A PHENOMENOLOGICAL STUDY OF MIDDLE SCHOOL TEACHERS' EXPERIENCES WITH CROSS-CURRICULAR LEARNING

by

Emily R Holloway

Liberty University

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APPROVED BY:

Christine Saba, Ed.D., Committee Chair

Rachel Hernandez, Ed.D., Committee Member

Abstract

The purpose of this phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. The theory that guided this study was the experiential learning theory, which supports active teaching and learning through experiences, not lectures of independent content, allowing experiences to build on previous knowledge. The study discusses the perspectives of 12 middle school teachers in rural, central-western Virginia who teach one of the main academic core contents of reading, math, science, or social studies. The central research question asked, what are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming? The perceptions of teachers were shared through in-depth interviews of the participants, focus group participation, and observations of participants in their classrooms. The data gathered was analyzed with van Manen's phenomenological hermeneutics through discovering themes shared about the perception and importance of teaming with cross-curricular content for personal and academic connections. The themes emerged from the study as relationships, cross-curricular learning, and autonomy; the participants who participated shared 100% satisfaction in teaming and the benefits for them personally and for students.

Keywords: cross-curricular, teaming, academic engagement, relationships, autonomy

Copyright Page

Dedication

I dedicate this dissertation to God, my creator, for the ability to seek life daily and for the faith to back my decisions. To my parents, who have supported me from birth and pushed me to continue learning. I know that my desire to push beyond what I think is possible is credited to my parents who never let me give up on anything. To my husband and daughter, for the love and understanding for the time and energy the process of my doctorate took. I realize I appeared distant and absent during many activities due to the time I spent in research and processing. To my middle school students who motivate me daily and inspire me, without you in my life I would not have the passion for making school better. Many people are quick to respond that middle school students are difficult and awkward, but I love middle school and the opportunities it brings to the lifelong learning process of students. To Delanee, may you continue to see that great things take time and perseverance; may you never give up on your dreams and know that anything is truly possible, with hard work, dedication, a true sense of trust in the Lord!

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List of Abbreviations

Community of Practice (CoP)

Elementary and Secondary Education Act (ESEA)

No Child Left Behind (NCLB)

Project Based Learning (PBL)

Socioeconomic Status (SES)

CHAPTER ONE: INTRODUCTION

Overview

What creates a lifelong learner? What separates those who are driven to go beyond and those who achieve surface-level success? Over the past decades, the value and importance of education has declined. Students are not motivated to continue the learning process and struggle to see the relevance in academics. Everyone has their individual beliefs about education and its importance. Among K-12 educators, the struggle has become real for everyone involved. For middle school students, the application and relevance of learning is not going beyond the classroom walls. Students are exposed to academics during a traditional schedule of teaching, without the interdisciplinary application and demonstration of relevance. Chapter one includes background information on cross-curricular content-based and hands-on learning. The historical, social, and theoretical concepts on public education are shared to introduce and provide background for the study. This chapter includes the significance of the study and my interest in the topic as a middle school principal who wants to see students engaged and enjoying the learning process while teachers are active in the delivery. The problem and purpose of the study are revealed in this chapter and its significance.

Background

The world is constantly changing. Public school systems have the greater challenge of preparing students to live in a world they are not familiar with yet. This preparation begins in the classroom and stretches beyond the four walls of the classroom to encourage and seek an interest in learning and engagement. Motivation and interest in learning has declined over the years in public K-12 school settings (Neugebauer & Heineke, 2020). Teachers and educators see this as a challenge to find a new and improved concept for reaching and teaching students. As an

educator, the range of abilities and interest of academics is larger than ever with more disengaged students sitting in the classrooms. When asked what is wrong with school, many students feel they will never need the material or use it in the real world. Learning feels isolated to students sitting in the classrooms and these concerns require deeper investigation and understanding. This background examined the historical, social, and theoretical concepts for this study.

Historical Context

School personnel have worked to decrease the dropout rate, but it continues to be a problem in many schools (Baker et al., 2019). The teacher's role is to balance the needs of students ranging from struggling learners to gifted learners (Dixon et al., 2014). Education now seems to be second to other factors in life, losing its importance and prestige. There is a link and connection between the personal and educational factors. Data shows that nearly all schools inherently have dropout concerns and nearly all schools have student success (Baker et al., 2019). The lack of motivation and application of learning has continued to grow over the past years, especially with the increase of technology and immediate answers at the fingertips of students.

Inequitable practices in education, especially those within poverty, were addressed when the 1965 Elementary and Secondary Education Act (ESEA) was started (The Social Welfare History Project, 2014). In 2002, No Child Left Behind (NCLB) was signed into law by President Bush, which reauthorized ESEA. No Child Left Behind required accountability for students, teachers, and schools, especially secondary schools. Although these expectations and mandates were put in place, there was little evidence that the outcomes were as anticipated. Many educators and school administrators felt the expectations were impossible and led teachers to

teach to the test, through memorization (Webley, 2012). Recently, in 2009, President Obama led the Race to the Top initiative (RTT) as another attempt to improve core subject areas of math and reading.

Within the sector of public education, the goal to shift and see more differentiated academic instruction and less "cookie cutter" outlines where students and teachers are both engaged has been increasing. These public-school educators are teaching outside of textbooks and worksheets, and instead introducing projects and personalize learning (Tang et al., 2021). Recently, motivational scientists have started investigating what motivates students and how they can connect their learning to their everyday life (Albrecht & Karabenick, 2017).

Social Context

Philosophers have stated and argued that learning should be beneficial for students individually and the population as a whole while focusing and recognizing social and emotional development in addition to academics (Albrecht & Karabenick, 2017). School systems are changing the way teachers are instructing students through personalized, problem-based learning (Patrick & Sturgis, 2015). Education and the long-term outcomes influence many people, not just the individuals in the classroom. The future of society is dependent on the education and motivation of today's children. Recent surveys share that the majority of the population has personal opinions about education and how the system should be developed from the purpose to the actual integration (Albrecht & Karabenick, 2017). Due to the varied opinions and viewpoints, the social dilemma evolves of what makes learning relevant to students and in turn, creates a society that reaps the benefits of the learning. Educators across the country are implementing new strategies to allow students to personalize their learning (Patrick & Sturgis, 2015). With the emphasis and expectation of assessment standards and accountability for schools, the emphasis

to be learning-centered and engaging is rising (Gilman & Anderman, 2006). Students can benefit from the self-regulation and interest that comes from problem-based learning through cross-curricular activities. The use of differentiated instruction allows students to be assessed on their prior knowledge of the topic and the student's work is arranged based on their knowledge (Duncan, 2013). Cross-curricular content-based learning is proven to enhance learning and expand student knowledge (In'am & Hajar, 2017). This research point indicated the importance of knowing student perceptions on learning and relevance, what motivates students to continue, and what leads a learner to continue.

Theoretical Context

Over a century ago, John Dewey argued that relevance was important for learning and the application of experiences is what allows learning to be successful (Petit & Ballet, 2021). John Dewey laid the philosophical foundations for current efforts in education including the psychological phenomenon related to academic achievement and motivation. "A sustained process whereby somebody(s) acquires new forms or develops existing forms of conduct, knowledge, practice and criteria, from somebody(s) or something deemed to be an appropriate provider and evaluator" (Bernstein 1999, p. 259). John Dewey was known for his insight into learning from reflecting on experiences, not the experience alone (Dewey, 1897). As a phenomenological research study, the lived experiences are the basis and the perceptions of those who experienced it and reflect on those experiences provide the research. No matter what educators or the public are discussing about education, the same question remains of what is the main purpose of school (Albrecht & Karabenick, 2017).

The International Bureau of Education (2016) states that learning is defined as a process that brings together the experiences and influences, both personal and environmental, and

creating the attitude and knowledge of learning. Although the theories of learning developed in the 20th century, the topic of learning and interest of it dates to Greek philosophy.

Constructivism has now been elevated as one of the largest influencers on education and the model of learning within the last twenty-five years. Teachers have embraced constructivist-based pedagogy with excitement for personalized project-based learning instead of sticking to the same models that used to work (Jones & Brader-Araje, 2002). Success takes time and a quick fix for learning may not be the best answer. However, emotion will drive change (Petit & Ballet, 2021). The emotion of wanting and needing a new way for students to engage in content is evident and past-due and utilizing constructivism allows students to build on their knowledge and experience for a new experience. Students actively construct new identities for themselves, consciously or unconsciously (Bokhorst-Heng & Marshall, 2018). Constructivism creates a theme for education that students should be purposefully engaged and involved, applying what they know to the learning process.

Constructivism Learning Theory supports students actively learning through experiences rather than accepting knowledge through lecture. Balfanz et al. (2007) studied middle school students and the lack of engagement due to the lack of active learning. The study was guided using constructivism theory and students being active participants in learning. Basel (2021) drew on creativity and innovation for learning and found the lack of it when students experience disengagement. Furthermore, the study shared students build on their learning by adding current information to their pre-existing knowledge. Cross-curricular learning allows students to build on knowledge and apply it outside of the textbook. Recent research examined the effectiveness in improving cross-curricular competences for real-life experiences (de la Puente Pacheco et al., 2020). Birchnall (2013) researched cross-curricular context-based learning and constructivism as

the process of learning and reflection was helpful and engaging. This means that cognitive development is a central part of constructivism as learning actively takes place in the environment instead of in isolation, requiring interaction with content, not fact absorption alone. Relevant to this study is the educator's experience in implementing cross-curricular activities into teaching and learning. Choi et al. (2019) recognized PBL and interdisciplinary learning increases teacher self-efficacy, embodying constructivism theory. Therefore, constructivism and teaching through experiences and having students actively engaged supports teaming and cross-curricular instruction.

Problem Statement

The problem is middle school students lack cross-curricular learning opportunities that will expose them to life and utilize their learning. As 21st-century learners, engaging in the learning process is one of the basic functions and lifelong skills (Griffin et al., 2017; Miliband, 2003; Verkuyten et al., 2019). Surprisingly, the way teachers teach and share academics has stayed the same since the Middle Ages, despite the massive changes needed and the advancements in technology for learning (Rifai et al., 2018). Educational and psychological points of view agree there are many arguments in favor of interdisciplinary cross-curricular work (Beckmann, 2009). Cross-curricular activities will strengthen thinking skills among students (Griffin et al., 2017; Kuisma & Ratinen, 2021). Specifically, our children have changed academically and need to see the relevancy of learning and how school is applicable to life.

"Education is not preparation for life, education is life itself," (Dewey, 1897, p. 78). The world is changing, and the future is among our adolescents who are in school, learning and growing. Many public schools utilize traditional middle school scheduling for traditional learning with separate classes for each content area, with no interaction or integration

(Berckemeyer, 2022; Cook et al., 2016). This format forces students to see their learning as preparation that they cannot apply to life experiences or integrate among each other. The puzzle of learning and academics becomes boring and presents itself as useless to students in middle school causing a lack of motivation and engagement (Cook et al., 2016; Elderbrook et al., 2018). Specifically, our children have changed academically and need to see the relevancy of learning and how school is applicable to life. Traditionally, middle school students have attended classes after a schedule, but life does not happen where we use reading only at a specific time of day, but we utilize it and need it. Middle school students lack relevant opportunities for learning and applying the content to see the application for real life. Earley (2019) shares that much of what happens in schools is cut up into small parts and appears to be a jigsaw puzzle of learning for students. When a student asks, “will I ever use this?” the combination of two or more contents shows them how the content can and will be applied. A team of teachers with a variety of strategies and techniques offers more learning opportunities for students and enhances their academic growth (Sund et al., 2020). John Dewey (1897) had this figured out years ago when he said it was better to give the pupils something to do, not something to learn.

Purpose Statement

The purpose of this phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. A cross-curricular model of teaching was defined as sensitivity towards, and a process of, learning, abilities, and knowledge from various contents (Battersby, 2012). This phenomenological study examined the experienced middle school teachers who have previously used traditional scheduling and changed to teaming among the middle school teachers to include cross-curricular activities through interdisciplinary studies. These informed an enriched

pedagogy encouraging an approach to learning which embraced and explored this wider awareness through different strategies (Savage, 2011).

Significance of the Study

As educators, we are preparing our students for the future and the world they will be living in, hopefully as successful citizens. To do this, involving interdisciplinary teaming of cross-curricular lessons may support students in seeing and living the relevance of the learning. American social philosopher, Eric Hoffer indicated that in times of change, learners gain knowledge and the world around them while those who have learned are only able to adapt to a world that has changed (Rich, 1997). Collaboration among educators of various and multiple contents encourages them to understand material and be able to process the understanding for application (Chatmaneerungcharoen & Sricharoen, 2021). This research has significance for school systems, administrators, teachers, and students to engage in the learning opportunities of teaming and cross-curricular lessons through observations and lived experiences of teachers currently utilizing the model. Individuals who have lived through the experiences are more believable and credible than those who just read about it (Ladson-Billings, 2021). This phenomenological research will help K-12 education leaders reflect and understand cross-curricular content-based instruction and how it supports preparing today's students for tomorrow's world.

Theoretical

Interest in cross-curricular learning has grown among educators, especially as it relates to the relevance of learning (Torres, 2018; Wankel &Wankel, 2016; Xhomara, 2019). A traditional approach to teaching focuses on the teachers in the front speaking to the class, while the theory of constructivism states that this information cannot fully be understood by being talked to, not

engaged (Netcoh, 2017). Birchinall (2013) found that the holistic approach to the context-based learning model mostly supported constructivist and project-based instruction with learning inside the activities, also called situated learning. Barker et al. (2021) looked at cross-curricular instruction in the middle school and a review of class documents, observations, and individual and focus group interview documents noted academic absorption for teachers and students that supported their participation in constructing the learning through curriculum and instruction rather than just passively taking in the academia. Only real-life, hands-on opportunities can model and encourage students to develop their own knowledge. Therefore, the overall desire for the outcome of teaching is to develop lessons and activities that include problem-based cross-curricular lessons. It is noted that the theory of constructivism is directly linked to teachers and their teaching. As middle school teachers live the phenomenon of middle school teaming, they build on the experiences and add to their preexisting knowledge then translate to the students. This study will contribute to the theoretical context by showing the importance for teachers to have an influence on the way students learn. This study will show that teachers who know how to present context together, through cross-curricular academics, allow students to build knowledge in a unique way. Ultimately, this study will show that teaming with cross-curricular academics allows learning to be learned, while learning a concept (Xhomara, 2019).

Empirical

This study supports and contributes to the empirical work associated with teaching students in a changing world as it focuses on teacher experiences. More specifically, it contributes to the lived experiences of middle school teachers who are teaming with cross-curricular content-based lessons. The perceptions of middle school teachers are sources of lived experiences specific to their classroom needs (King, 2017). In research, Barker et al. (2021)

studied middle school teachers and the implementation of cross-curricular work through interviews, focus groups, and observations finding the importance of integrated content and the analysis of it. Abbas (2020) looked at qualitative evidence of student perspectives on learning through teachers' delivery. He suggested that Maslow's Hierarchy was important for learning along with the teaching pedagogy of teachers through experiences. This study targets the opinions of teachers who are knowledgeable and affected by the phenomenon. This study adds to the literature through the participants' sharing the experiences of teaming and how the cross-curricular academics enable teachers to be deliverers of content while encouraging students to be active in the process, building on their previous knowledge. In addition, this study contributes to research for potential teacher retention strategies through teaming and the network of support it provides.

Practical

This research study has the opportunity to impact middle school education for many teachers, students, and administrators. Schools who are at risk of declining student engagement must seek new and effective tactics for learning (Buckett et al., 2016). This study supports middle school teachers while voicing their experiences of cross-curricular content-based activities and learning. Often, teachers learn from their peers and develop into better educators (Thacker, 2017). Understanding the lived experiences of the middle school teachers who implemented cross-curricular content-based instruction and activities was critical to explore in this study.

Research Questions

Examining the lived experiences of middle school teachers embracing cross-curricular learning may help public education gain respect and resilience for the changing world. There are

many individual opinions regarding education, and they are based on past experiences of the teachers and students. Unfortunately, both positive and negative experiences lead to future decisions by educators. All students and humans have their own personal beliefs, strengths and ability to solve problems that lead to learning and mastering content (Moustakas, 1961). This phenomenological research interpreted and reflected on the lived experiences of teachers and middle school students to gain better awareness and understanding of approaching education as life, not preparation for life through one central research question (CRQ) and four sub-questions (SQ).

Central Research Question

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming?

Sub-Question One

What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Two

What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Three

What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Four

What challenges do middle school teachers who are teaming with cross-curricular context-based academics face?

Definitions

1. *Academic engagement*- The involvement of learning through academia and applying it to activities and situations in life. Academic engagement is the participation of the student and their academic interests (Landson-Billings, 2021).
2. *Creativity*- The outcomes of embracing the imagination and original thought. Innovation and potential transformation are possible when creativity exists in learning (Braßler & Schultze, 2021).
3. *Cross-curricular* – Learning that involves multiple disciplines and content; utilizing rich learning, not subject specific (Battersby, 2012).
4. *Innovation*- The change and transformation among the way of doing things within the model that has benefits to all involved (Braßler & Schultze, 2021).
5. *Interdisciplinary*- The integration of subjects across academic curriculums. Interdisciplinary learning is key for real-world learning as Dewey presented the need of unity for experience (Morley, & Md. Jamil, 2021).
6. *Interdisciplinary teaming*- The model of two or more teachers from different academic content areas working together as a group sharing the same students (Mertens et al., 2010).
7. *Learning motivation* – The individual student's interests, goals, and abilities within their academic setting and the desire to continue with learning due to those abilities and interests (Lin et al., 2020).
8. *Pedagogy*- The method and theory of how the teacher teaches based on their beliefs and personal theories for the classroom (Hanley & Thompson, 2021).

9. *Project Based Learning (PBL)*- Problem based learning is the opportunity to apply the knowledge and see it within the real world of life, not just in text. According to Dewey, the learner that has inquiry and application of learning is the learner that is developing as a whole (Birchinall, 2013).

Summary

Douglas Adams once shared that he felt that human beings, those who are most unique in being able to learn from others and opportunities provided, are also known for having the reluctance of applying what they learned (Farrell, 2020). The problem is middle school students lack cross-curricular learning opportunities that will expose them to life and utilize their learning. Many researchers feel the integration of content will improve the specific subject matter and the learning process. For example, changed teaching and modeling that learning happens across all subjects improves the overall learning outcomes (Kirsten, 2019). The purpose of this phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia.

CHAPTER TWO: LITERATURE REVIEW

Overview

Where we come from and where we intend to go are key factors in planning and preparing educational change. In this chapter, the literature review examines the middle school educational experience through the implementation of cross-curricular interdisciplinary teaming. This chapter describes and connects Carl Rogers's experiential learning theory to prior educational concepts of middle school teaming and cross-curricular outcomes through lived experiences (Iyer & Ramamoorthy, 2023). Lastly, this chapter details teaming, communities of practice for teachers, cross-curricular instruction, and the benefits for all involved through related literature.

Theoretical Framework

Carl Rogers's experiential learning theory supports and lends itself to cross-curricular teaming and a new model for middle school academics (Iyer & Ramamoorthy, 2023). Rogerian educational practices are highly student-centered (Logue, 2022). Experiential learning is a shift from a teacher-centered model of giving information, where students are disengaged and unmotivated, to a student-centered model where the students are learning from direct involvement and lived experiences of real-world problems. Experiential learning is a theory of education focused on life's experiences and how the education, work, and experiences you have form your opinions and outlook (Renger & Macaskill, 2021). This theory identifies learning as a ceaseless process that allows students to contribute their own opinions, beliefs, and ideas, regardless of the level or depth, to their learning of newly added information. It focuses on the individual and their unique interests and opportunities and applies them to learning experience and growth (Renger & Macaskill, 2021). Experiential learning theory is often known as

personalized learning, allowing students to have personalized, project-based activities to facilitate content.

Experiential learning is a theory that is parallel to growth and change for the individual. Experiences of a phenomenon follow the truth of reality, as supported by Rogers's theory when it is penetrated the phenomenal field through the transformational process (Servant-Miklos & Noordegraaf-Eelens, 2019). Rogers indicates that all people have a natural desire to learn; the role of the teacher is to engage the students in the process of learning. This includes: (1) having a positive learning environment, (2) describing the purpose and role of the learner(s), (3) having resources available for learning, (4) balancing the student's abilities, and (5) sharing opinions and thoughts without forcing it upon them without leaving room for their own interests to be included. Within the study of cross-curricular content-based teaming, the students can engage in self-directed learning. The only thing worth learning for Rogers is the *process of learning itself*; learning to recognize and deal with problems, deepening understanding, and increasing the ability to learn (Servant-Miklos & Noordegraaf-Eelens, 2019).

Experiential learning theory and lived learning experiences relate directly to the topic of teaming in the middle school with cross-curricular integration. Our lived experiences are an essential part of learning and understanding the world around us (Durgun, 2019). The theory of experiential learning suggests that the personal situations from one's past through their abilities, skills, opinions, and thoughts combine to apply in other situations in life. Teaming with cross-curricular integration emerged here with a cycle of learning opportunities based on active and abstract previous observations within experiences. Experiential learning has been used in relation to cross-curricular work and learning through experiences. The main academic opinions surfaced as a philosophy of lifelong learning, centered around the learner, along with the teacher

facilitating the experience, not lecturing, allowing for the student to be involved and leading their involvement. Processes such as setting the learning goal, understanding the why of learning, defining the student's learning interests and knowing their motivation provided the background and stage for cross-curricular integration (Renger & Macaskill, 2021). This is essential for students and their future educational outcomes. Students need to realize there is more to learning than the final grade and realize that knowing and applying the content they learn is essential for living and within the real world (Durgun, 2019). Learning should be continuous and evolve as life happens. As an outcome of the experiential learning theory, learning self-identity is the aim (Renger & Macaskill, 2019).

