its natural setting (Stake, 2006). I used the data

collected around the quintain to reveal salient themes associated with the current roles of art, music and physical education teachers in public schools in each single case as well as across the cases (Stake, 2006).

Some arts-based research methods were utilized during the methods and data analysis portions of this multiple case study as modes of inquiry and representation. This arts-based approach was intended to examine and convey significant themes in tandem with the primary textual analysis of the research. Images in the presentation of this research are intended to simplify the research aims, conceptual framework and to highlight prominent emergent themes within and across the cases.

Arts-based research methods first emerged in the 1980s, a qualitative method of inquiry most often found in the humanities and social sciences. Eisner used arts criticism as a foundation for the development of arts-based research methods in his work at Stanford University. Though arts-based educational research methods are different than more traditional, scientific research methods, Eisner (1981) offers that scientific, qualitative and artistic research methods co-exist on a spectrum. Arts-based research methods may include a variety of genres, including dance, narrative, poetry, portraiture, theatre or visual arts (Cahnmann-Taylor, 2008; Lawrence-Lightfoot & Davis, 1997; Leavy, 2009; Springgay, Irwin, Leggo & Gouzouasis, 2008). Arts-based educational research is a qualitative method in data collection, analysis and data and creative representation of the findings (Cahnmann-Taylor, 2008; Chenail, 2008; Eisner, 1998; Leavy, 2009).

This multiple case study illuminates the ways that elementary art, music and physical education teachers perceive both their current roles and the integration of reading and mathematics into their content areas in three different settings. The study also reveals how the

role of the art, music, and physical education teacher is understood by teachers and principals and how variables in this line of inquiry relate to one another. Various data was systematically collected and coded through site visits and guided conversation interviews and later analyzed to identify themes in an effort to portray the current beliefs and practice of elementary art, music and physical education teachers in public schools. Through this case study I endeavor to understand the experience and context of elementary art, music and physical education teachers of western Pennsylvania with great depth.

This research reveals both the current status and the potential for interdisciplinary learning that exists in public schools from the experience of art, music, and physical education practitioners and school leaders. This research will be useful in determining how art, music and physical education teachers' content area proficiencies might be better utilized in public elementary schools.

Throughout the multiple case study research process, themes were identified within individual cases as well as compared across the three cases (Creswell, 2007). Significant concepts that emerged but failed to conform to common themes were also noted and analyzed as part of this study (Patton, 2002; Stake, 2006). Analysis of the data allowed the researcher to contemplate how the content area expertise of elementary public school art, music and physical education teachers might be better utilized to support the greater demands of current public education. Case study research and analysis should result in cautiously proposed generalizable findings that may be useful in defining programs and protocols for similar populations (Creswell, 2007; Stake, 2006). However, generalizability in case study research is very much dependent on context (Stake, 2006). Despite this limitation in generalizability, the vivid contextual data provided information that may be useful in delineating and refining programs aimed to

effectively and purposefully involving art, music and physical education teachers in other elementary schools. Implications derived from this research offer a rich account of both details and conclusions related to the research questions that can then be transposed and offered to other settings (Creswell, 2007; Stake, 1995; Stake, 2006).

3.4 CONCEPTUAL FRAMEWORK



Figure 2. Conceptual Framework

Visual representation was first employed during this research to articulate my conceptual framework and delineate the interplay of various concepts as they relate to integrated teaching practice. Leavy (2009) suggests that visual depictions may emerge early in the research process as a way of diagramming understanding and attending to the subtleties of the data. I developed the structure for this image during the review of the literature, as a way to better understand the significance and interaction of ideas offered by Bresler (1995), Russell & Zembylas (2007) and Barry (2008) as related to the context and the quintain.

The conceptual framework that was used to situate this research is the Integration Typology developed by Leora Bresler (1995). The various classifications were developed by Bresler for use in categorizing types of integration used in the arts. Though originally intended for the arts, this typology translates well to integration in other content areas, and for the purpose of this study the typology was used to situate physical education as well (G. Graham, personal communication, September 19, 2012). This use of this framework assists in the analysis of elementary art, music and physical education teachers' attitudes and beliefs about integration, and how this manifests in their practice within their individual context. Bresler offers four integration styles, each a very different framework for teaching across the curriculum in schools. The most commonly observed integration style Bresler coins the "subservient approach" (p. 5).



Figure 3. Subservient Integration

In subservient integration approach, the arts serve to augment other content areas. Learning through subservient integration is more general, with the arts content area being of lesser importance in the merging of two content areas. Subservient integration activities may be highly simplified and superficial arts experiences, like making a poster to enhance a book report, or learning a song that teaches students to remember the states or months of the year. Subservient learning activities include the arts but lack the depth and substance necessary to immerse students in the rich aesthetic experiences necessary to cultivate authentic learning in the arts.

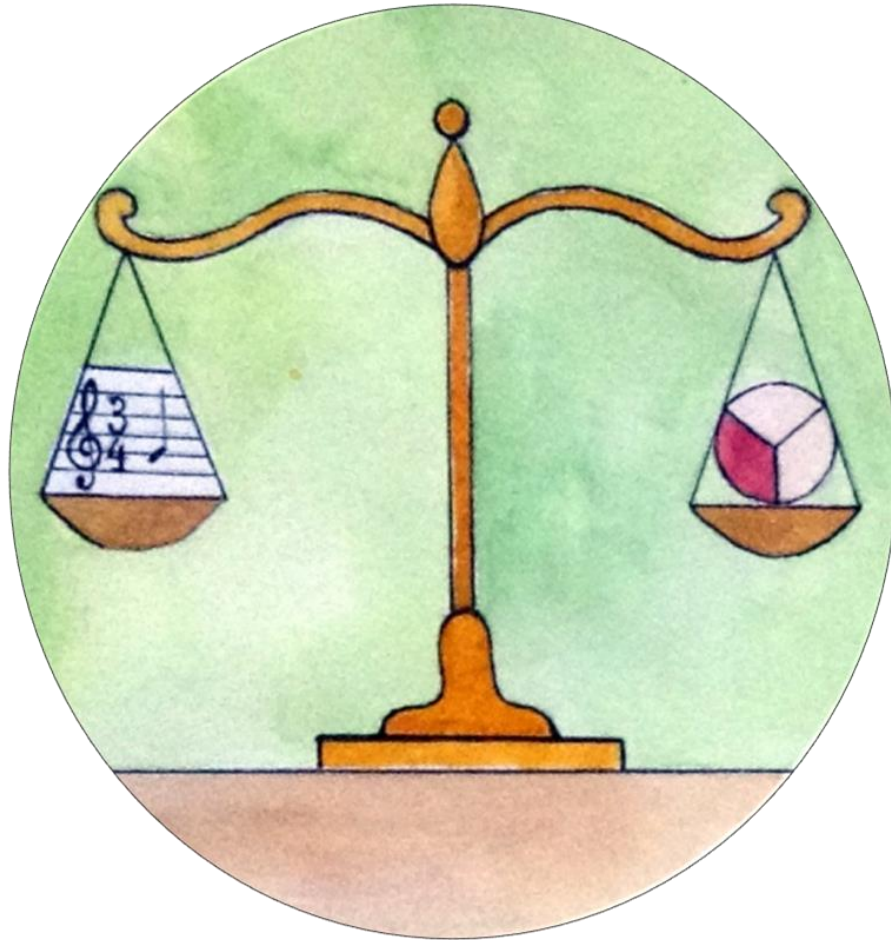


Figure 4. Coequal Integration

The second type of integration, known as coequal cognitive approach, is the ideal of integration as described by those scholars of the art for art's sake perspective (Davis, 2008; Russell & Zembylas, 2009; Smilan & Miraglia, 2009). Bresler's research in defining integration typology revealed the coequal style to be the least prevalent of the four styles. In coequal integration, all content areas represented in the learning experience are given equal importance. This approach involves the standards and skills associated with each content area being integrated; no one content area is bent to suit the needs of another but rather, each content area is extended to support higher order learning between and among disciplines (Bresler, 1995).



Figure 5. Affective Integration

The affective integration style, a third approach to learning as offered by Bresler (1995), serves to enhance mood or prompt creativity without great sophistication. An example of affective integration might be a teacher playing classical music during transitions between lessons, or sharing and briefly discussing artwork with students without engaging in substantive dialogue regarding the aesthetic elements and principles of the art. Because of its lack of authenticity for students and availability for learning experiences in the arts, the affective style also possesses some elements of the subservient style. A characteristic of this style is that it results in learning no deeper than a raw response derived from the mood-altering effects of the arts for a student which lacks sophistication.



Figure 6. Social Integration

The fourth and final integration style offered by Bresler (1995) is the social integration style. This style can either showcase or exploit the arts to serve the needs of the school. The emphasis is on the performance or exhibition of the arts in this approach, with actual student learning in the arts being of lesser importance. This style is typically tied directly to the beliefs and priorities of the building principal, and involves school community arts experiences like a spring choral concert, a visual arts exhibit, or a cultural diversity celebration (Feller, 2007). The benefits of the social integration style are that the arts are forefront and revered, yet the potential for exploitation of active learning experiences for students exists when these programs being used as budgetary propaganda, or when the integrity of the arts experience or product is

compromised to suit the needs of the school establishment to the detriment of the arts. This definition typology classification was used in comparative analysis of the data provided by both the teacher participants and building administrator participants, to determine how and why the arts serve a variety of interests within schools.



Figure 7. Self-Efficacy, Merit of Integration, and Preservation of Curricular Integrity

A secondary component of this conceptual framework is based upon Russell and Zembylas' (2007) literature review which offers that teachers' attitudes and beliefs influence integrated curricular presentation. This dimension of my conceptual framework is important to understanding AMPE teachers' self-efficacy and how they identify merit within integration and value the preservation of curricular integrity within their own content areas (Russell & Zembylas, 2007).



Figure 8. Time for Collaboration, Support and Ongoing Training

Barry's (2008) analysis of effective integration practices is the final dimension of the conceptual framework which indicates that ongoing training, support for teachers, and time provided for collegial collaboration are necessary components for school cultures that foster interdisciplinary learning.

3.5 PILOT STUDY

The inclusion of a pilot study can ensure triangulation and increase validity (Stake, 2006). Prior to embarking on the research associated with this multiple case study, a pilot study was conducted with AMPE teachers and a building principal at one site. Feedback obtained from the pilot study participants was used to tailor the interview approach used for this study and to increase the alignment of data collection with the three research questions (Creswell, 2007).

The results of the initial pilot study interviews, which utilized a semi-structured interview approach, revealed that a scripted approach to interview questions stifled the breadth of the interview and limited detail in the data offered by participants. This interview approach may have been too formal and restrictive to solicit thoughtful, candid participant responses. Reflection on the pilot study results prompted the researcher to consider and pilot a less structured, guided conversation interview style. A guided conversation interview method allowed the researcher to establish greater rapport with the participants while maintaining focus on the quintain to obtain the type of nuanced data that emerges from casual conversation (Creswell, 2007; Patton, 2002). A Guided Conversation Interview Outline (Appendices A and B) was developed to establish a specific line of interview inquiry aligned with the research questions which then allowed the participants' individual perspectives to surface through an informal conversational interview.

3.6 DATA COLLECTION

A letter of invitation, which is presented in Appendix H, was sent to selected teachers and administrators employed at each of the three school districts selected to serve as sites in the study. Data collection then occurred among individuals who are involved with the phenomenon of interest; this group of individuals included art, music and physical education teachers and building principals.

Data was collected from a total of 13 participants in three separate sites who have experienced and are involved in various aspects of school leadership, art, music, and physical education in public elementary schools in western Pennsylvania. Polkinghorne (1989) advises that a minimum of five and a maximum of 25 participants associated with the inquiry be interviewed as part of a case study. I opted to study three sites with the potential for cross-case analysis without compromising too much detail and depth within the presentation of individual cases (Creswell, 2007). This multiple case study includes data collection and corresponding iterative analysis derived from personal interviews, site visits, and internal documents.

In qualitative case study research, the overlap or convergence of several data sources is valued in arriving at various assertions (Stake, 2006). This ensures triangulation achieved by the inclusion of multiple viewpoints in the research design. One component of triangulation includes data collection from multiple perspectives surrounding the phenomenon of interest. At each of the three sites, not only were elementary public school art, music, and physical education teachers interviewed, but a public school principal was also interviewed to obtain an alternate perspective surrounding the phenomenon of interest. Yin (2009) recommends the use of multiple data sources. The variety of data collected from numerous facets of the phenomenon being

studied included personal interviews, observational field notes, and internal documents (Stake, 2006). All interview questions posed by the researcher were open-ended; follow-up questions were asked as necessary by the researcher. This range of data sources was necessary for representing the multiple perspectives necessary to triangulate the research (Stake, 2006; Yin, 2009). Additional flexibility was also demonstrated on the part of the researcher as necessary to obtain various data in response to unanticipated occurrences. Data collection plans and procedures were modified when necessary in order to meet the stated purpose of the investigation during the research process (Yin, 2009). In response to a selected participant's suggestion that a particular classroom teacher may have valuable data to share related to an interest in AMPE integration, the aforementioned teacher was approached and invited to participate in a guided conversation interview to obtain accounts of relevant professional experience.

3.7 PARTICIPANTS

The cases that were the foci of this study were selected using a purposeful sampling of accessible cases in western Pennsylvania (Creswell, 2007). Cases were selected based on Stake's (2006) selection criteria with consideration given to ensure research feasibility. Cases that were selected were relevant to the quintain, offered contextual diversity, and offered opportunities for dynamic contextual data collection (Stake, 2006). Four participants were initially included at each site; one building principal, one art teacher, one music teacher, and one physical education teacher. One classroom teacher was added at one of the sites. Participants at three different sites who

were eligible for this study were selected based upon two criteria: i.) participants must be currently working as a principal, or art, music, or physical education teacher ii.) participants must be employed at a public elementary school in western Pennsylvania. These participants were able to support the purpose of the research in providing substantive and detailed information regarding the perceptions, attitudes and beliefs of art, music and physical education teachers in western Pennsylvania.

A purposeful sample was selected from the larger population of eligible school sites in western Pennsylvania to ensure feasibility of the study. Professional connections and networks were utilized for the researcher to obtain initial entry and permission within the selected districts; I did not require any additional support beyond this entry to conduct research at the site and participant levels. It is also important to note that I had never personally visited any of these sites or met any of the participants prior to conducting this research. The purposeful sample included both teacher and administrator participants to provide deep, rich and varying perspectives of the quintain at each of the three sites (Creswell, 2007; Patton, 2002).

3.8 MATERIALS/INSTRUMENTS

Guided conversation interview protocols were developed from the review of the literature and aligned with the three research questions in order to solicit responses that provide dynamic insight to the quintain. These two separate sets of interview guides were developed for use in interviews with AMPE teachers and building principals. The interview guides listed in Appendices A (teacher) and B (principal) were used to facilitate data rich conversations with

study participants (Creswell, 2007; Patton, 2002). The topic sequence was structured to solicit candid yet descriptive responses from the participants. Discussion points that require responses comprised of attitudes, perceptions, and beliefs were preceded by inquiry that regards simple, objective recollection or experience-based answers. After objective data was collected from the participants at the beginning of the conversational interview, the entry vignette from the introduction chapter was shared with the participants. The content associated with the vignette invited the participants to share pertinent professional experiences related to the quintain. The conversational interview approach and sequence was designed to request more detailed responses of the participants, while maintaining the fluid conversational exchange between researcher and participant (Patton, 2002; Yin, 2009). Additional follow-up discussion and questions were initiated within this guided conversations interview format when the response offered by a participant required elaboration (Mertens, 2005).

A list of specific data sources eligible for inclusion in the study as observational field notes or internal documents was developed and is included in Appendix C. This was open to modification throughout the research process in order to include additional observations or documents based upon the emergent needs of the study as recognized by the researcher during the research process (Yin, 2009).

Protocols for collecting observational field notes and the analysis of internal documents were developed by the researcher as presented in Appendices C, D, and E. These protocol instruments aided the researcher in consistent qualitative data collection during the site visits. These protocol instruments were developed by the researcher based upon the conceptual framework that emerged from the review of the literature. The instruments were also used to organize data within Bresler's (1995) Integration Typology, Russell and Zembylas' (2007)

framework that acknowledges teachers' attitudes and beliefs surrounding integration, and Barry's (2008) structure for essential resources that support integration. Prevalence of art, music and physical education teacher professional development, support for integrated practices, and time for collaboration was also reflected in this protocol instrument. The protocol was also intended to collect qualitative data that revealed AMPE teachers' attitudes and beliefs as relevant to their roles, evidence of integrated teaching practices, and experiences with 21st century skills instruction (Russell & Zembylas, 2009).

3.9 DATA MANAGEMENT

The interviews conducted with the participants were audio-recorded. In addition to the guided conversation interviews, additional triangulated data was collected in the form of observational field notes, and internal documents, such as lesson plans, teacher schedules, student artifacts and in-service agendas (see Appendix C). Non-interview data sources were collected using the protocol instrument developed by the researcher. These data sources were integral to the identification and confirmation of emergent themes within this study. This data was compiled, coded, and analyzed. The analysis of coded data is represented in tables and matrices that disaggregate the thematic data in Appendix G. Because this is a multiple case study, comparisons among and across the cases are also represented in Appendix G.

3.10 DATA ANALYSIS

I completed a course on Qualitative Data Management and Analysis in order to efficiently conduct this research. Qualitative data analysis software was explored, studied and given ample consideration by the researcher as a means of coding; however I manually coded, organized and presented data using pragmatically constructed tables developed during the course of the research. This approach was selected because the researcher preferred to tangibly manipulate the data and opted to focus on the affective responses offered by the participants because of concern that use of the data analysis software may have created a chasm between the genuine beliefs, attitudes and perceptions offered by the participants and affective perception of the researcher (G. Graham, personal communication, September 19, 2012; Saldana, 2009).

Visual art was also created as part of the data analysis process. This first occurred immediately following the interviews in the form of hurried sketches related to imagery visualized based on significant statements offered by participants (Hendrickson, 2008). These studies and sketches were then developed into more detailed drawings and were eventually refined as mixed media paintings that represent the detailed perspectives of the participants and emergent themes. Leavy (2009) offers that visual representation and analysis can more thoroughly highlight the interpretive phase of this research, which often occurs with some haste in qualitative research. The creative process allowed me to become immersed in the analysis of the data and engage in deep reflection to construct meaning. An objective of qualitative educational research is to construct meaning from the data. This aim was addressed through visual representation in this study that both documented and organized significant themes and emergent conclusions as they occurred during the research process (Leavy, 2009). The act of

converting various forms of data into conclusive imagery required not only analysis and synthesis, but translation from one form of representation to another (Eisner, 1998; Leavy, 2009).

All interview data, observational field notes, and internal documents were coded using a combination of Saldana's (2009) recommended coding methods. Initial analysis occurred at the time of the interviews; prominent remarks that emerge from the interviews were pre-coded by the researcher at the time of interface with the participant in order to be later horizontalized (Creswell, 2007; Moustakas, 1994; Saldana, 2009). Moustakas (1994) suggests that by this process, which he calls horizontalization, the researcher can compile groups of similar thoughts, beliefs and responses which can aid in the emergence of themes and eventual assertions (Stake, 2006). These significant statements served as foundations for codes and later for themes that emerge and some quotations are offered in the data analysis to construct narratives and punctuate important concepts in order to more fully synthesize the research.

Following the completion of the interviews, I transcribed the audio recordings. Observational field notes were developed and later evaluated by the researcher at each site using the protocol presented in Appendix D. The researcher was the sole person responsible for the coding of the data in this study to increase consistency. The various raw data was subject to initial pre-coding through the illumination of significant concept or statements and Liamputtong and Ezzy's (2005) three-step code formatting was utilized prior to first-cycle coding in an effort to enable the researcher to arrive at final code classifications (Saldana, 2009). These code classifications were further developed at the time that the interviews were transcribed. Saldana (2009) recommends that the initial coding of significant themes occur during the transcription process to increase the reliability of the solo qualitative researcher's analysis and representation.

First-cycle coding occurred through both attribute coding and structural coding of data collected from each case, in the form of interview responses, observational field notes and internal documents (Saldana, 2009). Attribute coding is a first-cycle coding method that is appropriate for managing the wide range of data sources being utilized in this multiple case study (Saldana, 2009; Yin, 2009). All data was first coded by attributes and descriptors including the specific data format, site, pseudonym, participant background information (Saldana, 2009).

Interview data was then subject to structural coding, organizing the data into conceptual fragments that represented various concepts related to the research questions related to AMPE teachers' roles, attitudes and perceptions, and interdisciplinary, 21st century AMPE teaching practices in western Pennsylvania public elementary schools within each case (Creswell, 2007; Saldana, 2009). All interview data was evaluated by the researcher once again during the conclusion of first cycle coding to arrive at descriptive codes (Saldana, 2009). The internal documents, observational field notes and structurally coded interview data were assessed to allow initial categories to begin emerging. This organized, anecdotal information identified in the first-cycle attribute, structural, and descriptive coding was then further refined in second-cycle coding (Saldana, 2009).

In second-cycle coding, the researcher sought to synthesize themes from the initial first-cycle data codes through pattern coding (Saldana, 2009). Metaphors were developed to title the pattern codes, and these codes are represented within the matrix presented in Appendix G. Pattern codes were compared across data sources. These emergent pattern codes evolved as tentative assertions in the latter stages of data analysis (Saldana, 2009; Stake, 2006). Salient themes were compared to significant statements noted by the researcher during the pre-coding stage at the time of the interviews (Creswell, 2007; Saldana, 2009). During the conclusion of

second-cycle coding the researcher refined the initial coding based on the comparison of participants' responses to establish a vernacular for optimal navigation during the data analysis phase. The coded data was then situated within manually developed tables based upon salient themes (Saldana, 2009; Yin, 2009).

The analysis of the data was both deductive and inductive. The deductive analysis occurred within Bresler's (1995) Integration Typology framework. Various data including interview responses, observational field notes and evidence from internal documents were collected and categorized within this format as represented in Appendices F and G. Various nuances were noted in interpreting the data in order to authentically attribute data to the most appropriate style of Bresler's Integration Typology (Bresler, 1995; Patton, 2002). Conversely, inductive analysis was satisfied through the unearthing of patterns and themes within and across the case studies, with the interview transcriptions being the primary data source. The researcher's experiences with the study also allowed various findings to surface from within the collected data (Patton, 2002).

During the final portion of the data analysis, data from each of the three sites was compared in order to identify common and divergent themes with regard to AMPE teacher roles, attitudes and perceptions and interdisciplinary, 21st century teaching practices in selected western Pennsylvania public elementary schools. Comparative matrices that support each research question were developed using horizontalized, coded data from each site to allow for the emergence of various themes as seen in Appendix G (Moustakas, 1994; Saldana 2009).

Yin (2009) recommends five possible techniques that may be used in the data analysis phase; among these is "explanation building" (p.142). Established themes were further illustrated through participants' accounts from the personal interviews and other data sources to construct a

narrative of the quintain. The researcher intended to build an explanation across the various contexts presented in this multiple case study to describe art, music, and physical education teachers' attitudes and beliefs about their interdisciplinary teaching and their roles in public elementary schools in western Pennsylvania.

The arts-based analysis and representation of the conclusions was relevant to this research as this approach models the interdisciplinary analysis and synthesis examined in this study related to applied meaningful and sustainable student learning in K-12 art, music and physical education. Arts-based research practices require the researcher to exercise versatile navigation across disciplines. In this research the ideas being examined as they apply across the curriculum are presented visually, but with trans-disciplinary consideration of other content areas, including music and physical education (Leavy, 2009). This research seeks to draw conclusions through the construction of explanations across cases, situated in Bresler's (1995) Integration Typology framework in order to offer recommendations that promote more efficient approaches to art, music and physical education teacher expertise and practice that support interdisciplinary teaching.

3.11 RESEARCHER BIAS AND PROFESSIONAL KNOWLEDGE

As a potential limitation of the study, researcher bias associated with familiarity or personal experience must be identified and acknowledged to objectively perceive the phenomenon being studied (Creswell, 2007; Stake, 2006). However, bias should not be confused with the professional knowledge and experience that can spur passion in the articulation of significance

that occurs late in the research process (M. Gunzenhauser, personal communication, June 18, 2012; Machi & McEvoy, 2009; Yin, 2009). In this inquiry, the researcher is a former art teacher with an interest in the pragmatic purposes of integrated learning. I recognize the merit of coequal integration and found it rewarding when implemented into my own professional practice as a former public school art teacher (Bresler, 1995). While acknowledging my own professional experience and viewpoints, I utilized my professional knowledge and experience in order to understand and richly portray the educational cases that are being studied (Creswell, 2007; Machi & McEvoy, 2009; Patton, 2002; Yin, 2009).

3.12 METHODOLOGICAL ASSUMPTIONS

It can be assumed that all participants in this study have provided honest responses based on assurance of confidentiality by the researcher about their own individual perceptions, attitudes and beliefs regarding their practice as building administrators, art teachers, music teachers, or physical education teachers. This study was based on the assumption that the population selected is familiar with their own educational context in western Pennsylvania, has a basic understanding of 21st century skill sets, integrated teaching practice, and the current situation of increased educational accountability. It can also be assumed that their responses were based on their individual professional knowledge and experiences as specialists in art, music or physical education. Because this qualitative research is a multiple case study, it can also be assumed that comparative context is a highly integral facet of the research (Creswell, 2007; Stake, 2006). In this study, I pursued a rich textual and visual portrayal of the participants' attitudes, perceptions,

beliefs and experiences. After analyzing and comparing themes and significant statements among the cases, it was my intention to develop generalizable findings that were presented in order to advance knowledge and promote ways to better include, involve and integrate art, music and physical education teachers in their respective elementary schools.

3.13 LIMITATIONS AND DELIMITATIONS OF THE STUDY

Several possible limitations of this study exist. Though participants revealed their perceptions and beliefs during the interview process, a limitation exists in that the researcher can never really know the thoughts of the participants with certainty. This limitation was addressed by triangulation of multiple data sources. The inclusion of a variety of data sources validated the tentative assertions posed by the researcher (Yin, 2009).

A second limitation exists in the purposive sampling method being utilized in this study. The cases selected represented a small sample limited to western Pennsylvania schools. The cases and sites selected for the study had unique contextual attributes. As a result, the conclusions made through this research may not be applicable to all elementary schools in western Pennsylvania. This limitation was minimized through robust and descriptive information relative to the quintain being offered on the part of the researcher to increase overall generalizability (Creswell, 2007; Stake, 2006). The researcher also selected a range of cases with varying contexts, and provided vivid narrative to represent each circumstance.

The chance that the observer may affect the condition of the participants during the research process is always a concern with qualitative inquiry. Measures were taken by the

researcher to minimize personal bias, while following a structured data collection protocol. This process increased consistency and lessened opportunities for researcher interference during data collection as well as with the overall condition of the participants throughout the research process.

3.14 ETHICAL ASSURANCES

In conducting this study, the researcher sought authentic, thought-provoking data provided on the part of the participants. Because the data was that requested through the guided conversation interviews directly related to the participants' attitudes and beliefs with regard to their professional practice, it was important to assure each participant that they may speak freely without fear of their employment being jeopardized due to their sincere participation in this study. Each participant was provided with the consent script (see Appendix I) which was also read aloud to the participant prior to beginning the interview. At the start of each private, individual interview, the participants were informed by the researcher of several measures that are in place to ensure that the participants who are selected to participate in this study will remain anonymous and all data provided by the participants will be kept confidential (Mertens, 2005).

Throughout the research process, audio recordings and transcriptions of the interviews were located in a secure, locked location within the researcher's office. In addition, the actual names of the participants were not stored alongside the audio recordings or transcripts. Because participants were likely to be the only art, music, or physical education teacher or principal in

their school, the names of the participants, elementary schools and the school districts they belong to were replaced with pseudonyms to further protect the identities of the participants. Following completion of the written findings that emerged from this study, all transcripts and data collected from the site visits were destroyed.

3.15 FINDINGS

The following three chapters present the findings from each of the three elementary school sites. Each chapter is devoted to a comprehensive introductory representation of the elementary school site contexts and participants, a detailed account of the various data obtained related to the research questions, and a summary explanation of the emergent themes.

4.0 EVERGREEN FARMS ELEMENTARY SCHOOL

4.1.1 Contextual Portrait

Evergreen Farms Elementary School is the more affluent of the two elementary schools in the Harvest Valley School District, a small rural/suburban district. The school has about 540 students and is nestled in a wooded residential setting. The surrounding community has grown in recent years. The town center of historic Harvestville is about five miles away. Recently several new plazas with new industry, businesses and some restaurants have developed within about one mile of the elementary school. The Evergreen Farms Elementary School configuration includes grades one through six. There is one elementary art teacher, one elementary physical education teacher and one elementary general music teacher in this particular building who teach all 540 students.

The school principal kindly offered to show me around the building. The school structure is less than ten years old. The modern architectural style features wide and streamlined circular corridors with a variety of communal alcoves. The entire facility is on one floor with a nicely landscaped central courtyard. The various grade levels are housed in “pods” with community access to open-concept contemporary kitchenettes, student restrooms, and large open group instructional areas that are shared by each grade level with interactive wipe boards mounted on the wall. There are additional computer labs and iPad labs for school use. The school also

features a spacious stage and auditorium, a gymnasium for exclusive use of the physical education classes, an art classroom, and a music classroom. Students eat their lunch in a separate cafeteria; there is no mixed use for any of the AMPE teachers' classrooms. Some student work was exhibited throughout the building, with the most work being exhibited near the art classroom.

The Evergreen Farms student population is 99% white. The school receives Title I funding; however, less than 20% of students qualify for free or reduced lunch. The school has few students with Individualized Education Programs (IEPs) and has no special education subgroup as currently defined by NCLB (fewer than 40 students). Building and student safety is the only notable priority of the parents at Evergreen Farms.

The major educational priorities of both the district and the school are data-driven instruction related to Response to Intervention (RtI) and transitioning to the PA Common Core Standards. The focus on student performance data and targeted instructional intervention was particularly prevalent. Students receive core instruction in reading, math, science and social studies from their classroom teachers. Students travel to art, music, physical education, library and computer class once a week for 40 minutes. Students in grades five and six have health class and students in grade three have a special instrumental recorder class. Students in grades one and two have art twice a week. All teachers (including AMPE) work as part of various grade level teams to manage student data in order to group students and then work with these small groups of students based on individual needs in reading and math throughout the week in addition to their regular teaching workload.

4.1.2 Elementary Principal: Mr. Banks

I met with each participant in a small conference room near the front of the building, where we engaged in a conversational interview. Mr. James Banks, the elementary school principal, has been in education for nearly 20 years. He earned his bachelor's degree from a local public university and later earned his master's degree in science education and as well as his principal certification. He has no plans to continue any further with his own education; he indicated that he was content with his career and current position, and his family is also an important priority. He is a helpful, straightforward, and mild-mannered person. He is not extraverted, but is perceived as being reliable and consistent in his response and assistance to colleagues. The teachers I spoke to described him as very supportive and willing to give them anything they need.

Mr. Banks began his career as a sixth grade teacher in another district; after ten years in this position, he became a principal in the same district. After three years in that role, he became the principal of Evergreen Farms Elementary, where he has been for the past seven years. He has seen a lot of change occur in the Harvest Valley School District during that time. As the district level leadership has turned over, new educational priorities have been introduced to the district which he faithfully fosters within his building.

The current district and building goals have resulted in an intense focus on data analysis, breaking data down to the individual student level to support specific student needs in reading and mathematics through the Response to Intervention model. Several years ago, before the change in district leadership, the Adopt-an-Anchor Program was implemented at the district level for non-tested content areas. As previously mentioned, this program was developed and offered through the Pennsylvania Department of Education to promote a subservient integration style for

non-tested content area teachers to support student learning in reading and math through their content area curriculum. This program has since disintegrated, and the concentration on data analysis, the Response to Intervention (RtI) Program, and corresponding “flex groups” have become immediate priorities for all staff.

Mr. Banks is not at all opposed to AMPE integrated teaching practice, but admits that it is not an initiative at Evergreen Farms at this time. He does believe that there are individual teachers and collaborative groups of teachers who see the value in integration and work together to accomplish integration. He validates these efforts, but he reminded me that it is not something he is currently pushing in his building.

In discussing the new plan which involves the art, music and physical education teachers in the building priorities of targeted reading and math instruction for students, Mr. Banks offered, “It’s important for everyone to be involved and to be held accountable within the building. We used to have meetings and in-service days and the special area teachers would feel like, where do I belong? Now, they have a place.”

Because this focus on targeted flexible group reading and math instruction is relatively new, Mr. Banks sought ways to develop a master schedule this year that better supported this initiative. Mr. Banks explained, “Last year we had the special area teachers doing lunch duty, and didn’t have a lot of extra time in their schedule to do flex grouping, so we were really scrambling to find bodies to do our flex grouping.” Describing his solution to the lack of teachers for the flex grouping, Mr. Banks went on to offer, “This year I took the special area teachers off of those duties, to free up the time in their schedules so we have them available when they are needed to make sure we have people for the flex groups.”

Mr. Banks described how he views both the role and the general collective response of the AMPE teachers with regard to the current building initiatives:

With our RtI program, we're really utilizing the special area teachers heavily to help provide core instruction. They work with our classroom teachers, and push into classrooms to work with teachers on reading instruction. They'll also take flex groups and work with small groups of students on skills in reading and math. I think a lot of the teachers have really embraced that and are willing to run with it. Others struggle and need to be pushed along. They feel that they would rather be in their classroom, focusing on their subject area. They're not as willing to step outside their comfort zones and need to be pushed a little more, but for the most part they've really embraced it.

In discussing how the role of the AMPE teacher has changed during the course of his career, Mr. Banks offered that it has evolved in a positive way. He perceives that AMPE teachers used to be more isolated in their teaching positions. He feels strongly that the AMPE teachers are now actively involved and included in the current school-wide initiative. When I asked if curricular compromise is ever a concern that affects the AMPE teachers, Mr. Banks responded, "I think that is always a concern. They're proud of what they do and kind of protective of their subject areas. Anytime you ask them to step outside the box and do something a little bit different there is always discomfort there." Mr. Banks counters that discomfort by validating his teachers and supporting them as much as he possibly can.

Mr. Banks told me he believes art, music and physical education are important, and there is certainly a place for them in school, but he recognizes that some schools are eliminating these programs due to NCLB compliance concerns and funding. Mr. Banks does not dispute the heavy emphasis that NCLB has placed on the core subjects, and worries that this emphasis could take away from art, music and physical education. However, he does feel that the increased accountability associated with AYP has resulted in a positive impact on the general education of

students in that it has required educators to analyze data and focus on the individual student's needs.

4.1.3 Music Teacher: Mr. Wallace

Mr. Matthew Wallace, the music teacher, is in his ninth year of teaching. His background is strictly musical. Early on, he knew he wanted a career in music education, and throughout college he assisted with area marching bands and was involved with various state marching band organizations. Speaking of the time he sought out these experiences early in his career, he explained, "I was shaping my craft, so to speak." Mr. Wallace was initially hired as the high school band director in the Harvest Valley School District. He currently serves as the music department head for the district.

He explained that he requested to move to the elementary level two years ago so that he could have a greater musical and cultural impact on the younger students. One unique characteristic of Mr. Wallace is that he briefly taught pre-school. This would prove beneficial when he transitioned to teaching the elementary school students two years ago.

Mr. Wallace has been working toward obtaining his master's degree in music from a nearby private university; he has taken a recent hiatus as he and his wife started a family, but he is resolute in his intention to finish his master's degree in music education eventually. Mr. Wallace is an energetic, well-spoken teacher, who takes it upon himself to keep up with current scholarly literature in music education. The school district pays for his Pennsylvania Music Educators Association dues, which includes a subscription to three professional journals. While touring the school, I observed Mr. Wallace initiate and exchange some humorous banter with his

principal regarding an article in one of the music journals. Mr. Wallace described his own work as collaborative leader, problem-solving within the district's music department with colleagues to facilitate the development of solutions for district-level logistics related to the music program facilities, faculty, and scheduling.

I asked Mr. Wallace what he perceived as his role as an elementary music teacher. "Depending on who you ask, my role is to make sure that teachers have a prep, in the elementary world," he said with some polite sarcasm. However he went on to explain that, "For people who really understand what happens in my room, my role is to develop a group of children that are not culturally inept. Developing children that have sensitivity and can work as a team and can really fully understand and appreciate music and a musical language." His goal as the elementary music teacher is to cultivate an environment of true musical learning and cultural awareness, particularly at the elementary level. He feels both his principal and district administration respect and support this goal.

Mr. Wallace does not feel professional development offered through the district is relevant or beneficial to his work as a music educator. Most of the professional development is spent "data crunching" with grade level teams to determine student needs and develop flexible groups. Other than time planning for the flexible groups, Mr. Wallace has no scheduled common time to plan with his classroom teacher colleagues for the purpose of making curricular connections.

Our conversation then shifted toward the flexible grouping and Response to Intervention initiatives that he agreed have been at the center of Evergreen Farms' school-wide focus for the last two years. He described his role in "pushing-in" to the regular grade level classrooms to work with small groups of students to teach math concepts. He explained that the classroom

teachers were good about having the lesson and materials prepared so he could work with his group of students and that it was actually a fun change of pace for him to teach math. He enjoyed developing some of the lessons himself last year before the approach to flexible grouping was modified. Last year he had more autonomy in developing the lessons and he was also able to work with the students in his own classroom:

We had topics we had to cover from week to week, and the first grade teachers said, we can get you the materials...I'm like, this will be neat for me to do so, they would give me a topic and I would go online and I would kind of do my own little research. It would be hands-on using manipulatives, using my bright lights, and using different things in my room to just further, for lack of a better term, drill their math skills and help them understand a little better to get them pushed up to the top tier.

Mr. Wallace explained to me that he is willing to support his classroom colleagues, because he understands the demands they have to meet AYP targets. He further described his reasons for being a team player with the flexible grouping initiative:

As I told my principal, as a music teacher, I am very, very happy to have a full time job. And for the majority of my day I am making music with my kids, and as long as there is time in my day, I will do whatever you want me to do. And I am more than willing to be a team player and help out. It's when, and I'm hoping it's not inevitable, they say, "We really need to do this, so we're going to cut 5th grade choir so we can have more time," or "We're going to cut music class to 35 instead of 40 minutes to give more time." If that happens, then I won't be as supportive of this whole thing. But now, with the time in my schedule, I actually kind of enjoy it. I get to know those first and second graders a little better than the other kids, because I get to see them a little more. And it's a break in my day, it's something different and I enjoy it.

When asked if he ever had the opportunity to integrate music concepts into these flexible math groups, Mr. Wallace laughed loudly and said, "Oh goodness, no!" Mr. Wallace paused in reflection for a moment before going on to explain his somewhat reluctant acceptance of the dismal content area hierarchy he perceives:

Look...I know my role. Even though in my mind, I wish I was at the top of the totem pole, in the reality of today's education, music is not at the top of the totem pole. It is

very much towards the bottom with art and physical education, unfortunately. And I don't want to say that I accept it, but I understand that for a lot of the teachers music class is a fun time for their kids and gives the teachers a break. I don't push my opinion of what music should be to the teachers as much as some other people might, so it's not a music teacher versus them, because I think music is the most important thing. It's more about slowly getting everybody to understand, and it lets us live a little better, in a little more harmony, so to speak.

Mr. Wallace expressed his concerns that the United States' focus on insisting all students achieve minimum levels of proficiency in reading and math stifles students' 21st century critical thinking capabilities:

When you look at studies around the world, where every kid learns to play a string instrument in second grade, where every kid's singing in a choir, where music is a focal point their test scores and their ability levels in math and reading are way up here, and here we are not really focusing on anything but math and reading and not really understanding that maybe other things naturally will assist in that; we're kind of behind in that. I understand what music, especially at this age, first, second, third grade, how they're developing and everything, what understanding music and appreciating music will eventually do, especially from a critical thinking standpoint. I understand that, but does everyone else? Maybe, maybe not.

In discussing both the merit of integration and the preservation of curricular integrity in music, I learned that Mr. Wallace seizes opportunities for what he deems as appropriate music integration but feels strongly that such integration between content area concepts should not be forced:

When the opportunity presents itself, within my curriculum, to mention a math skill or to talk about a math skill I do, without even thinking about it. I also think maybe when I was in school, with things going cross-curricular, I think that's when it started really being pushed. I remember that being mentioned quite a bit in college. And then, it was just something that was always in the back of my mind with planning lessons and things. So if we're talking about note duration, and beat length, I certainly talk about what's half of four, this is a half note, this is a whole note. A whole note is four what's half of four that's why it's called a half note. So those sort of basic math skills, it fits, so I do focus on that, but I haven't been asked, nor do I go out of my way to try to purposely integrate math or reading.

Mr. Wallace described several approaches to integration he has orchestrated in his classroom. The first of these, a coequal lesson, can be done with any book. At the primary level, *Goldilocks and the Three Bears* might be used. A basic rhythm or melody is assigned to Papa Bear and read in the story. A student or small group of students would then play that part. When Papa Bear is speaking or referred to in the story, students assigned to that part perform it. A pattern could then be assigned to all other characters and/or events in the story in this way, with movement being added as an option as well. He explains that classroom teachers are pleasantly surprised and supportive when he teaches this lesson, offering him books that they are using in the classroom and asking if there is anything else that he needs.

Mr. Wallace described “Imagination Time,” a musically robust, creative affective integration routine that he incorporates daily, with every class and every grade level:

We do this thing in class, called Imagination Time. Every day, every kid, grade one through six, they come in the room, they don’t talk. There are no chairs in my room. I don’t use anything like that, because we’re always moving around and doing interactive things. They come in, they pick a spot in the room, they lay down and close their eyes and we listen to music for about two or three minutes, every day. And it’s not music that they know. I have a composer of the month and we listen to their music during imagination time. This rotation we’re listening to Franz Schubert’s Symphony Number Five. So they come in, they listen to it, and then afterwards we talk about what did they imagine, how did it make them feel. And then I have facts on my board, historical facts, about where he grew up. I’ll talk about what was going on in the world during that time, what sort of era in music it was. So I am naturally integrating history into the curriculum every day, grade one through six, every kid gets that. So by the time these first graders go to seventh grade, they would have listened to hundreds of different pieces of classical music. They probably wouldn’t have listened to any of them otherwise, and they learn to connect.

4.1.4 Physical Education Teacher: Ms. Kelly

Ms. Clare Kelly is the elementary physical education teacher at Evergreen Farms. She is a young teacher, now completing her third year of teaching. She initially began her undergraduate study at a large, expensive state university, but transferred to a smaller state university that better met her specific educational needs once she made the decision to become a physical education teacher. Ms. Kelly has no plans to further her education beyond her bachelor's degree, but she is currently taking courses through a local intermediate unit to obtain her Level II teaching certificate. Ms. Kelly completed her student teaching experience in a large urban district, which she believes was a valuable experience in helping her to understand the implications of teaching within an urban context before being hired as the physical education teacher at Evergreen Farms. She also has her middle level math certification.

Ms. Kelly has a positive demeanor. Throughout our conversation, she frequently mentioned that she is more than willing to help her classroom teacher colleagues in any way that she can:

I think these kids are my students, I think I am just as accountable as anyone else is for the results that we get. I think that it's hard because I don't have that kind of structured classroom that they sit down and I have these specific things that I have to teach them. So, I do try to incorporate different things that their classroom teachers do. But I don't think that I am not accountable because I am the gym teacher. When we go and do data and stuff, I am willing to do whatever I have to do, but I don't really know sometimes what I am doing or why I am doing it.

She feels that physical education has changed drastically over the last few years, from just "rolling out the ball" to a focus on actual physical skills and their relationship to teamwork and collaboration for students. She believes her role is to teach students about their physical well-being and how their bodies function in an effort to prepare them for "real life."

Since the flex time has been the primary instructional focus at Evergreen Farms for the past two years, Ms. Kelly explained that she is arbitrarily assigned to work with various grade level teams to support the flex time throughout the school year wherever she has extra room in her schedule. During many of the district's in-service days and professional development time, Ms. Kelly finds herself working with either the fourth, fifth or sixth grade teachers talking about student data. Ms. Kelly expressed concern about her ability to adequately plan for the flex time and analyze student assessment data with her classroom teacher colleagues:

Usually I don't even know what test it's from or why. They'll put kids into different levels based on their test scores. So we'll group them. We've started the flex now, I am sure you've heard about that. It's where the kids that have the lower scores go into groups and I help with that too. Whenever we split the kids up, usually I am just the one looking at the scores and highlighting, ok this kid's low, this kid's low, and telling the teachers what kids got what scores. I wish that I knew more about it, so that I could help them more, because I know that they're really stressed out with everything they have to do. They have a lot on their plate. I just do what they tell me to do. I don't really know what benefits it has.

In discussing this school-wide plan that has the AMPE teachers supporting additional core instruction because of the focus on testing, Ms. Kelly expressed some concern regarding the diminished value that this model suggests with regard to art, music and physical education teachers and their content areas:

Sometimes it's frustrating with the classroom teachers and the things they demand. I am the first one to say that my job is much easier than everyone else's. I have less to do, I don't have to go home and grade a bunch of tests and papers or worry about their actual test scores. Classroom teachers, I sometimes feel belittle what I do so much. You're just a gym teacher, or your job's so easy. I don't necessarily think that my job's harder than any of their jobs but I don't think it's easier either. That's one of the things we talk about. Like what if a kid can't run right, so I'd just call the third grade teacher up and say, "Hey, this kid's having trouble with their running form, can you come up and help them during your break?" That would never, ever happen.

Ms. Kelly went on to describe sometimes being devalued by classroom teachers because of her role as a physical education teacher:

With the other teachers, they'll make comments that rub me the wrong way...I think they brush us off because we're special areas. They don't think that they give us the same training as they give to everybody else. And because we're special area teachers, we can't do things, I couldn't incorporate things because I teach gym.

Despite having conversations amongst the other special area teachers about their concerns with being utilized to provide direct instruction in reading and math, the AMPE teachers have never expressed their concern to the principal. Explaining why they do not bring their concerns to Mr. Banks, Ms. Kelly said, "I think I just feel that it's not my place to say anything about that because I am not a classroom teacher. I am not that immediate educator."

Ms. Kelly believes that a major value of physical education is rooted in 21st century skills. Lessons she has developed to foster collaboration allow students to simultaneously develop group strategies using critical thinking skills in conjunction with teamwork. Critical thinking is also translated into her health curriculum, which is primarily project-based. Students have the opportunity to problem-solve freely within a general framework of criteria and objectives. Communication is a consideration in Ms. Kelly's practice, which she explained that she ties into collaboration for students through higher order thinking and team sports, by letting teammates know where other teammates are and their accessibility. In Ms. Kelly's class, basic skills are the foundation for her implementation of a 21st century curriculum. "I'll teach them a skill and then I will ask certain questions about the skills and introduce new words. I think I include 21st century skills almost every day."

Ms. Kelly also mentioned that it is not unusual to find that on in-service days, the art, music and physical education teachers are not included on the schedule at all. When she has asked where she is supposed to go and received clarification and attended a session, she found that it did not pertain to her at all.

Ms. Kelly told me that she had limited exposure to integrated teacher practices in her undergraduate program. She described developing a thirteen page lesson to teach students how to kick a soccer ball, but with limited emphasis on cross-curricular teaching. However, she does recall the PSSA being a major point of emphasis in her formal college training, understanding that the PSSA was of the utmost importance for students. “It’s only my third year, but I know the PSSA is what’s most important for kids, and the school and the district,” she explained. In understanding this, she has never felt she is sacrificing the physical education curriculum for the sake of covering concepts from another content area. She was self-motivated to experiment with some integrated lessons in physical education based on her desire to help students succeed on the PSSA.

Ms. Kelly explained her preference for mathematics integration over language arts integration, “I know that for me, I don’t like reading and I don’t like English. Now I am not saying that I am not willing to help out with that, but I’d rather do math. I have my middle school math [certificate] I enjoy teaching math. I think I can help them more with math than English.” Ms. Kelly is always willing to attempt integration within her classroom to tie in math concepts.

As the school-wide plan for the flex time was being developed, Ms. Kelly spoke with the classroom teachers in third grade about finding a time to meet and help with splitting the students into groups. However, she had no planning time available that was the same as the third grade

teachers. She resorted to email communication in an effort to collaborate with the teachers, and as an added measure of assistance, offered to find ways to incorporate third grade math concepts into her physical education class if the teachers would send their lesson plans. She described some of the integrated lessons she has used in recent years to reinforce mathematic concepts; many of these lessons had subservient qualities and included students stopping to complete math problems in teams, or being required to solve a word problem before being permitted to go on to the physical education lesson.

In health class, Ms. Kelly endeavored to have the students write a story because she knew they were working on story writing in their language arts class. However, once she implemented the lesson, she noted a divide between her approach to teaching the writing process and that of the classroom teacher that she believes stifled her attempt at integration:

The teachers were teaching the kids how to write a story, so I had them write a story in health class, and they had to use the correct grammar and write the right way. But even with that, the kids were asking about a specific story approach, and I had no idea what they were talking about. So it would have been nice to know, the exact format that it was set up, so that I could have done the same exact thing. And that was probably more my fault for not asking how they did things. In health, they do a lot of writing assignments, so that's something that I think helps.

4.1.5 Art Teacher: Ms. Scott

Ms. Julie Scott has been teaching visual arts at Evergreen Farms Elementary for the past eight years. Our conversation took place in her classroom; a tidy and spacious art room with large tables that allow students to sit in groups. Various pieces of student artwork and instructional

materials are exhibited on the walls. An art library is set up in the corner of the classroom, with a small carpet and comfortable seating arranged near a shelf of art related books intended for students.

Ms. Scott always knew she loved art and working with children; becoming an art teacher was her ultimate goal. She earned her bachelor's degree after being awarded a scholarship from a local arts league to study art at a nearby public university. She has a strong studio background, with an emphasis in painting and a minor in art history. She recently completed her master's thesis, which focused on arts integration, taking the art into the regular education classroom. In addition to her teaching certification in art, Ms. Scott also holds teaching certifications in secondary English and as a school librarian. She was very clear that although she holds these certificates, she does not prefer to teach either of these content areas.

Ms. Scott sees all students at Evergreen Farms in first through sixth grade once a week, except for first and second grade, who have art class twice a week. For the first and second graders, Ms. Scott explained that one art class is their regular art class each week, the second art class is an integrated art class:

Art with language arts, and we do projects that tie into what they are reading in the classroom, so, story-related projects. They are reading a weekly story that goes with a certain theme. We try to do a project that goes along with that to reinforce the learning in the classroom.

Ms. Scott explained that this class was already in place when she began teaching at Evergreen Farms:

To be honest, the reason [for the class] is because if first and second grade only had art once a week, teachers wouldn't have enough prep periods. So, they added in the second art class, and to justify it as another art, they wanted me to teach language arts with it. It's hard...I don't always stay on track with it. If we're doing a regular art project, it takes three periods to do. We'll finish it up and then we'll start on the story. It's really hard to

stay on track with it, because we don't have a common period and it's just hard to stay on track with what they're doing in the regular classroom, so it's a challenge.

Ms. Scott explained that she has adjusted for this lack of collaboration time with classroom teachers by emailing them to communicate as necessary and by obtaining a copy of the teacher's manual for the reading series. Forced integration with this reading series and the integrated arts class is sometimes a concern for Ms. Scott, because certain units don't lend themselves to an art project.

In response to the vignette I shared with Ms. Scott, she expressed her concern with the pressure to integrate reading and mathematics that results from PSSA testing:

It all sounds familiar, I mean just, every teacher no matter what their subject having to try to integrate math and reading across the curriculum and the pressure to just integrate it more and more no matter what your background is in education, whether you teach that or not...it all definitely sounds familiar and sometimes it is frustrating.

We went on to discuss how Ms. Scott felt about being expected to teach a reading flex group as an art teacher. "It's difficult," she said. "It's not what I went to school for and it's not what I would choose to be teaching."

When Ms. Scott started teaching at Evergreen Farms, under the supervision of a different principal, she was told that she had to include the visual arts standards, as well as either reading or mathematics standards in every lesson plan she submitted. She was not alarmed by this, because her undergraduate program had prepared her for integration. "I think we're told that [to integrate] for art for a reason, she explained, "Because then we can say art lends itself to teaching math and teaching reading and other subjects. But I definitely think it's become more rigorous." Ms. Scott is more comfortable integrating reading than mathematics. She feels more comfortable when she has the opportunity to collaborate with classroom teachers when integrating mathematics:

The more background they can give me on something, then the more confident I feel. But when I am kind of just on my own sometimes it is hard, it can be a challenge. Especially with math. Math is something that for me, was not my best subject in school, so to try to integrate that or even teach it, for flex class, that's something that would be difficult for me, that I really wouldn't be comfortable with.

Ms. Scott has also been asked by other classroom teachers to integrate math into her art class. One such instance occurred last year, before the PSSAs were administered. Students were struggling with the concept of rotational symmetry. At the request of the classroom teacher, Ms. Scott developed a lesson plan to help support student acquisition of this concept in her classroom.

Ms. Scott describes herself as someone who is interested in finding ways to integrate when the arts curriculum is not marginalized for the sake of the integrated content. Ms. Scott explained her feelings about art being exploited purely to convey learning in other content areas:

There is an approach to integrating art; the instrumental approach, where it just becomes an instrument for teaching other subjects. It takes away the inherent value of visual art, it just becomes a vehicle to teach math and reading and I think it really takes a lot away from what students can just learn naturally about art. But I think most teachers, if they do integrate art at all; it's used to serve another purpose. I think that's commonly what happens, it goes with a reading lesson or it goes with a math lesson.

Ms. Scott explained that she feels integration goes too far when, "The whole goal of the lesson is not really art-related anymore. Because I am an art educator." She went on to describe that integration becomes an exploitation of the arts when a subservient approach is used, "When it gets to the point that I am not really teaching art first anymore, I'm teaching the math or I'm teaching the reading. I think then it's crossed the point where art has just become an instrument for teaching."

While writing her master's thesis, Ms. Scott engaged in research where she co-taught with three different classroom colleagues, infusing art into several units and lessons within the regular classroom. "I do think it's important," she told me, "I think it helps the kids to see connections in other subjects too across the curriculum, and just to see that what we're doing in art relates to other subjects."

She accomplished the co-teaching initiative by teaching alongside the classroom teachers during her preparation time, but she felt the benefits of this approach were significant for her students. "The kids really enjoyed it and got a lot out of it. I think they learned more and I think they enjoyed the content that they were learning more, because there was an art project to go along with it, so it was fun for them," she explained.

Ms. Scott's co-taught lessons in the regular education classrooms involved the creation of three-dimensional animal habitat dioramas in conjunction with the study of animal habitats, student-developed advertisements created to advertise a particular state being studied, and an affective integration lesson related to a story about music in conjunction with the abstract expressionist painting of Jackson Pollock in the visual arts. Ms. Scott feels the benefit of the co-teaching that occurred between the art teacher and the classroom teacher was that they were there to support one another and to share the responsibility for student learning in both art and the other content areas. An added advantage of two certified teachers was the ability to break the larger group of students into smaller groups to work on various skills as necessary. In addition to collaborating with classroom teachers to convey the arts, Ms. Scott is also a proponent of classroom teachers integrating the arts on their own; she notes that her colleagues integrate the arts when they have time, "though they're probably not going as in-depth with it. It's probably

being used as just an activity that related to reading or math or that is emphasizing what they've learned in those subjects."

Ms. Scott described 21st century competencies as central and natural to her practice and her content area. She explained a recent large-scale collaborative sculpture of a papier mache eagle she recently worked with her second grade students to create:

That was a big learning experience for them; they had to learn to cooperate with each other. They all had a job and a task to do. There was communication, critical thinking when something went wrong or there was a problem, they had to fix it. They had to be creative as a group. When they started together with the materials, I think some of them didn't quite see how the final product was going to turn out so they had to learn to be creative with it, and when it was finished they were able to see how they had all come together and achieve the end result. They were just so pleased with themselves at the end, that they had just made something out of nothing. They had started with only a few materials and turned it into something recognizable.

Ms. Scott offered that learning in her classroom is essential to preparing students for career success in the jobs of the future, especially in learning how to work with other people with participation in the workplace as an ultimate goal:

Students are learning so much about problem solving and critical thinking and they are learning to think outside of the box and there isn't always going to be a right or wrong answer for every problem in front of them and they have to learn to look at it from different perspectives and different angles, make a choice and that there's a consequence for that choice. I think that those are all skills that business leaders are looking for and that can be applied in the workplace. So they are learning to collaborate with others and to cooperate. They're learning to communicate things about their artwork and to value their peers' contributions. So they are definitely learning how to work with other people and how to get along in the workplace.

Ms. Scott has had positive experiences collaborating with colleagues to integrate the arts. Our conversation sparked mention of one particular classroom teacher who believes in the value of integrated learning across the curriculum, and is motivated to provide these opportunities for

students. This regular classroom teacher, Mr. Tim Hamilton, was willing to meet with me and shared not only his experiences and beliefs surrounding integrated teaching but also his personal account of an experience which helped shed light on the narrative of integrated practice as it relates to the Evergreen Farms context.

4.1.6 Classroom Teacher: Mr. Hamilton

Tim Hamilton knew he wanted to become a teacher after he was inspired by a few of his own high school teachers, who were motivating and energized him to learn. He is a graduate of the Harvest Valley School District. He initially had an interest in science, and struggled to decide between studying science exclusively, or going into education. After starting out as a science major in college, Mr. Hamilton changed his major to education as more and more people who knew him told him how well he worked with children. He attended a local public university and completed his student teaching in a nearby large urban district. He requested a city school assignment for this student teaching and cited this urban student teaching experience as extremely valuable, explaining that, “The majority of things that people around this area see as a problem, is not really a problem, compared to what people in the city deal with on a daily basis.” He subbed for one year before returning to Harvest Valley to teach in the same school district where he had once been a student. When I asked Mr. Hamilton how long he had been teaching, he hesitated to answer as he explained, “I have to think about that at times because it doesn’t matter to me. I don’t think about things in terms of years, I could care less. I just love coming to work and teaching...but I want to say it’s twelve, twelve years.” Mr. Hamilton teaches sixth grade social studies. This year, because there is a smaller group of students in sixth grade

and a greater school-wide need for language arts instruction, he also teaches some language arts and spelling as well.

In his twelve years at Evergreen Farms, Mr. Hamilton has seen the larger changes to public education affect his classroom, marginalizing his social studies class:

When I started here, I was able to do a lot more in my classroom in terms of hands-on, creative projects, than I feel that I am allowed to do today. I feel that a lot of that is going away due to the increased emphasis on testing in a big way. When I first started, the principal at that time did put an emphasis on testing, we were taking the Iowa's at that time and he made note to really review how your kids did with you to see if you had made improvements, so at that time, our district was a little more progressive. He was really focusing on testing scores even though PSSAs weren't around yet. But, as the years have gone on now, there is definitely a significant change with what I can do in the room. My time for instruction feels like it's being taken away. When I first got here, I taught social studies for an hour each day, my time is now down to 40 minutes a day. Two years ago it was 50 minutes, last year it was 45, now it's 40. So I'm losing time every year. So what am I doing in the extra time then? That means I am spending additional time teaching or giving support to students with both math and reading. Not that that's a bad thing, it's definitely needed. But those aren't the only two subjects, and other things do matter. So it's a frustration that we've definitely gone so hard core towards testing. But I understand it, that it's not the district's decision; it's the state that's pushing them and the federal government that pushing them, you know, in hopes of getting students to achieve at a higher level.

I asked Mr. Hamilton how he felt about the federal education reform that he admitted is affecting his teaching practice. He explained he has experienced frustration; that he used to do a lot of hands-on projects with the students. "We used to do all of this stuff, and...you can't do that anymore. Partially because of time, and partially because of...well let's go back a little more," he said.

Several years ago, as he described to me, Mr. Hamilton, the other sixth grade teachers, and the art, music and physical education teachers used to work together to develop dynamic interdisciplinary thematic units for their students. They utilized the carpeted common pod area in their grade level wing to build a giant pyramid that filled the entire space, from floor to ceiling.

“In addition, we would make sculptures of full life-size paper mummies out of butcher paper,” Mr. Hamilton explained, as he showed me newspaper clippings from the local paper of sophisticated Egyptian-themed sixth grade student artwork featuring authentic hieroglyphics developed through the collaborative effort of many teachers who he said enjoyed working together. He went on to explain, “They’d trace each other, and then cut it out, decorate it with chalk and then spray it with hairspray to make it stick.” When developing this thematic unit, social studies and ancient Egypt was central to the learning. Mr. Hamilton rationalized, “At that time, we were very good at bending the rest of the curriculum around social studies. But it applied itself in so many ways. Like for Egypt, you could look at pyramids and measurement and geometry and it applied itself in so many ways.”