Teaming in middle school supports the process of learning and applying the content to solve and master learning. With experiential learning, the goal of long-term learning is achieved based on the application and transfer of the content into everyday life. This may be visible for teachers within students when they have a previous experience in life that they apply this learning to. Finally, a permanent change in the daily functions would be visible from the student where application and engagement in learning is evident (Renger & Macaskill, 2021). The relationships and community fostered in teaming provide the emotional aspect of learning and engagement for students. Our feelings are what connect us to learning, according to Rogers (Servant-Miklos & Noordegraaf-Eelens, 2019). This study will show how experiential learning will support students as they are using cross-curricular academics.

Related Literature

Innovation and change are essential to sustainability, especially in education. Creative minds are what allow students to grow and develop into life-long learners leading society (Braßler & Schultze, 2021). In this section of related literature, an in-depth review of sources to

outline and further synthesize information will be shared. This section will be organized to introduce and defend the implementation of teaming, the support for teaching through a community of practice, and continue with interdisciplinary learning through cross-curricular work and the experience of learning. This section includes the background and research outlining middle school changes and the importance for collaborative learning. Helen Keller shared that individually we are small, but together we can do more (Kittelman et al., 2021). Collaborative learning involves social interactions with others and has an academic and socio-emotional factor involved (Sjolie & van Petegem, 2022). This learning and the outcomes promote stability in the content and longer retention of the material.

Throughout the years, many studies have looked at teaming and the benefits as they compare to the traditional school standards where top-down instruction is the model (Meyer, 2011). There are gaps in research for leading middle schools and the most effective leadership style for successful results. This literature review examines team teaching, its potential benefits, and the initiation of something new that is needed to convert the learning silos of middle school into cross-curricular opportunities with rigor and relevance.

Why Cross Curricular Teaming?

Middle school is often referred to as the hardest time in a child's school career. Middle school teachers are those who work with students who are the most difficult to teach (Meyer, 2011). Middle school is the time when structure and organization of learning is essential, particularly the teaming model (Ellerbrock et al., 2018). Teaming and teachers teaching together for interdisciplinary academics is a positive strategy for middle school administrators. Several share that teaming is the model that allows a teacher to be creative and not follow a textbook, but

to create engaging opportunities that are cross-curricular, activities which allow students to live the relevance of learning (Li, 2022; Schleicher, 2018).

Middle school is the time where students are cultivating into the person they will be. This involves learning about themselves and their interests and being held accountable for actions. Exploratory experiences of hands-on learning and gaining additional topics of interest are relevant in middle school and allow for the teaming approach of cross-curricular implementation (Meyer, 2011). Teaming positions the teachers for availability in creating engaging lessons after assessing students regarding the needs of learning and remediation. Teaming is a united approach from teachers to the students during sone of the most difficult school years for students. Theories and phenomena have happened in schools, allowing for reflection of previous experiences, and learning opportunities as education progresses. Maslow's Hierarchy of Needs is addressed and considered as the first step of meeting the students' needs (Moser et al., 2019). Teaming is an effective and efficient model for meeting the students' needs, one tier at a time (Abbas, 2020; Beckman, 2009; Moser et al., 2019).

Understanding Teaming

Organizational structures within the middle school years are different and continue to change and move toward the needs of students (Woods et al., 2020). Teaming is growing and spreading in middle schools all across the world (Berckemeyer, 2022) due to the concerns of retention and learning outcomes. Researchers have associated the decline in student outcomes such as learning, involvement and chronic absenteeism to the classroom teacher's instruction (Desy et al., 2011; Jones & Rock, 2020). Teaming is a crucial structural process for supporting natural change to learning and to implement applicable outcomes of learning (Daher, 2022; Kittelman et al., 2021). Implementing teaming and seeing the success in learning outcomes

requires a clear understanding of the teaming process. Teaming is not something you can fake by going through the motions. It is vital for teachers to participate in prior training and professional development that is fluid for teaming to be effective and realistic (Jones & Rock, 2020). As a result of teachers buying into clearly understanding and embracing it, the entire school community reaps the benefits of effective teaming (Boyer & Bishop, 2004). Schools that model and embrace teaming model a strong belief in its importance and have a schedule to support its values and benefits. The National Research Council shares that team effectiveness, referred to how the team performs, is characterized by the team's ability to reach successful measures of the learning objectives (Jones & Rock, 2020). Teaming not only meets the emotional needs of students but meets the academic goals that promote academic achievement (Woods et al., 2020). This result in achieving goals and objectives leads to an increase in the final successes for the team of teachers and the students for an overall increased performance level at the school.

Middle schools in the United States are still struggling with engaging students in the learning process (Holdo, 2022). Interdisciplinary teaming is a signature component of middle schools and effective teams serve as the basis for an effective school atmosphere (Boyer & Bishop, 2004). Teaming builds enthusiasm and a readiness for learning (Kittelman et al., 2021). The beginning of teaming starts with a group of teachers who work together with the same students, serving as a smaller school within the school. The goal of teaming is to support students as they grow, develop, learn, and conform to their learning. Initially, the tole is to identify student needs and to support them. Teams typically identify students needing support through developing and administering placement or knowledge assessments and through observation. Knowledge assessments include systematic ways of collecting the student data to document those who need additional resources within the school day (Kittelman et al., 2021). Students who

lack motivation or are involved in classroom behaviors hindering learning are supported and embraced through teaming and its direct and continuous interventions (Jones & Rock, 2020). Teaming, as an effective model, resembles and supports the community of practice for teachers and educators.

Teaming includes a multitude of techniques and strategies for teaching and learning. Absorbing information and learning through stories of application are successful measures for middle school students today who benefit from multi-sensory teaching (Baker et al., 2021). Unlike traditional scheduling where students are divided into classes with small pieces of material and instruction are presented where students are forced to make connections, making it difficult to see the relevance and often leading to the lack of engagement (Daher, 2022; Early, 2019), teaming is designed for fluid instruction. For students, the ability to navigate information through cross-curricular exposure is a skill that can become a benefit for learning and applying their learning for real-life relevance (Baker et al., 2021). Teaming is a group of teachers who are socially independent but participate together in discussions and decision-making to share goals, content material, and student domains (Brouwer et al., 2012; Shibiti, 2020). Initially, teaming was started to be fluid for the everchanging needs of students within the world and to be collaborative in meeting those needs with other teachers. Ideally, teaming allows teachers to reach students and maximize their learning through the available resources and content. Teaming with cross-curricular content-based instruction is planned with purpose, not formed by accident (Brouwer et al., 2012).

Community of Practice

Communities of practice (CoP) are a conducive learning environment that promotes collaborative teacher dialogue within the community, a needed dialogue for interdisciplinary

work among teachers for cross-curricular integration. Since the beginning of time, middle schools have advocated for relationships and the importance of healthy relationships while focusing on learning (Cook et al., 2016). Among teaming, the concept of "community of practice" is utilized to build and form a knowledge bond from the working relationship (Prinity, 2007; Pyrko et al., 2016). A Community of Practice (CoP) is characterized as a group of teachers who continue to work together to become better, widening their knowledge of students and learning (Wenger, 1996). Teaming sets the stage for teachers to be better team players and leaders (Berckemeyer, 2022). Wenger (1996) shares that although communities of practice vary and change in their size and term of working together, they have three basic fundamental parts: knowledge domain, the community invested, and the method of effectiveness.

Over the past years, many school divisions began scheduled, regularly planned team meetings to collaborate and communicate the concerns of state testing with the material needing to be covered. These teachers established and accepted their teaching role for the students and created a culture of learning through respect and collaboration (Cook et al., 2016). It is essential to get everyone on the same page, building a solid vision that is developed through collaboration (Berckemeyer, 2022). Although teaming and a community of practice includes different ideas on effective ways of improving educational practices, establishing a collaborative relationship built on trust is crucial (Wallace, 2020). The goal and purpose of CoP conforms to these various challenges and commonalities and helps in forming the knowledge and scope of sequence for learning, which defines the issues teachers are facing (Prinity, 2007; Pyrko et al., 2016). Teaming with a community of practice brings experiences that will last a lifetime. These teachers are not isolated or alone; they have others to help them and bounce ideas off of (Berckemeyer, 2022). Having this determined confirms the importance of the community of practice to teachers

and other school staff. The understood CoP membership confirms a commitment to the collaboration on lesson planning to include cross-curricular lessons and the transfer of academics.

The second critical element of community revolves around the teachers and how they work together to engage in healthy relationships with each other as teaching partners and work together toward a common goal. According to the National Reference Group for Teacher Standards Quality and Professionalism, the outcome of learning is dependent on the teachers and how they relay content and curriculum to the students (Wallace, 2020). Teachers who are practicing and learning together allow them to be effective. Communities of practice allow teachers to have others who share the same perspectives and opinions working together and bring those values to the learning objectives (Wenger, 1996). As members of a community of practice, teachers are not alone, they have each other to bounce ideas off of and share new and interesting thoughts. There is a sense of community initiated and continued through the interactions, conversations, and meetings revolving around content and students. The meetings initiated through communities of practice are meetings of a safe space allowing all teachers to vocalize their opinions, ask the tough questions, and tackle the problems with unity (Prinity, 2007; Pyrko et al., 2016).

The third element of a community of practice is that the teachers are specialists, putting it into practice. From the work together, there are combined resources and tools to handle concerns and problems when dealing with students and their struggling needs. This allows the teachers to be effective in their knowledge of the students and what they need. Within schools where cross-curricular learning is initiated through teaming, communities of practice are often naturally created communities without pre-defined learning goals (Darling & Richardson, 2009).

Therefore, these teachers, the communities of practice, must have a basis of knowledge and a relationship to be able to build on their knowing and learning for full development (Goodyear & Casey, 2015). The learning outcomes of students are dependent on the teachers and their style of delivering content through their philosophy of education (Woods et al., 2020). It is essential that teachers know their style of teaching and the model in which they engage with students to inform their teaching (Wallace, 2020). Teachers who are open to looking at new ways, new resources, and new opportunities have a greater chance of reaching students with a deeper understanding. A community of practice can emerge as a group of teachers without formal collection or arrangement from the administration when they have a shared vision for students and learning. With teaming, teamwork is expanded through the community of practice, a safe place for learning to happen for the teachers and transfer the gains to the students through their cross-curricular work. Experiential learning and integrated lessons are the most memorable for teachers, delivering with excitement and connectivity, and transferred to the students (Durgun, 2019). For teachers to improve their teaching skills, it is acknowledged that adults learn both with and from each other (Prinity, 2007; Pyrko et al., 2016; Wenger, 1998). Within education, a key rationale for communities of practice among teachers is that it provides a more welcoming environment for teachers to feel comfortable and supported within their abilities and goals (Cohen & Hill, 2001; Darling-Hammond & Richardson, 2009).

For many teachers, time is not the only thing they are seek. They want to be given new strategies and resources for instruction and strategies for greater outcomes (DuFour, 2004). Common planning is essential to support teachers in effective instruction (Woods et al., 2020). Teachers need intentional time to form relationships and begin working together to better student

learning. Recent research concluded the teachers discovered the importance of collaboration and dialogue (Chauraya & Brodie, 2017; Gee & Whaley, 2016).

Experience of Learning

Experiential curriculum and learning started with John Dewey (1897) and his thoughts, who referred to himself as matter-of-fact and sensible. Connectivity of learning and life outside the classroom has continued to be a concern and goal for teachers (Liu, 2022), encouraging experiential learning. With Dewey, experiencing the learning has moved from the thinking through of application to the actual application. As John Dewey's famous quote stated that experiences are what enables all genuine learning (Dewey, 1897). Dewey and other theorists continued to introduce changes in curriculum and reform the models for student learning through doing, not just listening and absorbing knowledge (Schubert, 1993; Shibiti, 2020).

Failure in education is evident and understandable. As studies do not show research outcomes regarding the role of failure for the teachers and their functionality, there is evidence of how creativity emerges from failure in students (Durgun, 2019; Sawyer, 2019). Recent contributions continue to encourage educators to focus on how people learn and the social and emotional factors involved in the learning process and reflection (Holdo, 2022). The soft skills and abilities of employees in the workforce are declining when related to the ability to think, application beyond example, and problem solving. People are lacking in creativity and the understanding of others around them (Holdo, 2022; Ye &Shih, 2021). All these fit into the belief and practice of educators who believe that learning needs to be through doing and realizing that what is taught today can be applied tomorrow and beyond. Learning evolves and builds on prior knowledge and prior experiences; continuing this practice is needed for students to gain knowledge and learning in the classroom and to be able to carry it outside of the school building.

Learning involves collaboration and a relationship with people and the environment in which they live and work (Ye & Shih, 2021). The creation of projects and hands-on learning is continuing to evolve and influence educational decisions. Schubert (1993) stated that the experientialist focused on the importance of subject matter and application of the content than the actual facts of knowledge. Early (2019) stated that in education, Dewey recommended interdisciplinary approaches to deepen the experiences of learning and child-centeredness. Dewey combined the content with values and application for engaging students into realization for life (Holdo, 2022). Dewey's thoughts on education focused on the world around and the experiences students would have for connecting their learning in school to their real life and experiences outside of the walls of the school building. These opportunities would allow for successful application within social setting and exploring further learning endeavors (Ye & Shih, 2021).

This Progressive Education movement was open to interpretation in the sense of learning through doing. Among teaming, performance-based learning (PBL) is a form of education that has theoretical roots in constructivism, where learning is natural and builds on the students' interactions and previous experiences in life (Choi et al., 2019). Dewey's methods brought a balance between subject material and the experiences of use along with personal freedom involved in the learning process (Early, 2019). By utilizing this application of learning through doing, the performance leads to explanations and elaborations for inferences and applying it to life (Wirkala & Kuhn, 2011). The structure and design of teaming with cross-curricular content-based instruction will break down the independence and isolation of teaching, opening the doors to creating a learning community. Mertens et al. (2010) shared that teaming is an organizational approach of teachers representing different core curriculum and cross-referencing it for academic

purposes. There is an important connection between the expertise a teacher has and the experiences they previously had. Experience describes the opportunities for building expertise as time passes and more methods are experimented with in the classroom, while expertise is the ability to actually apply the knowledge and use the previous experiences for informed decision-making (Gardner & Tillotson, 2020). For an experience to be extraordinary, it needs to extend the students' application of learning beyond the commonality of the four walls of the classroom for one subject matter (Holdo, 2022; Morley & Md Jamil, 2021). The structure of interacting with each other and focusing on curriculum is encouraged and promoted through teaming with cross-curricular instruction.

Cross-curricular Teaming Within Core Academics

Middle school is a challenging time, if not the most difficult, in a child's life and support is necessary for academic and future success. If it is the goal of a middle level school to provide an environment that is reflective and responsive for student learning (Daher, 2022; Rheaume et al., 2021), this thought calls for responsive approaches of cross-curricular teaming. Interdisciplinary learning and cross-curricular teaching have been considered necessary as a way of teaching middle school since the 1960's (Berckemeyer, 2022). However, its actual implantation has not lived to its full potential. Jones (2016) shared the concern that although change is known and needed, schools are still preparing students based on previous learning methods and past generations. The development and continued implementation of cross-curricular teaching has taken many directions and continues to be developed into effective implementation. Researchers feel there are strong connections between teachers and how their personalities, abilities, classroom preparation, and teaching strategies all participate in the overall learning environment and how students absorb the content (Daher, 2022; Sawyer, 2019). The

goal of middle school education should be to deliver young adolescents who can think, be productive, demonstrate morals, and be caring toward others. All students need the opportunity to experience and wrestle with complex ideas while learning to be active problem solvers. Teaming is a method of teaching and collaborating that is believed to improve student outcomes and overall mental health due to connectivity. Morley and Md. Jamil (2021) suggested that teaching in silos, independent of one another, is not beneficial to overall learning. Cross-curricular content-based learning can make school and the actual learning process more creative (Daher, 20222). Cross-curricular connections among teaming is a strategy for teachers to combine content from other classes into their application of content. Teaming, where integration of content is evident, is utilized by combining and integrating the core academics of math, reading, science, and social studies into a combined method of instruction. Not only are students being introduced to the content and seeing the relevance for learning, but they are also able to apply such content to their experiences beyond that application. In addition, students who have increased needs and lack background knowledge of the content are less likely to fall through the cracks due to the stronger bond among the teachers as a team (Morley & Md. Jamil, 2021). The ability to implement flexible schedules and the autonomy for each student and their needs supports the individualized approach of teaming (Boyer & Bishop, 2015). Collaboration and teaming promote a community feel and have positive effects on the teachers and students (Brouwer et al., 2012; Daher, 2022). Teaming and interdisciplinary studies are evident in the recent curriculum developments that have advocated for implementing cross-curricular links and integration throughout curriculums (Early, 2019).

Middle school has offered a home to interdisciplinary teaching with some noted success. A study by Carrier et al. (2011) shared that education needed to be more interdisciplinary in

nature to meet the needs of the times allowing students to solve problems through thinking. The study noted that perceptions of learning evolved during the study (Carrier et al., 2011). Another study shared that interdisciplinary education sparks the investigation of learning (Smolinski, 2011). This approach to teaching is more in line with real life for students, not life in the classroom. These cross-curricular lessons offer opportunities for middle school teachers to integrate all subjects and reinforce what is being taught.

Benefits of Teaming with a Cross-Curricular Focus

In middle school, the scheduling flexibility for larger projects and extended time are beneficial (Jennings, 2018). Teaming allows students to be assigned to a specific team of teachers working with the same group of students, having the ability to form stronger relationships, know their academic abilities, and encourage project-based learning (Kittelman et al., 2021; Kuisma & Ratinen, 2021). This also allows those teachers to have the autonomy to adjust the schedule based on the needs of the students, the time needed for certain projects, and the needs of the group. Teaming, as described, allows teachers the ability to combine the vocabulary of other classes into another content area for cross-curricular connections and application. Students are introduced to the relevancy of learning and knowing that it will be applicable later in life. This model of teaching allows teachers to create fun and engaging lessons for students, changing the dynamics of middle school and their learning outcomes.

Interdisciplinary teaming started in the core curriculum of the 1930s, when the introduction of block scheduling and common planning time was integrated for teachers through the design of scheduling based on contents (Boyer & Bishop, 2015). Some of the most powerful effects of teaming result from the curriculum connections made among the subject areas covered by the team (Daher, 2022; Perez, 2021). Students are learning skills and concepts that

cross over content areas and can be used within the subjects and beyond. Interdisciplinary teaming allows teachers to benefit from the collaboration and support system of other teachers for professional growth that leads to a greater satisfaction of work (Childress, 2019; Kanmaz, 2022). When several teachers are coming together, sharing the same content, and applying it, reinforcing it, and reflecting on it, student engagement and motivation are evident (Daher, 2022; Moser et al., 2019). In some schools, teachers are strategically assigned to teams of interdisciplinary content for the purpose of improving content of all core academics, while in others they are arranged based on the social-emotional needs of students. The curriculum should not limit what is planned in the classroom, as a silo, but should include facets of the culture and activities of the schools and school communities (Kanmaz, 2022). The goal of middle school is to foster children growing into young adults who are able to think for themselves, be productive, and care for others in a healthy manner. To be successful with this, students need to have exposure to complex problems that require critical thinking and learn to solve problems (Daher, 2022). Cross-curricular learning provides benefits for students to be lifelong learners, applying what they learn as they grow (Childress, 2019; Kanmaz, 2022).

Cross-curricular Benefits School Community

Middle school students are known for bringing many stressors into school, academically and emotionally. Reports from teachers who are shifting to team teaching and co-teaching describe improvements inside and outside of their classrooms (Zalaznick, 2022). Interdisciplinary teams are working to make decisions for the best interest of the students and teacher together. There are different perspectives to learning and working as teachers. These varied perspectives come together to coordinate what is needed for students and the learning outcomes (Jones & Rock, 2020). Further, the study shared how interventions are tailor-made to

meet the students' needs and provide opportunities for the students to show academic success. Teaming teachers together and promoting cross-curricular, content-based instruction forces teachers to think beyond the four walls of their classroom and focus on meeting the instructional needs of their students (Kanmaz, 2022; Wentworth & Davis, 2002). Teaming allows teachers the time to collaborate regarding the students and to plan the support needed for their weaknesses (Chandler-Olcott, 2016). In a teaming environment, the teachers are all knowledgeable of the students on the team and able to talk openly about their academic and social needs. This time to work together, speaking freely of student needs enables a working ability for differentiated instruction and meeting the needs of each individual student as part of the collective team. The Chandler-Olcott study (2016) shared that it is needed for teachers on a team to share common planning time to create and develop lessons with integrated. Common planning time gives the time needed for teachers to collaborate, utilize resources, and plan lessons that were cross-curricular. Without the common planning time, the collaboration of content and lessons would have been difficult (Chandler-Olcott, 2016). Teaming as a whole is a model and opportunity for teachers to engage in relationships as professionals for increased academic learning (Childress, 2019).

Teaming with an interdisciplinary, cross-curricular approach requires teachers to know what others are planning for, including the topics, activities, and assessments, enabling the entire team of teachers to focus on integration and collaboration together. The main goal is to bring students’ learning to life with real-world experiences that will support the academics now and be applied later in life (Wankel & Wankel, 2016). The best time for teachers to begin this planning is before school starts, allowing the entire team of teachers to brainstorm about the curriculum and how they can incorporate activities and learning opportunities together (Boyer

& Bishop, 2004; Kanmaz, 2022; Wentworth & Davis, 2002). Kanmaz (2022) shared through the quantitative analysis scanning model that planning ahead together before starting lessons is beneficial to the teachers and students. The study further shared that although they find it helpful for instruction and relevancy, they often steer away from interdisciplinary units due to the time restraints for planning together with other teachers (Wentworth & Davis, 2002).