Similarly, when studying medieval times, Mr. Hamilton and his colleagues built an enormous castle in the pod area; they coordinated a medieval feast and would teach students the role of queens, kings, peasants, and serfs by allowing them to dress as each of the parts, partake in medieval meals and earn the “wages” of a specific class for a month for doing their homework. Mr. Hamilton showed me lesson plans and schedules developed to structure the thematic learning experiences. Parents were invited into the school and were actively involved with the medieval feast. Students learned medieval dances in physical education class, and studied medieval tunes in music class. The sixth grade teachers were able to collaborate amongst their own team easily due to nearby proximity. They collaborated with the art, music and physical education teachers via email or before or after school. Many of the teachers would willingly stay after school, after in-service days and come in on weekends to devote the time necessary for cutting wood and initiating foundation necessary for the large-scale projects. Mr.

Hamilton explained that this type of learning was so meaningful for students because they were learning about the same things in most of their classes at the same time.

Mr. Hamilton explained that the parents from the other elementary school in the Harvest Valley school district complained that their children weren't being afforded the same interdisciplinary learning experiences. As a result of this complaint, a grievance was filed by the teachers at the other elementary school. The committed teachers at Evergreen Farms were told their collaborative efforts were "un-educational." "So we developed these huge massive unit plans that we sent up to the administration building," Mr. Hamilton explained, "so we could prove what we were doing was what we were supposed to do. We were then told to tone it back because we were making the other teachers look bad. So in other words, they're punishing me for doing my job and for being a good teacher." Mr. Hamilton talked some more about all of the elaborate projects and opportunities for learning he used to work so hard to offer to his students. "That's all gone," he said sadly, "and that's the stuff the kids remember. They don't forget that. But...can't do that anymore."

Mr. Hamilton still continues to integrate his content area with the art teacher most often now. However, the focus on testing and the grievance from a nearly a decade ago seem to have hindered the momentum for integration that was once prevalent:

I do some stuff still with my kids. Not much has changed in terms of collaboration between myself and the art teacher. The previous art teacher, we did a lot of the same stuff. We did the mummies that we made out of papier mache down in the classroom and then, my step is get them to design it and create it and basically make it look how it needs to, I basically cover them in gold spray-paint, then they take it to the art room and then they do all of the additional design, paint and hieroglyphics with her. But they learned the hieroglyphics in my room. We planned together initially and now, from year to year, we talk at the beginning of the year and she'll ask, "Are you planning on doing this one this year?" and I say, "It depends if we have time." It usually comes down to that; it's unfortunate. I feel like sometimes I have to sacrifice those things in order to get my content in there as well, which is the tough part.

Mr. Hamilton expressed his belief that art, music, and physical education are extremely valuable:

When you read about how some of these programs are being cut in different districts around the state or around the country, I think it's a travesty. I have a student in 6th grade this year, who is an *amazing* artist. Right now he could be selling his work and making money off of it. He's just...that...good. For him to not have that opportunity, like if they were to cut that position would be to take away his livelihood in life. I mean that's what he needs to be, he is just that good. I think that the art teacher, getting to work with that kid, even if it was just that one kid, makes it all worthwhile. Physical education, you know how we talk about that all the time, being healthy and staying in shape, because people just sit at home and play video games and watch TV. It's very important. I think they do a lot more than what they teach. Like, I think our physical education teacher, I think she does an excellent job. She's very personable, will joke with the kids. She does extra stuff.

At times, Mr. Hamilton admitted he is also guilty of devaluing the importance of the art, music and physical education teachers in his school:

In all honesty, I feel like I look down on them sometimes. But it's not them I am looking down on, so much as the way the master schedule was put together for what everybody's responsibilities are. Their responsibilities this year are very light, in my opinion. They teach a set number of classes, they get a prep everyday, which everyone's entitled to, they also have a "bulletin board" prep, two of them maybe each week, and they don't get changed very often. They have a building plan prep, some of them have that twice a day. I am not sure why they get those, it doesn't seem to make a lot of sense. We have a flexible grouping that we're doing this year. They're supposed to push into the classrooms and help the classroom teachers in reading, especially at all of the grade levels. Some of them do it very well, some of them don't do it, at all. And it doesn't seem like they're held accountable. And that bothers me, it should be, if this is what your schedule says, then you should do it.

Mr. Hamilton feels it's appropriate for the art, music and physical education teachers to be supporting the flex time, explaining that he doesn't think the depth of content area knowledge in reading and math is a major concern at the elementary level:

At this level I think it's feasible because a lot of the material that, no matter what your major is, in college, you can handle the majority of the content and be able to support

students in the classroom. So I think the concept is good. I mean, going and helping a sixth grader with math, I mean, it's not like helping someone with calculus. So a phys. ed. teacher, or a music teacher or and art teacher would be able to go in and help them with some simple algebraic concepts or mathematic properties, like associative and commutative properties, that's not beyond anybody. I am pretty sure of that. So in concept, it's a pretty good idea. The more people we can get into the classroom and reduce the size of the groups of students, the better off everybody's going to be. Plus, they get to see that teacher in a different setting, realizing that they know more than just art, or they know more than just phys.ed. And they're going to respect them more as a result.

Mr. Hamilton believes that 21st century skills are essential to education, in every content area, but that students today seem to be struggling more to develop and command a 21st century skill set, particularly creativity. He feels that teachers tend to neglect them in their classrooms despite recognizing their importance:

I don't know that we teach them enough. We say we like to teach them, and then we try to, but does the follow-through really happen. I still see that the students struggle to learn in those 21st Century skill ways. They want to be spoon-fed. They don't want to think for themselves, they don't want to be creative, they don't want to learn these skills and be independent and think in these more abstract ways and really come up with solutions for things. They are very much content saying, ok, what am I supposed to do now, ok, what am I supposed to do now...

Mr. Hamilton described one such lesson he attempted earlier this year in his social studies class, assigning every student a role within the ancient Egyptian social pyramid and asking them to work in groups to build a ramp that was four inches high:

They couldn't do it. They couldn't do it within the allotted time, and they struggled and failed again and again and again. They fought over designs. Or they looked at the paper and thought they had to make it look exactly like the example on there. So you have to change things sometimes, help them out more than you want to, guide them more than you want to. I don't feel like they're achieving on their own, which I'd really like to see them achieve more.

4.1.7 Case Study Summary

Evergreen Farms in a ten-year-old elementary school with a current school-wide focus on individualized student learning in reading and math. Art, music and physical education teachers are currently teaching their own content areas to students in grades one through six as well as being utilized to support this effort by teaching reading and math to small groups of students. The AMPE teachers do not have common planning time with classroom teachers other than in-service days to accomplish this task.

Often, the AMPE teachers at Evergreen Farms do not find the professional development offered by the district to be relevant to their needs as content area teachers and often feel out of place. They are sometimes allotted a period of time to meet as district AMPE departments on the in-service days. Internal documents collected during this research validate the claims of the participants, specifically professional development agendas and teacher schedules. Formal AMPE teacher involvement in the flex time is evident in the teacher schedules.

The art teacher teaches integrated art class to students in first and second grade, but Mr. Banks, the principal maintains there is no school-based initiative to integrate reading and mathematics into AMPE. He believes it is good practice, however, and will validate teachers' efforts toward integration. Ms. Scott believes the integrated art class was implemented to provide additional preparation periods for the first and second grade teachers. Adopt-an-Anchor was an integration initiative in place at this school about three years ago, it has since vanished and RtI and flex time have taken its place as the central initiatives.

Mr. Wallace, the music teacher has not been asked to integrate within his music curriculum, but will do so when it seems appropriate and natural. Ms. Kelly, the physical

education teacher, has not been asked to integrate reading and math in physical education, but is extremely willing to do so. She tries to integrate math especially, because she feels an obligation to support the efforts of her colleagues and help students achieve on the PSSA. Ms. Scott, the art teacher, integrates on a consistent basis, teaches an integrated art class, and recently wrote her master's thesis on a co-teaching integration initiative she developed with classroom teachers. Mr. Wallace, Ms. Kelly, and Ms. Scott all agree that lack of time for collaboration, particularly with classroom teachers is an issue. Teachers at Evergreen Farms seem willing to collaborate with one another; the open floor plan with group meeting areas for each grade level fosters this inviting collegial atmosphere.

Integration efforts described by the participants range from subservient to coequal, with social integration being evidenced through the annual Evergreen Farms art show. Mr. Wallace feels comfortable integrating other content at the elementary level. Ms. Kelly feels very comfortable integrating math, but unable to effectively integrate reading into her health curriculum. Ms. Scott has no concern with regard to self-efficacy in integrating reading into her art class, but struggled with math herself and does not prefer to teach it.

All three AMPE teachers also agree that a 21st century skill set is both natural and essential to what they teach in their content areas. They believe that a 21st century skills framework to teaching in their AMPE classrooms is fundamental to teaching students real-world applicability to content area knowledge. Ms. Scott and Ms. Kelly endeavor to develop lessons in their classroom in an effort to foster 21st century skills. Mr. Wallace and Ms. Scott believe that a mastery of a 21st century skill set is important to the future of current elementary students, who will be active participants in a global market. Mr. Hamilton, the classroom teacher, feels that

students' ability to think critically and creatively has suffered in recent years as a result of the emphasis on testing.

Mr. Hamilton sees the role of the AMPE as valuable, especially for students who thrive in these content areas. However, at times, he feels all of these teachers aren't pulling their share of weight consistently with the flex grouping initiative and that their teaching schedules are lighter than other classroom teachers' workloads. He feels their involvement is appropriate and it's fair that all teachers should help to support this initiative, regardless of their background or content area knowledge.

In understanding the ten year history and context of Evergreen Farms, Mr. Hamilton's account of the systematic dismantling of inspired and collaborative integrated teaching provides an unusual perspective on cooperation and willingness stifled by barriers presented by the teachers' union. Several years later, the teachers' momentum to integrate across the curriculum has never fully recovered, though there are remnants of this tradition and consistent pockets of integration still occurring as part of some teachers' practice.

5.0 COCHRAN MILLS ELEMENTARY SCHOOL

5.1.1 Contextual Portrait

Cochran Mills Elementary School is an elementary school in the Summerville School District serving all 540 Summerville students in kindergarten, first, second and third grades. Cochran Mills is a school with an emphasis on literacy. The school was converted to this configuration two years ago, with nearby Barrett Elementary school serving grades four and five. Barrett has a STEM (science, technology, engineering, and math) focus. The schools are less than a mile apart. The reconfiguration of the schools occurred because of a constant competition between the two elementary schools, with parents perceiving various inequities. In moving all students at each grade level to one location, Summerville School District could ensure more consistent curricular delivery and opportunities for students.

Summerville is a small western Pennsylvania school district that prides itself in its active parent involvement. Summerville School District includes both the small city of Summerville and the rural township of Piedmont. Summerville is a bedroom community to Pittsburgh and many Summerville residents commute to and from the city for work. The city of Summerville has lost much of its larger retail commerce. Empty storefronts and vacant strip malls have become more prevalent. In recent years, an increasing percentage of lower income families have moved into the district. With about 30% of students currently receiving free or reduced lunch,

Cochran Mills is a targeted assistance Title I school, and has managed to sustain student achievement, making AYP every year. Only about 4% of students attending Cochran Mills qualify for learning support services; that is far less than the 40 students needed to make up a learning support subgroup as defined by NCLB. The original Cochran Mills Elementary School was built around 1959 as a ten-room building that served students in grades kindergarten through six. As the Summerville population increased, students in grades five and six were moved to the middle school in 1986. In 1996, a renovation and addition were completed to the existing Cochran Mills structure to increase its capacity, allowing the structure to accommodate a larger number of students. The school was then restored to the kindergarten through sixth grade configuration once again, until being converted to a K-3 primary center two years ago.

There are two physical education teachers, one art teacher and three music teachers, all of whom spend only a part of their day at Cochran Mills. The art, music and physical education teachers that I spoke to spend the morning at Barrett School and then travel to Cochran Mills, where they take their lunch breaks and teach through the rest of the afternoon. Every AMPE teacher in the Summerville School District travels during their school day.

The exterior style of the school is characteristic of a 1990s renovation. Simple metal architectural elements in a monochromatic color scheme complement the red brick exterior. I arrived at the school building and waited to meet my first interview participant. We struggled to find a quiet place to meet in order to conduct the interviews; one of the teachers later told me that since reconfiguring to house all students in the Summerville School District in kindergarten through third grade, the facility has become very crowded. The hallways are somewhat narrow with stairwells confined toward the rear of the building for access to the second floor. Various wings in the interior of the school appeared to be much more dated than others. Many classrooms

flank the short hallways within the squared layout of the building. The short corridors and many corners isolate the classrooms from one another. The classrooms were very traditional and some student work adorned the hallways. There is a music classroom, an art classroom, and a gymnasium.

A review of internal documents revealed that the current educational priorities of both the district and the school are the transition to the PA Common Core Standards and curriculum mapping. These priorities were validated by the participants at the site. The principal also explained to me that What I Need Time (WIN Time), an application of the Response to Intervention Model (RtI) is another major component at the primary level, with an emphasis on targeted literacy instruction for individual students. Students receive core instruction in reading, math, science and social studies from their classroom teachers. Students travel to art, music, library, and computer class once a week. Students have physical education twice a week. The teachers have one half hour of collaboration time daily, at the start of the day. All of the AMPE teachers are scheduled to begin their day at Barrett School before traveling to Cochran Mills, so they are unable to formally engage in the collaboration time with the classroom teachers at Cochran Mills. All of the AMPE teachers I spoke to have always had the experience of traveling throughout their day from one school to another while teaching in the Summerville School District, never being assigned to a single building to teach for the entire day in the past.

5.1.2 Principal: Ms. Schafer

Ms. Kim Schafer attended a nearby private university. She has been in public education for 14 years. She has a background as a Title I math teacher and elementary classroom teacher. She has

been the principal of Cochran Mills for seven years. She currently serves as the Title I coordinator for the Summerville School District.

Ms. Schafer believes the current priorities of education are reading and math as they relate to school accountability. She personally believes that reading and math are important priorities as well, and admits that she builds the structure of her school around those areas. She explained that she values art, music and public education as well, and laments the fact that some districts are cutting these programs at the elementary level. “My thoughts,” she offered, “For a child sitting in that seat, it’s something that they need. I found that it allows kids who maybe don’t shine in certain areas, to have an avenue to shine at this age.” Since the recent reconfiguration of the school grade span, Ms. Schafer is at the mercy of a schedule that shares the art, music and physical education teachers between Cochran Mills and Barrett. “Unfortunately, the way our schedule is doesn’t enable us to put it [AMPE] on the platform that it is a priority here,” she said.

Ms. Schafer told me that she spends a lot of time talking with her teachers about how 21st century skills might be fostered in the classroom, “but it’s really the special areas where kids think differently,” she said, “That’s where they have to.” Ms. Schafer believes art, music and physical education provide an essential foundation for students’ acquisition of a 21st century skill set:

When you think about communication, you think about it in the realm of music. Here you have kids working together to come up with a performance or a duet. When you talk about the experience of a finished product or evidence of what they’re doing, those areas, in a lot of cases they think that way and communicate that way more than you see in a regular classroom setting. I think it’s evident there, and it’s hugely important in those areas. I go back to, for me, I am passionate about the fact that those are areas where the kids can feel successful and shine where they may not in reading and math. I think that’s what our kids need to be able to do. No student in my building is older than 9 years old,

so they're not going to all of the sudden, when they turn ten, embrace those skills and start those building blocks. I tell my teachers, with the five year olds, it starts there, you know, getting them talking, communicating, problem solving all of those things. It has to start here, it has to become a natural part of what they do, because we're really planning for later, for them. But it has to be what they do every day, now.

She expects the art, music and physical education teachers in her school to be both experts in their fields and to work alongside the classroom teachers in an effort to integrate as much as possible. "To do some things to blend that experience for kids, but for us there are barriers after barriers after barriers for that expectation to happen," she concluded. The schedule, she reiterated, is the biggest obstacle. She views collaboration as being tied to integration for the "special area teachers." She perceives the AMPE teachers as being very willing to work with one another, but less likely to collaborate with the classroom teachers. That, she maintains, is "a work in progress." Classroom teachers, she said, are most likely to engage the art teacher in interdisciplinary collaboration, and will occasionally engage the music teachers as well. She noted that the chasm between the classroom and physical education is probably the most extreme.

School accountability measures have prompted Ms. Schafer to reconsider the role of the AMPE teachers in her building in an effort to address their disconnectedness from the role of the classroom teachers:

You try things to engage them in this arena, becoming more familiar with some of that data. The one that we did was when our students took the 4Sight Assessment, we brought them in, actually looking at student work, student information. I think that is a difficult thing too...how do you get your students that you're teaching your special areas to actually perform in those other realms? I think you can become so far removed from the academic end of it, just as it can happen in learning support. If it's always a pull-out model, you as the instructor don't always know what's happening in the classroom, where those students should be, what their strengths are, that sort of thing. We did make

an effort to pull specialists in with that, to be part of that specific data, to look at those specific writing samples and things like that.

Ms. Schafer feels that the curriculum mapping initiative the teachers are currently completing presents a promising opportunity for collaboration. Eventually, all teachers, both classroom teachers and specialists, will be able to view all curriculum maps. “I think those curriculum maps will be a great place where we can start,” said Ms. Schafer.

Ms. Schafer explained that integration at Cochran Mills Elementary generally consists of loose connections made between the classroom teachers and the AMPE teachers. She explained that a typical instance might revolve around the idea that, “We’re working on sharks, what can you do to support that need?” This year one of the second grade teachers worked with the art teacher and music teacher to see how connections might be made between his classroom literacy plan of instruction and the art and music content areas. “Was everything rich that came from it?” Ms. Schafer reflected, “Maybe not. But at least there was that effort to make a connection. Because I think it’s not really a connection for the teachers, it’s a connection for the kids, for them to see that learning is happening everywhere.”

5.1.3 Music Teacher: Ms. Finch

Ms. Sophie Finch has been teaching music for 31 years. She attended local universities to obtain both her bachelor’s and master’s degrees. She was a voice major. She has a background in vocal music, performing with local bands and singing in nightclubs years ago. She gave up this aspect of performance because of the heavy demands it placed on her time. She also has experience in

sacred music, she currently works in two churches where she sings, directs the choirs and plays the organ.

As a veteran teacher, Ms. Finch has experienced a transition in her role as a music educator that relates to integrated teaching practice:

I see it evolving over the years. It started off where everything was just, music for the sake of music and then over the years it's been pushed to integrate the other subjects and tie them in. How I view it is, I still look at my subject as the main subject, but I tie other curricular areas into what I am teaching. My objectives for my lessons are music. But I'll tie in math with rhythm, so if we're talking about note values, I'll tie in math. Social studies I'll tie in the background of a song. Today we're talking about spirituals, so we had a long discussion in 4th grade about slavery and spirituals, but the core of it was music. But it branched out from there. Even before we were asked to do that.

Ms. Finch received no formal training in integrated teaching; her integration practices were a result of her own curiosity as an educator:

Just experimenting, ideas that I would come up with, what if I did this? For example, at the beginning of the year I talk to the kids about their vocal chords and how they function. You know, put your fingers there, does this vibrate when you hum or sing? Then I started thinking, wait a minute, what if I actually showed them on an instrument. If I take the triangle and hit it and they can feel that vibration in addition to their vocal chords, and then I started thinking, let me take something bigger...I just started experimenting.

Ms. Finch integrates in a coequal manner that preserves the integrity of her content area. She explained that teaching music is her primary objective in her lessons, but she very frequently ties in other content areas. "My main thing is, I'm connecting to other subjects, but I'm not sacrificing. You know, I'm not neglecting to go over the note values because we're doing this, I tie it into whatever music it is."

Ms. Finch described some of approaches to integrated instruction. She sees simple, relevant connections with mathematics:

With math, for example, we talk about meter in a song. So we're going to break down, with the bottom number changing, it's going to change the note values. So then we're maybe going to tie in division or multiplication, because I am going to say, now the note values are cut in half, what's half of four, what's half of two. With fractions, if I have a dotted eighth and a sixteenth note, I am saying the dotted eighth gets three fourths of a beat, a sixteenth note gets a fourth of a beat. Three fourths and one fourth is four fourths, you know it's one. We talk about the fractions. Some of them, even saying is three fourths more than a half, you know they're going...? Then I'll do my pizza illustration, I have three pieces of pizza and so I'll get into an explanation of how I came up with that note value. The fifth grade was doing little mini-compositions, where I gave them a meter and said I need you to come up with four measures, in four-four, and we went over the note values, and they had to create combinations of notes and rests that would complete the measure.

Ms. Finch sees critical thinking as component of her pedagogy. She described one part of a lesson she teaches that can be translated to many melodies. She'll play a melody for her students in a major key, and then play the same melody line being underscored by minor chords. She asks students to describe the differences they perceive, both in sound and in feeling. Encouraging students to develop a description for their sense of sound as well as their affective response allows students to think critically.

During our conversation, Ms. Finch described numerous integrated lessons she teaches with students. She seeks out content area connections on her own, and frequently collaborates with other special area teachers. This is generally due to a lack of any common planning time with the teachers at Cochran Mills. Despite traveling daily between buildings throughout her entire career, she feels the AMPE teachers' current schedule is particularly problematic with regard to effective collaboration. In collaborating with other special area teachers, Ms. Finch has worked to facilitate musical performances that combat school bullying, showcase the performing and visual arts annually, and promote internet safety.

The textbook Ms. Finch uses in her music classroom is an important resource for integration, alleviating any concerns Ms. Finch may have had with regard to self-efficacy. "They

give you the national music standards and show how the lessons are meeting them, but they also list connections. I find myself referring to that, but also creating as I go along,” she explained. She told me that the textbook was selected for its robust vocabulary, and talked about the way lyrics, fluency and reading skills are associated within the textbook for students’ benefit through its graphic organization. “I like this series we have,” she said, “because say you have two verses and they don’t know which line they’re following. The book has it highlighted, so the second verse is highlighted in blue. So they can take their finger and follow the words...It actually helps their reading skills.”

Ms. Finch told me that when students are singing words out loud, recognizing the way the syllables relate to the rhythm they are practicing oral fluency in relation to eye coordination while reading through music. It upsets Ms. Finch when her students are pulled from music class to receive reading intervention. “I’ve even given them information that different music organizations will publish, research that shows how music, the reading of the words and the songs, will improve reading skills. I’ve given them research and information, but it’s in one ear and out the other.”

Another barrier Ms. Finch perceives is the expectation to integrate other content areas into her instruction with little direction or support. This lack of clear expectation is also apparent to Ms. Finch in the way professional development is provided to the AMPE teachers:

I know in the past couple of years they’ve talked about trying to integrate maybe more with math, math more than reading, in our classes to help the kids. But again, no direction is given. Then on the in-service days, we’re sort of left out here somewhere, on the fringes. It’s like we don’t quite fit in anywhere, yet they want you to do some of these things...I think the view of the specials sometimes, a lot of times, is that we’re just filler... They sort of throw it in your lap and say, “Here, make this happen.” You know it’s all up to you. We’ve had to give examples of things we did in class. I did the science connection with the vibration, talked about that with the principal, as well as the mathematical connection with the meter and things like that.

Ms. Finch described one in-service day she remembers from quite a few years ago that she found particularly beneficial and relevant to her practice as a music teacher. She arranged to have a college professor come in and present to the music department about vocal technique and voice preservation in both singing and singing for frequent use of the voice. She finds that now, administration will ask for ideas and suggestions of teachers for in-service days; she presents ideas but sees no initiative to plan for AMPE needs and nothing has evolved from her suggestions.

Social integration for the sake of music program advocacy is a significant part of Ms. Finch's practice. She works to plan and orchestrate many performances and programs with her students to showcase the work she does as a music educator:

I've done a lot of programs, that is one reason I do a lot of programs, to show what we do in class. I do think that if I didn't do the programs, that it would happen more. They would just think, oh, it's music, or whatever. But it's such a public thing, you know, these are evening concerts. The parents come and our concerts are well attended. That was the initial thrust when I did the programs, was to promote music in our schools. This is what we're doing. Here, I am showing you what I do in class, what I am doing is important. Even these cross-curricular things, I am sharing them with the public.

Conversely, Ms. Finch's efforts to showcase and advocate for music education sometimes yields a disappointing response from the classroom teachers that makes her feel devalued by her peers:

I do think some staff, like the classroom teachers, I think that they don't always recognize the importance of the arts. Again, it's their plan time. Even when we've done programs, the people who are involved with me, whether it's the computer teacher or the art teacher, they do the arts nights with me; they appreciate what goes into it. A lot of times we'll be sitting in a program, like the choir performances at the other elementary school, and some of the teachers will be sitting and doing their lesson plans, instead of focusing on what is going on. Even though it might be their kids in the program. That is disillusioning. I take pride in what I do, so for me, it's did the kids do well, am I happy with what I see, do I

feel I did my best in preparing them for the program, did the audience respond? That's where you sort of get your motivation.

In addition to having a very progressive outlook and exuding a willingness to collaborate and integrate content into her curriculum, Ms. Finch also has had lengthy career in public education. Her experiences have not seemed to cloud her viewpoint, but have prompted her to assume the role of a seasoned music advocate. Ms. Finch explained how even a positive music education promoter can be discouraged. She was able to identify one significant professional experience that she felt devalued her role as a teacher:

I can tell you something that happened here that I was very upset about, that I feel happened because I am the music teacher. The one classroom downstairs was designed as a music classroom for this building. I sat with the architect and the superintendent at the time asked me to come to the meeting and say what I need in a music room. They were trying to make this school as state of the art as they could at the time, it was '97. I said I'd like acoustical tile, a good location close to the stage, no common walls with other classrooms so that we don't interfere. So for 13 years, I had my music room. Well, last year, one of the first grade teachers didn't like her classroom and decided she wanted my room. So she had some parents call and complain, because she only had a couple of windows, that was the catalyst of this whole thing. The end result was, at the very last minute, I was told I was moving. Even though it was a music room, and it was designed as a music room. They totally ignored that and basically forced the issue and I ended up in the room with two windows. It's a smaller room, it's crowded and it's affecting our movement. It was just very frustrating, and I thought as a teacher with 30 years of teaching, there was no respect shown. It was just like they didn't really care... This teacher even said to me, what you do is not important. She openly said that. That is sort of an ugly thing to say to someone.

5.1.4 Physical Education Teacher: Mr. Butler

Both of Nick Butler's parents were teachers. His father left the profession in the 1970s, but his mother retired as a physical education teacher. Mr. Butler was inspired to be a teacher from an early age. He enjoyed accompanying his mother to school and watching what she did. Mr. Butler

graduated from a local university, earning a bachelor's degree in elementary education. He was hired right out of college as a classroom teacher at Summerville Middle School where he taught social studies and math for the first five years of his career. An elementary physical education position then opened in Summerville School District, and Mr. Butler returned to school to quickly earn his master's degree in health and physical education. Though he has a strong interest in basketball he enjoys coaching any sport. He has been teaching physical education at Cochran Mills for the last six years. Mr. Butler travels daily between Barrett and Cochran Mills. He shares the gymnasium all day, every day, co-teaching two classes, totaling about 50 students, with another physical education teacher.

Mr. Butler feels that reading and mathematics take priority at Cochran Mills. Mr. Butler feels his role as the physical education teacher changes often, and that it is dependent on whatever new initiative the district is pushing. "They try to find us as specialists a new role and how we help achieve that as a whole unit in the elementary," he explained. "If you're going to ask me what it is, I don't know. We have so many [initiatives] that have come and gone, I do forget where we are. I can tell you, this is a literacy-based school. That's something we're hammering home with our WIN time." Mr. Butler also sees himself serving in another role as a physical education teacher:

Sometimes I do feel like we're here, more or less, to provide the homeroom teachers with a planning period. Not saying that they don't care what education the kids receive in the physical education setting, but sometimes I do feel that if it wasn't for us, contractually, they couldn't meet their planning period requirements.

Mr. Butler feels fortunate in his current position co-teaching with another physical education teacher, because he can work alongside his co-teacher on a regular basis. Mr. Butler

and his co-teacher have the same schedule as the other specialists, beginning their day at Barrett and then traveling to Cochran Mills midday:

I don't feel isolated because I have someone to collaborate with, but then again, the person I have to collaborate with is in the same position as me. We can bounce ideas off of each other, but neither of us has the opportunity to talk to a homeroom teacher to help improve math scores. As far as planning, he and I are definitely seeing eye-to-eye. But as far as meeting with the homeroom teachers, it doesn't happen.

Mr. Butler explained that he and his partner co-teach out of necessity. "There is only one gym, and the whole grade level needs common planning time. So there is one music, one library, one art, one computer, and two phys. ed. classes. That is what they get in their six day cycle," he explained.

Merit of the integration is a concern for Mr. Butler, as it relates to lack of time and space to engage in meaningful content area learning with his students. He struggles to integrate due to a lack of communication with the classroom teachers at Cochran Mills:

At Cochran Mills, we don't see them at all, so it's kind of guess and check what they do. Nobody ever feels that they need to pass the buck to us, so the teachers in the homerooms take more of the initiative to teach the math skills that they need. I know that it's sad, but with 50 kids in that gym, and childhood obesity on the rise, any time we let the kids sit still to do something, with 50 kids, and then to add math it's really tough because they are only getting 90 minutes a week. In a 45 minute class session, by the time they come and we introduce the lesson, get the kids divided up, we're down to 35 minutes, and there is still a lot of standing around because of the tightness of space and safety... There really is no collaboration time for us to meet with them because of what's going on in their classroom. I don't want to say it's a survival thing, but in a sense, it becomes one.

Another issue with both regular classroom instruction and integration stems from the way students are grouped in Mr. Butler's class. The way the classes are set up, Mr. Butler and his co-teacher see double classes at each grade level several times throughout the week, however the double classes are never the same combination of students. "For one group, it's their second day in a row in the gym, for the other group it's their first gym day of the week," he explained, "So

one class has already done the activity, and the other class is just learning it. It doesn't provide the best structure." Mr. Butler tried to have this scheduling problem changed, and worked with the physical education department to develop a new schedule and approached the principal with a possible solution. Though the principal was receptive, the solution Mr. Butler proposed caused a conflict with another class, so the idea was scrapped. "The bad thing is, when you teach a game to your kids, one group has already played it; they want to play something new or add to it and the other group is still trying to find out the rules," he explained.

Mr. Butler has had greater success integrating lessons that foster 21st century skills than he has in integrating lessons that incorporate reading and math. He was able to talk to his mother, a former physical education teacher, about how to incorporate reading and math into the gym setting, "But then with limited budgets, some of the things she had in her bag of tricks that she could pull out, we really didn't have here," he concluded. With regard to integrating math, Mr. Butler reported that students look forward to their physical education class and seem disappointed when they come into the gym, and hear they'll be learning about math, "We instantly get that sigh, see that pouting look on their face, that disappointment of 'we're not going to have our regular phys. ed. class, we're going to do math?'" Mr. Butler has had a little more success integrating reading and engaging students, he described a lesson where his first grade students play "Sink that Ship" with sight words taped to the ball. When they throw the ball over the net, a student on the other team has to catch it, read the word and throw it back, "Like it was a cannonball firing from one ship to another. It was a basic lesson, but it was another way for the kids to see their sight words."

Mr. Butler told me that his principal talks about 21st century skills on a daily basis, and he frequently receives emails from his principal with links to literature touting the importance of

these skills. He tried to incorporate this way of teaching in physical education, and is encouraged by the student response but finds himself battling the logistics and scheduling constraints:

So many times, my lessons used to be teacher driven. This is what we're doing, this is how we're going to do it. Here are the rules, let's go, let's play, let's participate. But I think now, I am trying to realize that are other ways to teach kids the critical thinking aspects and problem solving, teaching the kids to communicate...the social skills with kids. We added a lot more group activities and group challenges, group games. The last thing we did, the kids in grades two to five had to design their own obstacle course for their group. They could use all types of phys. ed. equipment. They could go in the closet and take whatever they needed to make whatever they wanted. They had to design it, create the path that you needed to take to complete the challenge. They worked in 4 large groups; they had areas where they could work. Then they had to teach it to the other groups, time the other groups and show them how their course worked. It was kind of neat, because it gave them sole control. I was just a classroom manager at that time. But I can see when kids do get that opportunity to be creative, to collaborate with others, to think critically, it does open their minds and they do take ownership. But again, it's a time thing, because I realized cleaning up between each class was an absolute nightmare. Our classes are nothing but a revolving door. We have no time between classes, so one class comes in and we have another class going out the door. It does present a problem, but it all goes along with the scheduling issues everybody faces.

5.1.5 Art Teacher: Ms. Avery

Ms. Mary Avery has a total of 25 years of teaching experience in both public and private schools. Prior to teaching at Cochran Mills, she left the teaching profession entirely for a period of time to work in interior design and sales for a large national furniture retailer. She currently works as an exhibiting pastel artist in addition to teaching. She has been teaching at Cochran Mills for fourteen years. As an art teacher, Ms. Avery sees her role as being the teacher who introduces students to a variety of media, while helping students to build skills from kindergarten through fifth grade. She prides herself on her finely-tuned curriculum that introduces students to artists, styles, media and cultures. "For example with clay, we start out with doing a pinch pot, then we do slab, then we do coil, you know and by the time they are in 5th grade, they're doing

castles and dragons and doing a fantastic job,” she said. She sees herself as being a collaborative teacher; part of a team in educating students.

Ms. Avery’s goal in educating her students is to develop learners who have a strong global awareness through the arts. She is passionate in her effort to integrate multicultural content into the arts. She feels it is expected of her to integrate both reading and mathematics into her content area, but she is not uncomfortable with that because she has been doing it for many years. She feels mathematical skills are very important in the arts. “I didn’t realize how much I use math until I got this job, I didn’t realize how much I need math for myself, when I am cutting up paper for things. It’s great the way they have paper sized because it works very well for that.”

Ms. Avery believes that her ability to integrate mathematics and other content areas into her art lessons stems from her past experience in sales. She attributes her ability to engage students in learning experiences to her work in the retail sector:

I think that’s really a strength of mine, being able to come up with an interesting lesson that engages the students. And it goes back to my sales experience, when I was in interior design, which is a 90% sales job, is you’ve got to sell the benefits. So I am selling the kids on the lesson because we’re doing something really interesting; we’re doing something that they really want to do. So I don’t really have that many behavior problems, because I am always teaching something that they want to learn.

Ms. Avery explained that her frustration lies in both the merit of the integration and the lack of cohesion with how she is presenting mathematics content, being unaware of what mathematics content students are expected to learn at different grade levels:

I don’t know exactly what they are learning, I knew they were getting fractions in third grade, so we started doing some things with dividing and doing proportions on the face. I can refer to fractions and I can talk about them, I mean I have talked about that before but I don’t always know what and when they’re teaching. I know we’re working on that as a district to figure out who teaches what, when and overlap and so forth, and I don’t feel

like every lesson I teach should have a math component to it, I mean it has to be within reason, I don't think I have to invent lessons, there has to be validation.

Because Ms. Avery views herself as a team player, willing to collaborate with colleagues and integrate other content areas into her curriculum, she was taken aback when she was told to work more cooperatively with classroom teachers. She expressed her frustration with the expectation she perceives for collaboration combined with a teacher schedule that provides no such time:

I was told last year that I could no longer teach in isolation. I am the only art teacher in K through five, I teach everybody, I teach 800 some kids. So, I have both buildings. And I was a little bit insulted with that because there was no foundation at all to integrate any of the curriculum, now granted, it's all been developed on my own. I don't have a book, I don't have a curriculum handed to me. And I enjoy developing lessons, I think that's really a strength of mine, being able to come up with an interesting lesson that engages the students...And I do try to make a curricular connection, but we start all of our days over at the fourth and fifth building. So, yes, there is morning collaboration time, this district has built that in. It's available to use. But, I never, ever have an opportunity to talk to the K, one, two, three teachers because I come over here, and I am in class all day and I have bus duty.

Ms. Avery explained that she does experience isolation as the sole teacher of her content area. "I have no one to bounce anything off of and a lot of these teachers, on the in-services they are doing different things and they get to collaborate, I don't really have anybody that relates to what I teach," she offered. The only common time with any classroom teachers Ms. Avery has at Cochran Mills is when she occasionally eats an informal lunch with the kindergarten teachers. Ms. Avery frequently described "overhearing" the teachers discuss different content they teach to their students in this casual setting. The idea of sequencing was one such concept, "One teacher had a sign up that said first, second, then, next, finally or whatever, and I thought, bingo!" she said. Ms. Avery then used this concept of sequencing in story, emphasizing the order

of tasks and incorporating relevant vocabulary into a seasonal art lesson she taught with her kindergarten students.

Ms. Avery described one experience with a colleague, where preservation of curricular integrity was a concern. A fourth grade classroom teacher asked her to reinforce basic shapes in mathematics with students and suggested she implement a lesson she typically teaches with kindergarteners, having students arrange large pre-cut geometric shapes into a collage. She felt that these students had already been exposed to such concepts at a much younger age, and this simple art application wasn't a developmentally appropriate integration of the arts into mathematics.

Ms. Avery isn't very concerned with her ability to teach the integrated content; she relies on her own limited awareness of what other teachers are teaching in regular classrooms and will make an attempt to touch on these concepts as she feels appropriate:

Well, I've picked up things from the kids and teachers and listening, like if they need to know symmetry, I've always taught that but now I am stressing the word, or I am stressing the concept as a math concept. Or I'll even say to the fourth and fifth graders, this is something you should know for the PSSA. I know at one time one of the math teachers, had made these little posters, and they had them all through the school, because kids are visual learners, there's a lot of visual learners, and just to see that out there, you just might remember it. And I looked at some of those posters and I thought I can incorporate some of that in or stress that.

Ms. Avery was one of the only teachers who did not perceive pressure to integrate based on school accountability. She perceived the current aim of education to be cultivating 21st century learners. "That's what they've been pounding into our heads. It's nothing new, we've been trying to teach kids to communicate and collaborate with each other, how to be problem solvers. I mean this is what we do," she maintained.

Her job has been more enjoyable with this educational priority guiding her practice, Ms.

Avery explained:

It's made it very easy for me, because I think we've always been encouraging kids to problem solve. I mean basically, every lesson we do is a project that allows them to put their own input in, and analyze information. Interestingly enough, over the years, I used to be a lot more open-ended with the kids and letting them do a little bit more of their own thing and giving them a construct and letting them run with it. That has changed, because of rubrics. We've had to incorporate so much into, how am I scoring these kids and so forth and so the rubrics have almost limited me because I've had to tighten up on what I am giving them as far as what the predicted outcome is going to be. Whereas before, you had a lot for freedom of letting them just go.

Ms. Avery is very uncomfortable with incorporating technology, however, and feels it compromises the hands-on benefits the arts can provide for students. She feels that she has been pressured to integrate technology recently. She described a lesson she planned when she was being observed, where the students created a middle ages-themed shield utilizing an online program. Ms. Avery reported that Ms. Schafer was very pleased with this lesson:

It was *not* creative. The kids could do a program, and they learn how to do steps on a computer in computer class, it was not creative. She loved it. So I did it just for her benefit, but then I went back the next day, and did the lesson in my classroom, and I gave the kids the symbols, we talked about what they meant, but they created the symbols themselves, and drew freehand what they wanted. You lose that creativity. But, they want you do something, I'll do it. I really don't mind the math and I don't mind the reading because I do a lot of tie in with stories and things like that, but the technology, is really a stretch. I don't have the time to develop the lessons, to get the things set up in my room, I don't have the smartboard, thank goodness.

Ms. Avery does not recognize school accountability and testing as being significant concerns in her practice. When I asked her feeling about the increase in accountability, testing and AYP, she responded:

I don't know much about that. I mean, I know the teachers have scores, and they're always looking at scores and there is a lot of pressure on them to have the scores high... I mean I feel like I am a part of this and anything I can do to help support them, yes, I

believe that, but I don't feel like they've been singling me out or really putting the pressure on me.

Ms. Avery explained to me that she feels liked and respected by her principals, but doesn't feel particularly valued in her role as the building art teacher. When she was denied a one-day substitute just this year to prepare for the annual art exhibit she was disappointed. She told me she felt devalued in the overall appreciation and resources allocated to support her facilitation of a social integration initiative, the school-wide art show:

I don't think the principal here particularly respects the fact that I can add to the environment...I mean I feel that I am just the 46 minute slot for the teachers. And I will tell you why. I have been asked to continue to do an art show here, which I do with the kids, which is a tremendous amount of work. I give grades to over 600 kids. I have no time to give grades, so it's all on my own, because my schedule was not in compliance with our minimum number of minutes for the union, so guess what, in the morning time that we have, that's supposed to be collaboration time, that is my plan period. We have a travel time and a plan time. Well if you're ending at one school and starting at the other, most of that time spent is closing down your computer, washing out the brushes, doing the stuff you need to do to close out a room. Coming over, opening up a room, getting supplies out, where is the plan time? Doesn't happen. Plus I have bus duty. And I have six class periods. Step into our shoes.

5.1.6 Case Study Summary

Cochran Mills in a newly reconfigured elementary school with current school-wide foci on RtI (individualized student learning in reading and math) and curriculum mapping as part of the state-wide transition to the PA Common Core Standards. The art, music and physical education teachers I interviewed currently travel daily between two schools, teaching students in kindergarten through fifth grade. The special area teachers I spoke with have always traveled between schools. The AMPE teachers currently have one half hour of daily designated collaborative planning time at Barrett, the fourth and fifth grade school, which has a STEM

(science, technology, engineering and math) emphasis. The AMPE teachers generally do not meet with classroom teachers during this formal collaboration time, and occasionally meet as an AMPE team. The AMPE teachers have no scheduled common planning or collaboration time with the Cochran Mills classroom teachers.

The AMPE teachers at Cochran Mills do not find the professional development offered by the district to be relevant to their needs as content area teachers and feel somewhat uninvolved or unaware of the school and district initiatives. They are sometimes allotted a period of time to meet as district AMPE departments on the in-service days, which they all agree has been positive. Internal documents collected during this research validate the claims of the participants, specifically professional development agendas and teacher schedules.

Participant responses validate Ms. Schafer's claim that AMPE teachers generally do not initiate collaboration with classroom teachers at Cochran Mills. They are more likely to collaborate with one another to support school-wide social integration initiatives, like the arts nights and bullying prevention program. Ms. Schafer, the principal, has encouraged the AMPE teachers to integrate and collaborate as much as possible, but admits the schedule does not allow for any collaboration time between the classroom teachers and AMPE teachers. She feels that the limited connections that are made between the classroom and AMPE may not be rich. 21st century skills are a major priority to Ms. Schafer; as the instructional leader she has encouraged her AMPE teachers to develop lessons that foster these competencies. The internal documents show evidence of the literature which teachers have been exposed to as part of their "Moodle" online professional development. Ms. Schafer provides teachers with this research as a way of supporting their integration of 21st century skills. All AMPE teachers described specific and rigorous 21st century-oriented lessons they developed and implemented within their classrooms.

Mr. Butler will integrate reading and mathematics as much as possible; he sees value in this integration but struggles to identify appropriate connections that do not compromise his curricular integrity. Large class sizes, physical space and scheduling are barriers for Mr. Butler in his teaching practice. Ms. Finch is a veteran music teacher who enjoys collaborating with colleagues, especially in the other special areas, as well as integrating. She seeks out appropriate music connections with other content areas, and is a pleasant advocate for her content area, utilizing various performances as social integration that promotes the value of music. Ms. Avery has had a varied career that includes public and parochial teaching experience and sales experience related to interior design. She takes great pride in the curriculum she has developed and refined over the years. She can identify how the arts connect to students' global and real-world awareness. She does not acknowledge that she perceives the pressure as other AMPE teachers do with regard to increased educational accountability and the obligation to integrate other content areas into her teaching. She integrates because she believes it is appropriate and teaches students to learn through well-established, obvious content area ties.

Ms. Schafer, Ms. Avery, Ms. Finch, and Mr. Butler all agree the schedule that prevents collaboration and has the AMPE teachers traveling frequently is a barrier to both their perceived value and integration practices (Barry, 2008). Integration efforts described by the participants were generally coequal, with social integration being involved as part of the Cochran Mills' musicals and arts exhibits. All of the AMPE teachers at Cochran Mills felt comfortable with selecting and integrating various reading and mathematics concepts they feel are appropriate connections to be made in their classrooms. All three AMPE teachers also agree that a 21st century skill set is both natural and essential to what they teach in their content areas. Mr. Butler has developed elaborate lessons in physical education that focus on collaboration and

competition. He has observed student engagement in 21st century learning experiences that they enjoy.

Ms. Schafer acknowledges the disconnectedness that exists between her AMPE teachers and the classroom teachers. During our conversation, she told me she felt this research process was valuable to her as it allowed her to reflect on how she is supporting these teachers. She felt her personal reflection in this area might be helpful in finding new ways to improve their inclusion at Cochran Mills. She also believes that once all teachers have completed the curriculum mapping process, there will be increased opportunities for all teachers to make connections across the curriculum based on a more efficient mapped articulation of various concepts and pacing both within and across the curriculum.

6.0 JACKSON FALLS ELEMENTARY SCHOOL

6.1.1 Contextual Portrait

Jackson Falls Elementary School is one of two elementary schools in the Roaring Run School District, located in the heart of the small blue-collar town of Jackson Falls. The Roaring Run School District is comprised of both Jackson Falls and the more affluent adjacent town of Cooper Station. There is a significant economic disparity between the two neighboring communities.

After grade six, the students from both Jackson Falls and Cooper Station attend Roaring Run Junior/Senior High School. Although it is a small district, the Roaring Run School District takes great pride in their arts programs. Their marching band and musicals are driving forces in the community, with athletics taking a back seat in this tiny school district. Jackson Falls' annual elementary art show is a significant community event.

Cooper Station Elementary School parents are substantially more involved at the elementary level. Their access to and value for the arts is important. Many parents of Jackson Falls students work longer hours, and single-parent households are more prevalent. Jackson Falls parents may be less aware of or concerned with their students' access to the arts, but are fiercely devoted to their Jackson Falls community and school. This community allegiance may explain why Jackson Falls, which currently serves only 180 students in grades kindergarten through six,

has remained open despite its declining enrollment. Cooper Station has about 380 students enrolled in grades kindergarten through six.

63% of students at Jackson Falls Elementary School qualify for free or reduced lunch. A school-wide Title I building in both reading and mathematics, Jackson Falls is flooded with instructional support. 25 teachers, including three Title I specialists, two special education teachers, and nine paraprofessionals work to provide instruction to students. The principal explained to me that there are some reading classes that have as few as eight students. Currently, there is a school-wide emphasis on both differentiated instruction and AMPE integration. The AMPE teachers, as well as some science and social studies classroom teachers, currently engage in two professional development initiatives, through the Arts Bridge organization and Steeltown STEAM Endowment. Recently, Roaring Run's district mathematics scores have declined; increasing these scores has prompted the mathematics curriculum to become an educational priority in the district. Last year, Jackson Falls did not achieve AYP as defined by NCLB. Jackson Falls' substantial economically disadvantaged population did not achieve AYP in reading.

Jackson Falls Elementary School is a modest, painted brick structure that sits on the corner two streets within a small suburban residential grid. The front entrance opens directly into the small main office, which is also the foyer. Framed and matted student artworks adorn the exposed brick walls near the entrance. The nurse's office, the principal's office, and conference room surround the foyer. The principal showed me around the school, and explained Jackson Falls Elementary School was originally built as a high school in the early 20th century, and converted to an elementary school in the 1970s, when "open classroom" schools were popular. In keeping with the open classroom concept, Jackson Falls has no doors within the school or

classrooms. The acoustical design is so efficient, that classroom noise does not carry. Students were busy and engaged, yet sounds were only audible near the gymnasium. The foyer spills into a hallway which opens to the multi-use gymnasium and cafeteria space, followed by open concept lower level library with high ceilings. The art and music classrooms are located in a small designated fine arts hallway beyond the library.

6.1.2 Elementary Principal: Mr. Hannon

Mr. Wyatt Hannon is a graduate of a large state university with an undergraduate degree in history. He earned his master's degree and teaching certification before going on to teach history at the high school level for ten years. After completing his principal certification, Mr. Hannon served as an assistant principal at Roaring Run Junior/Senior High School for two years before assuming his current role as the Jackson Falls Elementary Principal. In addition to his experience and education in history, Mr. Hannon shared with me that he found his niche in high school and college as a performer and a musician.

Mr. Hannon's view of the current priorities of education is a dynamic one. He acknowledges first the state priorities, which are student achievement and assessments. His own priority for education is structured around his own students' contexts. He recognizes that his students do not have the same access to culture and rich experiences due to their socioeconomic status. He feels an obligation to provide students with a comprehensive education through a range of experiences that allow them to build skills that will afford them a multitude of opportunities. Mr. Hannon believes that the elementary setting serves as an essential foundation for student learning, and his role is to help teachers reconcile both focus and perspective:

On my desk I have a little Statue of Liberty there. And people think it's because I am a history teacher, but really, the way I look at it is: when you look at the Statue of Liberty, the base is actually taller than the actual statue. I view elementary education as that base. We just get to here, and then secondary starts to put the statue on top, which are the opportunities that the student has at the end. If we don't give that solid foundation, the opportunities fall apart. So that's kind of my view on education. My job as a school leader is to really try to get my teachers to get that same type of focus. That's difficult, because they have pressures on them from state assessments, from 4Sight Assessments, from 50 assessments that we give here all the time. And to try to have them see that big picture, everyday, is difficult. They don't have the perspective that I have, being more removed from the classroom.

Because Jackson Falls failed to make AYP this past school year, if AYP is not achieved this year, students at Jackson Falls can leave and attend any other elementary school in the district, the only option being Cooper Station. Mr. Hannon felt this disappointment and looming concern prompted a change in the role of his art, music and physical education teachers:

That's when they realized, look while there's certain things that we'd love to do, we need to start working on integrating some of those subjects into our areas, for a.) job security and b.) because it's skills the students need. And there are so many things we can do in art, music and PE to integrate reading, to integrate math. So I think that impact this year has been much more than it has in the past because, in the past...our scores haven't been 100%, but we've made AYP, ok, we're doing good, why should we really make major changes now...apparently what we're doing is working in every subject. That's not just art, music and PE, that's across the board. So I think when we finally hit our wall everyone kind of got a wake-up call, and started to do more integration and find ways to integrate those subjects.

He also attributes the growth among his AMPE teachers' roles to two professional development opportunities the teachers have been engaged in, the Arts Bridge, a local arts education advocacy and professional development organization, Steeltown STEAM, a local inter-district science, technology, engineering, arts, and math (STEAM) grant:

When I came it was like a teacher prep period, where they go to art, music, and PE and library. Now they've done a lot more integration, we've worked with the Steeltown STEAM grant and now with the Arts Bridge to really build their capacity and start doing more cross-curricular activities, and integrating them into what you would traditionally call a core subject area. And so far our music and our art teacher have really done a great job with that. And the physical education teacher is really starting to work around it too. I

think he sees it as a little more difficult because he doesn't really have the classroom setting. But he's still really focused on the health and other things more than the cross-curricular things. But over the past year, he's really been growing in his content area.

Mr. Hannon believes that his role in supporting his art, music and physical education teachers is to provide them with resources and strategies. He sees himself as a solutions-oriented person, and feels that he sometimes lacks patience in supporting his teachers. He is committed to improving in that respect, and makes it a consistent part of his practice to provide teachers with ongoing training and the means to integrate other content areas into AMPE.

Mr. Hannon was able to explain to me some of the value and tangible benefits he identifies within AMPE. He contended that all teachers might learn something from both his content area teachers' pedagogical approach and the students' greater willingness to take risks in AMPE settings. He encourages his AMPE teachers to communicate the successes they witness with students in the special areas to their classroom teachers. He offered that student engagement and intrinsic motivation can be developed from habits of practice in the arts and athletics:

In art and music, I think they do a better job at that, because their content leads to that. Kids are more apt to work on a piece of art and say it's a draft, than they are a piece of writing. And I think what we have to do is get our 'core', and I always put 'core' in quotations, get our 'core' teachers to model from that... A kid will practice the trumpet for hours at night, knowing they are gaining nothing from it. They're not getting a grade, it's not a performance. But, there is an end goal to it. We struggle with math and reading, to get that same understanding of, I have to go home and practice, and do this. And while I may not get a grade on it, while I may not get a reward for it, the end product which is being able to read higher level books or achieve on an assessment later on has to be their goal. That's something I think we need to really be able to look, especially at those three subjects, PE, art and music, where that's a given. A kid will shoot free throws all day, only to, at the end make the winning free throw at the game. But they'll do a hundred of them in a practice that mean nothing. How do we get kids to do that in our core subject areas? To read books that have no extrinsic value to them at all, they receive no reward, but in the end they will do better for it. You know, we'll have kids who will really thrive in an art room or in music or in PE, and they just don't thrive in other areas. We have to find ways to make those connections, and to me regardless of my background, that has to be our goal

Mr. Hannon described the powerful professional development experiences he has been involved in alongside his AMPE teachers. The Steeltown STEAM Endowment awarded grant funding to a proposal that was collaboratively developed by Mr. Hannon and his art and science teachers four years ago. The opportunity has now expanded beyond this initial core group to include music, social studies and physical education. Mr. Hannon told me that the professional development featured several books, two of these books were *Why are School Buses Always Yellow?* and *Developing More Curious Minds*, by John Barell. In addition to considering how to structure pedagogy that provoke both curiosity and critical thinking, the texts and professional development prompted teachers to consider how their content areas connect. Mr. Hannon described this professional development that also afforded the group Jackson Falls teachers the opportunity to engage with John Barell, both via Skype and in person:

We talked about some of the cross-curricular things we can do, and the creative things we can do, and then actually, he showed up to a couple of our sessions. It was really nice for some of the teachers to kind of start integrating those things in. And they started working on different projects, so one of the things we did was a sunflower project, where they were doing observations. And in art, they would look at that sunflower, and it was a giant sunflower, and do drawings of it, work on symmetry, work on texture, those types of things. And then in science, they took those types of ideas and kind of worked them into a science unit about the sunflower and how it grows and things like that. So they saw those connections across the board, and the teachers collaborated on the STEAM days, to kind of build that unit together. And we've grown that over the past couple of years, where we've integrated some social studies into those and things like that and created kind of a three-prong collaboration. So they collaborated on something in science, follow that up in social studies, go to art, follow it up in art. So that has really grown and created more of a congenial type of relationship amongst all of our teachers, because they have the time together to do that and they have the support. During the STEAM days, they talk to their colleagues in different districts, and see what they're doing. And it's been really great, and Ms. Conway has been a great leader in that, our art teacher.

Mr. Hannon observed the way that this collaboration amongst the teachers benefited the students. He explained that the students, "They started to see that, oh, the science teacher knows

what we do in art every day? She normally just drops us off and leaves....And now, she knows, we looked at sunflowers today, we were talking about symmetry today and she's expanding on that. And the art teacher was doing the same. So they started to see, like, all my classes go together!" Mr. Hannon shared with me that his inquiry-based approach to integrated learning in the content areas simultaneously cultivated 21st century skills for the students at Jackson Falls. He thinks 21st century skills are essential to education; he talked about a book he was reading at the time of this research *The World is Flat*, by Thomas Friedman, citing the example of Steve Jobs' development of fonts that evolved from his experience with calligraphy:

It wasn't the programming skills to make it that made that possible; it was the creativity to say, there's a thing of beauty that we need to work on. And, how do we integrate that, how do we make the next generation of MP3 players or whatever it may be, aesthetically pleasing that someone may want to purchase that over something else. Or how, if I am a builder, designing a building, to make someone want to buy it, and things like that. So, I think that's really a key component. You can't learn that in reading, you can't learn that in math. You can learn the actual x's and o's of it, but how to make it a better place for everyone, you can't learn it there.

The Steeltown STEAM grant is a valuable resource in that funding is provided to allow the AMPE teachers to engage in ongoing professional development days. AMPE teachers have been somewhat hesitant to leave their classrooms, though substitutes have been provided to allow them to attend the STEAM workshops. "We've had some struggles with that, where teachers have said, they'd rather not even take a half-day, because with specials teachers they see them at most two times a week and to miss one of those, is pretty significant," Mr. Hannon contended. Mr. Hannon admits that finding daily or weekly time for the AMPE teachers to collaborate either as a group or with the classroom teachers is also a challenge. When the AMPE teachers are teaching students, the classroom teachers have their planning periods. He explained he is committed to elevating the role of the AMPE teacher, and demonstrating that value by

offering collaboration time, but struggles to find that time. Currently, there are discussions occurring at the district level to rearrange the school day slightly. Teachers would work the same number of hours each day, and students would still attend school for the same number of hours. Student arrival and dismissal time could be adjusted to frontload more time at the beginning of the school day; this time would be designated to allow all teachers time for collaboration.

Mr. Hannon maintained that despite the barriers presented by the schedule, and lack of designated collaboration time, AMPE teacher collaboration occurs informally and effectively:

We're a close knit group... But everybody really works well together and knows each other, they hang out after school together...But, because of that it's more apt that the last 10 minutes of school somebody will walk into somebody else's room and ask a question about something or be willing to work with somebody on it...I think right now, because of our open-classroom setting, it does make it very easy. You can walk through the first floor, walk in a first grade teacher's classroom, and you don't have to open the door. There is no feeling that you're intruding on anything, it's wide open. So, I think that has built a more collaborative type of atmosphere and environment.

Mr. Hannon described an example of social integration and school-wide tradition. The annual Jackson Falls art exhibit is source of school and community pride. He perceives that parents of Jackson Falls students feel the arts are somewhat important, but they are intensely devoted to their small Jackson Falls community school. The attendance at this event is noteworthy:

We have the art show every April, and that's something that is really a community event. It's not a school event. It's in the evening, the kids display all of their art from the year. They do little write-ups on them so they explain why they were doing it that way, those types of things. And literally, it's an open house, we have our book fair that evening. It is the largest event we do here. We probably have close to 200 people in here that evening, minimum. When that happens, you see the standards that are listed there for each art project, you see every kids', you know, exhibit, and you see the explanation every kid put forth on it. It fills up our entire cafeteria, comes up into the hall and down into the library. That's the biggest, most sacred thing we have right now.

Because a large portion of the Jackson Falls community is economically disadvantaged, Mr. Hannon has a sense of obligation to provide students with increased opportunities in the arts and humanities. He is working with Mr. Graves, the music teacher, and one of the special education teachers to develop an after school ballroom dance program that will provide students with exposure to this art form and the corresponding communication skills and etiquette:

When we look at our community, and our demographics, we have 63% of our kids are on free and reduced lunch. And so when we look at what we have to work with, some of those things, of dealing with respect, dealing with manners and etiquette, sometimes aren't taught at home... And it's not a knock on the parents, I mean we have hardworking parents, where their job entails them working four to twelve and if they don't work that shift, they don't work and they don't put food on the table. So, I'm not going to knock them for that, but we have to step up and do some things to support them. Especially with dealing with the arts, especially with our music and special education teachers' backgrounds, we can start to build some more traditions that way.

6.1.3 Music Teacher: Mr. Graves

Maxwell Graves began teaching at Jackson Falls this school year. He is the third music teacher to work at this school in the past three years. Prior to working at Jackson Falls, Mr. Graves had an eclectic background as an instrumental musician, opera singer, and ballroom dancer. He has worked with a variety of prestigious arts organizations in western Pennsylvania. He has also choreographed musicals in the region. In addition to being a music teacher, Mr. Graves is certified to teach physical education. Last year was his first full year of teaching at a local charter school. He travels daily between Jackson Falls Elementary, Cooper Station Elementary, and the Roaring Run Junior/Senior High School. He directs a fifth and sixth grade choir after school at Jackson Falls.

Mr. Graves is energized by and committed to his role as the general music educator and music instructor. He feels he is viewed as a music instructor by his peers, because they see the

effort he makes to integrate other content areas into music. He believes most of his peers recognize and respect his integration efforts. However, he explains in his previous school and on rare occasions in this school, there are exceptions, teachers who view music class as their break time:

Sometimes I feel I am definitely just a release, you know, I am the teacher's prep and not another content area. It's not necessarily school to school, sometimes it's just individuals. There are certainly people who value the instruction, in every school that I have been to, and others who are like, oh, I get to drop off the kids for half an hour or forty minutes.

Mr. Graves went on to explain that he feels valued when he observes the students making connections between their content areas. He makes an effort to connect students' learning to other content areas like history, language arts, math and science. He told me that he had just been teaching his last class of students about spirituals and the civil rights movement. The class concluded with Mr. Graves and his students listening to an excerpt of Martin Luther King's "I Have a Dream" speech. He knows the students are recognizing the connections across the curriculum by the way they respond; they are able to articulate the content linkage and they seem excited about it.