The teaming model for middle school is a bridge from elementary school where all academics are taught by the same teacher in one classroom. Teaming allows the teachers to share ideas and work together. When the teachers have common planning time, the outcomes produce activities that are shared and bridged from previous classes. It is also helpful for teachers to have common planning time to discuss what they are doing as individual teachers and plan accordingly for student expectations of homework and assessment preparation. The research conducted previously shares the need and importance of common planning (Dugan, 2008; Flowers et al., 1999; Silver & McGowan, 1996). Common planning is defined as regularly scheduled time during the day, allowing teachers to meet for content planning, gathering materials, or discussing student needs (Kellough & Kellough, 2008). There is more to common planning than the academic outcomes, it builds the relationship among teachers and staff beyond teaching, which can positively influence the teaching as a whole (Ellerbrook et al., 2018). Earlier research shared that common planning among teams develops teachers and students who are more effective and successful (Mac Iver, 1990). Common planning time allows for teachers to gain friendships and support networks that create better environments for teachers and students.

Teachers in a teaming model have flexibility and enjoy the ability to adapt accordingly. Clark and Clark (1997) showed that autonomy among teachers who are teamed promotes higher

self-efficacy. Unlike schools who follow the traditional bell schedule, true teaming gives autonomy to the team to divide time based on the needs of the students. Not all days will the schedule look the same. For example, if there is a science lab that will take a longer amount of time, students could be combined to work in larger groups or a larger chunk of time or the teachers can adjust their lessons to hold students longer in other classes. Without the traditional bell schedule and bells, teachers can create lessons and activities tailored to the students and their learning abilities. There is no "perfect teacher" with all the best ideas and activities (Batič, & Lebar Kac, 2020; Wentworth & Davis, 2002). Practice and repetition of activities makes the outcome closer to perfect in teaching and exposure to other ideas and activities from the team of teachers opens the door to newer ideas and collaboration. It is the collaboration and relationships among teachers that create the best lessons for students (Hanley & Thompson, 2021; Kanmaz, 2022). As a team meets together to discuss students, the teachers are encouraged to share their ideas and expertise with the group, allowing other teachers to benefit from it as well as the discussion of individual students and strategies.

Discipline concerns and behavioral problems are common and increasing within middle schools. The design of the team allows teachers to implement a stronger expectation and follow through for behaviors. In team teaching, the teachers all instruct the same students through large groups, small groups, independently, and through projects (Friend & Cook, 2013; Liu, 2022). Purposeful instruction and working together with other teachers aid in decreasing time for behavioral issues (Barker et al., 2021). This design allows teachers to be preventative, not just reactive to the management of behaviors. Overall, literature reports that sharing the benefits of teaming is easily achievable involving the teachers' feeling and perspectives (Childress, 2019). Teaming teachers report that the teachers who are teaming feel fewer overwhelming thoughts

and are happier while able to offer the content integrated activities that students find engaging and fun (Flowers et al., 1999). The collaborative opportunities allow teachers to focus on teaching for learning instead of managing behaviors due to disengagement (Childress, 2019).

Creating a culture of interdisciplinary classes and embracing cross-curricular teaming starts with change for many teachers, not just the structure. Educational leadership involves more than the structure of a business, it involves people as humans (Dugan, 2008; Semilarski et al., 2022). People want to be appreciated and recognized for their learning and successes. John Wooden said it best in his quote that he worries business leaders are more interested in the overall material gain than how to create a level of success built on people; people are the basis of a strong organization (Morrison, 2022). The best schools and the best leaders are those that include others within the leadership team, the school model and structure, and embrace everyone for the common goal. Change is the number one thing needed by school administrators and school designs to grow as an organization that engages students for learning (Petrus van der Vyer, 2020). As times and the educational world continue to change, administrators have to decide to they want to part of the change for success or do they want to watch the success happen to others while they are left behind (Kalkan et al., 2020). It is important for school leaders to be aware of innovation and engaged in the learning process to engage students through teachers (Hurd & Ormsby, 2020, Kalkan et al., 2020). Kalkan et al. (2020) verify that schools need to be aware of the social demands and embrace the social needs of students within the world outside of school. Middle school leadership requires dedication, awareness, and involvement with students and staff to support the growing needs of society (Clark & Clark, 2008; van der Vyer, 2020). The vision of the school leadership and leadership team includes the acceptance of change and

improvement as a continuous cycle without stagnant opportunities (Li, 2022; Semilarski et al., 2022).

Previously, middle schools were encouraged to dissolve academic programs that focused on the whole student through knowledge and relationships and focus solely on the academic outcomes for testing success (Cook et al., 2016). Team teaching allows teachers to focus on relationships, learning, and testing outcomes (Dugan, 2008; Kanmaz, 2022). However, the success of teaming and change is dependent on how teachers embrace the change and implementation of teaming (Laboy-Rush, 2011). The attitude of the teachers determines the level of their commitment to combine principles, interdisciplinary activities, and change into daily routines for learning (Rockland et al., 2010). To enhance students' perceptions of learning and interests in the learning experience, the teachers need to create and embrace positivity toward their content, collaboration, and the ability to change what they are used to (Al Salami et al., 2015; Li, 2022). Teaming is innovative and ever-changing as it encourages teachers to be facilitators who fuse content into lessons across disciplines and to think outside of their comfort level (Li, 2022; Silver & McGowan, 1996). Many studies share that it is important for all forms of educational leaders to embrace teaming and the model for teachers to feel successful, just as it is necessary for the students to feel success through the acceptance and positivity from the team of teachers. The teachers and their excitement and energy about learning and school will filter to the students for engagement and interest.

Teaching and learning require self-confidence of teachers and students. Self-efficacy affects everything we do and how people respond (Bandura, 1971). For educational settings, teacher self-efficacy *determines* how the teacher responds and puts their attitude into practice with instructional strategies (Choi et al., 2019). In middle school, a lot is happening with the

growth and development of children. The changes that are happening are quick and often unpleasant to others. This critical time in their life is when they begin to form their own opinions, beliefs, and learning styles. During this time, the acceptance of personal thoughts and opinions is critical for academic success (Salavera et al., 2017). People function and move forward based on their beliefs and their ability to apply their beliefs to situations. These beliefs a student or teacher has can affect the choices made in a classroom for learning and how information is interpreted. Albert Bandura (1977) states that people combine four main sources of influence to create and develop what they know as their personal opinions and thoughts. Although complex, the concept, founded on Bandura's social cognitive theory, encompasses the teacher and their beliefs for approaching student learning, even when it may not be convenient and easy (Martin & Mulvihill, 2021). Success is a major contributor to a person's self-efficacy. Failures will oftentimes undermine it, especially when someone is in the building stages of their beliefs and thoughts. The belief and understanding of self-efficacy theory is within the social learning theory of Bandura, which encourages and states the importance of observation and living the behaviors, not being told about them (Salavera et al., 2017).

Cross-curricular teaming supports teachers observing students (Woods et al., 2020) and regularly modeling behaviors, in turn promoting a stronger sense of social skills (Wallace, 2020). Teacher self-efficacy has only been assumed to be a determinant of instructional practice but is shared that teacher self-efficacy can be positively affected by increased use of performance-based learning through cross-curricular academics (Choi et al., 2019; Li, 2022; Semilarski et al., 2022). The social and emotional intelligence of students may be related to the outcome of self-efficacy and how it affects students' academic results (Salavera et al., 2017). Existing studies have previously shared the background of self-efficacy and the determination

of instructional behaviors, but not how instructional behavior determines and leads to self-efficacy (Choi et al., 2019). Teachers with a high sense of self-efficacy determine positive outcomes for teachers and the students in the classroom (Bandura, 1971; Li, 2022). On the other hand, if a teacher (preservice or in-service) has low self-efficacy, unsuccessful teaching outcomes will not be evident (Martin & Mulvihill, 2021). This is believed to be evident and applicable in the beginning years of education. Salavera et al. (2017) shared the perception of self-efficacy is important in all aspects of life for a student including the academic achievements, vocational choice, and how the student engages outside of the classroom. Opening the door for teaming with cross-curricular interdisciplinary academics will support and build on through the lived experiences offered (Dugan, 2008; Kanmaz, 2022; Li, 2022).

Interdisciplinary Teaching and Learning

Since the beginning of middle schools, positive relationships have been a topic of all school leaders and has been characterized as one of the most important aspects (Cook et al., 2016; Schleicher, 2018; Silver &McGowan, 1996). The education students receive during middle school should be responsive to their developmental needs, empowering their age and ability, and equal among all students (Cook et al., 2016; Li, 2022). To improve middle school for students and the experiences within, studying the current practices and making progressive changes are beneficial (Li, 2022). Teaming is evaluated at the middle school level to improve and enhance the educational experience for students through the lived experiences of the teachers. Teaching and learning have more emphasis on the student and their conduct in addition to the background knowledge, where learning is part of the lived experiences and developmentally appropriate for them to understand life, learning and how they go together (Hanley & Thompson, 2021; Patick & Sturgis, 2015; Pierroux et al., 2022). Believing in cross-curricular instruction is the first step in

implementation of interdisciplinary studies where students apply and engage with the content to use it and see its importance for later.

Middle school, for many students, can be difficult in terms of education. Teaming as a model for teachers is designed to engage students in appropriate, positive relationships that will filter into the learning opportunities and increase engagement (Woods et al., 2020). Research shows that there is an increase in the academic gaps between what a student has mastered and what is expected at the grade level due to the negative outcomes of lacking student engagement (Archambault, et al., 2009; Rimm-Kaufman, et al., 2015). The students are more likely to attend school, be engaged, and ready to learn when they feel they are cared for and the relationships are evident (Balfanz, 2007; Fredricks et al., 2011). The students who go to school ready to learn, can perform and learn the material resulting in higher achievement than those with chronic absenteeism (Balfanz & Byrnes, 2012; Li, 2022; Kanmaz, 2022). The disengagement of students in their learning outcomes continues to gain attention from leaders as school leaders and policymakers have worked to develop and offer environments for student success (Kirsten, 2019; Merino-Armero et al., 2022; Willms et al., 2009). Many educators can argue students lack interest in school due to their lack of connections to the content. Teachers continue to struggle to develop effective individual learning plans and find increased student engagement through cross-curricular opportunities (Munoz & Porter, 2018). Cross-curricular learning allows teachers to work together covering the content efficiently while gaining the interest of students through the relevance of academics.

Interdisciplinary teaming requires a shared vision of all stakeholders and involves continuous professional development that is applied and embedded (Li, 2022; Sawyer, 2019; Wheelan et al., 2020). The movement for interdisciplinary curriculum has gained momentum

over the recent years (Lee & Malyn-Smith, 2020). Interdisciplinary teaming is a model where the teachers are sharing the same group of students, the same main schedule to divide the students, the same general area of the school building, and the opportunity to engage students in the academic subjects for their school experience (Woods et al., 2020). For planning purposes, teachers need to create and address individual student needs and accommodations for their group of students as part of the lesson-planning process (Munoz & Porter, 2018). Research to support the need for interdisciplinary teaching has shown that building and transferring knowledge is beneficial to the learning process (Barber, 2015). The real benefit of teaming for students comes from the teacher's delivery of instruction through the implementation of interdisciplinary cross-curricular activities (Daher, 2022; Merenbloom, 1979) and will provide the conditions where improved teaching and learning outcomes are fostered (Wallace, 2020). Students retain the learning and transfer the learning to later activities when seeing the relevance of the material.

Interdisciplinary teaming has been called an essential model and is encouraged by the Association for Middle Level Education (Wallace, 2020; Wheelan et al., 2020; Woods et al., 2020). Common planning is essential for cross-curricular interdisciplinary instruction along with the independent time to plan and prepare activities (Battersby, 2012; Jones & Rock, 2020; Li, 2022). More importantly, the teachers need an awareness of the staff responsibility and need for planning toward the outcome of evaluation (Munoz & Porter, 2018). Research discusses that focused common planning time is evident in the overall job satisfaction and the outcome of student achievement (Birchinall, 2013; Childress, 2019; Flowers et al., 1999) and more positive experiences at the higher educational levels (Kittelman et al., 2021). It is founded that high-functioning middle-school interdisciplinary teams met for common planning at a minimum of 30 minutes per meeting, at least four times within a week (Woods et al., 2020). Common planning

promotes quality teaching, and quality teaching has been identified as a significant factor for improving academic success among students (Wallace, 2020). Having a daily time for planning to occur enables instruction to model common practices among the teachers, increasing student routines and structures for success. The research supports that teaming is a solid model for students, and it is worth the effort to do it well (Cole et al, 2004; Durgun, 2019; Earley, 2019). Recognizing the shared purpose of education by the teachers and working collaboratively to reach that purpose is the outcome of effective teaming with cross-curricular academics.

Principals are primarily the leaders of their individual schools and are given the leadership challenge to adapt and oversee (Dana, 2009; Wheelan et al., 2020). The environment they create for the staff and the knowledge of teaming at the middle school level is critical in the shift for teachers to embrace the concept of change to teaming. The relationship a principal forms with their staff and individual teachers directly correlates with the overall success of the school and the students (Dana, 2009; Xhomara, 2019). This is where the pull leadership style is fundamental. The pulling in, engaging teachers in the belief of change, and teaming for the overall success of students is huge (Perez, 2021; Petrus van der Vyver, 2020). There are several tasks and decisions that need to be made each day in a school. Administrators who pull teachers into the team perspective encourage the teaming approach to decision-making for students that are not school-wide instructional decisions and can be made at the classroom or team level. Leadership that involves learning is a shared leadership that involves the professional work of all in the school community (Clark & Clark, 2008; van der Vyver, 2020). It takes work like all teams do; once they are formed and high performing, the success is evident and the benefits start showing (Sawyer, 2019; Shi et al., 2021; Wheelan et al., 2020). Administrators in a middle school recognize the importance of leadership for the teams within and the desired outcomes of

the school. Teaming is a great option for building strong schools within schools (the teams) and to expose children to accepting others through a caring and empathy-designed classroom community (Jennings, 2018; Li, 2022; Moser et al., 2019; Valckx et al., 2020). Effective teaming requires the school community to continue professional development, focus on academics, and modification to daily plans based on differentiation.

Cross-curricular Teaming Benefits for Teacher Retention

The lack in the supply of new teachers is a problem due to the demand for teachers in the United States (Perryman & Calvert, 2019; Van Overschelde & Wiggins, 2019), indicating the need for retaining those who are veterans in the classroom. Teaching is a challenging profession with elevated levels of stress shared frequently, causing teacher retention. Teaching has been considered a high stress profession for years and this stress increased post-pandemic (Will, 2021). Education Week reported that 60% of teachers say they experience job related stress and of those, 41% feel less effective when stressed (Will, 2021). Teachers have diverse ways of coping and react differently to challenges and stress (Petrus van der Vyver, 2020). A lacking school community may be one reason teachers are quick to leave the field due to feeling alone and one an island without support (Hasselquist & Graves, 2020). Teachers are continuously sharing the benefits of teaming and how it impacts the overall school community (Flowers, et al., 1999). Teachers who are teaming are learning from each other, gaining knowledge and resources to make their teaching a better experience for self and students (Childress, 2019). Teachers attend college to be experts of content, but need growth and support as they adapt and encounter the students of today. The ability to work with others in the teaming model allows teachers to have support and develop a support system for stressful and unknowing times (Chauraya & Brodie, 2017; Durgun, 2019).

The quality of education highly depends on the teacher and their engagement, how they feel in the classroom and in the school, and the amount of time they are working within the setting (Perryman & Calvert, 2019; Shibiti, 2020). Growing a strong school with dynamic teachers takes time and retention of great teachers. Moving forward beyond the pandemic and how the expectations created a lot of change and uncertainty, staff turnover is a major concern (Will, 2021). Only 2% of teachers say there is nothing their school district or administration can do to help with retention and stress reduction of teachers (Will, 2021). The retention and introduction of highly qualified staff with experience is an important concern of many school divisions (Perryman & Calvert, 2019; Van Overschelde & Wiggins, 2019). Torres (2018) shares that relationships are what make a teacher stay in a school and in the field of teaching, it isn't the pay. Although classroom stress is evident, the relationships with staff and leadership are most critical (Perryman & Calvert, 2019, Will, 2021). Teachers are motivated to seek re-employment within their current school or school division if they feel they are contributing and have the same educational beliefs as their peers. Teachers want to make a positive impact on their students and learning as a whole while involved in positive and effective relationships with others for the success of students (Shibiti, 2020). As an administrator and leader, the style of leadership can develop or hinder relationships within the building. Schools are at a time in education and school leadership where it is essential to have the right people on our bus and have them in the right seat (Collins, 2001). The teaming in middle schools enables this. Once the administrator has knowledge of the teacher, their strengths and content abilities, teaming them for grade level unity is beneficial (Torres, 2018). These teachers who are teaming find stability and comfort in the team as a family and as a support system. This model of teaming allows teachers to try out new roles in governance, management, and instruction (Flowers et al., 1999; Li, 2022; Moser et al.,

2019). These roles and responsibilities introduce teachers to a world of trust, therefore promoting high-performance teams and results. When teachers experience this trust and work satisfaction, teacher retention increases, inadvertently positively affecting the students to come.

Teachers are the key to improving the learning outcomes for students (Hasselquist & Graves, 2020) and it is critical to include effective strategies that promote student learning and positive outcomes (Kittelman et al., 2021). When a teacher leaves a school, it may be detrimental to the school's performance and the relationship among the teachers (Shibiti, 2020). To prevent this, it is essential to be aware and support teachers in methods that are beneficial to their career satisfaction as well as student performance. Not only are teachers critical in a school, but their job satisfaction is also in turn critical. Teachers share the desire and ability to be innovative in the classroom and its influence on career satisfaction (Hasselquist & Graves, 2020).

As the educational world continues to change and technology is increased, the possibilities in education and school leadership are no longer limited to geographical regions or what the past has presented (Makgato & Mudzanani, 2018; Sawyer, 2021). School leaders have a plethora of options for increasing student learning and engagement. The best option for students to tap into these resources and learn beyond the four walls of their classrooms is when true teaming is established and experienced. Teaming helps teachers and students to see the results of success in the classroom. Additionally, teaming allows teachers to divide the workload and share responsibilities based on their strengths and enabling a better involvement of help from peers (Kittelman et al., 2021; Li, 2022; Sawyer, 2019). The ability to change class mixtures, add additional time, and alter things within the day without disrupting the other students not on the team enables the teachers to utilize technology for innovative ideas of learning with others in other geographical areas. Now teachers can Skype, Zoom, or bring in guest speakers from

around the world. The possibilities are endless for a higher level of engagement and integration of learning when leadership at the administration level empowers the team. Learning becomes interesting and engages students at a higher level (Holdo, 2022; Liu, 2022).

The change in education and cross-curricular teaming starts at the top for the principal of the building. It is essential and critical for a leader to know how and when to effectively implement change for the greater outcomes. Research shows that retention and support of educational programming is linked to the support and relationships with leadership (Daher, 2022; Baker et al., 2021). The school principals' leadership styles are more likely to be linked to their relationship with the classroom teachers and the students along with the activities they are engaged with (Makgato & Mudzanani, 2018; Valckx et al., 2020). As teacher experiences are gained, learning opportunities for students are also increased (Hasselquist & Graves, 2020; Jennings, 2018). Supportive leadership allows these opportunities to continue and is necessary for retention of teachers with teaming.

Summary

The literature reviewed exposed the need for changes to happen for students to be engaged and learning outcomes to be successful, in data and application. There are several items of research for teaming, including collaboration and co-teaching, that can happen without the true middle school teaming concept. As middle schools focus on adolescents who bring much to school with them emotionally, teaming information would help in the knowledge and progress plan for education's future and the increase in success for students. Policymakers have identified collaboration and teaming as the backbone of what makes schools educate effectively and efficiently according to research (Li, 2022; Rosenfield, 2018). For years, educators and researchers have discussed the gaps in quality education and the changing needs of today's

adolescents as it applies to learning outcomes (Boyer & Bishop, 2015; Merenbloom, 1979; Moser et al., 2019). One of the most critical challenges for leadership is creating a school environment where relationships are key but also the defined responsibilities are known for collaboration and student success (Munoz & Porter, 2018). Teaming, like most school initiatives, was often implemented along with several other practices and changes, making it difficult to study in isolation as related to the lived experiences of teachers (Boyer & Bishop, 2015). The initiation of teaming in a middle school allows for many needed improvements such as creating smaller class sizes for teachers, enabling teachers to know their students, and eliminating the chance of someone being anonymous and not having a purpose in the overall function (Flowers et al., 1999, Morley et al., 2021; Pierroux et al., 2022). Benefits of teaming are being felt by teachers, students, and the larger school community (Daher, 2022; Zalaznick, 2022). Teachers find teaming to be rewarding as it offers flexibility and support. The sense of community and collaboration allows the teachers to find greater success in meeting their students' needs and academic goals (Chandler- Olcott, 2016; Patrick & Sturgis, 2015; Petrus van der Vyver, 2020).