Mr. Graves believes the current priority in education is testing, in both reading and math. However, he believes the priority should be to develop students who are well-rounded. After I shared the vignette with Mr. Graves, we talked a bit about the content he perceives he is expected to teach as a music teacher:

I definitely think the music teacher and specialists in general are expected to support and supplement regular content. And I think that's fine and I think it's very doable. I think in some ways, for some by the book music, art, PE teachers, it's very difficult. I could see, similar to in the story, where in a way we have to dilute and water down our curriculum a bit to meet those needs. However, that doesn't bother me. I could see where some people would be like, well, I don't get to this, this and this in my content area... I see how music is involved in everything. I see how there's reading in music, there's math in music, there's music in science. Music is in those things, and I see how easily you can

accomplish all the goals. The music goals, the regular content area goals. And, I see how easily it can be adapted. I might not get in as deep with the music concepts as other music teachers might, but I feel like I helped the kids understand that music concept within a broader spectrum that goes beyond the music world and the music classroom. For me, I am not necessarily teaching all these kids to become future musicians, but to at least appreciate music...and understand things, so that when they hear a song when they're 30, 40, 50, they think, oh, that's right, this is that thing I learned about and it applies to that. To help the kids understand the bigger picture.

Mr. Graves sees the virtue of 21st century skills acquisition for his students. One lesson he described to me was an Olympics-themed lesson where students in grades three through six had the ability to work in groups to invent their own imaginary countries, develop a national anthem for their country, and create a national flag for their country. The only stipulation was that the country has to be an original idea, developed collaboratively by each group. Students' original flags were then exhibited in Mr. Graves' classroom as they performed their collaborative anthems for their classmates:

I don't necessarily think, when I am creating a lesson, how do I make sure I hit all of those? I really try to make that part of my pedagogical technique, how are the kids going to collaborate, how can they be creative, and maybe not each one, every single lesson, but maybe this lesson in this unit, or the overarching unit, covers all 4 C's. But I think it's essential to have them, because I think they are very valid. Sometimes, some of the buzz words in education...I'm like, what is this really about? But I truly believe the 21st century skills are legit. I don't think these are 21st century skills, these are 20th century, 19th century. These are things that people should do, and I think this is why people have excelled over the years, is because they were creative, they could collaborate. These shouldn't be new things we have to learn how to incorporate; this should be standard issue in education. I definitely think there is merit to them and I try to incorporate them as best I can.

Mr. Graves enjoys collaborating with Ms. Conway, the art teacher, whose classroom is adjacent to his in the fine arts wing. He described an example of an approach he's used in integrating art with music, activating students' critical thinking skills:

I really try to incorporate art a lot of times. We were recently talking about Andrew Wyeth's painting, *Christina's World*, which is one of my favorites. And talking about him and just sort of how art can make you feel something, just like music can make you

feel something. Sometimes I will have the kids hear two pieces and they will have to compare and contrast them. Sometimes, I will play a piece of music and ask the kids, what does this sound like to you. Does it sound calm? Does it sound frenzied? Well how would that look to you , what would be a picture that you could draw?

Mr. Graves often consults with Ms. Conway regarding historical works of art and seeks her guidance in developing affective integration lessons in the music classroom. One of these lessons was developed to teach the musical concept of dynamics to kindergarten, first, and second grade students:

I gave [the students] little squares, and they have their very soft, soft, loud and very loud. Well let's listen to music that are at those 4 different levels. Let's draw pictures; what are things in the world that are really loud? What's something that's really soft? Oh, a mouse? Ok, then draw a mouse where it's marked piano. So just helping the kids understand real world application of what we're talking about, that it's not just music, but how things they already know are *in* music.

Mr. Graves utilizes both his opera background and physical education certification everyday in every music class. He believes movement is important to students' well-being, and he begins each class with a "Hello Song", which teaches students greetings in five different languages. He explained that students are exposed to English, their primary language, Spanish, their secondary language, and French, German and Italian, the three languages of opera. Following this song, students do a "movement" warm-up, engaging in exercises that cross the mid-line. Mr. Graves has taught his students about the research that has been done regarding the benefits of activity that crosses the mid-line, permitting greater brain function. He explained that when students are aware of why they're doing an activity and recognize the benefits, it becomes both relevant and engaging.

Mr. Graves is not overly concerned with the merit of the integration or compromise to the music curriculum. He seems genuinely interested in teaching students to make connections between content areas because he believes it benefits their learning. He described to me the way

that he integrates math in order to teach music theory. He believes this learning also supports students understanding of fractions. He is able to utilize students' understanding of fractions as a way of assessing his students in music:

About two months into school, I was focusing on note values, with the third through sixth grade, and talking about how each type of notes gets a certain number of beats. And then talking about the value of that, and relating it back to fractions. And helping the kids understand, a quarter note gets one beat, and that is one fourth of a measure in four-four time. So helping the kids, sort of understand the perimeters, and then, ok if we have a half note that's two beats, or two fourths. Working on adding and subtracting fractions, which I know is a big struggle for a lot of kids. Helping them understand the idea of numerator and denominator as far as time signature. How many types of notes, how many beats, just helping the kids really get values and fractions. And that was interesting, because it lets me know, where their deficits are. And that's something where, I seek out the math specialists, I seek out the classrooms teachers to find out areas where...what should the kids know, what should they be working on, what can I help them get a head start on? Again, I am teaching note values, which is essential to what I do, but it helps supplement what they're doing. I don't have to talk about fractions, but I want to, because I know it will help their math.

Mr. Graves grew up struggling with a learning disability in reading. Although he is always willing to integrate reading or any content area in order to enhance learning through music, he is particularly uncomfortable with being the person responsible for introducing a literary concept or reading strategy. Because this was a weak area for him personally, he questions his self-efficacy in this area. He also doesn't feel confident in his understanding of what is developmentally appropriate with regard to students' reading abilities:

I feel like I am good at supplementing, but I am not necessarily good at introducing concepts. I don't feel that I have those reading strategies. I was a very slow reader when I was a child. In particular, in second grade, I struggled tremendously. I continued to struggle, especially through elementary school. Again, I don't feel I can help kids have reading strategies, where sometimes I don't know what's age appropriate. I know what works for me, and also how I figure out math concepts. But I don't know if that's how they're being taught. It's one of those things, both in reading and math, I don't necessarily feel like I am the right person to introduce things, but I can certainly reinforce and supplement them.

Mr. Graves described the collegial, collaborative atmosphere he experiences in the open classroom facility that is Jackson Falls. Despite a lack of formal time for common planning for AMPE teachers and classroom teachers, he finds his colleagues to be accessible and available during the limited time he has to connect with them:

My coworkers here are fantastic. If I ever said to someone, can you stay after school so we can talk about this, I don't think I would ever have a problem. I feel like whenever I need people to be available they are willing to make the time, and we find common time. Or, I have a little flexibility in my schedule, that hopefully I am able to see somebody. But I feel like a lot of people are very much on the same page here. They know what's expected at each level. So, a third grade teacher might still be able to help me with what I can be doing in second grade, because that's who is coming to them next year. And I feel like everyone's really cooperative, and very willing to help out.

Mr. Graves would like to see classroom teachers seeking ways to integrate music into their own classrooms to enrich learning for their students. He believes this approach would benefit Jackson Falls students, but recognizes this notion also poses a risk to music teacher positions in a time where music education is in jeopardy due to limited budgets:

I wish there could be opportunities other than, how can I help include music in reading and math into my class...Are there other ways I can have music in the regular classroom? Well, I know that becomes a slippery slope, because then, what's the point of having a music teacher if the classroom teachers are teaching songs about Earth Day, or whatever the case may be. With budget cuts, people would be like...don't! Be careful what you wish for. But I think there are ways. But I've done things like that. The reason I said Earth Day was...one of my former schools, I had the music CDs for all the grade levels, and I put everything that was Earth Day related in a folder for that grade level teacher, and I printed out the lyrics for all the songs. If they wanted to use music in their classrooms, they could do that. So what they hear here, they do there. And again, now they're supporting my program...

Mr. Graves elaborated then, to explain why schools need music specialists, and such highly specialized content should not be passed off to a classroom teacher, who may experience

a similar concern with qualification and self-efficacy, and students may experience less sophisticated learning.

All the things that we teach in music and we teach in art, that it's not just, look kids, here's a painting by Picasso, and here's a little bit about his background. It's why are these composers, these artists relevant. If you have a piece of music, notes on a staff don't mean anything to kids until you teach them what that means. You can give the kids lyrics with no notes whatsoever. They hear the CD, they read the lyrics, and they sing along. Well that's not learning music, that's learning to follow along to a song. And that's why we need music teachers, and art teachers, and PE teachers. I was in a school last year that had no PE teacher, the classroom teachers were expected to do that, and they didn't know what they were doing. It was like, ok, here are these things we can do...and you no longer have the highly qualified teachers accomplishing what we are trained to do. Again, I couldn't just get a PE certificate. I had to get a degree in Phys. Ed. to become a Phys. Ed. teacher. We're all specialists in our own right, whether you're a reading specialist, a math specialist. Do you really want anyone teaching just anything? You really want the highly qualified teacher teaching their respective areas across the entire board no matter what the content area is.

The professional development Mr. Graves has experienced at Jackson Falls this year has been beneficial and relevant. He talked about his experiences with Arts Bridge and explained that it helps the specialists "hone their craft", deeply examining their own curriculum and then exploring ways to connect across the curriculum. This professional development also provides emphasis on analyzing and teaching to various content area standards through integration.

Mr. Graves feels supported by Mr. Hannon, his principal at Jackson Falls. He attributes some of the support from Mr. Hannon's background in musical theatre:

I know I can go to him and I can talk music talk and what I am trying to accomplish and what I need. He understands that and he can hear me fully. That has been a huge, huge benefit to having someone who has the arts. Because ultimately principals and superintendents were once teachers, and have a specialty area that they concentrated on. They aren't all-knowing educators. They don't know everything. So having that component in him has been a huge asset to me.

As our conversation drew to a close, I asked Mr. Graves if he had any other culminating thoughts. He paused thoughtfully and told me why he believes art, music and physical education to be essential:

If mankind had to start all over again, the arts and physical activity would happen, inevitably. As we know historically, some cultures didn't have a written language, but simply spoken tradition. But most every culture since the time of cave paintings has had art. It is inevitable that a person would hum, and that hum would turn into a song. It is inevitable that athletic competition would evolve, even if it was solely for mating purposes.

6.1.4 Physical Education: Mr. Pearson

Mr. Mike Pearson is a veteran teacher. He attended a large urban university in western Pennsylvania. His undergraduate degree is in Movement Science. He has a master's degree in the Art of Teaching. Mr. Pearson has been teaching for 18 years, traveling daily between several schools in the Roaring Run School District. He is the high school basketball coach.

Mr. Pearson and I tried to find a quiet place to talk; this was a challenge as the gymnasium is a shared space that also serves as the cafeteria and auditorium. I noted Mr. Pearson's calm demeanor and quiet conversational tone against the hushed chatter of the cafeteria staff and clanking of cooking utensils and trays that filled the background. He shared with me that he believes his role is to instill in his elementary students a passion for movement and exercise. He teaches them the fundamental knowledge they need to make healthy choices.

Despite the occasional frustrations that come with functioning and teaching daily in this shared space, Mr. Pearson believes he is valued and also understands the importance of being flexible in his role as the Jackson Falls Elementary physical education teacher:

I understand things like that are kind of part of the deal in the special areas. Being flexible, is how I put it, instead of taking it as an affront. We've got to be flexible. I don't feel like I am not valued because of it...In our building here, this is our gym, our cafeteria, our auditorium. Things happen, and I do feel like our program is valued here, and they try to work around us where there is an assembly or things like that. It's tried to be done before, or during times when phys. ed. classes are not going on. So those things have gotten to the point where they're not really an issue.

Mr. Pearson has an awareness of the public school accountability measures that are currently affecting Jackson Falls. He believes that testing has become a significant priority of education, and worries how that is affecting his own school:

The testing issue, which right now is just overwhelming in Pennsylvania, you have to meet these PSSA standards, and the punishments seem pretty harsh. We're actually in a danger zone here, in our warning year, so if we don't get up to adequate yearly progress this year, we go up to the point or second stage where kids can leave our school. So there is a lot of pressure with that. I hate to think that that's a priority, just teaching to the test, but it seems like classroom-wise that is a lot of it.

Mr. Pearson feels the pressure to make AYP and is willing to work with classroom teachers to help students learn the content they will need to know in order to be successful on the PSSA, but he feels discouraged when classroom teachers feel it is acceptable to keep students out of his class for this reason:

I feel like we're all seeing those changes, whether it's the pressure from the testing in the classroom to meet those standards, which filters down too, into the special areas. We get kids pulled out of specials all the time to focus on their math or reading, who are falling behind or deficient to begin with, and I know here in our building there are special area teachers who say, no, you can't take them out of my class. I know the trickle-down effect is, they'll come to me, because I'm not going to fight with this teacher, I'll just take them out of phys.ed. I am not thrilled with that. I'll be flexible to a degree, as long as it doesn't get out of hand. There's been times when I have pulled a teacher aside and said, you know this is just becoming too much for this kid, being pulled out of phys. ed. once a week, every week, for however long, that's too much.

Mr. Pearson worries that with so much emphasis on testing, students may not be prepared for "real life." He believes that 21st century skills are important:

I think it's a natural integration with phys. ed., as they get further along in years of phys. ed. obviously the earlier years are taught more toward the basic fundamentals, movements and things, as they get further along those things become huge. Communication becomes huge in athletics and sports, and those things I think translate very well into life, things that you need to be able to do on a daily basis. I think those things are focused on in phys. ed. naturally.

Mr. Pearson is a reflective teacher. He avoids identifying any barriers to his progress and practice as a teacher. He feels supported, and believes that he has the resources he needs to teach, though he admits the classroom issue is a small source of frustration. He is always looking to improve as a teacher and is willing to work with his colleagues. One way Mr. Pearson works with the classroom teachers is by teaching some integrated lessons in physical education. Mr. Pearson described a coequal integrated concept he teaches with his students about heart rate. He is able to align this learning with the concepts of healthy choices and body awareness with mathematics. He feels there is merit to this integration; it is relevant to physical education, and he was able to teach his students how to engage in a simple calculation, understand what that number means and how it can help students exercise. He felt this lesson was positive and meaningful for his students, because it helped them to "see the big picture."

Mr. Pearson described another daily warm-up he uses with his students each day in fourth grade that connected geography and physical education based on what students were learning in their social studies classes:

We do a warm-up, each day, where we've charted the distance we've run, and related it to an actual distance, and related that to social studies, where one group ran through England, and we talked about different things along the way in England. We had a map up and I would chart with a little red arrow, this is where we are at this point, and when we ran near Stonehenge, I put up a replica of Stonehenge and I was like, 'There's Stonehenge over there!' It was a cumulative total; how many laps did you run today, and what does that equal out to miles, and kind of charted it that way, and added a whole class together and figured out how far. It took a good, two months.

Mr. Pearson told me that a lesson like this requires some communication, although minimal, with the grade level classroom teachers. He talks with the classroom teachers as necessary to determine what content they are teaching and when they are teaching various concepts:

You make that time. Another theme that runs through the special areas is prep time is kind of non-existent, you don't really get the chance to meet with other classroom teachers, but even to just do your own prep work, is just not there, there's hardly any prep time.

Mr. Pearson described the Field Day he facilitates annually at Jackson Falls. Because of limited parent involvement at the school, this social integration activity is dependent on the cooperative efforts of the Jackson Falls staff:

It's very collaborative. Everyone has their two cents put in. The teachers at Cooper Station and I work together on that, but our events are very different, because of parent involvement. She pretty much hands it off and lets the parents run with it, because they're very involved there. Here...we hand it off to teachers and the teachers are great here about doing this and getting involved with it. That part is very different but also a benefit here I think.

Throughout his career, Mr. Pearson has experienced professional development activities that didn't always pertain to him. Mr. Pearson noticed that the professional development he is provided with has improved recently:

It's gotten better, as far as related to the specials. It didn't used to be. I think from colleagues in other districts, that was a problem across the board...people were getting nothing out of in-service days. The PD was not focused on anything relative to what we could use. Even the things that were more general were tough to translate to the special areas. I think the change of focus in saying, you know, we do want to address you guys, was a big change. To say, what do you want? What do you want to get out of this? Was an improvement, how that is getting done isn't always effective. We've had multiple times where it's like, you have a PD day next week, what do you guys want to do? What do you mean what do we want to do?! If you say, hey why don't you all plan a PD day, and implement this next year or whenever, you don't just say it the week before.

The Jackson Falls AMPE teacher involvement with Arts Bridge has been a positive experience for Mr. Pearson. He found value in the collaboration and professional discussions that helped him to identify the commonalities among art, music and physical education. The Arts Bridge facilitator has had a lengthy career in arts leadership and advocacy. He believes that these common concerns have not only been heard, but are now being addressed by administration to improve scheduling issues for the AMPE teachers:

The woman who runs it is fantastic. She's an art teacher through the intermediate unit. It's been nice to be able to get some focus work with her, our departments, and with the specials group together. Sometimes you don't realize the common ground you have, because it just feels like phys. ed. and art are very different, but there are a few things...with the scheduling issues, I had no idea some of them were feeling the same way we were, just how things were scheduled and how we were looked at within the schedule, as a dumping ground, where we'll just put kids here, and no concern with who is being put where, or number of kids being put there, was an issue. And some of these things have been brought up through this process and are being resolved as it is now. Things like that, we had no idea, there were those same issues in other areas as well.

6.1.5 Art Teacher: Ms. Conway

Ms. Conway earned both her bachelor's and her master's degrees in art education from local universities. She is currently working on her doctorate through an online university in supervisory administration. She is researching how the arts can be integrated into the regular education classroom. She is an exhibiting watercolor artist and ceramicist who has shown her work in local galleries. Ms. Conway has been teaching for thirteen years, and has been teaching art at Jackson Falls for the past 11 years. Ms. Conway travels daily between three schools in the district.

Ms. Conway and I met in her art classroom; the walls were plastered with student artwork and visual aids intended to help students understand the objectives and sequence associated with

various projects. Evidence of heavy integration in reading, writing, math, and social studies was prevalent in Ms. Conway's classroom displays. Conway has a very confident, extraverted demeanor. She is candid in sharing her beliefs with me, and thoughtfully and loyally advocates for the arts. "I don't like the way that we are termed 'specials'. I feel that we should be considered fine arts instructors," she explained. "I think that the way our profession is termed, has a lot to do with the way that we are treated. We have a lot of respect amongst our peers, however, I think that we are nothing more than a plan period and they don't see our class as significant."

Ms. Conway takes a pride in her content area and her creativity with integration. She described several integrated lessons she teaches; she described how critical the support she receives from her principal and classroom teachers is to her practice when implementing integrated lessons. She gestured to a row of in-progress projects behind her, brightly colored original puppets of kings and queens lined up near her desk that are about ten inches high. She explained the materials she is using with her second grade students to create the puppets:

I have the kings and queens over here, they're like little soldiers all lined up. We're using recycled cardboard cones that are left over from my yarn, clay heads using foil armature and then we used pipe cleaners and clay for the arms, and then we're using recycled fabric that I get from my tailor to make the robes and the gowns that would go on. So the cost is extremely low. I actually call it a recycling unit, because the only things we pay for are the paint and the clay. It's a nice way to make things go a long way.

The instruction approach to this unit is a multi-day lesson with goals in both art and writing aligned with both content areas. As with almost all of Ms. Conway's units of study, this creative learning opportunity ties in closely with students' simultaneous work to write first person narratives in their second grade classroom:

They're doing first person in second grade classrooms, so we did first person stories about our kings and queens. Saying, "I'm the king of this land, and we get to make up our own rules, and who has to listen to us and what our pets would be and what our friends would be." So we're taking first person writing from the classroom, which is a little cut and dry and making it into a fun creative writing unit in the art room. So, I've been able to get instructional support as well from the regular ed. classroom as well. The paraprofessionals will come to my room to help me with my writing prompts with my second grade. They come and help me with learning support for the kids that are having trouble, which is great. Because those teachers could choose to be in another classroom, but the principal says, "If Ms. Conway wants you for the writing unit, then you'll go." So I appreciate that support.

Ms. Conway shared with me that she used to have a major concern with the preservation of her curricular integrity. She now values quality and depth of student learning over quantity. She believes that the professional development she's received through the Steeltown STEAM grant has altered her beliefs in this regard:

I used to have a problem with that, but then I realized that less is more. It's not how many things we make. It's the quality of the things that we make that students remember. It's not like, oh my God hurry up, hurry up, let's move on. And I used to have a more fervent pace of what my goal was for a number of things to create, but now I realize that it's really about digging deeper and getting more in-depth with each unit you do. Make it more important, rather than moving onto the next thing all the time.

Because Ms. Conway now spends a greater period of time on each unit, she insists that students engage in deeper learning of both art concepts and integrated concepts. The priority Ms. Conway places on integration does not compromise the quality of her students' artwork, because she devotes an equally substantial amount of time to the aesthetic dimensions of her students' learning. This practice allows for deep and rigorous coequal learning to take place in the art classroom:

Just even expanding this writing unit with the kings and queens, it took the kids to a whole new level. Now the kings and queens have names, and they have names of lands. It's just been a lot of fun. It's taken away the next lesson that I might have done, but the lesson that I am now teaching is more important.

Ms. Conway was able to collaborate with Mr. Graves to make some connections between art and music while teaching the unit about kings and queens. “He’s really into cultures,” she explained, “and it seems to be an easy way for us to integrate. So if he’s talking about Europe, then we integrate over in the art class. Like with second grade, we were talking about kings and queens and hierarchy, and he’s been teaching about the culture of Europe, so we’ve been able to work together. He often shows art pieces within his music instruction, which I think is neat.”

Self-efficacy is not a concern for Ms. Conway when integrating through the arts at the elementary level. She feels the knowledge in the other content areas is basic enough that she can artfully integrate concepts. When integration requires collaboration with classroom teachers, Ms. Conway can engage teachers in a brief conversation if necessary. She typically teaches the same concepts around the same time of year, and she has familiarized herself with the regular classroom curriculum. She feels fortunate that the staff is fairly consistent at Jackson Falls; she has many well established integrated lessons and now only finds herself making minor adjustments from year to year.

Ms. Conway conveyed to me the urgency she feels, knowing Jackson Falls did not make AYP this year. She was already integrating reading, writing and math into the art curriculum, but this concern has prompted Ms. Conway to intensify her approach:

We are being asked to incorporate reading and writing in every single instructional unit that we teach right now. We are on red line for reading, specifically in the socioeconomically disadvantaged category. We do have a large number of students on free and reduced lunch, which I know that is how they obtain that number. So for art, music, gym, and library, we are asked to integrate reading and writing into every one of our lessons. I have taken it very seriously and have really changed what I planned to do for the year.

Ms. Conway perceives Mr. Hannon as being a supportive principal. She feels she is trusted to do her job and consistently meets his expectations. She explained that she feels elated when her work towards integration is noticed and validated. This motivates her to do more integration:

[Mr. Hannon] loves that I am always doing integration, and I think he's often surprised, he's like, "Oh! You're doing math!", and he jumps right in and is doing math equations with the kids. I don't think he realized I did so much integration, and now that there's been such a push and I've been working on the STEAM Grant Committee for two years, they always talk about, what core curriculum are you integrating within your unit? Because it's not really an effective unit unless you're integrating your core curriculum. So because they've changed my way of thinking, my instruction is focused on content area teaching within art. So he's impressed with it and I think that's why he's continued to support us leaving the classroom to attend STEAM Grant, because we are out of the classroom four days a year, which is significant.

Ms. Conway perceives traveling between schools to be a barrier for the AMPE teachers. Similarly she believes that classroom teachers are experiencing pressure in relation to the test scores and additional duties:

I think a lot of our classroom teachers and some of our special area teachers have a minimalist approach because they feel very overwhelmed. I mean really do, our art and music teachers, our music teachers specifically, are stretched extremely thin. Like, very thin. They have tons of supplementals added to their contract without their permission, and to get the job you have to take all these supplementals on. I mean, it kills you. And I think a lot of the classroom teachers are overwhelmed with additional duties, and have very limited time to plan, very limited coordinated planning time. They would say that they would want to do it, but they would say how on earth would we have time to do it, when we barely have time to do what we need to do.

Ms. Conway and I discussed professional development; she believes that the STEAM grant and involvement with Arts Bridge have been progressive, especially for the AMPE teachers. Discussions between the AMPE teachers and administration have been underway to determine ways that AMPE teachers' schedules could be improved, and more collaboration time could be offered. Ms. Conway admitted she worries sometimes that this progress gives her hope.

She thinks that her optimism might only be “wishful thinking.” She finds it difficult to focus on fine tuning the improvements to AMPE teachers’ experiences when she is actually more concerned with keeping her job, and does not want to be perceived as complaining about her schedule or professional development needs:

There’s an undercurrent, and it’s not just at this school, but in our state, of be happy you have a job, shut up about it and don’t complain. I think that any special area teacher would be amiss to not admit that that is an undercurrent for the entire state. So many of our peers are, you know, jobless. So, it’s like you want to push the envelope to make things better. But at the same time, I think all of us know that you have to be smart enough not to push too hard. Because cuts in programming certainly could be an answer. We certainly wouldn’t want that, because it could be our jobs. So, I think within the past four years, the tone and the current of the entire country has changed, which you can see in the news. I don’t know if we can really blame it on one particular president, but there’s certainly been a difference. If I look at my career, the past four years have been the worst I’ve ever had, as far as feeling like my job is secure.

In describing the professional development she has experienced in the past, prior to the more focused AMPE training, Ms. Conway shared that she found value in that approach to professional development. Although past professional development may have been geared more toward classroom teachers, scoring the 4Sight Benchmark Assessments was relevant to Ms. Conway. She was interested in learning more about the content presented on the assessments so she could employ this knowledge to inform integrated content in her practice:

It has been occasionally outside of my genre...Because I am an art teacher that always focuses on integration, some people would see that as a negative, and I don’t. We had to sit in on testing 4Sights. Several of the special area teachers said ‘We don’t want to have to do that, we don’t instruct for those tests’. I said, ‘Are you crazy? That would let us know what these kids are being tested on, so that when we do integration, we know what they’re being tested on in that grade level’. They almost killed me, people were ready to throw things at me for wanting to be included in the 4Sight testing and scoring, because it was additional time we had to give after work. I volunteered to do it, because that is what I wanted to do. They did not want to be a part of it because they felt like it wasn’t pertinent to them. So I guess it really is defining what you feel is significant to an art teacher. Most art, music and gym teachers want to know about art, music, and gym. Well that’s our area of expertise. We’re supposed to know about those areas already and go to

the museum, on our own time. Not during professional development. That's supposed to be our time, I feel, to determine how we can be better instructors with the gifts and talents that we're given. So, I like to be included, with the regular education teachers, often.

Ms. Conway's interest and later her passion for integration stemmed from being placed in professional development that didn't totally pertain to her. This less relevant professional development sparked reflectivity in her understanding of arts education, prompting Ms. Conway to seek ways that classroom teachers' professional development might become fundamental to her practice as an art teacher to benefit students. I asked her how she became interested in integrated teaching:

Pretty much on my own, through taking additional classes, and we would get professional development offered here and there, but they were never anything pertinent to what we would need as art and music and gym teachers, it was always for classroom instructors, so it never applied to us. I felt like, well I need to be able to do this, I don't even know how to do this. So I need to learn how to do this. So I took some little classes, from the Teacher Education Institute, and that's what started me wanting to get my master's because I started taking these classes. I thought this is fun, I love to learn, this feels great. I felt empowered to know what's going on. It all came together for me.

Ideally, Ms. Conway would like to engage in more ongoing, meaningful professional development and training alongside the classroom teachers to share her integrated practice with them. "I would work with each grade level teacher, and we would create integrated lessons that would run throughout the year. And I would put my lessons with all their core curriculum," she confidently stated.

Ms. Conway believes reading and math are important, but has concerns over the way they are presented to students. "I think it's just the way that they are being instructed, is so dry that the kids are pulling away. Because there is just no fun in what the teachers are forced to teach," she offered, "They have much less control over their classroom curriculum...and it's basically just read it from this book, make this handout, make the kids do it. She sees the art classroom as

a place where deep learning in reading and math can occur in a way that permits 21st century skills application. She has noticed that over the last decade, students have become increasingly less creative, and more unable to engage in independent critical thinking, “I think if we start to get back to more of a project-based learning, where we have more theatre in the classroom or we have more performing arts within our instructional time, the kids would have much more fun and still get what they need to get,” she proposed. This is one reason Ms. Conway enjoys the professional development associated with the STEAM grant:

It gives us time to reflect on our own personal practice, which is huge. Integration is all we talk about. How we can teach other subjects and, I think that’s why my dissertation is leaning towards this direction, because it’s like how can we teach other subjects within art, without the kids even knowing that they are learning these other subjects and having fun doing it.

Ms. Conway worries that the focus on testing has detrimentally stifled students’ critical thinking skills. She sees the classroom learning students engage in as counteractive to creativity. She tries to foster creative and critical thinking by validating her students’ artistic choices and providing a framework around goals that she encourages them to challenge.

Every single thing the kids do all day, throughout their day, kills critical thinking. Because it’s, “You’d better do it this way, we all have to do it the exact same way.” When I tell the kids they can do it any way they want, they almost shut down. They don’t know how to do anything the way that they want. They don’t know how to do that. Critical thinking is about making your own choices, and making your own mind, and they’re not allowed to do that at all, all day. So how do you teach that skill? I try to have a very open environment and I always say, “You’re the artist, you make the decision.” And they look at me like, “What do you mean I’m the artist?” You know, you have to empower children. It starts by the way you address them, when you tell somebody that they’re the artist, they kind of perk up, like I am the artist; I am allowed to make a choice. It’s really cool. I have guidelines for what our goal is, but I always tell the kids, I want you to take it to another level and I want you to do more than what I ask you for. I want you to ask questions and challenge what it is we’re supposed to be doing and take it to another place. But getting them to do that isn’t always easy.

Ms. Conway sees 21st century skills as tethered to both integrated practice and the arts. She often allows students to take artistic risks and then share their success with their peers as leaders, cultivating collaboration, creativity and critical thinking in her practice:

When we were doing our weaving unit, which we're currently on, one of the kids said, "Could we try to put a pattern in, like those patterns you showed us in the American Indian weaving unit?" I said, "You know what, let's try it!" So it was one, student, asking to try something a little harder, so we put a little diamond into his weaving, and it was really hard, and the kids were like, "How did he do it! We don't understand". But it was great, because they saw that he was challenging himself a little further. I would say, you don't see students often using any critical thinking skills, at all. They are completely shut down, from kindergarten on, not to be independent, not to stray from the group. Not to. That's one of the huge skills USA's really going to be lacking in the future, because the kids are so stifled.