Research from the literature review shared that teaming in middle schools is common and estimated to be in 80% of all middle schools in the United States currently as a model of grouping and assigning students for academic instruction (Echols, 2015). Other research shared that teaming in middle schools have become common in American schools (Rosenfield, 2018). The ability to engage in a teaming model and support for teaming starts with the school administration through all aspects of implementation (Kalkan et al., 2020). Overall, teaming is not about getting to perfection, it is about changing and adapting to the student needs as they continue to change (Berkemeyer, 2022). This literature review revealed an overview of research related to middle schools, their learning environments, the importance of cross-curricular

context-based academics in the middle school, and the positive outcomes from implementation. For teaming to be successful, it takes time and dedication from the leadership. Like all teams, it does not happen overnight but is a process in the making.

CHAPTER THREE: METHODS

Overview

The purpose of this phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. Goals and objectives are what drive people to get things done. Without an idea or design of where you want to be or where you want to go, you are not motivated and have no reason to continue. In qualitative research, Creswell, and Poth (2018) state a phenomenological study describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon. Exploring the lived experiences of educators who implement cross-curricular lessons into teaching was key to understanding this phenomenon. Middle schools have a problem where students are not being prepared for the world they will be living and working in. This chapter shares the research design, the setting and participants, the data collection, analysis, trustworthiness, and ethics of the study.

Research Design

Creswell and Poth (2018) define qualitative research as an inquiry process of understanding a social or human problem based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting (Creswell and Poth, 2018). For the concern of the preparation of the “whole” child among today’s education system and implementing teaming at the middle school level to allow for cross-curricular, interdisciplinary lessons as well as intentional work for the “whole” child, intentional data collection to show this experience was essential. This research of experiences and documenting the data through people and their perceptions supported and embraced the qualitative model of research. As a researcher, gaining insight through open-ended interviews

and lived experiences allowed for a greater understanding and deeper insight into interdisciplinary studies and hands-on learning. Qualitative research was chosen for this study to take a deeper look at experiences of those living the unique learning opportunities and for taking the data from personal voices who may rarely be heard. Qualitative research methods were resourceful in explaining the phenomena through descriptive descriptions; the best qualitative research follows a system and seeks to gain deeper knowledge from participants who have lived experience. Qualitative research can be used to describe a deeper knowledge and understanding of a phenomenon through lived experiences (Creswell, 2018; Moustakas, 1994).

There is no better way to learn and reflect than from those who have already experienced it. To understand a complex phenomenon, you must consider the multiple "realities" experienced by the participants themselves, also known as the "insider" perspectives or opinions and personal recollections (Creswell and Poth, 2018). This allowed for the essence of the lived phenomenon to be shared by several individuals who have experienced the model of teaming. Phenomenology was chosen for this study to embrace the lived experiences of learning through cross-curricular academics and hands-on application.

Creswell and Poth (2018) identify the clear process for phenomenological research as beginning with determining if the research problem is best examined by using a phenomenological approach. For middle school teaming, a phenomenological study was effective due to looking at several individuals who have a common or shared experience of the phenomenon. This study of research included the experience of learning, learning from the experience of teaming and what the students gain from the implementation of cross-curricular instruction according to the perspective of the educators. In this qualitative study, the primary source was in-depth interviews of several participants, 12 teachers. As a detailed summary of the

interviews, the teachers were those with at least two years of teaming experience. This experience allowed for consistency. Creswell and Poth (2018) share that van Manen's approach focuses more on the lived experiences of the participants and their shared recollections than the opinion of the researcher. It leads our attention toward the consciousness of the editors regarding this phenomenon. Intentionality is about how our consciousness relates to the world, "the inseparable connectedness of the human being to the world," (van Manen, 1997, p. 181). Having the guidelines of time spent with teaming as middle school teachers allowed all to have background knowledge and implementation of the concept. Phenomenology should include in-depth, open-ended questions with responses that are transcribed for review allowing the emotions of the participants to be important as qualitative data focuses on feelings, rather than numbers. Mirhosseini (2020) shares that qualitative data focuses on the emotions and feelings of the participants and using that to gain an understanding of the phenomenon being looked at. The intentional interviews and data gained from these were most beneficial to the qualitative research and its outcomes. The key concern is understanding the phenomenon of interest from the participants' perspectives, not the researcher's (Mirhosseini, 2020).

Hermeneutic phenomenology, according to van Manen (2016), involves studying a topic that interests the researcher, dissecting the lived experience of the participants, recognizing the themes from the phenomenon, and sharing the relation of the phenomenon to academia. Van Manen describes hermeneutic phenomenology as a way to interpret the lived experiences of a phenomenon (van Manen, 2016). For this study, I chose to use hermeneutic phenomenology as the research design to gain insight from the perceptions of the participants through their experiences while having personal experiences to actively have a role in the study and interpretation. Hermeneutic phenomenology was the right choice for this study as "essentially

interpretive and primarily oriented to the explication of texts," (Van Manen, 2014, p. 132). The choice of hermeneutic phenomenology supported the human understanding of teaming with cross-curricular academics through the dialogue of interviews and focus group discussions (Van Manen, 2014).

Research Questions

Phenomenology allows the researcher to describe or translate the lived experiences shared by the participants (Moustakas, 1994; van Manen, 2016). Phenomenology is a common research approach due to the inclusive and detailed participant descriptions, the researcher's interpretations, and the reflexivity that allows the researcher to take a look from the inside (van Manen, 2016). The research used hermeneutic phenomenology. The opinions of the participants were important to the study for interpretation of the lived experience (van Manen, 2016). This study was designed to interpret the perceptions of teachers through interviews of research questioning, allowing for human understanding through dialogue (Van Manen, 2014).

Central Research Question

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming?

Sub-Question One

What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Two

What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Three

What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming?

Sub-Question Four

What challenges do middle school teachers who are teaming with cross-curricular context-based academics face?

Setting and Participants

The setting for this study included three middle schools located in west-central Virginia. The use of multiple schools provided the researcher with solid data and extensive research from the participants (Creswell & Poth, 2018). Purposive sampling was chosen for the participants involved in the study. This type of sampling allowed the researcher to seek out participants who have personal and lived experience of the phenomenon.

Setting

For this research, the setting was middle schools in west-central Virginia. The middle schools in west-central Virginia have recently adopted the teaming concept with increased initiatives for cross-curricular integration. The leadership structure of middle schools in west-central Virginia includes middle schools with administration overseeing the learning outcomes and structure of the school, with autonomy to support the needs of staff and students. The academic structure includes some grade levels with no teaming or cross-curricular academics while the initiative to shift to teaming mostly included the sixth and seventh grades of middle school. The teaming initiative has four academic teachers assigned to the same group of students, around 100 total, for their core academic classes. The teaming and cross-curricular learning environment has been evident in some of the middle schools but was initiated in all middle

schools in 2020. This setting allowed for vast interest in teaming and a variety of prior experience related to the topic. Many schools in west-central Virginia have endorsed initiatives for teaming in middle schools based on best practices for middle school academics and recently invested a significant amount of their budget increases toward staffing needs for implementing teaming. The difference in implementation across west-central Virginia schools allowed for a variety of perceptions of the implementation and the outcomes due to the varied levels of teaming and the varying teacher demographics.

Participants

The participants in this study included middle school teachers of core contents within west-central Virginia. The participants' experience included teachers who have more than two years teaching experience as teachers in the rural area, public middle school education classroom setting, indicated through a sampling criteria survey conducted initially (Creswell & Poth, 2018). This study included 12 middle school teachers to ensure a thorough look at the implementation, benefits, and opinions of the phenomenon (Creswell & Poth, 2018; Van Manen, 2014). Communication with the participants was fluid and transparent throughout the process, allowing for ethical consideration. To ensure trustworthiness of all names and positions, the research data includes pseudonyms. This study's intention was to review and investigate the implementation of teaming for cross-curricular instruction for instructing the whole child and the teachers' lived experiences through dialogue of human understanding (Van Manen, 2014). To do this, research included a variety of teachers from multiple middle schools who are implementing this initiative of cross-curricular content-based teaming instruction.

Following the study proposal approval by the Institutional Review Board, the process for selecting participants was initiated. The sampling type used was convenience sampling for ease

and availability. Convenience sampling is often used in qualitative research because it can be cost-effective and time-efficient due to the availability of participants (Creswell & Poth, 2018). Research using convenience sampling allows for non-random sampling to ensure the background and knowledge intended for the study (Creswell & Poth, 2018; Mirhosseini, 2020).

Researcher's Positionality

As a researcher, my motivation was derived from teaching middle school and now being a middle school principal. For this research, I was not involved in direct supervision of participants willing to be part of the study. My passion for this topic came from my experiences as a principal and teachers feeling inadequate for content delivery; this fueled my desire for research. I have witnessed students coming to school and "learning" content but not learning the skills to apply this to life. In addition, classes are getting larger for teachers and the connection to students and their families is becoming harder to accomplish. Teaming allows teachers to share the same group of students, allowing them to focus on the "whole" child, not just the data of their learning.

While planning this proposed study, the planning of data sources evolved from the need for descriptive information, not numbers of success or failure. This research came from a lot of thought to the problem of today's educational setting and how school is set up with a schedule of courses that happen at a certain time and no integration of that curriculum later in the day or use of the learning in other courses that can be demonstrating how learning goes beyond the classroom and textbook. Life does not happen that way; we need to create schools that are models of life for the students. To do this, these three main sources for research helped give the researcher a better understanding of this phenomenon.

Interpretive Framework

The interpretive framework for this qualitative study was social constructivism, as an opportunity to understand the world in which we live and work (Creswell and Poth, 2018). These complex views were looked at as subjective meanings of the experiences, not specific, narrow views. The phenomenological approach for this study required the researcher to find middle school teachers who were willing and able to share their stories and lived experiences from their point of view (Creswell and Poth, 2018). The questions used were open-ended so the opportunity to learn and form the visual appearance of the experience was possible. In addition, the information was also be combined with my experiences and previous work with teaming to form the interpretation.

Philosophical Assumptions

Philosophy means the use of abstract ideas and beliefs that inform our research (Creswell and Poth, 2018). The idea of middle school teaming comes from my beliefs about students being prepared for the real world and using the education they receive. Life does not happen by a clock with certain content needed at specific times. Children need to grow up knowing how to integrate their learning into life and daily situations. Cross-curricular work with interdisciplinary teaming of teachers will allow students to live their learning. The research methods facilitated in this study included personal interviews, focus groups, and observations. These methods allowed opportunities to honor and capitalize on the individuals and their lived experiences and shared experiences between the participants.

I chose to study middle school teachers participating in teaming with cross-curricular integration because of my role as a middle school teacher and administrator. These roles have impacted my career professionally, but also personally. My goal was to gain knowledge and an

understanding of the academics around us and how teachers are experiencing it. This phenomenological study was conducted from the ontological, epistemological, and axiological perspectives described below.

Ontological Assumption

Within this study, the nature of reality was visible through the multiple views and experiences of the participants. Interacting with others through interviewing and talking was representative of an ontological approach, the process of gaining knowledge and understanding (Creswell and Poth, 2018). These themes were evident through the participants' interviews, the observations, and the provided documents. Looking at the lived experiences, ontological assumption helped show how things were related to each other. Personally, being able to see the connections of reality helped understand the themes and processes of the outcomes. One concern for my personal beliefs on the nature of reality was accepting and understanding the complexity of things and accepting that things change through processes.

Epistemological Assumption

Although the research and data showed an unbiased approach, my experiences and lived opportunities were part of the formation within the research. The subjective evidence was assumed through the interviews with participants and hopefully lessened the distance between them and me, the researcher (Creswell and Poth, 2018). During this time, I spent time with the participants and observe to gain greater knowledge and a greater understanding of the phenomenon. Throughout this process, I wanted to feel like an insider to the experiences shared by participants. I formed a close connection with the participants of the study to allow a greater understanding of their lived experiences. Obviously, through this, my personal perception of the world and its function was an influence. My view on experiences and the world as a whole center

around my personal beliefs as a Christian. My Godly worldview allowed me to accept all opinions, ideas, and experiences shared by others. The Bible states, “Fear of man will prove to be a snare, but whoever trusts in the LORD is kept safe” (New International Version Bible, 2011, Proverbs 29:25). A Godly view allows us as Christians to have ultimate faith in the Lord above all things happening or the people around us.

Axiological Assumption

Axiological assumptions are the values, biases, and traditions that I brought to the study, as the researcher (Creswell and Poth, 20118). The assumptions I have are from my firsthand experiences as an educator, professional experiences as an administrator, and my own interpretations of the data. I do recognize that I have my own opinions and biases, and I brought those interpretations to this study.

Throughout this research, my role as a middle school administrator and former teacher were generalized within context. From my life experiences, along with the participants, the research continuously evolved. My values as a principal and as a former educator was evident and shared throughout the process. As a former middle school teacher, I have personal experience with cross-curricular teaming. I previously taught sixth grade as a language arts teacher paired with a social studies teacher with a classroom that included a movable wall for integration of our two classes. Our environment allowed for cross-curricular teaching with a movable patrician between the classrooms, allowing our classes to combine for interdisciplinary work. Daily, our students were taught cross-curricular lessons by the social studies teacher and me. The majority of our content was delivered through cross-curricular studies. As I changed counties, teaming was not common in middle school and through transitions of education and high-stakes testing, teaming

seemed to dissolve in schools. My personal experience was beneficial as a teacher, seeing students engaged in the content as a transferable application of academics.

Researcher's Role

My role as the researcher is clear and evident as a life-long learner myself. As a middle school principal and educator inspired by the middle's years, I utilized three middle schools in central-western, Virginia who were moving to teaming to get a clear image and clear experiences, while also having these same experiences myself as a teacher and principal. None of the participants within the study were teachers in my personal school, allowing for no authority over them and their honest opinions of cross-curricular content-based instruction. The participants were aware of my role as a researcher and middle school principal. Although I am a strong believer in cross-curricular work and have initiated many innovative changes as a principal and as the Superintendent's representative on committees, the conversations and interviews were not based on my experiences or beliefs on the topic. As a researcher, I did not want the data to be skewed from my knowledge or beliefs. To execute recruitment of participants, I shared my Liberty University credentials as a graduate student and my university email. Utilizing my credentials as a graduate student allowed participants to understand that the research collected was part of my role as a graduate student, not as a middle school principal.

Procedures

The first step of the study was to narrow the purpose and decide on a location of teachers who are teaching middle school and submit a Liberty University IRB application. Once the IRB was approved (Appendix A), I started planning for participants. Recruitment of participants was contacted through email with a recruitment letter (Appendix C). Within the letter, a survey link was included as a screening tool to ensure the participants met the stipulations for participating.

Participants willing to participate were required to sign the Informed Consent Form (Appendix B). There was no financial offering for participation in the study by any of the participants. Participants who completed the Informed Consent Form and were involved in the study participated in an individual interview and a focus group interview. Three of the teachers who completed the Informed Consent form participated in a classroom observation.

The individual interviews were offered in-person or via Zoom remotely and facilitated transcription of the audio recordings following the interview. After the interviews, a digital copy was saved to a password protected drive (USB) and stored in a locked cabinet with the key stored off premises. Focus group discussions were offered in-person or via Zoom, remotely and facilitated transcription of the audio recordings. The classroom observations were conducted in-person for a "real-life" experience in the classroom design and teaching methods.

Permissions

Initially, this study began with applying for approval from the Institutional Review Board (IRB) of Liberty University (see Appendix A). The committee chair and members ensured all expectations and requirements were met and completed. For this study, the involved participants were middle school teachers from west-central Virginia. In doing so, specific site permissions were not needed.

Recruitment Plan

Creswell and Poth (2018) suggest interviewing at least ten people in a phenomenological study. This qualitative study utilized convenience sampling, also known as "volunteer sampling." Creswell and Poth (2018) share that convenience sampling utilizes participants who are ready and willing to participate. Convenience sampling saved time and money for research as the participants were willing and easily accessible for the study. For this study, middle school

teachers in west-central Virginia participated voluntarily. During my participation selection, I ensured my biases did not lead or become involved in the study. I had no authority or supervision over the participants included in this study. The first step of questions served the purpose of sampling the potential participants with the following questions:

1. Are you currently a middle school teacher in central-western Virginia? Yes/ No
2. How many years of experience do you have teaching middle school? Less than 2/ more than 2
3. Do you currently teach in a teaming model? Yes/ No
4. Are you interested in voluntarily participating in this study? Yes/ No

Potential participants were asked to respond to these questions and complete a letter of consent before participating in the research (see Appendix B). Participants were invited to participate in the study voluntarily as a teacher in the middle school setting in western-central Virginia. The potential candidates were informed that the study involved teachers of middle schools who are teaming with cross-curricular lessons in core academics. They were asked to participate in an interview, in person or via Zoom that would take approximately one hour and then participate in a focus group as participants to share experiences and respond to questions. Lastly, three of the participants were involved in a 45-minute observation by the researcher. From participation, they knew they had no gain from this study other than the academic benefits for planning cross-curricular teaming into middle schools. The expected risks were minimal as a participant and that their identity would be secure and private. As a participant, they would be given the right to withdraw should they desire to do so. To have a vast spread of experiences and interviews, the research included 12 participants and participants were screened to meet research criteria (see Appendix D).

Data Collection Plan

The root of phenomenological study is research through the lived experiences of a phenomenon (Creswell and Poth, 2018). The proposed research involved looking at the concern of the "whole child" within preparation of today's education system and implementing teaming at the middle school level to allow for cross-curricular, interdisciplinary lessons as well as intentional work for the child. To complete this study, intentional data collection was desired and critical.

To understand this complex phenomenon, the multiple experiences of the participants themselves, also known as the "insider" perspectives need to be considered and taken into consideration (Creswell and Poth, 2018). In this qualitative study, the first source of data was to consider the primary source of personal interviews. These interviews included in-depth, open-ended questions with responses from the participants that were transcribed for review. Specifically, hearing and gaining from the emotions of the participants were important as qualitative data focuses on feelings, rather than numbers for records. Mirhosseini (2020) shares that qualitative data focuses on the emotions and feelings of the participants and using that to gain an understanding of the phenomenon being looked at. The intentional interviews and data gained from these were most beneficial to the qualitative research and its outcomes.

The second source of data collection was focus groups. From the focus groups, there was a hope to increase the understanding and rationale and support for teaming and the benefits for the students through the teacher, the deliverer of content. Looking into qualitative studies, focus groups are one of the most beneficial sources used, and offer groundwork for a glimpse into the experiences, thoughts, and perceptions of interdisciplinary work through teaming (Creswell & Poth, 2018). These focus groups offered a large number of situational accounts from the teachers

involved to be collected as evidence of the experiences and themes used for cross-curricular academics among the team.

Lastly, observations were an intended source of data. As the researcher, immersion into the environment where teaming was happening and where concrete observations were made was essential. During the three observations, not only were notes taken, but also the use of photography and drawing the parts of the classroom was part of the observation. The key concern was understanding the phenomenon through the lens of the teacher, not the researcher's (Mirhosseini, 2020). These observations allowed for the insight and perspective of the participant in a live setting, their classroom.

Individual Interviews Data Collection Approach

In this qualitative study, the primary source was in-depth personal interviews of 12 teachers with at least two years of teaming experience. Individual interviews allowed for the researcher to gain knowledge through the gathering of stories as well as developing the meaning of the experiences (Creswell & Poth, 2018). Interviews were essential to discovering participant experiences and developing meaning of the experience (Creswell & Poth, 2018; van Manen, 2016). This experience allowed for consistency. Having the guidelines of time spent within a teaming model as middle school teachers allowed all the participants to have background knowledge and implementation of the concept. For a strong phenomenological study, collecting information involves personal, in-depth interviews with a minimum of 10 individuals (Creswell and Poth, 2018). For this research, the personal interviews with teachers were simple, organized, and prepared. The data was compiled from participants teaching middle school and teaming with the interdisciplinary approach. All participants in the study had at least two years of teaming experience. It was the goal to have teachers with more than four years of experience to

accomplish the trends from those familiar with teaming before the effects of COVD-19. With so many changes in the ability and academic awareness of students, it was important for the research to focus on the specifics of cross-curricular context-based integration.

The goal of the interviews was to have in-person interviewing but offer the virtual option if in-person is not possible due to scheduling or previous commitments or illness. The connection and understanding through conversation with interviewees were easier to develop and feel through in-person, but due to scheduling, three needed the virtual option. All interviews were recorded for audio to be transcribed. As a researcher, the focus was to listen to the teacher participant and to show engagement and interest during the interview, not take notes.

As the data collection of individual interviews occurred, each interview had 16 questions and each participant was aware of the total number of questions and the period of up to an hour to complete. Additional time could be given, if needed, by the participant.

Individual Interview Questions

1. How long have you been a teacher? CRQ
2. Describe your career in teaching. CRQ
3. Describe the types of experiences with teaming you have had with cross-curricular activities. SQ1
4. Describe your challenges when working with lower academic students in your classes. SQ2
5. What are the moments like when students share their academic struggles with you? CRQ
6. Describe successful practices you use when working with cross-curricular academics among students in your classes. SQ1

7. What professional development experiences have you had that prepared you for teaming and/or interdisciplinary studies with your students as a teacher? SQ1
8. What else would you like to add to our discussion of your experiences with teaming and the interdisciplinary work with students that we haven't discussed? SQ4
9. Describe your challenges when working with lower socioeconomic status (SES) students in your classes and their abilities to apply the content to additional curriculum. SQ2
10. Describe successful practices you use when working with lower SES students in your classes. SQ1
11. Describe your challenges when working with other teachers for interdisciplinary assignments. SQ2
12. Describe successful practices you use when working with other teachers for interdisciplinary assignments. SQ1
13. What professional development experiences have you had that prepared you to work with other teachers for interdisciplinary assignments? SQ3
14. Describe a specific time you experienced the phenomenon. SQ2
15. What role do you feel teaming plays in mitigating what you experience from supporting students? SQ2
16. What else would you like to add to our discussion of your experiences of working with other teachers for interdisciplinary assignments? SQ4

The first three questions were factual questions about the participants to gain knowledge about their background (Mirhosseini, 2020). Asking factual questions to begin allowed for a sense of comfort to be established in interviewing. Questions four, five, six, nine, ten, twelve, and fifteen were inquiry questions involving opinions and sought the emotion of the participant.

Seeking emotion from participants allowed for the lived experiences to be shared (Creswell & Poth, 2018). Lastly, questions seven, eight, eleven, thirteen, fourteen, and sixteen were questions to seek thoughts from the participant, gaining a deeper understanding of their experiences and perceptions. In this qualitative research, the purpose of the questions for interviewing was to gain the most important data from experiences of the participants, as it is the most meaningful piece of data (Mirhosseini, 2020). Hermeneutic phenomenology allows for the participant's opinions, thoughts, and lived experiences to form the meaning and outcome of the study (van Manen, 2014).

Individual Interview Data Analysis Plan

Data analysis for the individual interviews was a clear representation of the data collected. Van Manen's hermeneutics encouraged the participants to participate in an ongoing discussion (Cooper, 2016). Since data analysis is not custom-built and outlined (Creswell and Poth, 2018), it was altered and changed to fit the data sources and the participants' style. Van Manen (2016) encourages researchers to include more conversational interviewing. While conversational interviewing is often seen as a more flexible interview format than structured interviews, van Manen (2016) cautions against using unstructured or open-ended interviewing. Therefore, van Manen's conversational interviewing is also semi-structured. The researcher's experience and personal description was the initial analysis. Following the individual interviews of the participants, the recorded interview was transcribed and first documented by themes discussed.

As a researcher, the use of Saldana's coding approach will allow for discovering and interpreting what is happening (Saldaña, 2021). A code for qualitative research inquiry is usually a word or short phrase that recognizes or indicates the intent or focus of the participant as a piece

of visual data through transcribing (Cooper, 2016). In the margins of the transcribed text, notes and codes were added to show the researcher's interpretation and thoughts. The first step of analyzing was reading and collecting the emerging ideas inside. This allowed the data to show significant statements and how the participants were experiencing this topic of teaming and interdisciplinary content.

Next, the themes were classified and described through clear descriptions of firsthand experiences shared and the essence of the phenomenon listed. In addition, interpretations of the participants were used into meanings and grouped. As shared in Creswell and Poth (2018), identifying the themes will allow the data to be shared as themes and removes repetition.

The last step of the analysis was for the data to be visualized through a clear description and detailed structural response of the phenomenon. This was a detailed paragraph of "what" and "how" the experience was lived by the participants. Phenomenological research focuses on the sharing of lived experience and how we know the world before reflecting on the experiences (van Manen, 2016).

Using the information of the interviews, the analyzation was detailed through themes and content from the participants. The themes evolved from the transcriptions of the interviews and the codes shared. Coding is a research method used to interpret data by a researcher (Miles et al., 2014). The commonalities were grouped and shared through details and clear examples for chunking and themes that were reoccurring. The themes and data were visualized in a chart demonstrating common themes.

Focus Groups Data Collection Approach

Focus groups provide the participants with an additional setting for sharing experiences and the researcher additional opportunities for hearing the participants' lived experiences

(Creswell and Poth, 2018). Focus groups were an additional research collection of this research study as offering an additional method for gaining a deeper understanding of the teachers' experiences. For some, focus groups allow a time for additional insights from participants not shared in the individual interviews, allowing experiences to be elaborated on (van Manen, 2016).

The goal of the focus group was to allow time for deeper understanding and explore the experiences revealed by the participants in a common setting (Creswell & Poth, 2018; van Manen, 2016). In this study, the 12 participants who conducted individual interviews participated in the focus groups: two separate groups of teachers. Participants for this study were chosen based on their experiences of middle school teaching with teaming and implementing cross-curricular activities in the classroom setting. Each focus group setting included the researcher. The purpose was to gain a deeper sense of information than from a single person's perspective. Focus groups are beneficial when looking for beliefs, thoughts, and feelings (George, 2022).

It was understood that participants in the focus group needed to feel comfortable and open to sharing within the group. The questions used were intentionally chosen to avoid the privacy concerns of the teachers participating. The researcher provided the expectations and guidelines related to the potential ethical issues of a focus group (Creswell & Poth, 2018). The participants were reminded by the researcher to keep the discussions confidential. The goal was to expand on the themes that emerge from personal interviews and to collect data through interactive and directed discussions. Focus groups provided the advantage of diversity of the voices and sharing opinions through responding to focus group questioning.

Focus Group Questions

1) Please share the differences in how your students learn today compared to your own experiences. (CRQ)

2) Describe how you ended up participating in the phenomenon of team teaching. (CRQ)
3) Share any experiences of teaming as a student when you were in school. (CRQ)
4) Think back over the past two years, what went particularly well with teaming? (RQ4)
5) What are the positive experiences? (RQ4)
6) What needs improvement? What are the negative experiences? (RQ4)
7) When you think about situations of lacking motivation with students, how did offering cross-curricular activities change the motivation level with students? (RQ1, RQ3)
8) When you hear the word "cross-curricular," what comes to mind? (CRQ, RQ4)
9) How do teaming and cross-curricular academics foster relationships among the students with you, the teacher? (RQ2)
10) Describe your experiences teaching your favorite subject in a cross-curricular method? (CRQ)
11) What pros and cons of teaching through teaming cross-curricular instruction do you see? (CRQ, RQ4)
12) If you were telling a colleague about teaming with cross-curricular activities, what would you say? (CRQ)
13) Please share anything about teaming with cross-curricular instruction that we have not discussed. (CRQ)

Focus Groups Data Analysis Plan

During the focus group discussion, there was one moderator. As the researcher, I was the moderator, asking the questions. The sampling method of participants involved was voluntary

response sampling. All participants had informed consent, knowing all the information, benefits, and risks before began.

The focus group settings began with an understanding of the roles and feeling comfortable to share openly within the group. The location of focus groups was chosen by the participants, allowing a supportive and accommodating location for them to share. Participants were also provided the ethical guidelines and expectations to not share or repeat things outside of the focus group.

Following the focus group interview, I reflected and recorded my initial thoughts from the discussion and any highlights, concerns, or outcomes created. Next, I transcribed using pseudonyms to protect the identity of the participants. Lastly, the recordings were transcribed, the transcripts were coded, and an analysis of the themes took place.

Observation Data Collection Approach

When conducting observations among the participants' classrooms, plans were to complete a 45-minute observation of three participants. This allowed for a descriptive and reflective approach to what was visible and happening in the classroom. The observations were known, but not scheduled for a "real-life" view of what was happening in the classroom.

Descriptively, the observation documented the classroom's layout, the visual images in the room, and the background of what was happening from the teacher to the student during the lesson. The descriptive part of documentation also documented the interaction among peers.

During the observation, the goal was to answer the following questions related to the teachers and learning: how the teacher incorporates cross-curricular work, what are some examples of engagement and performance-based activities that allow for the transfer of knowledge, and what is the teacher's appearance of excitement and involvement. As an observer,

I looked for follow-up to previous cross-curricular implementation and teacher engagement for the transferability of the contents.

Reflectively speaking, the documentation from observation analyzed the data and notes. This reflective piece allowed the researcher to think about each interaction, movement, and engagement to analyze and reflect on the "why." Creswell and Poth (2018) share that classroom observations can be recorded, written, or drawn. These observations included all the above for effective and efficient reflection of the classroom.

Observations Data Analysis Plan

During the observation portion of data, recordings were taken to document the time and allow for clear representation. While watching the observations, notes were taken to summarize the recording. This also offered time for creating a point of view of the scene, audience, and then creating a way to display the data. The observations of classroom time varied from room to room allowing for varied information and supporting facts. The data needed to be coded and grouped among the themes. For example, in a classroom with interdisciplinary teaching, the researcher separated and documented the engagement, the students' behaviors and participation, the overall feel and interest in learning, and the teacher's engagement level. All the data from the observations were documented through notes, coded, and bar graphs created to illustrate the data.

Data Analysis

The qualitative data analysis was structured and based on the data gathered along with the researcher's decision-making of evaluating the data, requiring the researcher to explore the data deeply (van Manen, 2016). After analyzing the data, synthesizing it into one document and final themes was critical. The analysis allowed for the researcher's interpretation and what was learned through the patterns and repeated themes providing descriptions of the lived experiences

of the participants (van Manen, 2016). During synthesis, the researcher was making sense of the information (Creswell and Poth, 2018). For further synthesis, I used ATLAS.ti as it enabled the organization of the text, graphics, audio, and coding of the project (Creswell and Poth, 2018). Using this program allowed comparisons and retrieval of data. This data was also able to be exported and shared as findings. This program helped store the data, locate, sort themes, and retrieve the information. Once the information was retrieved, the comparison and relating was easier and more accessible. At that point, the analyzing and synthesizing of data was new and I wanted to make sure I researched and expanded on ideas for the best and most transparent way for researching teaming among the middle school. Reviewing the research data to identify the themes that are reoccurring in the study helped explain the phenomenon and the lived experiences (van Manen, 2016; Creswell & Poth, 2018). Reporting the themes evident in the data was the last step of the process. While reporting the themes, I stated where my experiences and interpretations contributed to the perspective shared.

Trustworthiness

Trustworthiness for qualitative researchers will provide examples and proof of validity and transferability since there are no numeric data to be traced, evaluated, and used. Creswell and Poth (2018) share that effective research relies on "trustworthiness and external reviews" to ensure validity. This section describes the measures taken to ensure a rigorous study justifying credibility, transferability, dependability, and confirmability.

Credibility

Credibility is trust of a particular study's findings or the extent to how well the findings describe reality in an accurate setting (Lincoln & Guba, 1985). A greater understanding comes from multiple methods of data collection (Creswell & Poth, 2018). Credibility answers the

question of how data and research align with reality. In qualitative research this is subjective, and methods are used to ensure credibility. In this study, the researcher achieved credibility in three ways: (a) triangulation, (b) peer debriefing, and (c) member-checking.

Transferability

Transferability shows that the findings may have applicability in other contexts (Lincoln & Guba, 1985), which is achieved using thick descriptions when describing research findings (Geertz, 2008). Qualitative research depends on peer review to analyze and judge if the study can be applied in another setting (Creswell & Poth, 2018). Transferability is usually determined by the judgement of the reader and the descriptions shared of the lived phenomenon (Korstjens & Moser, 2018). Performing the multiple forms of data collection and ensuring detailed descriptions aid in the explanation of participant experiences and transferability (Korstjens & Moser, 2018; van Manen, 2016). Creswell and Poth (2018) suggest selecting an appropriate number of participants in the study to represent the diversity of perspectives while describing the phenomenon. The descriptions and data from both were complimentary of each other and supported the same premise, allowing the researcher to conquer that the data was valid and credible.

Dependability

Research should show that it is repeatable and consistent with the findings of the topic. Dependability is what does that in qualitative research. Descriptions of the procedures were comprehensive enough that this study could be replicated again in another setting. Qualitative research is obtained from first-person lived experiences and those experiences are shared with the researcher (Moustakas, 2013). Dependability requires the researcher to carefully document the steps accomplished and carried out so it can be replicated again (Creswell &Poth, 2018).

Specifically, I used an inquiry audit of the research study, an investigation from an outside researcher, to ensure dependability where another researching team could replicate the study and achieve the same results. An inquiry audit allowed an outside researcher to examine the process of data collection, data analysis, and results (Creswell & Poth, 2018). This inquiry showed the accuracy of the result and the data to support it. The data and results showed the lack of carelessness and consistency. Additionally, I followed the research process of Liberty University to ensure a complete inquiry audit reviewed by my committee members.

Confirmability

Confirmability is the confirmation that the study is research and data based, not perceptions of the researcher. It assumes that the researcher and the research could contribute a different interpretation through the specific perspective of data. To achieve this, results were descriptions of the data collected from the study and clearly indicated the findings, not biases of the researcher (Korstjens & Moser, 2018; van Manen, 2016). The experiences of those who participated in the study were instrumental in developing the study's themes and context. Utilizing a sample of 12 teachers as participants, provided deep detail about the lived experiences of teaming with cross-curricular context-based content. The researcher evaluated the responses of participants to find compatibility between participants of the study and to find compatibility in the data (Korstjens & Moser, 2018; van Manen, 2016). The use of triangulating the interviews, focus groups, and observations documented the trends and themes in the data (Creswell & Poth, 2018; Korstjens & Moser, 2018; van Manen, 2016).

Ethical Considerations

Ethical considerations are essential considerations in qualitative research. The researcher must have protocols in place to enable accuracy among readers, eliminating any confusion or

unintended meanings beforehand. Before beginning the research, I received approval from the Liberty University Internal Review Board (see Appendix A). I gained permission from participants (see Appendix B) and informed them of the obligation and purpose of the study. I informed participants of the purpose of research, their role, and how the results will be used, allowing the participation to be voluntary and freely accepted with full information about the study (Creswell & Poth, 2018). For this research, I used pseudonyms to protect the identity of the participants. Since qualitative research relies on human experiences, ethical awareness of the study was critical. This study of teaming in the middle school setting allows the reader to have confidence in the data and findings utilizing the platforms of trustworthiness. As a researcher, ethical considerations were taken to ensure protection and trust of the participants. I also ensured there were no risks associated with the participation of the study and the information shared had no effects on their teaching positions, current or in the future. If a participant asked to withdraw from the study, they were allowed to, and their data would not be used, according to their request. The ultimate concern of trustworthiness was through ethical consideration of how the data was protected, not only through the pseudonyms, but also through keeping the research saved and not shared during the process. The data was kept in a locked filing cabinet and will be discarded within three years of the dissertation.

Summary

In summary, this research will provide educators with an introduction and explanation of teaming in the middle school with cross-curricular content-based instruction. This study seeks to gain knowledge for cross-curricular teaming in middle school. The study was conducted in central-western Virginia with 12 middle school teachers who voluntarily agreed to participate. Throughout the study, teachers shared their lived experiences of the phenomenon through clear

and precise interviews, focus groups, and observations. Throughout this research, approval for participants was clear and ethical considerations were taken. The data and documents from interviews were saved and recorded with confidentiality and protection. In addition, as the researcher, personal perception and thoughts were kept separate to allow for authenticity of the research and findings were evident through the themes that were determined from interviews, focus groups and observations. The detailed responses were shared in a chart to visualize and bar graphs to illustrate the themes.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. This chapter begins with participant descriptions followed by the themes that emerged from the data. In addition, the research question responses are given, and the chapter ends with a detailed summary.

Participants

The study included 12 participants, ranging from two to 30 years of teaching experience. The experience of teaming by participants ranged from two to 28 years of experience. There were ten female participants and two male participants. Four of the participants had content background in social studies, five had content knowledge in math, six participants had content background in English, and one participant had a science teaching background. Of the 12 participants, six were sixth-grade teachers, four were seventh-grade teachers, and two were eighth-grade teachers.

Table 1

Teacher Participants

Teacher Participant	Years Taught	Years Taught In Teaming Model	Content Area	Grade Level
Allison	3	2	English	7
Helen	22	5	English	7
Jeff	6	4	Social Studies	6
Jill	17	8	Science/Math	7
Joni	22	6	English	6
Larry	15	5	Social Studies	6
Mary	18	6	English/Civics	8
Mona	12	5	Math/ English	8
Rhonda	7	3	Math	7
Sandra	30	28	Social Studies/English	6
Sara	15	4	Math	6
Tina	26	20	Math	6

Allison

Allison is a teacher who started teaching three years ago and has two years of teaming experience. She teaches seventh-grade English and all three years she has taught English. The two years of teaming for Allison have been with the same teachers, at the same middle school. Allison wants to add the social studies endorsement to her license for future teaching opportunities and feels that having the experience of teaming encouraged her to feel this way. Allison shared, "Since I am new at my school and as a teacher, I feel I embraced teaming from day one and have learned so much from the mentorship of other teachers it provided me."

Helen

Helen is a 22-year veteran teacher with an English endorsement. She has been teaching seventh grade for the entire 22 years, but due to her family moving, she has spent time at three different middle schools during those 22 years. Helen shared that she has spent the last five years at a middle school participating in teaming. Helen said that she has enjoyed the transitions of new schools and the change it brings. Recently, the teaming school she has joined has introduced her to seeing her work in a new light. She feels energized by the newer career teachers she is working with and feels she has learned more about herself as a teacher.

Jeff

Jeff has been teaching for six years in middle school and has four years of experience with teaming. Jeff has taught sixth-grade social studies the entire six years, in the same school and in the same classroom. Jeff said he was excited to begin teaming four years ago because in college he enjoyed group work and felt teaming would be a way to incorporate group work into his everyday life. Jeff also shared, "Teaming holds me accountable as a teacher." He also suggested that being part of a team allowed him to grow as a teacher and try new things because

of the support of his teammates. Jeff said he has no intention of ever leaving the teaming model and will advocate for it to all teachers.

Jill

Jill is a 17-year veteran teacher with a science and math endorsement. She has been teaching seventh grade for the last eight years in a teaming model on a two-person team. Jill said that she was nervous and pessimistic about teaming when they started eight years ago. Due to numbers in seventh grade, they did not have enough students for all teams to have four teachers and with Jill's endorsement, she was able to teach both science and math. After a few years, she found herself integrating content together on a regular basis and felt that being on a two-person team allowed them more time to collaborate and teach cross-curricular activities than the teams with four teachers.

Joni

Joni is a 22-year veteran teacher with an English endorsement. Joni has been teaching sixth grade for most of her teaching career; she spent her first five years in fifth grade before moving to middle school. Joni has spent the last 17 years at the same school teaching sixth grade. During those 17 years, she has had many teachers come and go. Six years ago, Joni's school started teaming and she has taught alongside the same social studies teacher the entire time but has different teammates for math and science. The last two years, Joni shared they have had the same team of four teachers.

Larry

Larry is a 15-year veteran teacher with a social studies endorsement. He has been teaching sixth grade for the entire 15 years and has spent five of the 15 years in a teaming model. Larry has taught at the same school for 15 years and has worked with two of the same teachers

for the entire 15 years. His five years of teaming have been with the same team. Larry said that he has loved the transition to teaming and what it offers to students through the autonomy of the teachers by the administration. He does not want to go back to teaching middle school without teaming. Larry shared, "Teaming has allowed me to know my students better, teach them better, and reflect on the outcomes with fellow teachers of the same students. The relationships are stronger due to the time spent with the students and the reality that all of us share the same group of students."

Mary

Mary is an 18-year veteran teacher with a social studies and English endorsement. She has been an eighth-grade teacher for the entire 18 years and has spent six of the 18 years in a teaming model. Mary has taught at two schools, one school for nine years and just finished her ninth year at her current school. The six years of teaming have been at her current middle school, and during the six years, she has had a variety of teammates due to staffing turnover. Mary said that teaming was nothing more than "a necessary evil." She has been frustrated with the turnover but does feel that consistency of the teams would allow for stronger teaching and stronger teamwork among the group.

Mona

Mona is a 12-year veteran teacher with a math and English endorsement. She has been teaching eighth grade for the past eight years after moving to Virginia. Mona shared that during the last five of the eight years she has been working at a middle school with teaming. She started on the team as a math teacher and recently moved to English for the past three years. Of the five years in teaming, she shared she has learned a lot from the others on her team.

Rhonda

Rhonda is a math teacher with seven years of middle school teaching experience. She has taught seventh-grade math for seven years and recently finished her third year in a teaming model. Rhonda shared that when the idea of teaming was shared with her faculty, she was not happy and was concerned about beginning something new to her. She shared that as a math teacher, she did not feel like she needed to collaborate with the other content teachers and needed to focus all her time on math only. Rhonda shared that after one year of teaming she was sold on the idea. She stated she hopes that her school does not dissolve teaming and continues to structure the schedule with teaming as a focus. Rhonda stated, "I love the support I receive from other teachers and the comfort it provides me when dealing with a difficult student or family."

Sandra

Sandra is a 30-year veteran teacher with a social studies and English endorsement. She has been teaching sixth grade for the entire 30 years in the same county but at two different middle schools. Sandra's career started as an English teacher and the last 12 years as a social studies teacher. Sandra has 28 years of teaming experience. She has 16 years of experience as an English teacher teaming with three other teachers and 12 years as a social studies teacher teaming with three other teachers. Sandra said she felt she had a lot of experience with teaming and has "lived through the good, the bad, and the ugly." She shared her experience as an English teacher helped her when she transitioned to the social studies teacher on the team, enabling her to have background knowledge for planning cross-curricular work.

Sara

Sara is a 15-year veteran teacher with a math endorsement. She has been teaching sixth grade for the entire 15 years and has spent four of the 15 years in a teaming model. Sara has

moved four times in the 15 years of teaching, allowing her to have a wide variety of experiences. Her last four years have all been at the same school and within the teaming concept. She said she entered the most recent school with a positive attitude and felt the sense of community among the team allowed her to feel accepted quicker than other transitions at new schools.

Tina

Tina is a 26-year veteran teacher with a math endorsement. She started teaching eighth grade and has been teaching sixth grade for the last 20 years. During the last 20 years, her school implemented the concept of teaming and during that time, she has taught sixth-grade math and has also served as the team leader. Tina labeled teaming as "the best thing that happened to middle school" and said she loves the autonomy it allows. Additionally, she said that teaming for 20 years has opened her eyes to new ideas and collaboration that she did not have the first six years.