Ms. Conway believes an integrated understanding and 21st century skills are important because this way of knowing and learning will allow students in the United States to remain competitive in a global market:

All the future careers that we'll have in the United States and in the entire world, because we're now in a global market, we're in a global economy, are going to be focused on being creative. It's not going to be the kid that can crunch numbers, it's not going to be the kid that can read the fastest, it's going to be the person who can think of an idea that's outside the box. The next iPod, the next cell phone, the next design, the way to make things personal for people, the way to make things customized. That's going to be the careers of the future, because we've already made everything you can possibly make. Creative end, film producers, fashion, that's going to be where all the big money is, and I think that people are deluded in thinking that it's going to continue to be the same skills that we're teaching kids today and it's really not. So I think that if we don't regain this ability to help kids be critical thinkers, we're not going to have any of the skills that are needed to be marketable within a global economy... We have to change our instruction, so that kids have more control over the instruction and this idea of test-taking, so that the kids start to regain a desire for education... Giving kids more freedom and more ability to have an impact on instruction and the methods of assessment is the way to go.

6.1.6 Case Study Summary

Jackson Falls is a small, Title I elementary school with current school-wide foci on differentiated instruction and AMPE integration. The AMPE teachers have been involved with both the Steeltown STEAM grant and Arts Bridge, which provide professional development in both integrated practice and 21st century skills. The principal has some background in the arts; AMPE teachers perceive him as understanding their content areas as well as being engaged and supportive. Mr. Hannon is an important champion for AMPE. He believes the collegial atmosphere, sense of urgency related to AYP, and professional development opportunities promote integrated teaching practice at Jackson Falls.

The school failed to make AYP in reading; this is a concern because another year of insufficient progress will result in Jackson Falls students having the option to transfer to Cooper Station, the only other elementary school in the district. The art, music and physical education teachers I interviewed currently travel daily, teaching students in kindergarten through sixth grade. The AMPE teachers have little to no collaboration time with one another or with classroom teachers. Teachers are generally supportive and collegial; despite the lack of formal collaboration time teachers are willing to plan together on their own time. The open classroom facility nurtures the collegial atmosphere.

The AMPE teachers at Jackson Falls find the professional development offered by the district to be improving significantly over the past four years. All of the AMPE teachers are involved with and are aware of the school and district initiatives. They are sometimes allotted time to meet as district AMPE departments through the STEAM grant and Arts Bridge initiatives. Internal documents collected during this research validate the claims of the

participants, specifically professional development agendas and teacher schedules. AMPE teachers have been involved in curriculum inventories of their own content areas; they use the identification of content area standards and concepts to make connections with students' learning in the regular education classrooms. This has been an important foundation for integrated teaching practice. Participants identified connections between AMPE, integrated teaching and 21st century skills in their practice.

Participant responses validate Mr. Hannon's claim that AMPE teachers are likely to collaborate with classroom teachers at Jackson Falls. They occasionally collaborate with one another as well. A school-wide social integration initiative, Jackson Falls' annual art show, is a centerpiece in the school community. Mr. Hannon encourages the AMPE teachers to integrate and collaborate as much as possible, but admits the schedule does not allow for any collaboration time between the classroom teachers and AMPE teachers. A new teacher schedule that builds in collaboration time is being explored and developed. 21st century skills are a major priority to Mr. Hannon, Mr. Graves and Ms. Conway.

Mr. Pearson believes 21st century skills are important and applicable to physical education. The AMPE team and principal have engaged in book study through professional development that has established the importance of developing 21st century learning opportunities in AMPE classrooms. The internal documents show evidence of literature and curriculum development teachers have had access to through professional development with the STEAM grant and Arts Bridge.

Mr. Pearson is a veteran teacher who is consistent in his approach to teaching. He understands the sense of urgency associated with failure to make AYP. He appreciates the newfound interest in AMPE and has observed improved professional development opportunities.

He will integrate mathematics and social studies in physical education class; he sees value in this integration and is willing to communicate with classroom teachers as he deems necessary regarding the connections. The shared gymnasium facility is a barrier Mr. Pearson overcomes by being flexible in his practice. Mr. Pearson is a quiet team player, who exercises patience with his colleagues, even when they subtly devalue physical education class.

Mr. Graves is a new music teacher who enjoys collaborating with colleagues, especially in the other special areas, as well as integrating. His background in opera, physical education and ballroom dance (as well as his interest in visual art) play a role in his integration style. He seeks out appropriate music connections with other content areas, and feels comfortable supporting both reading and mathematics through music. He is uncomfortable introducing reading concepts as he struggled with reading due to a learning disability as a child. He is working to develop an after school ballroom dance program with a colleague to support the needs of the community.

Ms. Conway's career has spanned a decade as both an art teacher and professional artist. She arrived at integrated practices through reflection on her own teaching. She sought out additional education to learn how to make integration result in meaningful learning experiences for her students. She coequally integrates with depth. She can identify how the arts connect to students' global and real-world awareness, and sees learning in the arts as a way to help students meet the current demands of education in reading and mathematics. She encourages students to think creatively and critically through her pedagogy.

Mr. Graves, Mr. Pearson and Ms. Conway would like more time for collaboration and believe that traveling frequently between schools is a barrier to both their value and integration practices. Integration efforts described by the participants were robust and coequal, with coequal integration being observed through the inclusion of student writing as part of the Jackson Falls'

arts exhibit. All of the AMPE teachers at Jackson Falls felt comfortable with selecting and integrating various reading and mathematics concepts they feel are appropriate connections to be made in their classrooms. All three AMPE teachers also agree that a 21st century skill set is both natural and essential to what they teach in their content areas.

7.0 CONCLUSIONS

7.1 EMERGENT THEMES WITHIN SITES

The educational systems of other nations have surpassed public education in the United States of America, thus threatening the United States' ability to compete in the global market (Friedman, 2007). Federal legislation intended to improve the public education system has resulted in increased public school accountability and high-stakes testing in reading and mathematics that marginalizes non-tested content areas like art, music and physical education. As pressure for increased student achievement in reading and mathematics is amplified, elementary art, music and physical education teachers may either consider or be asked to implement integrated teaching practices within their classrooms. The problem is that we know little about the attitudes, beliefs and perceptions of art, music and physical education teachers with regard to how they perceive their roles within their schools and their beliefs and experiences surrounding 21st century integrated teaching practices (Strand, 2006).

The purpose of this study was to examine how the selected art, music and physical education teachers perceive their professional roles, their beliefs about integrated teaching practice, and how they believe 21st century skills influence their teaching practice within their school contexts. This qualitative multiple case study used multiple data sources to examine the perspectives, attitudes and beliefs of a total of thirteen participants; the elementary art, music,

and physical education teacher and the building principal at each site as well as one classroom teacher. This research method was selected to construct a detailed representation of the quintain, participants, and context being examined (Stake, 2006). During the interview process, a participant recommended that data relevant to the quintain might be obtained from an additional participant, a sixth grade classroom teacher who engages in integrated teaching practice. This participant was then approached and added to the study. Data was then gathered through a guided conversation interview and analyzed as part of the research.

Themes emerged in the data analysis within individual sites related to each of the three research questions. Themes also emerged across the three sites. This chapter offers emergent themes identified within each of the three sites as related to each of the research questions.

7.2 EMERGENT THEMES: EVERGREEN FARMS

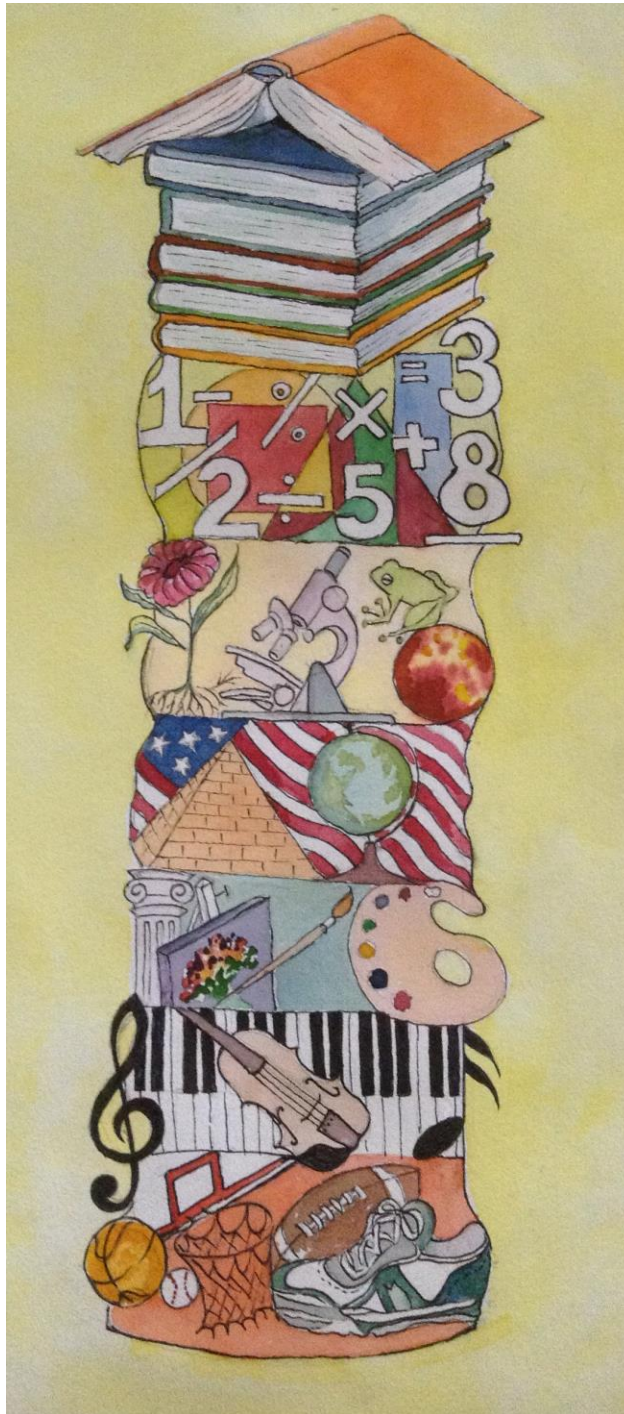


Figure 9. Curricular Totem Pole

7.2.1 AMPE Teachers' Roles

Mr. Wallace described an imaginary totem pole that places the highest priority subjects at the top; he described these subjects as being reading and math (Figure 8). He explained that he accepts his role, and placed himself among the subjects that receive the least priority; art, music and physical education (Robinson, 2005). Though the teachers at Evergreen Farms are treated respectfully by their peers and principal, their content areas assume a low level of priority within the school. As content area specialists in art, music and physical education, their time with students in those classes is limited (Eisner, 1998). They are scheduled to spend part of their school day teaching outside their content area, supporting instruction for small groups of students in reading and math. The art, music and physical education teachers at Evergreen Farms seem to have accepted this place within the curricular hierarchy in understanding the uncertainty of job security in these content areas, which are usually the first to be cut from the curriculum.

The AMPE teachers at Evergreen Farms are proud of the content areas they have chosen to teach. Their accounts exuded the importance they perceive for art, music and physical education. The Evergreen Farms AMPE teachers feel maligned by classroom teacher peers who assume they have an easier job, and feel excluded in that they do not fully understand school accountability measures and the implications for their role as art, music and physical education teachers. AMPE teachers also reported feeling excluded and devalued when they are forgotten on professional development days entirely, or required to sit through sessions that have little relevance to them.

The Evergreen Farms AMPE teachers are reluctant to outwardly advocate for their content areas for fear of compromising their program and employment in an era of school budget concerns in Pennsylvania. The teachers at Evergreen Farms perceive art, music and physical education programs as being in a precarious position, believing that they are fortunate to have jobs as teachers of these content areas in the current economic climate. Their location on the curricular ladder assumes a role even more inferior than as delineated by Bresler's (1995) subservient integration approach. Teachers at Evergreen Farms accept subordination in relation to their classroom teacher peers because of their perceptions of the demands of educational accountability, their concerns with job security.

7.2.2 Integrated Teaching Practice

The perceived role of art, music and physical education teachers at Evergreen Farms related to the integrated practices described by participants. AMPE teachers integrate to support classroom teachers' efforts, to preserve their jobs, and because they believe students benefit when they can identify connections between their classes. Though Ms. Kelly seemed to employ more subservient approaches to integration in her physical education class, she was enthusiastic in her willingness to support mathematics through integration. She described fragmented and subservient content presentation in her account of integrated practice, like having students complete mathematics problems or word problems before they could participate in a physical education activity (Bresler, 1995). Ms. Kelly described understanding the pressure the classroom teachers were under to yield high student test scores and reported feeling obligated to help support increased student performance on the PSSAs in reading and mathematics. Ms. Scott

teaches an integrated arts class, which she believes was developed to provide ample preparation time for the first and second grade classroom teachers, and not for the purposes and benefits of authentic integration. She finds merit to this integration to be problematic at times; forced integration with the school's reading series does not always make for meaningful, coequal integration in her art class. Ms. Scott explained that she had engaged in some work with co-teaching in the arts alongside classrooms teachers for a brief period of time as part of her master's thesis. She reported that this experience was enjoyable as it allowed her to partner with colleagues, and beneficial for the students, who were able to observe and engage in the connections between art and their "core" content areas.

All AMPE teachers at Evergreen Farms were willing to integrate in their classes, but also reported having concerns with self-efficacy, preservation of curricular integrity, and accepting the merit of the integration (Russell & Zembylas, 2007). Ms. Scott and Ms. Kelly expressed concerns with self-efficacy, feeling uncomfortable with both integrating math and reading respectively. Ms. Scott reported that the reading series she uses to develop lessons for her integrated art class does not lend itself to integration very well. Mr. Wallace described his disapproval for forced integration, but expressed his interest and willingness to integrate when the connection between two content areas was logical. Mr. Hamilton, the classroom teacher, feels that at the elementary level, all content is relatively simple to teach. He does not perceive self-efficacy as being a concern for the AMPE teachers in integration or in supporting reading and math.

Mr. Banks, the principal at Evergreen Farms, is supportive of the AMPE teachers as employees, but integration is not an area of focus of expectation. He validates good practices he observes as implemented by his teachers, and appreciates when they do attempt to make cross-

curricular connections. He believes he has supported his AMPE teachers by including them in the flex time, which requires them to teach outside of their content area by supporting the work of the classroom teachers in reading and mathematics. Mr. Wallace expressed feeling comfortable with the flex time, but also explained that he accepts this assignment as part of his perceived lesser role within the school. Ms. Kelly reported feeling uncomfortable with working with the data the teachers were using to develop flex groups, and Ms. Scott expressed feeling concerned because teaching other content areas as part of the flex time was not what she desires to or was formally educated to do. The training and professional development the AMPE teachers receive does not inform them fully of ways to support instruction in reading and math classes, nor does it promote integrated teaching practice. The AMPE teachers have little time to collaborate with one another, and no time to collaborate with the classroom teachers. This lack of time with their classroom teacher peers contributes to their perceived alienation.

Integration as a formalized initiative seems to have run its course at Evergreen Farms. Large-scale thematic learning experiences involving Egypt and the medieval period and cross-curricular integration in the form of the Adopt-an-Anchor have come and gone. At this site concerted school-wide integration does not occur. Mr. Hamilton's account of the grievance that put an end to grade level thematic integration was unexpected and did not align with the literature, but shed light on a significant barrier to integration at this site. The motivation among teachers for the purposes of integration was compromised as a result of the grievance filed a few years ago. Mr. Hamilton lamented the loss of these learning opportunities, because he believes they were valuable to the students. The participants revealed that a lack of school-wide priority for AMPE or integration, school-wide foci on reading and math, and a lack of time for collaboration are barriers to integrated teaching practice. Despite an absence of school-wide

cross-curricular and interdisciplinary teaching practice at Evergreen Farms, the art, music and physical education teachers do integrate other content into their classes when they deem it to be appropriate; they do so because they believe that this provides valuable learning opportunities for their students.

7.2.3 21st Century Skills

The AMPE teachers at Evergreen Farms believe what they teach is valuable and essential to conveying a 21st century skill set to students. The teachers (including Mr. Hamilton, the classroom teacher) observe their students' ability to think creatively, critically and independently to be declining. There is awareness and concern among these teachers that students in the United States are falling behind students in other nations in this regard. They attribute these deficits to the intense focus on testing. Despite receiving little professional development around 21st century skills, participants were aware of these skills and identified direct connections between their content areas and the potential to impart 21st century competencies within their classrooms. They perceived merit to integration of these skills and could incorporate them into their content area pedagogy naturally (Russell & Zembylas, 2007). The Evergreen Farms AMPE teachers believe there are authentic ties between art, music and physical education.

The Evergreen Farms AMPE teachers are somewhat conscientious in their effort to instill 21st century skills with their students. They have not been provided with formal training related to 21st century skills, but they reported structuring some higher order application of knowledge within their content areas to foster these skills. Mr. Hamilton develops lessons where students work collaboratively to problem-solve within a historical theme. Ms. Scott worked with students

to create a large-scale collaborative sculpture. Ms. Kelly has developed frameworks for project-based health lessons that require students to apply their learning and to problem solve. Mr. Wallace offers creativity and critical thinking as part of his daily routine; exposing students to a variety of world music and engaging in discussions with them about what they've listened to each day.

7.3 EMERGENT THEMES: COCHRAN MILLS



Figure 10. Inquiry in Isolation

7.3.1 AMPE Teachers' Roles

AMPE teachers at Cochran Mills identify as proud teachers of their respective areas. The AMPE teachers also indicated that they perceive their purpose as providing the classroom teachers' preparation period. The teachers expressed frustration with this role and feelings of perceived subordination in relation to their classroom teacher colleagues. This inferiority is further perpetuated by their hectic schedules, constant traveling, assigned teacher duties and lack of relevant professional development. Ms. Finch's account of losing her acoustically designed music room at the whim of a classroom teacher's preference offered insight into her perception of being devalued. Teacher isolation was more prevalent at Cochran Mills than at the other two sites. Ms. Avery described being scolded by the principal for teaching in isolation. The exception at this site is the co-teaching which occurs in physical education; this arrangement reduces isolation for this particular teacher. Isolation is also perpetuated at this site due to the physical layout of the classrooms and lack of space. Space is a commodity at this crowded school, and teachers' protection of their allotted space has increased isolation. Closed off, narrow corridors discourage impromptu collaboration among teachers. All AMPE teachers reported experiencing some degree of exclusion within their profession. This can be attributed to a lack of relevant professional development that acknowledges their content area needs as well as being disregarded within a schedule that allows daily collaboration time among Cochran Mills classroom teachers. Art, music and physical education teachers at Cochran Mills are dissatisfied with the intense focus on testing and reading and math that they perceive. They were less aware of NCLB accountability standards and the measures implemented by their district to maintain adequate yearly progress. The AMPE teachers are dismissive and uninformed with regard to

school-wide instructional initiatives, perceiving school-wide foci and pedagogical approaches as passing trends and “buzz words.”

7.3.2 Integrated Teaching Practice

Despite being unaware of AYP requirements and school-wide initiatives, the AMPE teachers perceive the classroom teachers as being under a great deal of pressure to obtain “high scores.” They recognize this burden for the classroom teachers, and maintain that they are willing to help. Adkins and Gunzenhauser (2005) offer that the responsibility for the development of integrated lessons typically falls on the specialist teachers, often in response to a request from a classroom teacher. Ms. Avery described being approached by a classroom teacher asking her to develop an arts integrated mathematics lesson that featured arts activities that was not developmentally for fourth graders. AMPE teachers reported various approaches to integrating reading, mathematics, social studies, and science in their classrooms. However their integration efforts are fragmented, typically being developed by the AMPE teacher in isolation. As a result, integrated lessons are developed through teacher experimentation and trial and error. With little time to meet with classroom teachers, these integration efforts, while well-intended, do not relate to specific areas of individual student or school-wide need.

Professional development at Cochran Mills has never been focused on integrated teaching. Ms. Finch reported requesting to participate in collegial teacher walkthroughs within her school, but never being granted this opportunity. Ms. Schafer, the principal, says she expects her teachers to integrate and collaborate with classroom teachers to the extent that they are able; she recognizes that the resulting integrated learning opportunities may not be rich. She hopes that

the curriculum mapping that is currently in progress will eventually help teachers make connections across the content areas.

Social integration for the purpose of program advocacy was prevalent at Cochran Mills. Ms. Avery and Ms. Finch described substantial involvement in facilitation of social integration for the purpose of arts and music preservation. Ms. Finch utilizes social integration in the form of programs and performances to showcase the student learning that she believes makes music education academically valuable (Bresler, 1995).

The AMPE teachers revealed that their heavy teaching loads, daily schedule and lack of collaboration time are barriers to integrated teaching practice. The schedule allows the AMPE teachers limited time with consistent groups of students each week. Art projects take many weeks to finish with an inadequate amount of class time. Ms. Finch reported that students are often pulled out of music to receive extra help in reading. Mr. Butler explained his frustration with teaching inconsistent groups of students in a small space. The AMPE content areas are regarded with less priority than other content areas. Teachers are willing to integrate content areas into their teaching, but they have not been provided with anything more than a loose expectation to support other content areas in their classes.

7.3.3 21st Century Skills

Twenty-first century skills have been introduced to the teachers at Cochran Mills as being pertinent to their practice. Some professional development has been provided to the AMPE teachers; this was evident in the analysis of the internal documents. AMPE teachers' familiarity with the concept was apparent in the discussion; they have been exposed to 21st century skills as

a result of their time spent teaching AMPE at Barrett, a STEM-themed school, where they travel from each day before they arrive to teach at Cochran Mills. Teachers described applications of 21st century relevant pedagogy in their classrooms at Cochran Mills. For Ms. Avery, collaboration and communication were natural parts of her curriculum. She has not adjusted her teaching much with the introduction of these concepts at Cochran Mills; she explained she has been doing these things for many years.

Ms. Finch expressed that all of her integrated lessons have emerged from her own curiosity; she has little opportunity to collaborate with peers to develop interdisciplinary lessons. One 21st century integrated lesson Ms. Finch described was born from experimentation in isolation; merging critical thinking and science. She described having students hum and feel the vibration of their vocal cords. She used this experiential learning to ask students higher order thinking questions. Ms. Finch built on the inquiry established through the examination of vocal cord vibration. She played a triangle to reinforce students' emergent understanding of frequency and its relationship to various instruments. In Figure 9, Ms. Finch's experience with teaching inquiry through music is represented, with the silo classroom as a metaphor for isolation. She used this experience as a platform for developing inquiry-based lessons in music, teaching students to experiment, observe and understand the connections between the science of sounds waves, vibration and sound. Ms. Finch built on this student learning as students developed and created their own short musical scores, as students began to understand how the science of sound becomes the basis for creativity in music.

Mr. Butler described his attempts at fostering creativity, critical thinking, collaboration and communication in physical education. He noted the advantages to encouraging students to collaborate, develop, map, teach, and time the completion of their own obstacle courses using a

variety of equipment in the gym. He reflected on the results of the lesson, noting that he became more of a facilitator of learning as students developed and engaged in their own obstacle courses. This lesson merged kinesthetic learning and awareness with 21st century skills. Mr. Butler described the schedule as a barrier to such a lesson; clean-up was a problem as there is no time between classes, and the AMPE teachers teach a different group of students every 45 minutes.

AMPE teachers at Cochran Mills identify and implement 21st century skills in their practice. Professional development has fostered this approach to teaching at Cochran Mills. Twenty-first century skills, while present in these AMPE teachers' pedagogy, might be utilized as a platform to establish stronger connections between content areas through the addition of collaboration time, curriculum maps and the validation of the principal and other colleagues.

7.4 EMERGENT THEMES: JACKSON FALLS

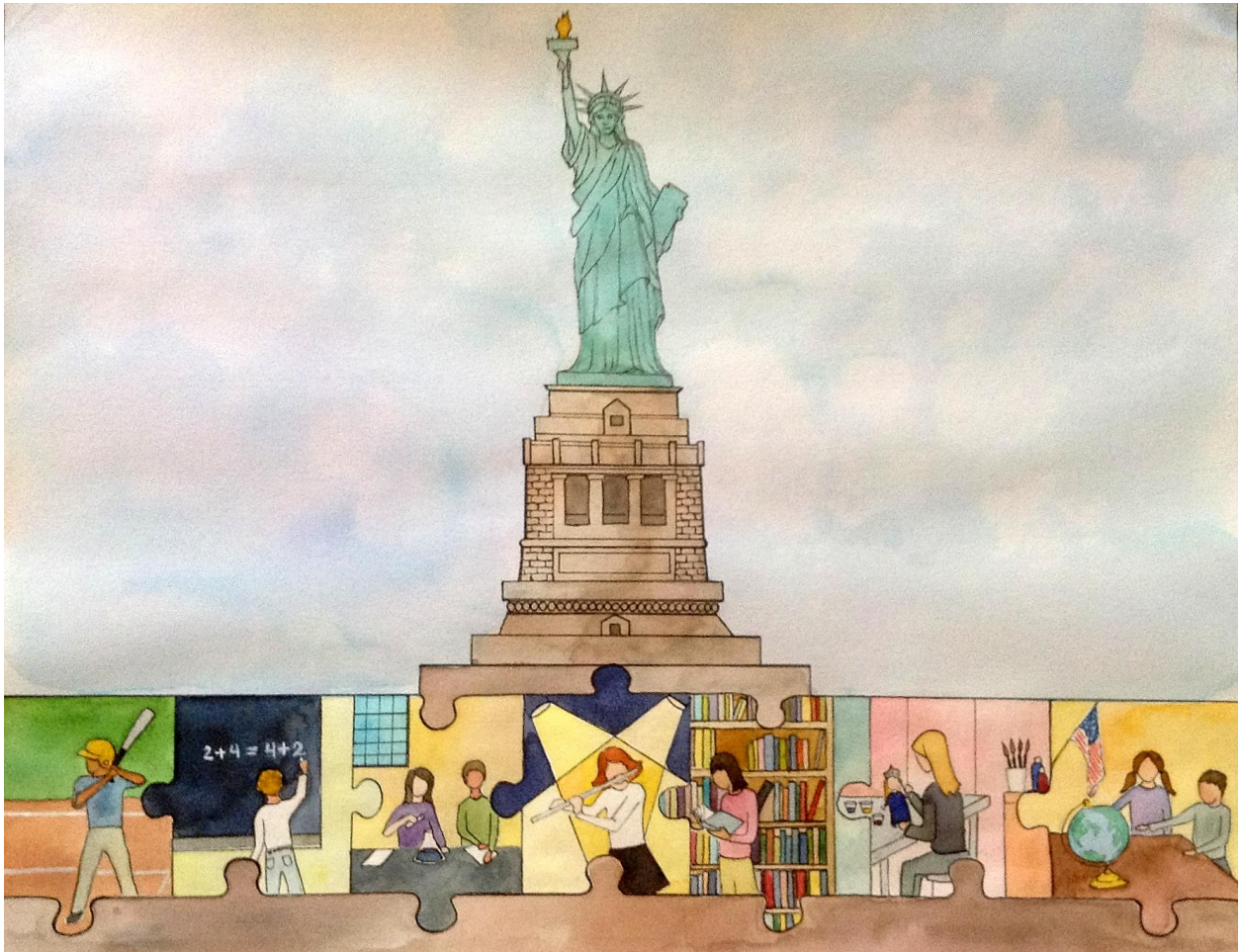


Figure 11. Foundation for Opportunity

7.4.1 AMPE Teachers' Roles

Jackson Falls' AMPE teachers are aware of the NCLB expectations and looming consequences for their school if they continue to fail to make AYP. They perceive themselves as integral to increased student achievement at their school. The AMPE teachers at Jackson Falls have emerged as tactful teacher leaders as a result of their involvement in professional development opportunities that nurture 21st century integrated teaching practices. The participants recognize that AMPE classes provide teacher preparation periods which has, in the past, diminished their value. They discussed their discontent with the term "specials" and what subjects are considered "core." Mr. Graves, the music teacher and Ms. Conway, the art teacher, have been especially proactive in capitalizing on this opportunity in an effort to equalize their content areas with the "core" content areas at Jackson Falls. The AMPE teachers are cautious, diplomatic advocates of their content areas. Despite perceiving inequities with regard to the schedule, traveling, and supplemental duty expectations, they exercise restraint in their activism for fear of compromising their employment. Ms. Conway, a passionate champion for arts education, described experiencing uncertainty with regard to her job security over the last four years, despite being in her current position for the past eleven years.

The Jackson Falls AMPE teachers have managed to strike a delicate balance between compliance and articulation of concerns when they perceive their content areas have been devalued. Mr. Pearson reported that he tries to be as easygoing and flexible as possible, but when colleagues consistently kept students from physical education to work on math or reading he eventually addressed that teacher with his concern.

7.4.2 Integrated Teaching Practice

The AMPE teachers' involvement in integrated curriculum development and their awareness of the requirements for AYP have altered their practice significantly. They believe in the merit of integration and have little concern with compromise to the integrity of their curriculum (Russell & Zembylas, 2007). The majority of their lessons include strong interdisciplinary connections. However, the characteristics of integrated lessons described by the Jackson Falls AMPE teachers generally aligned with coequal integration (Bresler, 1995). Ms. Conway explained that she has learned to cover less with students, but spends more time on projects to achieve greater quality and depth of learning. She described a lesson that promoted creativity, first person writing and sculpture simultaneously. Mr. Pearson is newly involved with the Steeltown STEAM grant, and appreciates the collegiality and support provided through Arts Bridge. Mr. Pearson described establishing some basic content linkage and explored thematic integration with both mathematics and social studies, having students simulate running through England, logging their miles and running past a Stonehenge replica (Mohnsen, 2011).

The AMPE teachers and Jackson Falls principal reported that they integrate within their teaching because they believe it's beneficial for students. They also feel the urgency to integrate as a means for increasing student achievement in order to help their school make AYP. Further, they engage in integrated teaching practices in an effort to make themselves valuable within the school and increase their job security.

Involvement in professional development that included the AMPE teachers and other classroom teachers has sparked conversations to begin building in common, purposeful collaboration time for all teachers in the near future. Despite a current lack of common planning

time, the layout of the school promotes collegiality and collaboration as the classrooms have no doors. Additionally, Ms. Conway and Mr. Hannon reported that the staff does not turnover often, and most teachers at Jackson Falls have been there for several years. This stability promotes sustainable collaboration; integrated lessons require little maintenance once established and a quick conversation can occur between various teachers as necessary.