Results

This study helped me understand the lived experiences of middle school teachers who have hands-on knowledge of teaming. Through my analysis of the data, I was led to three main themes: relationships, cross-curricular learning, and autonomy. Two of the main themes have sub-themes. The teachers I interviewed shared that they have had good experiences with teaming, although they may not have wanted to initially begin that model of teaching. The majority of teachers interviewed also shared that they felt they became better teachers due to the relationship building and had a better understanding of their students due to teaming and the collaboration of the teachers on the team. Finally, most of the teachers shared they appreciated the autonomy of teaming even though it scared them in the beginning. These themes and sub-themes will be discussed throughout the results section below.

Table 2

Themes and Subthemes of Triangulation Data

Themes	Sub Themes
Relationships	Student-to- Teacher Teacher- to-Teacher Parent- to- Teacher
Cross-curricular Learning	Collaboration for Cross-Curricular Work Increase in Student Engagement
Autonomy	

Table 3

Open Codes and Themes Derived from Research Questions

Open Codes	Frequency of open-code appearance	Theme	Subthemes

	across all data point		
Building connections	67	Relationships	Student-to- Teacher Teacher- to-Teacher Parent- to- Teacher
Common planning	42		
Opportunities for open communication	31		
Accountability	58		
Reflection	26		
Common expectations	17		
Increase in active student engagement	46	Cross-curricular Learning	Collaboration for Cross-Curricular Work Increase in Student Engagement
Increase in hands-on learning	65		
Increase in trying something new	19		
Relevance and rigor	17		
Ability to change the schedule	28	Autonomy	
Remediation	54		

Increase of teachers being the leaders of the learning, not following a schedule	19
Job satisfaction	37

Relationships

The middle school teachers who participated in the study shared they had good and responsive experiences with teaming. In every individual interview conducted, I kept hearing the word “relationships” as positive and increased. They viewed the model as a great way to build positive relationships with students, families, and fellow teachers. Six of the 12 participants said that they did not initially like the idea of teaming when presented with the change but ended up finding positive outcomes after one year. Rhonda told me, “I was not excited at all and had a lot of reservations about teaming, but after one year of seeing the benefit and relationships built, I became a huge fan and share the positivity with others who have reservations.” She said she had realized that teaming allowed for so many more opportunities to see students succeed that the relationships with them became stronger. She also said that she found the relationships with her fellow teachers were much stronger and she appreciated the teamwork and additional ideas for curriculum and classroom management. In the individual interview with Larry, he said, “Due to the closer relationship with my fellow teachers, I feel like we share more about students, teaching, and communicating with parents. This helps us plan better lessons and reflect on them to make future lessons more effective.” In one of the focus groups with Rhonda, Allison, Helen, and Tina, they shared the same thoughts and agreed with comments from Larry. Tina pointed out

that it is helpful to share situations of failure as a teacher with the team and feel supported, knowing she was not alone. Also, in the same focus group, Helen added, “I have always felt confident as a teacher but having the team to bounce ideas off of allows me to try new things.”

Student-Teacher Relationships

During the individual interviews, 10 of the 12 participants focused on the relationships formed between the teacher and the students due to teaming. These relationships and positive interactions were witnessed in all three of the classroom observations and shared in the focus groups. The 10 participants who shared positive experiences with student- teacher relationships were convinced that the students felt a sense of comfort and safety due to the team model of the same teachers and students working together collaboratively. Sandra shared, “I have taught for many years and realize how hard middle school is for students. Teaming shows the students that the teachers are all on the same page and truly know them as a student, allowing them to trust me as a teacher build a tighter bond.” Tina elaborated in her interview,

> “Sometimes there are personalities among students and teachers that do not mesh and often clash. I have found that teaming typically allows me to see that student in a positive light with another teacher on the team and inevitably our relationship gets better.”

Teacher-Teacher Relationships

My data analysis shows that the participants all feel they are gaining a stronger relationship with fellow teachers due to teaming. Of the 12 teachers participating, all mentioned independently that teaming allowed them to know the other teachers better, share ideas, and grow as a teacher. This was also discussed during both focus groups; all 12 participants agreed and elaborated on the relationships among teachers. Most of their team meetings allowed discussions and time to get to know each other personally and professionally, which formed

stronger working relationships and background knowledge about each other and how they deal with situations. Additionally, it was an added benefit of friendships formed that some mentioned were not as strong before. Sandra said, “After starting the teaming, I felt I knew more about my fellow teachers than I had the teachers in sixth grade before.” Jeff said, “The accountability from my teammates held me to a higher standard and I became better because of them.” Joni, Mona, and Sara agreed with him during the focus group. Jill said, “I never thought of it that way, but you are right. I am not only learning from myself, but I am also learning from others who make me better.” During both focus groups, a lot of comments circled back to relationships among the teachers and how they benefit from the professional relationship, but also the personal one. Helen said, “Once we started on our team, we started doing things together outside of school and I felt we fit better as a puzzle at school also. Our students benefit from that.”

Teacher-Parent Relationships

In a few of the individual interviews, participants shared that the relationships with parents increased due to teaming. In the first focus group, Mary said, “I feel I became better at talking to parents due to the support of my team.” Tina agreed and shared,

> Teaming has enabled us to conduct parent conferences as a team. This allows parents to see similarities among teachers and the behaviors they share, but also it allows me as a teacher to hear positive statements about a student in another teacher’s class and the strategies they use that I could apply.

In the second focus group, Sandra shared the importance of parents in the equation. She said, “I like teaming and having parents as part of the team for meetings. Including them and their opinions and ideas increases the relationship and trust among the group.” Jill agreed and shared, “Yes, we have noticed the same thing. Parents feel they have a voice, and we all talk

together, not just sharing information." The second focus group teachers discussed how many times parents come apprehensive to the group but end up sharing and collaborating for the better of their child.

Cross-curricular Learning

All 12 participants, during the individual interviews, told me that they wished they had realized the options of teaching and content delivery among subjects earlier in their careers. The most common topics discussed were cross-curricular activities and the increase in student engagement. Larry shared, "I feel the real-world learning and integration of content is a skill they carry with them beyond the school year. They start to realize learning is more than a worksheet that has a start and finish."

Collaboration for Cross-Curricular Work

The teachers in this study revealed they have found motivation and encouragement from cross-curricular work. The topic of cross-curricular assignments was mentioned by all 12 participants. Allison shared, "When we first started as a team, I thought it was hard to work with the science and math teachers but after a few activities, I realized English was the subject that could apply to anything." Helen agreed and said, "I agree! I love team meetings and hearing what the others are teaching and topics they are addressing. It motivates me to find new and innovative strategies to bring English into it." The second focus group teachers discussed how collaborating together with cross-curricular activities opened their eyes to new ideas and projects. Jill said, "When we start talking, it goes so many places and we all start saying things like, 'let's try this or what about this,' and by the end we have something better than what we could have thought of individually." Jeff shared, "We start the year with a cross-curricular assignment where all of our students are in the gym. We talk about who they are individually and

take hexagons about them to create what looks like a diagram or cell of the group. We discuss the connections and similarities of the group and how we 'fit together' as a team. This activity has allowed us to show collaboration and acceptance of others from the start on something personal before adding the cross-curricular piece." Both focus groups discussed the importance of showing relevance and rigor through cross-curricular activities and how they are needed more than ever. Sandra said, "Students want to see that what we are teaching them will be used and needed in their future. Cross-curricular integration is the only way to do that."

Increase in Student Engagement

Participants shared that they wanted to be teachers and see the learning among their students. They became teachers to meet the needs of their students and see growth in the students' performance. They all agreed that when they have team expectations and all follow the same basic parameters, the students know what is expected and perform better due to the structure and routines in place. During all three of the classroom observations, students were actively engaged and working together. The classroom setup enabled students to collaborate and communicate during class time. When I asked the opinions of the participants about student engagement and effective strategies, seven of the 12 teachers shared collaborative projects and presentations with cross-curricular integration at the top of their list. All 12 of the participants shared that they do not find meaningful student engagement from worksheets or recall activities. Joni shared,

> I became a teacher with the goal to share my love of English with students and to see them love it also. Although that is not always the case, working with my social studies teammate to introduce activities allows English to be part of the learning, not an

> individual outcome. I have finally realized they are applying what I teach them, not just recalling what I taught.

Tina added, in the focus group, “Over the last 20 years I have seen a lot and learned a lot. Ultimately, I have learned that teaching is about the students and what they get from it. When they are engaged and focused, they learn more and can apply it beyond that one activity.” Larry agreed and said, “Yes, that is when true learning occurs in the classroom.”

Autonomy

Many teachers have a desire to help all students, particularly those specific students who have an interest in learning, but so many things have changed, and students come into the classroom different and needing more attention. Out of the 12 teachers I interviewed, 11 of them said that the autonomy of teaming opens the doors to teaching and remediation, in one way or another. The discussion of remediation and assessments focused on the autonomy of the teachers during both focus groups. Rhonda said, “The ability to change our schedule among the team allows us to group students based on need and spend as much time as needed with them.” Allison said she found the same to be true on her team. “We make changes each grading period based on student data. For middle school students, this allows them to meet new friends.” Tina added,

> Absolutely. As a sixth-grade teacher, I am learning from my students, and they are learning from each other. The team meetings with our teachers, as a group, let us share and get a better sense of the needs of the students. After that, we use that information to adjust their class groups.

Outlier Data and Findings

During the study, I found one topic addressed by a participant that seemed to be an outlier among the data. Mona shared during her individual interview that staff turnover had

created a culture of change among teaming. Although she has spent the last five years as part of a team and has learned a lot from teammates, she feels the constant turnover has hindered the positive outcomes of teaming.

Staff Turnover

One teacher in the study has taught for five years in a teaming model but has had different teammates all five years. Although she shared that she felt this was beneficial for learning new ideas, techniques, and activities, she felt it hindered the bond for collaboration and relationships. Although many of the participants shared the positive outcomes of relationships and continuity, staff turnover made that impossible for Mona. She stated that some teachers out of college joined her school and were more interested in their own content and did not appreciate or accept the collaboration and cross-curricular work of teaming. Mary also commented about teaming being a "necessary evil," due to the students' behaviors and needs socially and emotionally. Her greatest frustration has not been the change to teaming, but the staff turnover that causes a lot of time to be spent in relationship building for the team of teachers.

Research Question Responses

The 12 participants teaching middle school were extremely willing to share their lived experiences of teaching cross-curricular context-based academics through teaming, which provided in-depth answers to my research questions. I found that during the initial individual interviews the teachers were less descriptive and less talkative about experiences. I had to encourage them to expand on comments and personal experiences. As I expected from the veterans of teaming, the two teachers with 20 or more years were open about examples, descriptions, and experiences over the years. The focus groups were informative and provided additional thoughts and depth to the topic as previously shared in the personal interviews. The

participants demonstrated a sense of comfort and built on the conversation as a group. When one participant mentioned a topic or point, the others would comment and elaborate. The classroom observations presented a visual for classroom design and teacher proximity for teaching. Ultimately, the data revealed a constant trend among the participants, and it provided me with a detailed explanation of their experiences.

Central Research Question

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming? The themes that answered this central research question were relationships, cross-curricular learning, and autonomy. All of the study's participants indicated that the experience of teaching cross-curricular context-based academics was applicable due to teaming. The participants involved in the study shared detailed descriptions of their experiences as middle school teachers. The participants had varying degrees of comfort in sharing and describing their lived experiences; all accounts helped develop the three overall themes and subthemes.

Larry specifically stated, "If we were not on a team, I would not be able to do as many cross-curricular lessons. Working together as a team provides me with that opportunity." All the participants mentioned the importance of relationships between the students and the teachers. The data analysis revealed that all 12 of the participants found teaming to be beneficial for them as a teacher.

Sub-Question One

What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming? The main themes that answered this question were relationships and autonomy. When asked about strategies for

motivating students, 100% of the participants agreed that a safe, risk-free environment was critical. Many of the teachers also shared that fostering a growth mindset where students are open to learning and trying new things is helpful. In addition, offering repeated opportunities to apply what is taught will motivate students when teaching with cross-curricular academics through the "I do, we do, you do" method of modeling and individualized work.

Tina suggested that "a safe, risk-free environment is critical for all learning models, not just teaming with cross-curricular activities." During one of the focus groups Allison and Rhonda both agreed but also felt that students needed to feel safe to make a mistake to try new techniques and apply various content among activities. Allison stated, "In my classroom, I find students are more motivated when they do not feel it is a social risk to mess up." Helen agreed with her comment and replied, "Middle school is socially awkward and to motivate students they need to feel comfortable. I found that teaming the students, so the same groups work together in all classes supports the safe environment where they trust each other."

The classroom observations all supported the motivation of students and demonstrated repeated opportunities for learning. Students engaged and talking together on topic, was observed during the observations. While in classrooms, the teachers were demonstrating and modeling activities and expectations; clarity of the lesson and activities was evident. Jeff specifically shared during the observation in his classroom, "I do, we do, you do is important here to have multiple attempts to put out learning into practice."

Sub-Question Two

What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming? When asked about fostering relationships, the participants agreed 100% that it was beneficial for everyone

involved in teaming. They all shared the positive outcomes for them as a teacher with their students, fellow teachers, and parents. The participants also shared how their students benefit from the relationships of the teachers and how they plan activities that are engaging to them.

Jeff was vocal in his beliefs about the relationships fostered from teaming. He said, "There is no other accountability like teaming. I have learned so much from my colleagues and from myself." Helen shared, "I enjoy the time we are together as a team of teachers, learning from each other. I have grown due to the relationships." Tina elaborated on her experiences and how she gets to know her students on a deeper level due to the cross-curricular work. "I am expecting more of them when I integrate content and expect them to apply the learning."

Sub-Question Three

What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming? The theme tied to this question was cross-curricular learning. The response shared among all individual interviews was connecting content to the real world. During the individual interviews, 100% of the participants shed light on middle school students and their focus levels increasing when it relates to their life or the real world. Most of the participants also shared that it is important to seek knowledge of the students personally and their interests then apply it to activities in the classroom.

Sandra said, "Middle school students are self-centered and want to know that the time they are spending on learning is relevant to them and their life." Jill responded with, "Amen to that. I find students engage more when they see the application in real life."

Larry's comments shared during the focus group elaborated on his individual interview about knowing your students. "The relationships I form with my students allow me to create interesting lessons for them." Mary acknowledged this during the focus group and commented

similarly. “I like for my students to be part of the learning, not sponges to only absorb knowledge. I want them to share ideas, needs, and make suggestions. The relationships built among teaming allows for this to occur.” Tina shared a great point about autonomy as a teacher and the ability to adapt based on her students’ interest, “Lesson planning for the long term is difficult in teaming with cross-curricular activities because I like to exercise the ability to make changes based on their interests and needs, not just what is planned in the unit.”

Sub-Question Four

What challenges do middle school teachers who are teaming with cross-curricular context-based academics face? This question had connections with all three themes of relationships, cross-curricular learning, and autonomy. Immediately when asked questions around challenges, the majority of the participants responded with the same theme of learning loss. During the individual interviews, 11 of the 12 participants specifically mentioned COVID-19 and the learning loss they see when students enter the classroom based on where they entered prior to the pandemic. All 12 of the participants shared that the gaps in the background knowledge of students are a challenge when creating innovative and higher-order thinking activities. Lastly, seven of the participants shared that the behaviors of students hinder some of the collaborative cross-curricular activities.

Sara thought it was helpful to discuss behaviors and learning gaps as a group of teachers to motivate and provide consistency. Mona agreed and said, “Students need to learn the basics and be taught the basics. We can’t expect them to know what we expect without modeling it. Our teams meet regularly to discuss students and the patterns in learning we recognize.” Jeff had many of the same themes during his interview. He shared, “I have noticed a great deal of learning loss the last two years, but I also feel I am addressing it better than ever due to the team

meetings and the relationship we have as a group. We meet with students regularly during planning to talk about concerns we have with the students. This addresses our challenges head-on and makes the student aware."

Summary

This chapter revealed findings from the hermeneutical phenomenological study of the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. Middle school teachers who participated in this study were open to discussing their experiences of teaming through cross-curricular context-based academics. The data revealed that the teachers had good experiences, some more extensive and involved than others. The first main theme that emerged was relationships, with the sub-themes of student-to-student relationships, student-to-teacher relationships, and teacher-to-parent relationships. The second theme that emerged was cross-curricular learning, with the sub-themes of collaboration and increase in student engagement. The third theme was autonomy. These three main themes answered research questions about experiences with teaming at the middle school level.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this hermeneutical phenomenological study was to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia. This phenomenological study examines the experienced middle school teachers who have previously used traditional scheduling and changed to teaming among the middle school teachers to include cross-curricular activities through interdisciplinary studies. The researcher is seeking to gain an understanding of the benefits of teaming. This chapter discusses the interpretation of my findings, the implications for policy and practice, theoretical and methodological implications, limitations and delimitations, and recommendations for future research. This chapter closes with a summary of the entire study.

Discussion

This section will divulge the findings from the study and highlight the themes: (a) relationships, (b) cross-curricular learning, and (c) autonomy. This section shares the interpretation of the findings and the implication for policy and practice along with the theoretical and empirical implications, along with the explanation of limitations and delimitations. Lastly, this section includes recommendations for future research.

Summary of Thematic Findings

This section of the study summarizes the thematic findings and the interpretation of the themes within the data. From the data I documented, I found three overall themes with five subthemes. In addition, I found one outlier from a participant. The three main themes found in the study are: (a) relationships, (b) cross-curricular learning, and (c) autonomy. The outlier that emerged from one participant was staff turnover. The analysis of data showed that all 12 of the

teacher participants teaming in the middle school setting had beneficial and successful experiences. Eleven of the 12 teachers participating shared that they felt they became better teachers due to the relationships and collaboration involved with teaming. Additionally, they all discussed the appreciation for the autonomy that teaming embraces, even though it was scary and uncomfortable in the beginning.

Interpretation of Findings

Teacher participants involved in the study were willing and eager to share their experiences of cross-curricular context-based academics through teaming. The resulting themes within the data show that the participants had beneficial experiences as teachers, became better teachers because of the relationships and collaboration, and found comfort and support for long term within the career of teaching. The teachers I interviewed shared a strong desire to continue teaming due to the benefits for them personally and for the students. None of the participants shared a desire to depart from the teaming model.

The study included questioning as the method for gaining information from the 12 participants involved in the study. To gather data, I used personal interviews, two focus groups involving the 12 participants, and three classroom observations. The analyzation of the data revealed the three thematic findings as (a) beneficial experience, (b) real-world applicable, and (c) responsive.

Beneficial Experience

Teachers want to make learning beneficial, and they want to see outcomes, whether through interest, scores, or application of content. During the study, 100% of the participants used the word beneficial to describe teaming and their experiences. Teaching is at a crossroad and teachers want to see more collaboration where they can learn from other teachers. Teachers

also realize the importance of relationship building during middle school for the connection with students. Rogers's theory of experiential learning is responsive to the adapting world that students are learning in. Rogers believed all humans have the ability to learn and that teachers facilitate this through a positive learning atmosphere, clarifying the purpose of learning, sharing resources and tools for learning, and including personal feeling and thoughts with the learners (Servant-Miklos & Noordegraaf-Eelens, 2019).

Real-world Applicable

All 12 of the participants involved in the study shared a personal goal to engage students through the learning experience and to enjoy what they do, as teachers. Teachers want to know the fruits of their labor are appreciated and applicable. Teaming as a group of teachers can motivate and enhance the teaching of the group and they can learn from their colleagues as they collaborate as the team. Teaming with cross-curricular context-based academics allows teachers to demonstrate the relevance of the content through applying it to real-life situations.

Carl Rogers's theory of experiential learning encourages a learning environment where application is based on the student's individual life experiences (Iyer &Ramamoorthy, 2023). Through real-life applications, the students are engaged in a continuous learning process where they become active in the process, personalizing the experience. The teachers become facilitators through Rogers's theory and the process of learning itself, solving problems, and sharpening the ability to learn (Servant-Miklos & Noordegraaf-Eelens, 2019).

Responsive

The participants involved in the study all shared the concern of being responsive to their students. They described the need to be responsive to academic needs, social needs, and emotional needs. The individual interviews revealed that they feel teaming provides a bond

among the teachers that allows for a productive working relationship to know the student needs. The meetings among the teachers allow for discussions and plans to support students. Teachers working in a team share the collaboration from the teachers who allows them to respond to the students and be effective with learning.

Implications for Policy and Practice

Middle school teachers who are not currently in a teaming model could benefit from the option or exposure to cross-curricular context-based academics through teaming. This section will offer ways for teachers to tailor their teaching to engage in cross-curricular academics to possibly improve the overall achievement and engagement of learning. Additionally, this section will offer ways middle school teachers can adapt their teaching to the needs of students in today's world.

Implications for Policy

School divisions should entertain structures for middle school that meet the diverse needs of teachers and students through teaming. Although teaming in middle schools is widely common and currently estimated to be in 80% of United States' middle schools (Echols, 2015), it is needed now more than ever. Diverse learners with varied levels of background knowledge and academic abilities need teachers who are engaged, energetic, and focused on them and their progress. As a teacher involved in teaming, academic obligations are obtainable when the relationship with others is evident. Middle school students want to know how they matter, and the teaming model enables teachers to really get to know them, discuss them, and implement strategies for them. Teachers in middle school who refuse to be part of a team, working to improve learning and refusing to be involved, should be documented and monitored.