Mr. Hannon is acutely aware and supportive of the kinds of integrated teaching that are happening in his teachers' AMPE classes. His teachers appreciate his validation, because he recognizes the nuances and significance of their integration. He has a background in music and believes that learning in and through the arts is vital to students' learning. Mr. Hannon's reference to the large base of the Statue of Liberty as a metaphor for the solid foundation a well-rounded elementary education provides for students is represented in Figure 10. Mr. Hannon believes that it's important for his teachers to communicate and teach across the content areas for the purposes of developing relevant, enriching, applicable learning experiences for students. He encourages his classroom teachers to observe and analyze their students' individual successes in AMPE as a way to understand intrinsic motivation for the purposes of teaching the "core" subjects. He cited the examples of application and practice in music and in sports, and offered that excellence in those areas is prompted by passion, interest and personal motivation (Wagner, 2012).

7.4.3 21st Century Skills

The AMPE teachers at Jackson Falls believe that the national emphasis on testing is hazardous to students' creativity. The influence of Steeltown STEAM grant, Arts Bridge and corresponding study of relevant professional literature surrounding 21st century skills development is evident in the AMPE teachers' description of their teaching practice. Their principal, Mr. Hannon, is keenly aware of their efforts in this regard, and validated teachers' accounts of 21st century focused teaching in our conversation. Skills like collaboration, creativity, critical thinking and communication are central to the AMPE teachers' practice at Jackson Falls.

The participants at this site described deeper 21st century, integrated learning experiences than were reported at the other two sites. Students engaged in observational drawing related to scientific inquiry in their art class. In music they studied the Olympics as a theme, and explored vocal music and movement through creative and collaborative application, developing their own imaginary countries, creating authentic flags within groups and performing their own original national anthems. Ms. Conway has adopted the approach of allowing students to serve as teachers within her classroom; she observes that it increases confidence through communication, validates student success and promotes collaboration and critical thinking as an individual student shares his or her creative process with peers.

Participants at Jackson Falls described subscribing to 21st century responsive teaching practices because of their concern that children in the United States will be unable to compete with children in other nations, now as students, and later, when they seek employment opportunities. Mr. Hannon referenced Friedman (2007), echoing Ms. Conway's concerns that our students' creative abilities have been repressed and our nation will fail to produce innovators

as we once did. Jackson Falls participants believe teaching in AMPE is essential to cultivating proficiencies that allow students to have a repertoire of communication, critical thinking, creative, and collaborative skills at their command to apply their knowledge from a range of disciplines. The Jackson Falls teachers perceive integration and 21st century skills as both natural and central to their practice. They displayed positive body language and their vocal inflections and word choices conveyed optimism and confidence when discussing their integrated teaching practices and the importance of AMPE in imparting the 21st century skills students will need to navigate a flat world (Friedman, 2007).

8.0 CONCLUSIONS

8.1 IMPLICATIONS ACROSS CASES

This chapter explores the themes that emerged across the three sites in relation to each of the three research questions in this multiple case study. The themes situated around the quintain were analyzed with respect to context. These themes were compared across sites within this multiple case study design. This chapter then builds upon the findings of this research to offer thematic implications across cases, suggestions for future research, and recommendations for practice.

8.1.1 AMPE Teachers' Roles

Q1: How are the roles of art, music and physical education teachers perceived by selected teachers and administrators within their public elementary school contexts?

The findings of this research indicate that AMPE teachers do not always feel valued within their schools. As indicated by the literature review, AMPE teachers typically teach within a schedule that provides the classroom teachers' preparation periods (Smilan & Miraglia, 2009). In this study, the AMPE teachers at all three sites teach a schedule whereby they provide

classroom teachers preparation periods. Participants indicated that the traditional elementary schedule affects the perceived value of AMPE teachers in schools.

Though participants at all three sites reported an emphasis on the perceived importance of reading and mathematics test scores, the AMPE teachers at Evergreen Farms and Cochran Mills were less aware of school accountability measures as dictated by No Child Left Behind (2001). The unfamiliarity with AYP was remarkable at Evergreen Farms, where the AMPE teachers are being utilized to provide direct instruction in reading and math in addition to teaching their regular AMPE classes. This obligation “filled holes” in the AMPE teachers’ schedules. Participants at Cochran Mills were equally unaware with AYP requirements, and indicated they were aware that the classroom teachers discussed and analyzed “scores,” but they weren’t sure how the data were used or what the data indicated.

The AMPE teachers expressed concern over their job security in light of climate created by the current education funding crisis in Pennsylvania. Teachers at Evergreen Farms have accepted the change to their role, providing small group reading and math instruction because they feel fortunate to be employed. Feeling that they were regarded as teaching less important content areas was also identified as an implication for their perceived role. Teachers reported that experiences such as disparaging remarks from classroom teachers and a forced classroom relocation contributed to this perception. The AMPE teachers at all three sites believe what they teach is important; however, they are passionately cautious in their approach to AMPE advocacy. Their advocacy efforts included subservient, coequal and social integration (Bresler, 1995).

Teachers at both Evergreen Farms and Cochran Mills indicated that they felt excluded from school-wide initiatives at times. Lack of common planning time contributed to this perception (Barry, 2008). Cochran Mills teachers reported that constant traveling and lack of

collaboration time contributed to their feelings of isolation and exclusion (Adkins & Gunzenhauser, 2005; G. Graham, personal communication, September 19, 2012; Krueger, 2000; Reeves, Emerick & Hirsch, 2006; Russell & Zembylas, 2007; Smilan & Miraglia, 2009). The physical education teacher at Cochran Mills reported that his current co-teaching experience with another physical education teacher helps to reduce feelings of isolation, though he still experiences exclusion from school initiatives. The music teacher at Cochran Mills described seeing teachers meet about test scores, and glimpsing them engaging in collegial walkthroughs in regular grade level classrooms, but felt excluded from this practice. Teachers at Jackson Falls reported experiencing less exclusion, but believe that their workload and constant travel diminishes the importance of their role at Jackson Falls (Barry, 2008; Holman, 1999). Lack of collaboration time was more of a practical barrier than an affective concern at Jackson Falls.

Participants at all three sites described their principals as supportive; teachers at Jackson Falls described their principal as not only supportive but also involved and responsive to art, music, and physical education in their school. Participants at Cochran Mills and Evergreen Farms described the professional development as being a factor that contributed to a general feeling of exclusion. These teachers reported being assigned to irrelevant professional development. Though supportive, the principals at Cochran Mills and Evergreen Farms demonstrated less ability to meaningfully involve their art, music and physical education teachers in school-wide initiatives in order to utilize their content area knowledge. The concern that principals may lack the ability to support more specialized content areas is validated in the literature (Barry, 2008; Stout, 2002). Still, the principal at Jackson Falls actively engaged in cross-curricular professional development with content area relevance related to integration alongside his teachers (Strand, 2006). The teachers at Jackson Falls reported that the relevance of

their professional development has improved as various approaches to curricular integration have become a centerpiece of their school. The art teacher at Jackson Falls described finding value in analysis of benchmark assessment data with the classroom teachers in reading and math; this helped her to both elevate and enhance her own role as the art teacher by considering how she might specifically support areas of need in reading and mathematics in the art classroom.

The review of the literature was used to authenticate findings related to this research question with regard to AMPE teacher workload, typical elementary school schedules, isolation and perceived curricular importance (Barry, 2008; Krueger, 2000; Smilan & Miraglia, 2009). Emergent themes of exclusion, diminished AMPE teacher roles due to focus on school accountability, and concerns with job security surfaced as part of the findings of this research.

8.1.2 Integrated Teaching Practice

Q2: How do selected elementary art, music and physical education public school teachers and building administrators perceive integrated teaching within their practice?

The conceptual framework used as a basis for the data analysis revealed nuanced relationships between the AMPE teachers' awareness of their context and perceived urgency as related to school accountability measures, general inclusion/exclusion in school-wide improvement initiatives, perceived expectations and support for integration, and their perceived ability to develop integrated lessons. The selected AMPE teachers all reported using integrated teaching methods within their practice. All AMPE teacher participants were willing to engage in integrated teaching practices. Many teachers reported that they were more likely to engage in

integrated teaching when they were able identify legitimate, merited connections across content areas, as validated by the literature (Russell & Zembylas, 2007).

The selected AMPE teachers' rationale for integrating within their teaching was either to: a.) help their classroom teacher peers and students to perform well as measured by the PSSA; b.) offer the benefits associated with integrated learning to their students; or c.) showcase learning in their content areas as a means of AMPE advocacy. Teachers who were unaware of AYP measures or the AYP data for their schools were less likely to engage in integrated practices that supported specific areas of need as indicated by analysis of the PSSA data. These teachers were more likely to engage in basic content linkage, and the learning may not have been robust, as described by Ms. Schafer (Mohnsen, 2011). Teachers who had a basic awareness of AYP measures, but felt excluded from classroom teachers' analysis of data were still willing to integrate in an effort to be helpful. Despite being willing to assist through integration, these teachers reported lacking self-efficacy in their understanding of the most appropriate content to integrate or the best way to present the external content within their AMPE lessons (Russell & Zembylas, 2007). This phenomenon was particularly evident at the Evergreen Farms and Cochran Mills sites. Teachers who expressed feeling obligated to help classroom teachers raise scores were less concerned with the merit of the integration and more likely to engage in subservient integration practices (Bresler, 1995; Russell & Zembylas, 2007).

Teachers who engage in integrated teaching practices because they believe in the merit of integrated teaching as being beneficial to student learning tended to have at least a basic understanding of the broader elementary curriculum. These teachers were able to establish co-equal learning opportunities based on areas of need as indicated through data analysis. Because

their self-efficacy was high, they were comfortable selecting content to integrate and were more confident in their integrated teaching practices (Bresler, 1995; Russell & Zembylas, 2007).

The AMPE teachers at Evergreen Farms and Cochran Mills were amiable to integration when they considered the curricular connection to be worthwhile. The teachers at these two schools experienced greater exclusion and cited more pressing concerns within their perceived roles and practice like childhood obesity and teaching cultural awareness. The AMPE teachers at Cochran Mills and Jackson Falls perceived their professional development opportunities to be irrelevant and were lacking in depth of understanding as a result of the professional development they had experienced, which was designed to address classroom teacher practice. The Evergreen Farms and Cochran Mills AMPE teachers have been unable to translate or adapt this professional development to meet the needs of their teaching practice.

The teachers at Jackson Falls were aware of their school's AYP status, and have been invited into and engaged with the school-wide solution to increasing student achievement. Their ongoing professional development has advanced their perceived role and value, and they have been offered validation and support for their efforts (Barry, 2008). Their professional development has been relevant to their content areas; Ms. Conway described her emerging understanding of ways professional development designed for the classroom teacher might be converted and customized for use by AMPE teachers.

Limited occasions for collaboration and traditional "core" content-oriented elementary schedules were themes related to time that emerged as barriers to integrated practice. At all three sites, the AMPE teachers provide the classrooms teacher's preparation periods; this limits time for collaboration among all teachers as indicated in the literature (Krueger, 2000; Reeves, Emerick & Hirsch, 2006; Russell & Zembylas, 2007; Smilan & Miraglia, 2009). All three sites

also offered common planning time to their classroom teachers at each grade level, however AMPE teachers are excluded from this time.

Despite a lack of formal co-planning time, the physical layout promoted some collegiality at Evergreen Farms; a stable teaching force and inviting group spaces in each wing encourages some informal collaboration. A faded history of thematic integration related to collaboration also serves to remind Evergreen Farms teachers of the value of teamwork and provides a basis for sustainable cooperation. The opposite was observed to be apparent at Cochran Mills; AMPE teachers have no time at all to meet with the classroom teachers and their constant travel between two buildings further hindered their ability to engage in any collaboration with classroom teachers (Barry, 2008). As a result these teachers were more likely to engage with other AMPE teachers to plan social integration programs. Ms. Finch reported using social integration to both showcase and advocate for music education (Bresler, 1995). At Jackson Falls, time is more of an obstacle than a barrier. Classrooms without doors and a close-knit teaching staff increases art, music and physical education teachers' perceptions of greater inclusion and permits more frequent informal collaboration to occur despite AMPE teacher travel and a lack of formalized common planning time. Discussions are in progress to create collaboration time for all classroom teachers and AMPE teachers.

8.1.3 21st Century Skills

Q3: How has art, music and physical education teacher practice been influenced by the introduction of 21st century skills like collaboration, communication, creativity, critical thinking?

All participants in this study indicated that the current priorities of education are testing, reading and mathematics. The respondents are conversant in the language of 21st century skills. The teacher participants were passionate as they expressed their concern that students' creativity and critical thinking skills are declining as a result of increased focus on testing. This apprehension articulated by the teachers is consistent with the literature (Wagner, 2010; Robinson, 2006). AMPE teachers explained that their classes are fundamental to the development of learners who will support the United States' ability to remain prosperous within a global context. Some teachers described observations of students' decreased ability to cooperate with one another and communicate effectively and confidently for the purposes of collaboration.

The principals at all three sites reported that art, music and physical education are closely affiliated with 21st century skills. Ms. Schafer believes the arts and physical education provide students who might not be academically inclined an opportunity to experience success in another area. Mr. Hannon offered a broader belief that students' motivation is tied to their success in the AMPE, and suggested that this drive should be examined by classroom teachers, for the purpose of replicating more engaging classroom lessons that elicit similar intrinsic motivation for "core" content learning. As Wagner (2012) suggests, this motivation stems from passion; passion drives the quest for expertise and expertise nurtures innovation. Mr. Hannon described how students practice foul shots or trumpet out of the tenacity and intrinsic motivation that result from interest and become passion. He believes that educators should communicate across the curriculum and examine this phenomenon to heighten more dynamic student learning.

The selected AMPE teachers perceive their content areas as natural platforms for teaching 21st century skills. Beyond identification this natural connection, innovative 21st century teaching practices in AMPE occurred when teachers were provided with exposure to a register of

21st century skills via professional development, as seen at Cochran Mills and Jackson Falls. Teachers at Cochran Mills were as likely to engage in 21st century integrated lessons as they were to integrate reading and math. Some lessons described by teachers at Cochran Mills revealed integration of both academic and 21st century skills. At Jackson Falls, AMPE teachers frequently described concurrent and coequal integration of science, social studies, reading or math with 21st century skills and AMPE (Bresler, 1995). Teachers at Evergreen Farms described various lessons they teach that involve 21st century skills, however it was apparent that the teachers have had little exposure or professional development in this arena. Teachers at Evergreen Farms reported great concern with students' ability to apply creativity, collaboration, communication and critical thinking skills, however they were observed to be uncertain as to how these competencies might further their teaching practice.

At Jackson Falls and Cochran Mills, teachers utilize integration of 21st century skills to demonstrate meaningful student learning which they then showcase in the form of social integration for the purpose of AMPE advocacy. This clever advocacy was evident in the proud demeanor and vibrant accounts of teacher participants as they shared the details of their student-led art classes, student-created obstacle courses and student-developed mock Olympic performance as applications of 21st century learning.



Figure 12. The Roots and Fruit of Interdisciplinary Learning

Figure 11 represents the integrated 21st century learning experiences that were described by participants across the sites. The olive tree is traditionally recognized as the symbol for Athena, the ancient mythological Greek goddess of many disciplines, including: wisdom, industry, arts and crafts, architecture, strategy, mathematics, reason, intelligence and literature. The attributes of Athena span many fields of knowledge. In this painting, the olive tree represents student learning as influenced by interdisciplinary pedagogy. The imagery rooted beneath the tree reflects the significant inquiry-based, thematic, intrinsically motivating, interest-oriented learning experiences described by participants across sites within this research as the foundation for interdisciplinary learning.

8.2 RECOMMENDATIONS FOR FUTURE STUDY

This research holds potential for many future studies; in this section I highlight several of these options. One recommendation would be to examine a similar line of inquiry more comprehensively from the perspective of the classroom teacher. A study that examines the attitudes, beliefs and prevailing themes related to integration from several classroom teachers' perspectives would add another dimension to this research.

Another recommendation would be to develop a study that addresses the limitations associated with the multiple case study research design. A mixed methods approach to the examination of the framework for integrated practice suggested in this study with a broader population might provide different types of comprehensive qualitative and quantitative data and findings. These findings could be obtained through a different research design that quantitatively

evaluates the integration framework proposed in my study in relation to measurable school improvement.

Another possible longer term qualitative study might be based on the formal training and professional expectations of student teachers in art, music and physical education content areas who go on to teach in elementary schools. Their undergraduate training and expectations could then be compared to what they experience as new teachers in a complex, high accountability public education system.

Finally, it would be interesting to consider how a comprehensive school-wide framework for 21st century integration might benefit content area literacy and college preparation at the secondary level. I would suggest a study that aims to understand what skills will be required of students both in higher education and within the workforce, how their learning can connect across non-tested disciplines and “core” classes. Content area literacy might be examined as a means of enhancing interdisciplinary teaching practice at the high school level.

8.3 RECOMMENDATIONS: TEACH BEYOND THE TEST

This multiple case study examined the attitudes, perspectives and beliefs of elementary school art, music and physical education teachers within three different elementary school contexts. This research revealed various perspectives associated with art, music and physical education teachers’ roles, integrated teaching practices and the influence of 21st century skills. In obtaining a detailed understanding of the perspectives of selected art, music and physical education

teachers, I have learned how the factors associated with context and integration influence selected teachers' practice.

As revealed through this research from the perspectives of AMPE teachers in selected schools, the school level response to educational accountability often results in an emphasis on teaching reading and mathematics at the expense of art, music and physical education. Teachers offered that this tendency to prioritize reading and mathematics devalues AMPE and disregards the potential to convey “core” content or 21st century skills through AMPE. The themes that emerged from this research suggest that integrated teaching practice and advocacy are commonly intertwined in the experiences and beliefs of AMPE teachers. The conclusions of this research identify how the problems of school accountability, stifled student creativity and the devaluing of AMPE might be addressed through integrated teaching practice as an approach to credible advocacy that tangibly demonstrates the value of AMPE. This research reveals that capacity and interest in integration exists in the selected schools; the expectation for integration simply needs to become a priority. Once a foundation for integration is established, interdisciplinary practices can grow and many curricular connections might be explored. This foundation is largely dependent on leadership that not only tolerates integrated teaching practice, but rather understands and encourages this approach to teaching.

8.3.1 School Accountability and the Devaluing of AMPE

School accountability, supported by increased access to a variety of student achievement data, now permeates public education. This claim was validated within the contexts of the three sites examined in this study. Declining fiscal resources in Pennsylvania are a concern as public

schools struggle to increase student achievement with less funding. Budget reductions generally result in larger classes, fewer teachers, and minimization or elimination of those programs deemed non-essential (Della Pietra, 2010; Krueger, 2000). Art, music and physical education fall into this category. This was evident in the three sites explored in this research. Most students have art, music and physical education class once a week; many AMPE teachers travel and have heavy workloads (Barry, 2008; Smilan & Miraglia, 2009). They are often the last priority in scheduling. Both the review of the literature and this research indicate that AMPE are important elements in students' development, yet these content areas are at the greatest risk for extinction with the mounting emphasis on ensuring that students obtain proficiency in reading and mathematics (Graham et al., 2002; Dewey, 1934; Robinson, 2006).

This study sheds light on the chasm that exists between much of the scholarly literature in arts education and the actual practice and experiences shared by the selected elementary public school AMPE teachers. This gap between theory and practice is revealed through the vivid realities described by many of the participants in this study: feeling they serve to provide classroom teachers' preparation periods, being utilized to provide small-group instruction in reading and mathematics, traveling between schools, often feeling forgotten on in-service days, losing a specially designed music classroom, or having students in weekly AMPE classes pulled out for extra help in reading. These types of experiences carry connotations that contribute to the devaluing of AMPE in schools despite the good efforts of those who contend that art and music should remain in schools for art's sake.

8.3.2 Challenges to Teacher Advocacy

In coming to understand the relationship between educational accountability and the perceived value and practice of the selected art, music and physical education teachers, content area advocacy materialized as a related theme. Mr. Wallace expressed a passive approach to music advocacy influenced by concern with job security. At Cochran Mills, Ms. Finch explained that she frequently showcases music via social integration so that teachers and administrators can identify the educational value of her music program. However, her attempt to educate her administration about the importance of music for teaching reading skills was disregarded. At Jackson Falls, where job security was also a concern, Ms. Conway and Mr. Graves coequally integrate within their teaching to demonstrate that art and music are both important and authentically woven into the elementary school curriculum.

Ms. Conway, Mr. Graves and Ms. Finch's demeanor, beliefs, and experiences suggest that AMPE teachers' content area pride, specialized skills and knowledge might be productively channeled to initiate a pedagogy that preserves the integrity of these content areas, while deliberately confronting the urgent demands of AYP and authentically elevating the role of the AMPE teacher. This is an approach to advocacy that demonstrates how AMPE can be valuable to the overall success of the school to those school leaders, administrators and policy makers who may lack this understanding. As specialists, the AMPE teachers possess subject specific knowledge they can utilize within integrated teaching practices, as well as to educate those who have an immediate influence on educational decisions.

A question that emerged from this study is what might be done to counter the marginalization of AMPE in public schools before these content areas are irrevocably neglected.

In order to establish and maintain a meaningful position within the framework of an elementary school, AMPE teachers will need to better understand and respond to educational accountability through their integrated practice. This is not only important for job preservation, but for AMPE preservation with the eventual aim being AMPE securing a curricular position commensurate with the “core” content areas. This requires a delicate balance between diplomacy and advocacy, as discussed by Mr. Wallace and demonstrated by the teachers at Jackson Falls (Davis, 2008).

Although there is no scientific evidence that the arts increase student achievement (Eisner, 1998), we do know that active learning in and through art, music and physical education promote discipline and deep understanding that benefit student learning (Burton et al., 1999; Hetland et al., 2007; Marlett & Gordon, 2004). In order for AMPE to survive it must first be elevated to a platform that is equally regarded alongside “core” content areas. While teachers at all three sites described sophisticated examples of integration that are present within their practice, classroom teachers and principals were often either unaware or unconvinced of the evidence and value of integrated teaching practice in AMPE. A generally accepted understanding of the benefits of AMPE to student learning for non-AMPE educators and school leaders will be important to establishing this equity among content areas. This research reveals that teacher advocacy in this regard can sometimes be perceived as protest; job security in relation to advocacy emerged as a prominent theme. Currently, in Evergreen Farms and Cochran Mills, the AMPE teachers assume a lesser role than the classroom teachers. Jackson Falls AMPE teachers are making strides in their positive advocacy approach by identifying themselves as teacher leaders who have equal worth in comparison to their classroom teacher peers.

In considering both the review of the literature as well as this research implication that both advocacy and accountability can influence approaches to integration, perhaps arts education

might learn from integrated practice in physical education, which the literature indicates is more universal and open to assimilation and less concerned with unwavering curricular integrity (Christie, 2000; Rikard, 2008; Russell & Zemblyas, 2007). Ms. Conway demonstrated how this can be achieved in her visual arts class without compromising the integrity of her content area; covering less with greater depth in her art class, but immersing students in higher order learning experiences as they developed first person narratives alongside the creation of original mixed-media puppets. Additionally, Ms. Conway, Mr. Graves and Ms. Finch revealed that they often advocate for their content areas by demonstrating how carefully crafted lessons in AMPE relate to other content areas. The tangible and observable learning that occurs in their classrooms becomes a testament to this approach in both pedagogy and content area advocacy.

8.3.3 Integrated Practice and School Accountability

As evident in this research, characteristics of the AMPE teacher role and integrated teaching practice are mutually dependent. Before meaningful contributions to student learning can be made school-wide through integration in art, music and physical education, these content areas must first become indispensable elements of school-wide success, which is currently being identified through AYP measurement. As seen within the cases presented in this research there are many approaches and rationale for AMPE integration: social, coequal, subservient, for support, for survival, or to promote dynamic student learning.

All AMPE teachers who participated in this research agree that art, music and physical education are important. They are proud supporters of their content areas. However, in this context of heightened educational accountability, arts for art's sake proponents are losing ground

by simply making the case that art should remain in schools solely because of the inherent value of the arts, and not for the purpose of increasing test scores as educational accountability requirements continue to loom over school leaders. Participants in this study confirmed that testing in reading and math, and educational decisions made to support increased student achievement on these tests now take priority. Continual failure to meet AYP will result in decreased funding, school choice options for students, and eventual school restructuring. Instructional decisions are made at the selected schools in response to school accountability requirements. This research suggests that integrated teaching practice in AMPE is a pragmatic response to the aforementioned reality of public education. Maintaining local control of their school is important to the teachers and principal at Jackson Falls, and they are open to possibilities in an effort to preserve their institution. Jackson Falls educators understand school accountability at the local level and the art, music and physical education teachers are deliberately and purposefully engaged in practical school-wide integration tailored to the context and needs of the school.

Integrated teaching practices in AMPE can equip students with content area vocabulary, broaden their repertoire of skills, and offer a frame of reference to be used in order to synthesize knowledge across the disciplines. As revealed in the literature and suggested by Mr. Hamilton and Ms. Schafer, instruction that spans the disciplines provides memorable, connected learning experiences to students (Mathison & Freeman, 1998). Subsequently, relevant and interactive lessons in AMPE that evoke the senses and contain meaning for students may increase the longevity of their learning and reinforce the application of 21st century skills (Stevenson & Deasy, 2005).

8.3.4 Creativity is Essential

Bronson and Merriman (2010) describe the decline of creativity in United States' students over the last two decades as measured by psychologist Paul Torrence. Bronson and Merriman suggest that divergent and convergent reasoning are necessary to produce and synthesize original ideas. The preoccupation with testing as observed in this research may be an important factor in the decline of creativity (Robinson, 2006). Wagner (2012) advances that despite the growing global need for more creative innovators, these creative thinkers require substantial expertise within disciplines in order to seize the opportunities to invent new ideas. This expertise is sparked by talent, interest and passion. In a public education system comprised of schools that currently limit exposure to AMPE, this passion will remain untapped and consequently innovators will cease to emerge from our nation (Wagner, 2012).

Art, music and physical education are essential components to both our national and global civilizations. Mr. Graves described the importance of art, music and physical education, as he explained what he believes might happen if mankind had to start over in reconstructing our societal existence. He offered that art, music and athleticism would be among the first skills that humans would incorporate to reconstruct civilization and society. Someone would hum, and that hum would turn into a melody. Pictorial representation would emerge as a means of communication as it did in the caves of Lascaux, France. Athleticism would evolve from the intrinsic human desire to survive which would eventually lead to competition. The wealth of knowledge and expertise associated with the art, music and athletics has taken thousands of years to develop, however this progress can quickly be erased from our cultures if we do not preserve these spaces for student learning within our schools. With minimal exposure to art, music and

physical education by highly qualified teachers in schools, it is likely that Olympic records will remain stagnant, and that the masterpieces and symphonies that might have composed by our children will never be created.

8.3.5 Recommendations for School Leaders

School leaders and principals can offer support to increase the value of AMPE in their buildings, as demonstrated by Mr. Hannon at Jackson Falls. Mr. Hannon helped to elevate the role of his AMPE teachers by engaging in professional learning with content area relevance alongside his AMPE and “core” content area teachers. He described listening to the concerns of his AMPE teachers regarding their lack of common planning time and how his subsequent ideas emerged developing a schedule that provides collaboration time for all teachers to more fully include his AMPE teacher in school efforts.

This research suggests that principals can support AMPE integration and teacher collaboration (Strand, 2006) in their schools by considering alternate approaches to providing classroom teachers’ preparation periods within their master schedules. Additionally, by stating clear expectations for integration, as well as training and visibly involving AMPE teachers in concerted school-wide improvement efforts, principals can assist in neutralizing perceptions that are similar to the belief expressed by the classroom teacher, Mr. Hamilton that specialist teachers may not be taking on their share of the collective workload.

Ms. Scott shared her positive experiences with co-teaching alongside the classroom teachers at Evergreen Farms. This approach was fleeting at Evergreen Farms and solely dependent on Ms. Scott sacrificing her preparation period. However, a co-teaching arrangement

such as this, for the purposes of co-equally merging disciplines within elementary schools is worth consideration; students would have the advantage of learning through integration with the support of both their classroom teacher and a content area specialist. The literature supports this approach as supporting curricular preservation because students are taught by a teacher who is highly qualified in both content areas being integrated (Russell & Zembylas, 2007). This co-teaching approach offers many possibilities to meaningfully integrate AMPE with “core” content areas.

Alternative elementary school schedules should also be considered in alleviating a logistical problem that stems from the low priority of AMPE (Smilan & Miraglia, 2009). Eisner (1998) offers that the amount of time students spend in a particular subject signifies the importance of that class. AMPE teachers indicated that when students rotate through a myriad of “specials” classes each week, and those classes are sometimes interrupted to provide students extra help in reading or cancelled to provide time for special programs, teachers and students experience fragmented teaching and learning, and it becomes difficult to establish continuity in student learning. Students might benefit from having at least a version of art, music and physical education class every day (Robinson, 2006).

8.3.6 Recommendations for Teachers

Mounting school accountability requires AMPE teachers to be responsive to change by adapting their practice in order to claim and maintain a meaningful position within the curricular hierarchy. The findings of this research suggest that in order to both preserve AMPE and provide students with a dynamic 21st century education within the context of school accountability, we

must consider the possibility of teaching beyond what is tested. If students can recall, navigate, apply and integrate content area knowledge learned from art, music and physical education to problem solve and analyze a variety of texts, art, music and physical education teachers have helped students to demonstrate those skills that deem them “proficient” on the test. I am not suggesting that AMPE teachers subscribe to subservient integration as a means for curricular survival. I offer that teaching beyond the test in a coequal manner, rather than teaching to the test with subservience, will satisfy these competencies required by state assessments, but also allow AMPE teachers to engage students in higher order application of “core” content area knowledge within art, music and physical education.

We currently assess students using a test that does not assess art, music, physical education, creativity or collaboration. Testing promotes individual learning at the expense of celebrating collaborative achievement (Wagner, 2012). However, standardized tests do measure students’ ability to apply basic knowledge in reading and mathematics to solve problems; students must communicate their responses and solutions and think critically at times to decipher meaning within text. These basic competencies, as well as higher order thinking abilities, can be conveyed through many of the integrated lessons described by the participants within this research.

Integrated teaching beyond the test requires some general understanding of the assessment, so that teachers understand the minimal knowledge-based standards they aim to exceed. As observed in my research, teachers at Cochran Mills and Evergreen Farms had minimal understanding of AYP, areas of school-wide need in reading and mathematics, and procedures for analyzing individual student data. Deliberate but content-relevant involvement of AMPE teachers alongside classroom teachers, as was requested by Ms. Conway, would promote

AMPE teachers' familiarity with eligible content in the "core" areas and understanding of various student data to advance purposeful integration practices achieved through collaboration.

The proposed transition to Pennsylvania Common Core Standards may provide an opening for structuring learning experiences that surpass the test. The Pennsylvania Common Core Standards (and eventual PA Common Core-aligned PSSA) advertise greater depth of knowledge, which may provide a timely opportunity for greater involvement of AMPE teachers to advance higher order application of learning across the curriculum (Riley, 2012). Ms. Conway's "less with more depth" approach to teaching art might serve as a worthy framework for establishing consistent and coequal integration of AMPE within the PA Common Core Standards.

This research considers the experiences of selected elementary art, music and physical education teachers related to their roles and perceived value in their public elementary schools. The art, music and physical education teachers revealed their experiences within their schools related to integrated teaching and the importance of the 21st century skills that are fostered in art, music and physical education. This study suggests the value of these content areas and offers that new paradigms might be considered in elementary schools to advance the role of art, music and physical education teachers and explore the untapped potential that exists for purposeful integrated learning through 21st century-oriented experiences in art, music and physical education.

8.4 VIGNETTE

Mrs. Payton is an art teacher in an elementary school that includes students in first through fifth grade in a middle class suburban town in western Pennsylvania. She has enjoyed teaching art at this school for the last four years. She arrives at work on a blustery November morning ready to begin a typical day. As she approaches the front doors of the school she admires the large-scale collaborative tile installation created by her third grade students through the large glass windows. This exhibit is comprised of hundreds of smaller tiles, each one created by individual third graders. The students design and create the tiles each year as they study symmetrical and asymmetrical shapes, balance, and color in their classes at school. Each year, Ms. Payton works with the students and third grade teachers to add a row of original tiles. This cumulative exhibit is a proud tradition in the school.

Ms. Payton walks through the main office where she checks her mail. She runs into the principal, who thanks her for her help with matting and framing integrated student artwork and corresponding artist statements for exhibit in the conference room. He also mentions that he approached a sign-painting business in town seeking support for their school-wide arts needs. The business has offered paint and other art supplies to be used as resources by all teachers throughout the school.

Ms. Payton excitedly shares the news of the donations with her third grade classroom teacher colleagues when she meets with them during their daily morning collaboration time. This collaboration time is sacred, and utilized for instructional alignment across the content areas. This daily meeting time was derived from the teachers' involvement in an ongoing professional development partnership that was intended to unify 21st century learning opportunities across the curriculum. Teachers typically use this time to co-plan integrated lessons, evaluate student data, and engage in analytical discussions regarding student artifacts. The teachers present at this meeting include the third grade reading teachers, the art teacher, the mathematics teachers, the social studies teacher, the science teacher, the learning support teacher and the reading specialist. The principal stops in to engage in this discussion and ask the teachers if they need anything to support their effort.

This semester Ms. Payton is working with the third grade team; the music and physical education teachers collaborate in the same manner with other grade levels until January, when they will change and work with different grade levels. This morning, the reading specialist is sharing some student data and indicating that a group of students who were struggling with the literary aspects of the poetry genre have improved. The social studies teacher also expresses some concern regarding the complexity of the non-fiction passages used within the social studies curriculum.

Today during her third grade co-teaching period, Ms. Payton will be working with the reading teacher; they will teach collaboratively in the art room. Students have been reading poetry, and will soon begin the process of writing their own poems. Last week, students examined the concept of metaphors, and today they will be creating their own original depictions of visual metaphors that they have identified in poetry. Students will complete this task after engaging in some collaborative discussion about surrealist art. Ms. Payton and Mr. Mason, one of the reading teachers, work together to help students identify metaphors and develop sketches for their paintings using pre-established criteria that incorporate the reading/language arts standards, visual arts standards, and certain select elements and principles of design. When the students' paintings are complete, students will complete a reflective writing piece developed during the morning teacher collaboration time.

The reading, learning support and social studies teachers are hopeful that Ms. Payton will have some ideas for how to convey the social studies concepts through the arts. Because the students are reading and learning about different types of communities in social studies, Ms. Payton offers to analyze the text and develop an essential question for overarching use in the social studies class. By analyzing the text, she hopes to determine how the possible study of landscapes, art history, local maps and architectural models might help to engage students in critical thinking as well as different ways of representing communities. She explains that she will use this analysis to guide lesson development with the third grade team. She mentions that she might like to conclude the lesson by having the students complete a writing prompt that allows them to articulate and apply what they've learned about communities. One reading teacher agrees to develop the writing component of the lesson and asks Ms. Payton to share more

detailed arts-based ideas tomorrow to increase the correlation between the two content areas before they co-teach the lesson next month.

The teachers run out of time and the meeting draws to a close, but Mr. Mason offers to stop by Ms. Payton's room during their common prep period while his students are at lunch to finish their co-planning. Ms. Payton then begins her day, teaching a range of art lessons that integrate other content areas. First grade students study Taino petroglyphs and create their own simple symbols with meanings in clay. Second grade students use monotype printmaking to develop symmetrical images.

The third grade students work on some basic sketches, establishing several possible compositions for their visual metaphor paintings. They engage in a student led critique process to articulate their ideas and to help one another select the strongest composition sketch to develop into the final work before they begin painting under the supervision of Mr. Mason and Ms. Payton during the next period. Students take turns proudly describing the cognitive and creative processes they applied to develop their metaphor pieces.

Fourth grade students begin the study of artist Louise Nevelson, while fifth grade students work on collaborative set design for the upcoming student-developed school-wide musical. Ms. Payton works closely with the music teacher and physical education teacher each year to coordinate set design, vocal music, and choreography for this production. The fifth grade language arts teachers develop the storyline and script during their co-teaching semester with the music teacher each year.

Each day is a busy whirlwind of art, integration and collaboration. At the end of this day, Ms. Payton tidies up her room and prepares for the next day. She selects two very different emerging pieces of student artwork, the visual metaphor paintings created by her third grade students. In preparation for sharing at tomorrow's morning meeting, she places copies of the criteria list, language arts and arts standards, elements and principles of design, rubric and project guidelines alongside the two pieces of student art. She will use these articles as a framework for collaborative discourse with her peers. She looks forward to engaging in a collegial discussion with the third grade team tomorrow morning as they analyze the students' art work and look for ways to deepen this learning experience for their students.

APPENDIX A

TEACHER GUIDED CONVERSATION PROTOCOL

1. What is the professional background of the teacher?
 - Background
 - Number of years teaching
 - Current position
 - Work experiences
2. How does the teacher perceive his or her professional role?
 - Formal Training
 - Experiences
 - Professional development
 - Increased educational accountability
 - Responsibility for reading and mathematics
 - Collegial relationships

*****(Present vignette to participant to read, then continue interview)***

3. What are the current demands of education?
 - Beliefs
 - Perceptions
 - Reading and mathematics focus
 - Reading and mathematics accountability
 - Changes to practice

- Changes to curriculum
 - 21st century skills
4. How does the teacher perceive overall importance of their own content area?
 - Valued
 - Devalued
 - Included
 - Excluded
 5. How does the teacher define or describe interdisciplinary teaching?
 - Bresler's Typology
 - 21st Century Skills
 6. What does an interdisciplinary lesson look like in the classroom?
 - Why an interdisciplinary approach was used
 - Interdisciplinary connection selection
 - Learning outcomes
 - Lesson design
 - Curricular integrity
 7. How does support, resources, training or professional development affect interdisciplinary teaching practice?
 - Schedule
 - Opportunities for collaboration
 - With other AMPE teachers
 - With classroom teachers
 - Professional Development
 - Sole teacher of content area
 - Formal training/background
 - Self-Efficacy
 - Principal support
 - Resources
 8. What factors promote or impede interdisciplinary teaching practice in this school?
 - Merit of integration
 - Curricular preservation
 9. How does the teacher define a 21st century skill set?

- Purpose
- Function
- Integration into AMPE
- Opportunities for lessons that feature communication, collaboration, creativity, critical thinking

APPENDIX B

PRINCIPAL GUIDED CONVERSATION PROTOCOL

1. What is the professional background of the principal?
 - Background
 - Number of years in education
 - Current position
 - Work experiences
2. How does the principal perceive the current role of the AMPE teacher?
 - Professional development
 - Increased educational accountability
 - Responsibility for reading and mathematics

*****(Present vignette to participant to read, then continue interview)***

3. What are the current demands of education?
 - Beliefs
 - Perceptions
 - Reading and mathematics focus
 - Reading and mathematics accountability
 - Changes to practice
 - Changes to curriculum
 - 21st Century Skills

4. How does the principal perceive overall importance of art, music and physical education?
 - Valued
 - Devalued
 - Included
 - Excluded
5. How does the principal define or describe interdisciplinary teaching?
 - Bresler's Typology
 - 21st Century Skills
6. What does an interdisciplinary lesson look like in the AMPE classroom?
 - Why an interdisciplinary approach was used
 - Interdisciplinary connection selection
 - Learning outcomes
 - Lesson design
 - Curricular integrity
7. How does support, resources, training or professional development affect interdisciplinary teaching practice?
 - Schedule
 - Opportunities for collaboration
 - With other AMPE teachers
 - With classroom teachers
 - Professional Development
 - Sole teacher of content area
 - Formal training/background
 - Principal support
 - Resources
8. What factors promote or impede interdisciplinary teaching practice in this school?
 - Merit of integration
 - Curricular preservation
 - Schedule
9. How does the principal define a 21st century skill set?
 - Purpose
 - Function

- Integration into AMPE
- Opportunities for lessons that feature communication, collaboration, creativity, critical thinking

APPENDIX C

SITE VISIT OBSERVATION AND INTERNAL DOCUMENT DATA COLLECTION PROCEDURES

The following elements listed below were identified through a review of the literature encompassing K-12 art, music and physical education teachers' roles in contemporary public education and integrated teaching practice that supports reading and math as well as 21st century skills (Barry, 2008; Bresler, 1995; Davis, 2008; Russell & Zembylas, 2009; Smilan & Miraglia, 2009). A closer examination of these components will be used to assist the researcher in gathering pertinent data that supports a descriptive analysis of art, music and physical education teachers' attitudes and perceptions toward an integrated curriculum, as well as their access to professional development, support and collaborative time with peers (Barry, 2008; Russell & Zembylas, 2007). Additional elements may be observed and included if data gleaned from the interviews indicates considerable importance. Data related to these components will be collected through observational field notes and internal documents when available; this data will then be analyzed and a summary will be developed that is reflective of each site.

Site Visit Observations:

- Teacher attitudes

- Articulated teacher perceptions
- Principal support /instructional leadership
- Interactions among teachers
- Interactions between building administrators and teachers
- Content area teacher expertise
- Team meetings and Professional Learning Communities
- Physical layout of school building
- Student artifacts
- Classroom and corridor bulletin boards and displays
- Teacher schedules
- Integration typology
- Resources

Internal Documents

- Professional development agendas
- In-Service day agendas
- Master Schedule
- Teacher schedules
- Lesson plans
- Professional Learning Community/ Team Meeting Documents

APPENDIX D

SITE VISIT OBSERVATIONAL FIELD NOTES GUIDE

School District Pseudonym _____	Date _____
Variable	Observations
• Teacher attitudes	
• Articulated teacher perceptions	
• Principal support /instructional leadership	
• Interactions among teachers	
• Interactions between building administrators and teachers	
• Content area teacher expertise	
• Team meetings and Professional Learning Communities	
• Physical layout of school building	
• Student artifacts	
• Classroom and corridor bulletin boards and displays	
• Teacher schedules	
• Integration typology	
• Resources	

APPENDIX E

INTERNAL DOCUMENT GUIDE

School District/School Pseudonym	Date
	Observations
<ul style="list-style-type: none">• In-Service day agendas	
<ul style="list-style-type: none">• Master Schedule	
<ul style="list-style-type: none">• Teacher schedules	
<ul style="list-style-type: none">• Lesson plans	
<ul style="list-style-type: none">• Professional Learning Community/ Team Meeting Documents	
<ul style="list-style-type: none">• Professional development agendas	

APPENDIX F

DATA COLLECTION TABLES

	Data Collection Procedures		
Research Question:	Data Gathering Activity	Data that Emerged	Planned Analysis
Q1: How are the roles of art, music and physical education teachers perceived by selected teachers and administrators within their public elementary school contexts?	Teacher Interviews Q. 1,2,3, 4, 7	<ul style="list-style-type: none"> • Anecdotal notes • Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites relative to: <ul style="list-style-type: none"> • Role perceptions, role changes • Increased Accountability • Visual representation will be developed to depict emergent themes
	Principal Interviews Q. 1, 2, 3, 4, 7	<ul style="list-style-type: none"> • Anecdotal notes • Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites <ul style="list-style-type: none"> • Role perceptions • Role changes • Increased Accountability
	Site visits/ observational field notes	<ul style="list-style-type: none"> • teacher attitudes • principal support • interactions among teachers • principal/teacher interaction • content area teacher expertise 	<ul style="list-style-type: none"> • Field note summaries were developed and used to support themes identified through participants' responses to interview questions. • Contextual details provided in field note summaries were used to support interview analysis and create rich site descriptions • Field note observations that support teachers' role perceptions and response to increased accountability were summarized

		<ul style="list-style-type: none"> • team meetings/PLC time • physical layout of school • classroom/corridor exhibits/displays 	
	Internal Documents	<ul style="list-style-type: none"> • in-service agendas • teacher schedules • lesson plans • Team/ PLC meeting agendas/ minutes 	<p>Internal documents were analyzed, summarized, and used to elaborate upon and validate participants' responses and perspectives as revealed through the interviews. Documents that provide additional information relative to role and role changes related to increased educational accountability were analyzed and interpreted.</p> <ul style="list-style-type: none"> • AMPE teacher training and professional development • Teacher roles • Evidence of educational accountability influence; emphasis on reading and mathematics

Data Collection Procedures			
Research Question	Data Gathering Activity	Data that Emerged	Planned Analysis
Q2: How do selected elementary art, music and physical education public school teachers and building administrators perceive integrated teaching within their practice?	Teacher Interviews Q. 3, 5, 6, 7, 8	<ul style="list-style-type: none"> • Anecdotal notes • Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites related to: <ul style="list-style-type: none"> • Participants' descriptions of integrated teaching practice • Participants' experiences with integrated teaching practices • Factors that promote or impede integrated teaching practices • Various integration typology styles at sites (Bresler, 1995) • Value of interdisciplinary instruction, content area integrity, and self-efficacy • Visual representation will be developed to depict emergent themes
	Principal Interviews Q. 3, 4, 5, 7, 8	<ul style="list-style-type: none"> • Anecdotal notes • Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites related to: <ul style="list-style-type: none"> • Participants' descriptions of integrated teaching practice • Participants' experiences with integrated teaching practices • Factors that promote or impede integrated teaching practices • Various integration typology styles at sites (Bresler, 1995)
	Site visits/ observational field notes	<ul style="list-style-type: none"> • teacher attitudes • principal support • interactions among teachers • principal/teacher interaction • content area teacher expertise • team meetings/PLC time • physical layout of school • classroom/corridor displays; • integration typology 	Field note summaries were used to support themes identified through participants' responses to interview questions with regard to: <ul style="list-style-type: none"> • Participants' descriptions of integrated teaching practice • Participants' experiences with integrated teaching practices • Factors that promote or impede integrated teaching practices • Contextual details provided in field note summaries will be used to support interview analysis and rich site description • Observational field notes will be analyzed to support classification of various integration typologies (Bresler, 1995)
	Internal Documents	<ul style="list-style-type: none"> • in-service agendas • professional development agendas • teacher schedules • master schedule • lesson plans 	Internal documents were analyzed, summarized and used to elaborate upon and validate participants' responses and perspectives as revealed through the interviews: <ul style="list-style-type: none"> • Participants' descriptions of integrated teaching practice • Participants' experiences with integrated teaching practices • Factors that promote or impede integrated teaching practices • AMPE teacher Professional Development

		<ul style="list-style-type: none"> • Team/PLC meeting agendas/minutes 	<ul style="list-style-type: none"> • Time allotted for teacher collaboration • Support for AMPE teacher integrated practice • Identification and analysis of Integration Typology at sites (Bresler, 1995) • Contextual details provided in field note summaries will be used to support interview analysis and create rich site descriptions
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		Data Collection Procedures	
Research Question:	Data Gathering Activity	Data that Emerged	Planned Analysis
Q3: How has art, music and physical education teacher practice been influenced by the introduction of 21st century skills like collaboration, communication, creativity, critical thinking?	Teacher Interviews Q. 3, 6, 8, 9	<ul style="list-style-type: none"> Anecdotal notes Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites: <ul style="list-style-type: none"> Perceived current demands of education Approaches to teaching 21st century skills Factors that promote or impede AMPE teacher practice that integrates 21st century skills Visual representation developed to depict emergent themes
	Principal Interviews Q. 3, 6, 8, 9	<ul style="list-style-type: none"> Anecdotal notes Audio-recordings of interviews 	Pre-coding; coding to determine themes within sites; divergent and common themes identified across sites: <ul style="list-style-type: none"> Perceived current demands of education Approaches to teaching 21st century skills Factors that promote or impede AMPE teacher practice that integrates 21st century skills
	Site Visits	Observational field notes: <ul style="list-style-type: none"> Content area teacher expertise Team meetings/PLC time classroom/corridor exhibits/displays resources/technology 	<ul style="list-style-type: none"> Field note summaries will be used to support divergent and common themes identified through participants' responses to interview questions. Contextual details provided in field note summaries will be used to support interview analysis and to create rich site descriptions Approaches to teaching 21st century skills Factors that promote or impede AMPE teacher practice that integrates 21st century skills
	Internal Documents	<ul style="list-style-type: none"> Professional development agendas In-service agendas Lesson plans Team /PLC meeting agendas/minutes 	Internal documents were analyzed and used to validate participants' responses and perspectives as revealed through the personal interviews: <ul style="list-style-type: none"> Perceived current demands of education Approaches to teaching 21st century skills Factors that promote or impede AMPE teacher practice that integrates 21st century skills

APPENDIX G

DATA ANALYSIS TABLES

	<i>Findings in Response to Research Question 1:</i>				
	<i>Q1: How are the roles of art, music and physical education teachers perceived by selected teachers and administrators within their public elementary school contexts?</i>				
	Data Source	Findings/ Evergreen Farms	Findings/ Cochran Mills	Findings/ Jackson Falls	Theme Across Sites
Perceived Role	<ul style="list-style-type: none"> -Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations 	<ul style="list-style-type: none"> -Accept place on the “totem pole” -Serve to provide teachers’ preps -Proud of content areas -Experience some exclusion -Concerns about job security -Some passive advocacy -AMPE teach reading and math groups -Lack of time -Supportive principal 	<ul style="list-style-type: none"> -Feel they are teachers’ prep -Proud of content areas -Experience exclusion from school-wide efforts -Experience isolation -Constant travel -No time to meet -Supportive principal 	<ul style="list-style-type: none"> -Teach during teachers’ preps -Feel included -Pride in content areas -Constant travel -Experience high expectations for practice -Concerns about job security -Cautious advocates -Highly supportive principal 	<ul style="list-style-type: none"> -Concerned with subordination when perceived -Pride in content areas -Teacher travel -Experience inclusion/exclusion in relation to awareness of school initiatives -Principal support influences role perception
Role Changes	<ul style="list-style-type: none"> -Teacher Interviews -Principal Interviews 	<ul style="list-style-type: none"> -Job security -Some testing pressure -Not what AMPE teachers were trained to teach -Working to foster students’ 21st century skills 	<ul style="list-style-type: none"> -Content area existence/ preservation -More removed from testing pressure 	<ul style="list-style-type: none"> -Job security -Testing pressure -Teacher leaders of integrated content -Focus on 21st century skills 	<ul style="list-style-type: none"> -Content area preservation/job security -Role affected by perceived testing pressure

Accountability	<ul style="list-style-type: none"> -Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations 	<ul style="list-style-type: none"> -School focus on flex groups/data analysis -Willing to integrate to support the needs of school -Limited awareness of AYP/student data analysis -Expected to teach small groups in reading/math -Classroom teacher feels AMPE should support reading/math instruction 	<ul style="list-style-type: none"> -School foci on RtI/curriculum mapping -Willing to help support the classroom teachers efforts' -Limited awareness of AYP/student data analysis 	<ul style="list-style-type: none"> -School foci on differentiated instruction/curricular integration -Eager to integrate to support school-wide progress -Awareness of AYP/interest in analyzing student data for AMPE integration 	<ul style="list-style-type: none"> -Focus on data-informed differentiated instruction -Different levels of concern/awareness related to school accountability measures -Comfort levels with data analysis range from total unawareness to emergent
Value	<ul style="list-style-type: none"> -Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents 	<ul style="list-style-type: none"> -Proud of AMPE content areas -Feel devalued by peers -Classroom teacher devalues AMPE because of perceived workload 	<ul style="list-style-type: none"> -Social integration to showcase AMPE content areas -Loss of music classroom -Experience exclusion 	<ul style="list-style-type: none"> -Feel valued -Feel included in school-wide efforts 	<ul style="list-style-type: none"> -Value relates to inclusion/exclusion
Professional Development	<ul style="list-style-type: none"> -Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents 	<ul style="list-style-type: none"> -PD is generally irrelevant to AMPE -Teachers feel devalued and excluded in PD 	<ul style="list-style-type: none"> -PD is generally irrelevant to AMPE -Teachers find value in PD offered that supports 21st century teaching 	<ul style="list-style-type: none"> -PD is becoming more relevant to AMPE -Ongoing Steeltown STEAM grant/Arts Bridge support collaboration 	<ul style="list-style-type: none"> -PD relevance relates to inclusion/exclusion and perceived value

	<i>Findings in Response to Research Question 2:</i>				
	<i>Q2: How do selected elementary art, music and physical education public school teachers and building administrators perceive integrated teaching within their practice?</i>				
	Data Source	Findings Evergreen Farms	Findings Cochran Mills	Findings Jackson Falls	Common Theme Across Sites
Integration Typology	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Some subservient examples -Some co-equal examples	-Mostly co-equal examples -Social integration prevalent as means of advocacy	-Mostly co-equal examples -School-wide arts based social integration traditions	-Integration exists in different forms for different purposes -Most integration is co-equal -Integration as content area advocacy
Integrated Teaching Practice	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Integration appreciated; not mandated -Co-teaching experience in art -Willing to integrate -Past history of integration -Not always certain of best ways to integrate -Self-efficacy is a concern -Curricular integrity is a Concern -Merit is a concern in music and art -Past grievance stifled integration momentum	-Some integration expected -Teachers willing to integrate -Integration occurs in isolation -Integration by experimentation -Basic content linkage is not always rich -Merit of integration is a concern in P.E.	-Teachers passionate about integration -Teachers expected to integrate -Prevalence of integration in AMPE -Teachers identify and teach merited integrated lessons that preserved curricular integrity	-All teachers willing to integrate; all have some experience with integration -Range of beliefs regarding merit and curricular integrity -Varying levels of expectation and expertise with regard to integration -Varying levels of intensity in integrated practice -Awareness of accountability affects integration
Resources	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Lack of collaboration time -Reading series does not lend itself to integration -Ample space and exclusive use AMPE classrooms	-No common time with Cochran Mills classroom teachers -Schedule constraints -Small, shared gymnasium is a barrier -Large, inconsistent P.E.classes -Lack of time is a barrier	-Lack of common time is a concern -Schedule constraints -Mixed use gym/cafeteria; flexible PE teacher	-Lack of collaboration time and schedule constraints are concerns -Relationship between classroom space and teacher practices
Support	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents	-Supportive principal -Principal is focused on flex group initiative	-Supportive principal -Principal expresses interest in examining AMPE through curriculum mapping	-Highly engaged -Promotes integration	-Principals range from supportive and respectful to engaged; principal support affects frequency and saturation of integration

Training	-Teacher Interviews -Principal Interviews -Internal Documents	-No training for integration provided -Co-taught art experiences initiated by teacher	-Integrated teacher training is not offered	-Ongoing training to support integration among all teachers -Book study/John Barell	-Amount and extent of training provided relates to prevalence of integrated teaching practice
Peer Collaboration	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Open spaces promote collegiality -Lack of time is a barrier -Collaboration increases self-efficacy	-Lack of time, -Crowded facility; isolated classrooms - Hurried atmosphere increases isolation	-Door-less classrooms and workforce stability foster collaboration -Lack of time is inconvenient but circumvented -Collaboration increases self-efficacy	-Time allotted and physical space influence collegiality and collaborative work -Collaboration assists with AMPE self-efficacy

	<i>Findings in Response to Research Question 3:</i>				
	<i>Q3: How has art, music and physical education teacher practice been influenced by the introduction of 21st century skills like collaboration, communication, creativity, critical thinking?</i>				
	Data Source	Findings Evergreen Farms	Findings Cochran Mills	Findings Jackson Falls	Common Theme Across Sites
Demands of Education	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents	-U.S. falling behind -emphasis on testing in reading and math	-US falling behind -emphasis on testing/reading and math	-Necessary for U.S. to remain competitive -emphasis on testing	-Important skills for U.S. success in global market -Public education is in jeopardy in the U.S. -Emphasis on testing
21st Century Skills Integration	-Teacher Interviews -Principal Interviews -Observational Field Notes	-Natural fit to AMPE -Limited support/PD related to 21 st century skills.	-Natural fit within AMPE -Moodle PD supports teacher familiarity with 21 st century lessons -Time is a concern when planning these types of learning experiences	-Natural fit in AMPE is platform for co-equal integration -Inquiry-based learning across curriculum -Ongoing PD fosters deep learning through 21 st century oriented lessons -Principal's validation encourages teachers	-Natural connections with AMPE content areas -Teachers merge content area integration with 21 st century skills -PD supports integration and implementation
Importance	-Teacher Interviews -Principal Interviews -Observational Field Notes	-Teachers notice creativity is stifled in students	-Important for students to learn 21st century skills through AMPE	-Essential to producing students who are innovators -Principal discusses Friedman (2007)	-Extremely important to AMPE practice
Relevance	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Teachers provided accounts of 21 st century relevant lessons	-Teachers endeavor to incorporate 21 st century skills into teaching	-Teachers lessons are designed around 21 st century learning experiences -Students' interest; passion; motivation; innovation	-21 st century skills are frequently and naturally incorporated into AMPE to varying extents across sites -Students' interest; passion; motivation; eventual innovation through AMPE
Examples in Practice	-Teacher Interviews -Principal Interviews -Observational Field Notes -Internal Documents -Classroom Observations	-Large-scale collaborative sculpture -Critical thinking important in music -Communication/ Collaboration in P.E.	-Collaborative/ creative obstacle course -Inquiry in music/science -Forced technology integration is a barrier for art	-Book Study (Barell, 2008) -Student –led art classes; creative risk-taking -Movement integrated into music -Ballroom dance program being developed; communication and etiquette	-Various rich and/or relevant examples of 21 st century lessons observed across cases

APPENDIX H

LETTER OF INVITATION TO TEACHERS AND BUILDING PRINCIPALS OF SELECT WESTERN PENNSYLVANIA SCHOOL DISTRICTS TO PARTICIPATE IN RESEARCH STUDY

Dear Educator,

I am a doctoral candidate at the University of Pittsburgh. My dissertation examines the perceptions and attitudes of elementary art music and physical education teachers surrounding their current roles and experiences with interdisciplinary teaching in an era of increased educational accountability. The purpose of this research study is to better understand how elementary art, music and physical education teachers perceive their current roles as teachers in elementary schools and to identify the factors that promote or inhibit 21st century, interdisciplinary teaching practice.

The results of my study will be used to assist school principals, school administrators, and teacher leaders in better utilizing the content area expertise of elementary art, music and physical education teachers in an era of increased educational accountability in reading and math.

Your district has given consent to permit your elementary school to participate as one of three western Pennsylvania elementary schools in three different school districts being included in this study. You play an important role in supporting and providing art, music and/or physical education in your school. Your willingness to participate in an interview in order to share your experiences and perceptions with regard to your professional role will provide the valuable

information necessary for this study. There are no foreseeable risks or direct benefits to you should you choose to participate in this study.

Your consent to participate as an interview participant will include your participation in a personal interview with the researcher during a time that is convenient for you. The interview should take about half an hour. The interview will be recorded, and will be transcribed. All information that you offer during the interview will be regarded as confidential and will be maintained in a secure location throughout the data collection stage of the research. If necessary, you may be contacted for follow-up questions. All identities of participants in the study will remain confidential in the written report of the research.

Your participation in this study is voluntary; you may also withdraw from this project at any time. Some internal documents relative to your professional work associated with this study may be requested. If you elect to participate in this study, I will personally contact you to schedule a convenient time to visit your building and interview you. You will not receive payment for your participation in this study. Following the completion of this study, all results will be shared with you. Please do not hesitate to contact me should you have any questions regarding my research.

Thank you,

Ashley Coudriet
ajc145@pitt.edu

APPENDIX I

CONSENT SCRIPT

Thank you for your voluntary participation in this study. This research examines the perceptions and attitudes of elementary art music and physical education teachers surrounding their current roles and experiences with interdisciplinary teaching in an era of increased educational accountability. The purpose of this research study is to better understand how elementary art, music and physical education teachers perceive their current roles as teachers in elementary schools and to identify how various factors affect 21st century, interdisciplinary teaching practice.

Your school district has given consent to permit your elementary school to participate as one of three elementary schools in three different school districts being included in this study. Your voluntary participation in this interview and your willingness to share your experiences and perceptions with regard to your professional role will provide the valuable information necessary for this study. There are no foreseeable risks or direct benefits to you should you choose to participate in this study. This interview should take between thirty and forty-five minutes. The interview will be audio recorded by the researcher, and will be transcribed. If necessary, you may be contacted by the researcher for follow-up questions. All information that you offer during the

interview will be regarded as confidential and will be maintained in a secure location throughout the data collection stage of the research. At the conclusion of the research, all transcripts will be destroyed. All identities of participants in the study will remain confidential in the written report of the research. Real names will be replaced with pseudonyms to protect participants' identities. Your participation in this study is voluntary; you may also withdraw from this project at any time. This study is being conducted by Ashley Coudriet, who may be reached at ajc145@pitt.edu with any questions.

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