Implications for Practice

A few practical implications for cross-curricular context-based academics through teaming is to offer professional development and opportunities for teachers to experience or interview current teachers in the model. Middle school students are presented with a world of immediate responses through social media and technology. If teachers are open to new strategies and teaching models, they would find ways to make learning relevant and fun again, reaching students who are learning from technology and other devices. This data shows that teachers who are teaming are enjoying their daily interactions with other teachers and students. In addition, they are seeing the interest of learning among students when integrating content through cross-curricular activities. These findings apply to many middle school settings.

Empirical and Theoretical Implications

This phenomenological study had both theoretical and empirical implications. This section addresses both of the theoretical and empirical implications. The middle school teachers who participated in the study with at least two years of teaming experience shared their lived experiences of cross-curricular context-based academics. The findings from the study build on Carl Rogers's experiential learning theory.

Empirical Implications

Many of the findings from this study supported the empirical work of teaching and focused on teacher experiences. Middle school teachers know their classrooms, the needs, and their students (King, 2017). The participants involved in the study were eager and willing to share their lived experiences of teaming with aspirations to improve middle school education and middle school teaching for others. The study revealed that all 12 of the participants involved feel passionately about the integration of teaming and the analysis of it. The focus groups allowed the participants to share openly and elaborate on their experiences. The participants enjoy teaming

and integrating cross-curricular activities and as a result found the phenomenon to be beneficial. The study supported the literature showing that teaming is an effective model for meeting student needs (Abbas, 2020; Moser et al., 2019).

Learning has changed over the past decades and this study revealed the changes to support the students and their outcomes of learning (Kittelman et al., 2021). The increase of collaboration and strong relationships initiated with teaming are enabling teachers to achieve the goals and objectives of the school (Jones & Rock, 2020). The teachers are considered facilitators of instruction, not lecturers and are meeting the needs of them through improved strategies (Holdo, 2022). Literature shared that student engagement is getting harder to accomplish and sustain. Teaming is an attempt to build a strong bond among teachers and students and ultimately increase the engagement levels.

The literature review shows the variety of techniques for teaching within a teaming model (Daher, 2022; Early 2019). The participants involved in the study discussed and shared the ability for connections to be made among contents as cross-curricular activities enabled the relevance of the content as application (Shibiti, 2020). The participants involved in the study shared their interest in teaming and suggestions for further improvement. Although middle school may be a difficult time for students and present teachers with many behavioral and classroom management dilemmas, teaming allows the teachers to build on others' strengths and learn from each other. The teachers are tapping into new ideas and strategies through collaboration and communication with teammates. The literature showed that student achievement is tied to student perceptions of teacher delivery and involvement (Abbas, 2020) and 100% of the participants in the study shared the importance of this and achievement through teaming. This study shed light on many of the experiences of teachers and the commitment to

others through teaming. Not only did they feel responsible and accountable to the students, but also each other.

Theoretical Implications

The theoretical framework used to guide this study is the experiential learning theory by Rogers. The interest in cross-curricular learning has grown among educators and how it relates to relevancy (Torres, 2018; Xhomara, 2019). With experiential learning theory, the learning environment focuses on the learning through the environment, the student's involvement, their hands-on activities, and the active engagement (Petit &Ballet, 2021). The study found that teachers' involvement in teaming increased their collaboration and knowledge of the students they are teaching, showing how the experiences play a significant role in the teaching and learning (Renger & Macaskill, 2021). These teachers who are collaborating and integrating cross-curricular academics into the classroom are engaging students in experiential learning. The study showed that learning and teaching is a continuous process, involving the knowledge and teamwork of all involved. This study revealed that relevance is important to middle school students (Petit & Ballet, 2021) and teaming allows teachers to integrate activities that are relevant. Middle school students need to be engaged and active (Balfanz et al., 2007) and the study supported experiential learning and the active involvement of teachers and students where they apply what they know to the entire process. Ultimately, the study revealed that teaming embraces the learning to solve problems and applying it to the student's everyday life (Servant-Miklos &Noordegraaf-Eelens, 2019).

Limitations and Delimitations

This study involving middle school teachers and their lived experiences included limitations and delimitations. The limitations are potential weaknesses of the study that cannot be

controlled due to an outside force or situation. Delimitations are purposeful decisions the researcher makes to limit or define the boundaries of the study. This section will share the limitations and delimitations included in this study.

Limitations

A potential weakness of the study was timing. The interviews and focus groups were conducted in the summer, when teachers were not teaching. Potentially, the time away from school could have implications on how they responded to the questions since they were not currently working with the teachers on their team. The limitations include difficulties in recruiting participants with varied experiences of content and years of experience to get the full perception of the teachers' experiences. Recruiting a variety of content teachers was difficult and I was only successful in securing one teacher of science. Teachers of other content areas, specifically math and science, may have different experiences than those who focus on social studies and English. This limitation may be related to the staff changes and newer teachers within the school setting due to the COVID-19 pandemic and the staff turnover rates following. Teachers who taught prior to COVID-19 and lived through the transition to middle school teaming previously may now have varied opinions and perceptions regarding the effects of teaming and how the creation of teams impacted their lived experiences.

Delimitations

Delimitations included only allowing teachers with a minimum of two years of teaming experience in teaching to participate in the study and the geographical location of central-western Virginia. Teachers with only one year of experience would have been less likely to have experience and less reflection on teaming to share in the study. I chose a hermeneutical study due to my personal interest and lived experiences in teaming. Teachers from schools outside of

central-western Virginia may have varied experiences with teaming and its outcomes due to the geographical location of the schools, the students who attend, and the teachers they employ. This study was limited to the teachers in central-western Virginia and their lived experiences.

Recommendations for Future Research

Future research needs to be conducted to determine if teachers in elective classes have the same opinions and experiences when integrating cross-curricular context-based academics through teaming. Additional research would be helpful to inquire and gain knowledge for sharing the information about students beyond the core content teachers in teaming. With the limitation of certain content teachers, future research could change or have a different perspective. In addition, future research could also determine if teaming with a two-person team is more effective than a four-person team. The recommendation of having teachers who are certified in multiple contents areas could allow for more autonomy and a stronger bond as fewer teachers would be on the team. This model could be effective in smaller schools where four academic content teachers are too many for one team of students. The participants in this study all felt that teaming is beneficial and enjoyed it overall, however, the need was shared for professional development and sessions for growth as a teacher with cross-curricular academics. Future research is needed to show the model of collaboration and integration of cross-curricular content-based academics. Teachers who are in the field of teaching could benefit from further learning opportunities to support the teaming model and examples for integrating content into real life situations. Although this study was conducted only in central-western Virginia, it could be conducted again in another area to see if the same results were revealed. Lastly, a recommendation for future research is to conduct this study in the middle of the school year,

while teachers are in session with students and actively working with their teammates instead of the end of the school year, as a comparison.

Conclusion

This hermeneutical phenomenological study examined the lived experiences cross-curricular context-based academics through teaming of middle school teachers in central-western Virginia. The theories used to drive this study were Bandura's (1971) social learning theory and Carl Rogers's experiential learning theory. Data collection included individual interviews with 12 middle school teachers, two focus groups involving the 12 participants, and three classroom observations of the original 12 teachers participating. These data collection methods were sufficient for answering my central research question and the four sub-questions. The findings from the study show that teachers are motivated and engaged in their profession due to teaming and found the phenomenon beneficial for teachers and students. Teachers, to be effective, have holistic needs and teaming allows those needs to be met, allowing for improved relationships, improved academic learning, and improved teacher retention.

The themes that emerged were evident early in the interviews and supported by 100% of the participants. First, relationships where the participants felt that the student-to-teacher relationships embraced teaching and learning, the teacher-to-teacher relationships improved knowledge of the students and their needs, and lastly the parent-to-teacher relationships improved with consistency and the increased ability and comfortability in meeting with them. Secondly, learning that happens outside of silos was discussed. Participants felt that relevant academics that are intertwined engaged students to see why they are in school and how they will use it long term. Teaming and collaborating as teachers led to increased participation and risk-taking for academics. Lastly, the participants shared the outcome of autonomy as a teacher. The

participants had the desire to try new things and focus on their individual student needs, not affecting the entire school or school schedule. The main takeaway for me as the researcher was that teachers enjoy teaching and feel empowered because of teaming and the ability to integrate cross-curricular context-based academics.

References

Abbas, J. (2020). Service quality in higher education institutions: Qualitative evidence from the students' perspectives using Maslow hierarchy of needs. *International Journal of Quality and Service Sciences*, *12*(3), 371–384. https://doi.org/10.1108/ijqss-02-2020-0016

Al Salami, M. K., Makela, C. J., & de Miranda, M. A. (2015). Assessing changes in teachers' attitudes toward interdisciplinary STEM teaching. *International Journal of Technology and Design Education, 27*(1), 63–88. https://doi.org/10.1007/s10798-015-9341-0

Albrecht, J. R., & Karabenick, S. A. (2017). Relevance for learning and motivation in Education. *The Journal of Experimental Education, 86*(1), 1–10. https://doi.org/10.1080/00220973.2017.1380593

Alfrey, L., Burke, G., O'Connor, J., & Hall, C. (2020). Learning about health through 'intergenerational arts-led pedagogies' in health and Physical Education: Exploring Pedagogical Possibilities. *Sport, Education and Society*, *26*(8), 815–830. https://doi.org/10.1080/13573322.2020.1814715

Archambault, I., Janosz, M., Morizot, J., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school: Relationship to dropout. *Journal of School Health, 79*(9), 408–415. DOI: 10.1111/j.1746-1561.2009.00428.x

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518–529.

Balfanz, R., & Byrnes, V. (2012). Chronic absenteeism: Summarizing what we know from nationally available data. Baltimore, MD: Johns Hopkins University Center for Social Organization of Schools. Retrieved from http://new.every1graduates. org/wp-content/uploads/2012/05/FINALChronicAbsenteeism.

Balfanz, R., Herzog, L., & Mac Iver, D. J. (2007). Preventing student disengagement and keeping students on the graduation path in urban middle-grades schools: Early identification and effective interventions. Educational Psychologist, 42(4), 223– 235. doi: 10.1080/00461520701621079

Baker, R. S., Berning, A. W., Gowda, S. M., Zhang, S., & Hawn, A. (2019). Predicting K-12 dropout. *Journal of Education for Students Placed at Risk (JESPAR)*, *25*(1), 28–54. https://doi.org/10.1080/10824669.2019.1670065

Bandura, A. (1971). Social Learning Theory. *General Learning Press*.

Barber, J. (2015). How to design for breakthrough: a story of collaborative design across disciplines. *Educational Designer, 2*(8).

Barker, K. S., Pettit, S. K., & Pace, C. L. (2021). Preparing middle level teachers through a collaborative documentary novel study. *Middle School Journal*, *52*(5), 25–35. https://doi.org/10.1080/00940771.2021.1978789

Barnes, J. (2018). *Applying cross-curricular approaches creatively*. Routledge.

Batič, J., & Lebar Kac, P. (2020). Cross-curricular analysis of picture books in the fifth grade of primary school: A case study. *Center for Educational Policy Studies Journal*, *10*(4), 165–185. https://doi.org/10.26529/cepsj.910

Battersby, D. (2012). Cross-curricular teaching and learning in the secondary school - by Jonathan Savage. *British Journal of Educational Technology*, *43*(2). https://doi.org/10.1111/j.1467-8535.2012.01297_5.x

Beckett, G. H., Hemmings, A., Maltbie, C., Wright, K., Sherman, M., & Sersion, B. (2016). Urban high school student engagement through CincySTEM iTest projects. *Journal of*

Science Education and Technology, 25(6), 955–1007. https://doi.org/10.1007/s10956- 016-9640-6

Beckmann, A. (2009). A conceptual framework for cross-curricular teaching. *The Mathematics Enthusiast, 6*(Supplement 1), 1–58. https://doi.org/10.54870/1551-3440.1153

Berckemeyer, J. C. (2022). *Successful Middle School Teaming*. Association for Middle Level Education.

Bernstein, B. (1999) 'Official knowledge and pedagogic identities', in Christie, F. (ed.) Pedagogy and the Shaping of Consciousness. London, Cassell.

Bestelmeyer, S. V., Elser, M. M., Spellman, K. V., Sparrow, E. B., Haan-Amato, S. S., & Keener, A. (2015). Collaboration, interdisciplinary thinking, and communication: New approaches to K–12 ecology education. *Frontiers in Ecology and the Environment*, *13*(1), 37–43. https://doi.org/10.1890/140130

Birchinall, L. (2013). Case study of trainee teachers' responses to the impact on engagement and motivation in learning through a model of cross-curricular context-based learning: 'keeping fit and healthy'. *The Curriculum Journal*, *24*(1), 27–49. https://doi.org/10.1080/09585176.2012.731014

Boyer, S. J., & Bishop, P. A. (2004). Young Adolescent Voices: Students' Perceptions of Interdisciplinary Teaming. *RMLE Online*, *28*(1), 1–19. https://doi.org/10.1080/19404476.2004.11658176

Bokhorst-Heng, W., & Marshall, K. K. (2018). Informing research (practices) through pedagogical theory: Focus Groups with adolescents. *International Journal of Research & Method in Education*, *42*(2), 148–162. https://doi.org/10.1080/1743727x.2018.1449195

Braßler, M., & Schultze, M. (2021). Students' innovation in Education for Sustainable Development—a longitudinal study on interdisciplinary vs. Monodisciplinary Learning. *Sustainability, 13*(3), 1322. https://doi.org/10.3390/su13031322

Brouwer, P., Brekelmans, M., Nieuwenhuis, L., & Simons, R. J. (2012). Fostering teacher community development: A review of design principles and a case study of an innovative interdisciplinary team. *Learning Environments Research, 15*(3), 319–344.

Brown, J. S., & Adler, R. P. (2008). Minds on fire: Open education, the long tail, and learning 2.0. *Educause Review 43*(1), 17-32

Carrier, S., Gray, P., Wiebe, E.N., & Teachout, D. (2011). BioMusic in the classroom: Interdisciplinary elementary science and music curriculum development. *School Science and Mathematics, 111*(8), 425-434.

Chandler-Olcott, K. (2016). Co-teaching to support early adolescents' writing development in an inclusive summer enrichment program. *Middle School Journal, 48*(1), 3–12. https://doi.org/10.1080/00940771.2017.1243916

Chatmaneerungcharoen, S., & Sricharoen, N. (2021). Supporting interdisciplinary instruction on science, Mathematics and Technology for Thai gifted students: Centered on Raiwa Lesson Plan. *Journal of Physics: Conference Series, 1835*(1), 012039. https://doi.org/10.1088/1742-6596/1835/1/012039

Chauraya, M., & Brodie, K. (2017). Learning in Professional Learning Communities: Shifts in Mathematics Teachers' Practices. *African Journal of Research in Mathematics*, Science and Technology Education, 21, 1-11. doi:10.1080/0035919X.2017.1350531

Childress, G. (2019). From Where Two or More are Gathered: Understanding an Interdisciplinary Team. *Current Issues in Middle Level Education, 24*(1). https://doi.org/10.20429/cimle.2019.240104

Choi, J., Lee, J.-H., & Kim, B. (2019). How does learner-centered education affect teacher self-efficacy? the case of project-based learning in Korea. *Teaching and Teacher Education, 85*, 45–57. https://doi.org/10.1016/j.tate.2019.05.005

Clark, S.N., & Clark, D.C. (1997). Exploring the possibilities of interdisciplinary teaming. *Childhood Education, 73*(5), 267-271. https://doi.org/10.1080/00094056.1997.10521112

Clark, S., & Clark, D. (2008). Leadership That Makes a Difference: Revitalizing Middle Schools. National Middle School Association.

Cohen, D. K., & Hill, H. C. (2001). Learning policy: When state education reform works. New Haven: Yale University Press

Cole, C. M., Waldron, M., Majd, M. (2004). "Academic Progress of Students Across Inclusive and Traditional Settings." *Mental Retardation* 42 (2): 136–144. doi:10.1352/0047-6765(2004)42<136:APOSAI>2.0.CO;2.

Collins, J. (2001). Good to Great: Why Some Companies Make the Leap and Others Don't (1st ed.). Harper Business.

Cook, C. M., Faulkner, S. A., & Howell, P. B. (2016). The developmentally responsive middle school: Meeting the needs of all students. *Middle School Journal, 47*(5), 3–13. https://doi.org/10.1080/00940771.2016.1226645

Cooper, R. (2016). Decoding coding via the coding manual for qualitative researchers by Johnny Saldaña. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2009.2856

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Cui, L., Wang, Y., Chen, W., Wen, W., & Han, M. S. (2021). Predicting determinants of consumers' purchase motivation for electric vehicles: An application of Maslow's hierarchy of needs model. *Energy Policy, 151*, 112167. https://doi.org/10.1016/j.enpol.2021.112167

Dana, N. F. (2009). Leading With Passion and Knowledge: The Principal as Action Researcher (1st ed.). Corwin.

Darling-Hammond, L. & Richardson, N. (2009). Research Review - Teacher Learning: What Matters? A new paradigm -- The professional learning community -- Emerges. *Educational leadership, 66*(5), 46.

de la Puente Pacheco, M. A., Guerra Florez, D., de Oro Aguado, C. M., & Llinas Solano, H. (2020). Does project-based learning work in different local contexts? A Colombian caribbean case study. *Educational Review, 73*(6), 733–752. https://doi.org/10.1080/00131911.2019.1694489

Demeris, H., Childs, R.A., and Jordan, A. (2007). "The Influence of Students with Special Needs Included in Grade-3 Classrooms on the Large-Scale Achievement Scores of Students Without Special Needs." *Canadian Journal of Education* 30: 609–627. doi: 10.2307/20466655

Desy, E. A., Peterson, S. A., & Brockman, V. (2011). Gender differences in science related attitudes and interests among middle school and high school students. Science Educator, 20(2), 23-30. Retrieved from https://files.eric.ed.gov/fulltext/EJ960633.pdf

Dewey, J. (1897). My pedagogic creed. *School Journal,* vol. 54, pp. 77-80.

Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted, 37*(2), 111–127

Drake, S., and Burns, R. (2004). *Meeting Standards Through Integrated Curriculum*. Alexandria, VA: Association for Supervision and Curriculum Development.

DuFour, R. (2004). What is a" professional learning community"? *Educational Leadership, 61*(8), 6-11.

Dugan, K.B., Letterman, M.R. (2008). Student appraisals of collaborative teaching. *College Teaching*, 56,11-15.

Duncan, T. A. (2013). Differentiated contracts: Giving students freedom to learn. *Kappa Delta Pi Record, 49*(4), 174–179.

Durgun, B. (2019). “bringing the world to the classroom”: Cultural studies and experiential learning. *Cultural Studies in the Classroom and Beyond*, 155–165. https://doi.org/10.1007/978-3-030-25393-6_9

Earley, S. (2019). An Investigation into the Implementation of a Cross-Curricular Approach in an Irish Primary School Classroom. *International Journal for Cross-Disciplinary Subjects in Education (IJCDSE), 10*(2). 4031-4039.

Echols, L. (2015). Social consequences of academic teaming in middle school: The influence of shared course taking on peer victimization. *Journal of Educational Psychology, 107*(1), 272–283. https://doi.org/10.1037/a0037440

Ellerbrock, C., Main, K., Falbe, K., & Pomykal Franz, D. (2018). An Examination of Middle School Organizational Structures in the United States and Australia. *Education Sciences, 8*(4), 168. https://doi.org/10.3390/educsci8040168

Farrell, E. (2020). Researching Lived Experience in Education: Misunderstood or Missed Opportunity? *International Journal of Qualitative Methods, 19*https://doi.org/10.1177/1609406920942066

Flowers, N., Mertens, S., & Mulhall, P. (1999). The Impact of Teaming: Five Research- Based Outcomes. *Middle School Journal, 31*(2), 57–60. http://ezproxy.liberty.edu/login?url=https://www.jstor.org/stable/23043228

Forte, A. (2015). The new information literate: Open collaboration and information production in schools. *International Journal of Computer-Supported Collaborative Learning, 10*(1), 35–51. https://doi.org/10.1007 /s11412-015-9210-6

Fredricks, J., McColskey, W., Meli, J., Mordica, J., Montrosse, B., & Mooney, K. (2011). Measuring student engagement in upper elementary through high school: A description of 21 instruments. Issues & Answers. REL 2011-No. 098. Regional Educational Laboratory. Retrieved from https://files.eric.ed.gov/fulltext/ED514996.pdf

Friend, M., & Cook, L. (2013). Interactions: Collaboration Skills for School Professionals (7th ed.). New York, NY: Pearson.

Friesen, N., Henriksson, C., & Saevi, T. (2012). *Hermeneutic phenomenology in education: Method and practice*. Sense Publishers.

Gardner, M. A., & Tillotson, J. W. (2020). Explorations of an integrated stem middle school classroom: Understanding spatial and temporal possibilities for collective teaching. *International Journal of Science Education*, *42*(11), 1895–1914. https://doi.org/10.1080/09500693.2020.1794078

Gee, D. L., & Whaley, J. (2016). Learning Together: Practice-Centered Professional Development to Enhance Mathematics Instruction. *Mathematics Teacher Education and Development*, 18, 87-99.

Gilman, R., & Anderman, E. M. (2006). Motivation and its relevance to school psychology: An introduction to the special issue. *Journal of School Psychology*, *44*(5), 325–329. https://doi.org/10.1016/j.jsp.2006.04.006

Geertz, C. (2008). *Thick description: Toward an interpretive theory of culture* (pp. 41-51). Routledge.

George, T. (2022, November 11). *What is a Focus Group | Step-by-Step Guide & Examples.* Scribbr. Retrieved November 28, 2022, from https://www.scribbr.com/methodology/focus-group/

Goodyear, V. A., & Casey, A. (2015). Innovation with change: Developing a community of practice to help teachers move beyond the 'honeymoon' of pedagogical renovation. *Physical Education and Sport Pedagogy*, *20*(2), 186-203.

Griffin, C. B., Cooper, S. M., Metzger, I. W., Golden, A. R., & White, C. N. (2017). School racial climate and the academic achievement of African American high school students: The mediating role of school engagement. *Psychology in the Schools, 54*(7). https://doi.org/10.1002/pits.22026

Hanley, P., & Thompson, R. (2021). 'generic pedagogy is Not enough': Teacher educators and subject-specialist pedagogy in the Further Education and skills sector in England. *Teaching and Teacher Education, 98,* 103233. https://doi.org/10.1016/j.tate.2020.103233

Hasselquist, L., & Graves, N. A. (2020). CTE teacher retention: Lessons learned from mid-career teachers. *Career and Technical Education Research*, *45*(1), 3–16. https://doi.org/10.5328/cter45.1.3

Hayes, D. (2010). The seductive charms of a cross-curricular approach. *Education 3-13*, *38*(4), 381–387. https://doi.org/10.1080/03004270903519238

Herro, D., Quigley, C., Andrews, J., & Delacruz, G. (2017). Co-measure: Developing an assessment for student collaboration in Steam Activities. *International Journal of STEM Education*, *4*(1). https://doi.org/10.1186/s40594-017-0094-z

Hoffman, E. (2020). The Social World of Self-Actualizing People: Reflections by Maslow's Biographer. *Journal of Humanistic Psychology*, *60*(6), 908–933. https://doi.org/10.1177/0022167817739714

Holdo, M. (2022). Critical reflection: John Dewey's relational view of transformative learning. *Journal of Transformative Education*, *21*(1), 9–25. https://doi.org/10.1177/15413446221086727

How qualitative data analysis happens. (2018). https://doi.org/10.4324/9781315171647

Hurd, E., & Ormsby, A. A. (2020). Supporting K-12 teachers in the context of whole-school sustainability: Four case studies. *Applied Environmental Education & Communication*, *20*(4), 303–318. https://doi.org/10.1080/1533015x.2020.1740115

In'am, A., & Hajar, S. (2017). Learning geometry through discovery learning using a scientific approach. *International Journal of Instruction, 10*(1), 55–70.

Iyer, L., & Ramamoorthy, S. (2023). *T-Group Facilitation: Theory and practice of Applied Behavioral Science*. Routledge, Taylor & Francis Group.

Jennings, J. (2018). It's time to redefine the federal role in K-12 Education. *Phi Delta Kappan, 100*(1), 8–14. https://doi.org/10.1177/0031721718797114

Jones, A. C. (2016). Leading the charge in changing times: 21st Century learning and leading (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMINo. 10242235). Retrieved from https://ecommons.luc.edu/cgi/viewcontent.cgi?article=3797&context=luc_diss

Jones, M. G., & Brader-Araje, L. (2002). The impact of constructivism on education: Language, discourse, and meaning. *American Communication Journal, 5*(3), 1-10

Jones, J. L., & Rock, M. (2020). Coach supported teaming: Enhancing functioning to improve outcomes for students with and without disabilities. *International Journal of Leadership in Education,* 1–19. https://doi.org/10.1080/13603124.2020.1842507

Kalkan, M., Altınay Aksal, F., Altınay Gazi, Z., Atasoy, R., & Dağlı, G. (2020). The Relationship Between School Administrators' Leadership Styles, School Culture, and Organizational Image. *SAGE Open, 10*(1), 1–15. https://doi.org/10.1177/2158244020902081

Kanmaz, A. (2022). A study on interdisciplinary teaching practices: Primary and secondary education curricula. *African Educational Research Journal, 10*(2), 200–210. https://doi.org/10.30918/aerj.102.22.032

Katz, J., Sokal, L., & Wu, A. (2019). Academic achievement of diverse K-12 students in inclusive three-block model classrooms. *International Journal of Inclusive Education, 25*(12), 1391–1409. https://doi.org/10.1080/13603116.2019.1613450

Kellough, R. D., & Kellough, N. D. (2008). Teaching young adolescents: methods and resources for middle grades teaching (5th ed.). Pearson Merrill Prentice Hall.

King, K. (2017). The future of student life: learning. *On the Horizon, 25*(3), 161–164.

Kirsten, N. (2019). Improving literacy and content learning across the curriculum? how teachers relate literacy teaching to school subjects in cross-curricular professional development. *Education Inquiry*, *10*(4), 368–384. https://doi.org/10.1080/20004508.2019.1580983

Kittelman, A., Goodman, S., & Rowe, D. A. (2021). Effective teaming to implement evidence-based practices. *TEACHING Exceptional Children*, *53*(4), 264–267. https://doi.org/10.1177/0040059921993020

Korstjens, I., & Moser, A. (2018). Practical guidance to qualitative research. *European Journal of Generic Practice*. Taylor & Francis.

Kuisma, M., & Ratinen, I. (2021). Students' narratives and conceptual changes in a cross-curricular inquiry-based study unit in a Finnish upper secondary school. *International Journal of Educational Research, 110*, 101889. https://doi.org/10.1016/j.ijer.2021.101889

Ladson-Billings, G. (2021). *Culturally relevant pedagogy: Asking a different question*. Teachers College Press.

Langdridge, D. (2012). *Phenomenological psychology: Theory, research and Method*. Pearson Prentice-Hall.

Lauterbach, A. (2018). Hermeneutic phenomenological interviewing: Going beyond semi-structured formats to help participants revisit experience. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2018.3464

Lawson, H. A., & Lawson, M. A. (2020). Student engagement and disengagement as a collective action problem. *Education Sciences, 10*(8), 1–20. https://doi-org.ezproxy.liberty.edu/10.3390/educsci10080212

Lee, I & Malyn-Amith, J. (2020). Computational thinking integration patterns along framework defining computational thinking from a disciplinary perspective. *Journal of Science Education and Technology, 20,* 9-18.

Li, H. (2022). Educational change towards problem-based learning. https://doi.org/10.1201/9781003357230

Lin, L., Ginns, P., Wang, T., & Zhang, P. (2020). Using a pedagogical agent to deliver conversational style instruction: What benefits can you obtain? *Computers & Education, 143,* 103658. https://doi.org/10.1016/j.compedu.2019.103658

Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry.* Sage.

Liu, K. (2022). A retrospective study on the first-year implementation of an integrated curriculum in a shanghai middle school. *The International Journal of Pedagogy and Curriculum*, *29*(2), 47–61. https://doi.org/10.18848/2327-7963/cgp/v29i02/47-61

Mac Iver, D. J. (1990). Meeting the needs of young adolescents: Advisory groups, interdisciplinary teaching teams, and school transition programs. *Phi Delta Kappan, 71*(6), 458–464.

Makgato, M., & Mudzanani, N. N. (2018). Exploring School Principals' Leadership Styles and Learners' Educational Performance: A Perspective from High- and Low-Performing Schools. *Africa Education Review, 16*(2), 90–108. https://doi.org/10.1080/18146627.2017.1411201

Martin, L. E., & Mulvihill, T. M. (2019). Voices in education: Teacher self-efficacy in education. *The Teacher Educator*, *54*(3), 195–205. https://doi.org/10.1080/08878730.2019.1615030

McPherson, H., Frank, G., Pearce, R., & Hoffman, E. (2021). VIRTUaL FieLD TRIPS. *The Science Teacher, 88*(6), 45-51. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fvirtual-field-trips%2Fdocview%2F2668443357%2Fse-2%3Faccountid%3D12085

Merenbloom, E. Y. (1979). Interdisciplinary team teaching: A successful approach. *Middle School Journal*, *10*(3), 10–11. https://doi.org/10.1080/00940771.1979.11495491

Merino-Armero, J. M., González-Calero, J. A., Cózar-Gutiérrez, R., & del Olmo-Muñoz, J. (2022). Unplugged activities in cross-curricular teaching: Effect on sixth graders' computational thinking and learning outcomes. *Multimodal Technologies and Interaction*, *6*(2), 13. https://doi.org/10.3390/mti6020013

Mertens, S. B., Flowers, N., Anfara, V. A., & Caskey, M. M. (2010). Common planning time. *Middle School Journal*, *41*(5), 50-57. https://doi.org/10.1080/00940771.2010.11461741

Meyer, P.(2011). The middle. *Education Next, 11*(1), 40-47.

Miles, M.B., Huberman, A.M., & Saldana, J. (2014). *Qualitative data analysis: A sourcebook of new methods* (3rd ed.) SAGE.

Miliband, D. 2003. *21st century Teaching: Leading Modern Professionalism*. April 7. Speech delivered to the Teacher Training Agency. Retrieved November 21, 2022, from http://www.dfes.gov.uk/speeches/search_detail.cfm?ID=65 [Google Scholar]

Mirhosseini, S.-A. (2020). Collecting data through observation. *Doing Qualitative Research in Language Education*, 61–84. https://doi.org/10.1007/978-3-030-56492-6_4

Morley, Dawn A., and Md. Golam. Jamil. *Applied Pedagogies for Higher Education Real World Learning and Innovation Across the Curriculum*. Ed. Dawn A. Morley and Md Golam. Jamil. 1st ed. 2021. Cham: Springer International Publishing, 2021. Web.

Morrison, D., & Morrison, A. written by:D. (2022, April 19). *John Wooden: Quotes from the legendary basketball coach*. On3. Retrieved January 8, 2023, from https://www.on3.com/news/john-wooden-quotes-from-the-legendary-basketball-coach/

Moser, K. M., Ivy, J., & Hopper, P. F. (2019). Rethinking content teaching at the middle level: An interdisciplinary approach. *Middle School Journal, 50*(2), 17–27. https://doi.org/10.1080/00940771.2019.1576579

Most influential theories of learning. International Bureau of Education. (2016, February 24). Retrieved November 23, 2022, from http://www.ibe.unesco.org/en/geqaf/annexes/technical-notes/most-influential-theories-learning#:~:text=Learning%20is%20defined%20as%20a,how%20this%20process%20takes%20place.

Moustakas, C. (1961). The sense of self. *Journal of Humanistic Psychology*, *1*(1), 20–34. https://doi.org/10.1177/002216786100100104

Moustakas, C. E. (1994). *Phenomenological Research Methods*. SAGE.

Moustakas, C. (2013). *Phenomenological Research Methods*. SAGE Publications, Inc.

Muñoz Martínez, Y., & Porter, G. L. (2018). Planning for all students: Promoting inclusive instruction. *International Journal of Inclusive Education*, *24*(14), 1552–1567. https://doi.org/10.1080/13603116.2018.1544301

Netcoh, S. (2017). Balancing freedom and limitations: A case study of choice provision in a personalized learning class. *Teaching & Teacher Education*, 66, 383–392.

Neubauer, B.E., Witkop, C.T. & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspect Med Educ* 8, 90–97. https://doi.org/10.1007/s40037-019-0509-2

Neugebauer, S. R., & Heineke, A. J. (2020). Unpacking K-12 Teachers' Understandings of Academic Language. *Teacher Education Quarterly*, *47*(2), 158–182. https://www.jstor.org/stable/26912671

New International Version. (2011). BibleGateway.com. http://www.biblegateway.com/versions/New-International-Version-NIV-Bible/#booklist

O'Boyle, É. (2022). Adolescents' perceptions of how teachers encourage creativity in the context of the International Baccalaureate Middle Years Programme. *Journal of Research in International Education*, *21*(3), 201–227. https://doi.org/10.1177/14752409221135018

Papanastasiou, G., Drigas, A., Skianis, C. *et al.* (2019). Virtual and augmented reality effects on K-12, higher and tertiary education students' twenty-first century skills. *Virtual Reality* 23, 425–436. https://doi.org/10.1007/s10055-018-0363-2

Patrick, N., & Sturgis, C. (2015). Maximizing competency education and blended learning: Insights from experts. Competency Works. Retrieved from https://www.inacol.org/wpcontent/uploads/2015/03/CompetencyWorks-Maximizing-Competency-Education-andBlended-Learning.pdf

Perez, A. M., (2021). *The successful middle school schedule*. Columbus, OH: Association for Middle Level Education.

Perryman, J., & Calvert, G. (2019). What motivates people to teach, and why do they leave? accountability, performativity and teacher retention. *British Journal of Educational Studies*, *68*(1), 3–23. https://doi.org/10.1080/00071005.2019.1589417

Petit, E., & Ballet, J. (2021). Habit and emotion: John Dewey's contribution to the theory of change. *Cambridge Journal of Economics, 45*(4), 655–674. https://doi.org/10.1093/cje/beab023

Petrus van der Vyver, C. (2020). The relationship between teachers' professional wellbeing and principals' leadership styles to improve teacher retention. *Perspectives in Education, 38*(2). https://doi.org/10.18820/2519593x/pie.v38.i2.06

Pierroux, P., Steier, R., & Ludvigsen, S. R. (2022). Group creativity in adolescence: Relational, material and institutional aspects of creative collaboration. *Journal of the Learning Sciences*.

Printy, S. M. (2007). Leadership for teacher learning: A community of Practice Perspective. *Educational Administration Quarterly*, *44*(2), 187–226. https://doi.org/10.1177/0013161x07312958

Pyrko, I., Dörfler, V., & Eden, C. (2016). Thinking together: What makes communities of practice work? *Human Relations*, *70*(4), 389–409. https://doi.org/10.1177/0018726716661040

Renger, S., & Macaskill, A. (2021). Developing the foundations for a learning-based humanistic therapy. *Journal of Humanistic Psychology*, 002216782110076. https://doi.org/10.1177/00221678211007668

Rheaume, J., Brandon, J., Donlevy, J. K., & Gereluk, D. (2021). An analysis of responsive middle level school leadership practices: Revisiting the developmentally responsive middle level leadership model. *RMLE Online, 44*(9), 1–16. https://doi.org/10.1080/19404476.2021.1987103

Rich, J. C. (1997). In times of change learners inherit the Earth. *Journal of Neurosurgery, 87*(5), 659–666. https://doi.org/10.3171/jns.1997.87.5.0659

Rifai, N., Rose, T., McMahon, G. T., Saxberg, B., & Christensen, U. J. (2018). Learning in the 21st Century: Concepts and tools. *Clinical Chemistry*, *64*(10), 1423–1429. https://doi.org/10.1373/clinchem.2018.292383

Rimm-Kaufman, S. E., Baroody, A. E., Larsen, R. A., Curby, T. W., & Abry, T. (2015). To what extent do teacher-student interaction quality and student gender contribute to fifth graders' engagement in mathematics learning? *Journal of Educational Psychology, 107*(1), 170-185. doi: 10.1037/a0037252

Rogers C., ed. (1996). "Carl Rogers: Student-Centered Learning." Project Innovation, a Monograph to Education.

Rosenfield, S., Newell, M., Zwolski, S., & Benishek, L. E. (2018). Evaluating problem-solving teams in K–12 schools: Do they work? *American Psychologist, 73*(4), 407–419. https://doi.org/10.1037/amp0000254

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, *61*, 101860. https://doi-org.ezproxy.liberty.edu/10.1016/j.cedpsych.2020.101860

Salavera, C., Usán, P., & Jarie, L. (2017). Emotional intelligence and social skills on self-efficacy in secondary education students. are there gender differences? *Journal of Adolescence*, *60*(1), 39–46. https://doi.org/10.1016/j.adolescence.2017.07.009

Saldaña Johnny. (2021). *The coding manual for qualitative researchers*. SAGE.

Savage, J. (2011). *Cross-curricular teaching and learning in the Secondary School*. Routledge.

Sawyer, K. (2019). *The Creative Classroom: Innovative Teaching for 21st-century Learners*. New York: Teachers College Press.

Sawyer, R. K. (2019). The role of failure in learning how to create. *Thinking Skills and Creativity*, 33, 1–10. https://doi-org.ezproxy.liberty.edu/10.1016/j.tsc.2018.08.002

Sawyer, R. K. (2021). The surprising path of creativity. *Journal of Creativity 31*, 1-6. https://doi-org.ezproxy.liberty.edu/10.1016/j.yjoc.2021.100002

Scafidi, B. (2016). "The dismal productivity trend for K-12 public schools and how to improve it." The Cato Journal *36*(1). Business Insights: Global. Web. 3 July 2022.

Schleicher, A. (2018). World class: How to build a 21st-Century school system, strong performers and successful reformers in education. Paris, France: OECD Publishing.

Schubert, W. H. (1993). Curriculum reform. In G. Cawelti (Ed.*), Challenges and achievements of American education*. Alexandria VA: Association for Supervision and Curriculum Development.

Seitamaa-Hakkarainen, P. (2022). Creative expansion of knowledge-creating learning. *Journal of the Learning Sciences*, *31*(1), 138–149. https://doi.org/10.1080/10508406.2022.2029105

Semilarski, H., Soobard, R., Holbrook, J., & Rannikmäe, M. (2022). Expanding disciplinary and interdisciplinary core idea maps by students to promote perceived self-efficacy in learning science. *International Journal of STEM Education, 9*(1). https://doi.org/10.1186/s40594-022-00374-8

Servant-Miklos, V., & Noordegraaf-Eelens, L. (2019). Toward social-transformative education: An ontological critique of self-directed learning. *Critical Studies in Education*, *62*(2), 147–163. https://doi.org/10.1080/17508487.2019.1577284

Sharples, M., & Ferguson, R. (2019). Pedagogy-informed design of conversational learning at scale. *European Conference on Technology Enhanced Learning*. https://www.dropbox.com/s/sktksric2t74t67/ECTEL2019SUBMITTED.pdf?dl=0

Sheridan, K., Halverson, E. R., Litts, B., Brahms, L., Jacobs-Priebe, L., & Owens, T. (2014). Learning in the making: A comparative case study of three makerspaces. *Harvard Educational Review*, *84*(4), 505–532. https://doi-org.ezproxy.liberty.edu/10.17763/haer.84.4.brr34733723j648u

Shi, Y., Tong, M., & Long, T. (2021). Investigating relationships among blended synchronous learning environments, students' motivation, and cognitive engagement: A mixed methods study. *Computers & Education, 168,* 104193. https://doi-org.ezproxy.liberty.edu/10.1016/J.COMPEDU.2021.104193

Shibiti, R. (2020). Public School Teachers' satisfaction with retention factors in relation to work engagement. *SA Journal of Industrial Psychology, 46*. https://doi.org/10.4102/sajip.v46i0.1675

Silver, W.S., & McGowan, R.P. (1996). Adventures in team teaching. *Journal of Management Education*, 20, 435-445

Sjølie, E., & van Petegem, P. (2022). Measuring the sociability of virtual learning environments for interdisciplinary student teams – a validation study. *Scandinavian Journal of Educational Research,* 1–12. https://doi.org/10.1080/00313831.2022.2148279

Smolinski, K. (2011). Learning science through music. *Science scope, 35*(2), 42-45

Sun, L., Hu, L., & Zhou, D. (2021). Which way of design programming activities is more effective to promote K-12 students' Computational thinking skills? A meta-analysis.

Journal of Computer Assisted Learning, *37*(4), 1048–1062. https://doi.org/10.1111/jcal.12545

Sund, P., Gericke, N., & Bladh, G. (2020). Educational content in cross-curricular ESE teaching and a model to discern teacher's teaching traditions. *Journal of Education for Sustainable Development*, *14*(1), 78–97. https://doi.org/10.1177/0973408220930706

Supovitz, J. A., & Christman, J. B. (2003). Developing communities of instructional practice: Lessons from Cincinnati and Philadelphia

Szumski, Grzegorz, Joanna Smogorzewska, and Maciej Karwowski. 2017. "Academic Achievement of Students without Special Educational Needs in Inclusive Classrooms: A Meta-Analysis." *Educational Research Review* 21: 33–54. doi:10.1016/j.edurev.2017.02.004.

Tang, H., Lin, Y.-J., & Qian, Y. (2021). Improving K-12 teachers' acceptance of open educational resources by Open Educational Practices: A Mixed Methods Inquiry. *Educational Technology Research and Development*, *69*(6), 3209–3232. https://doi.org/10.1007/s11423-021-10046-z

Tassone, B. G. (2017). The relevance of Husserl's phenomenological exploration of interiority to contemporary epistemology. *Palgrave Communications*, *3*(1). https://doi.org/10.1057/palcomms.2017.66

Thacker, E. S. (2017). "PD is where teachers are learning!" High school social studies teachers' formal and informal professional learning. *Journal of Social Studies Research, 41*(1), 37–52. doi: 10.1016/j.jssr.2015.10.001

The Social Welfare History Project. (2014). Elementary and secondary education act of 1965. Retrieved from http://www.socialwelfarehistory.com

Tikva, C., & Tambouris, E. (2021). Mapping computational thinking through programming in K-12 education: A conceptual model based on a systematic literature review. *Computers & Education, 162*, 104083. https://doi.org/10.1016/j.compedu.2020.104083

Torres, A. C. (2018). Push, Pull, Tap and Switch: Understanding the Career Decisions of Charter School Leaders. *Leadership and Policy in Schools, 19*(2), 171–189. https://doi.org/10.1080/15700763.2018.1513155

(U.S.), I. (2003). *Engaging schools: Fostering high school students' motivation to learn*. National Academies Press.

Valckx, J., Vanderlinde, R., & Devos, G. (2020). Departmental PLCs in secondary schools: the importance of transformational leadership, teacher autonomy, and teachers' self-efficacy. *Educational Studies, 46*(3), 282–301. https://doi-org.ezproxy.liberty.edu/10.1080/03055698.2019.1584851

van Manen, M. (1997). Researching lived experience: Human science for an action sensitive pedagogy (2nd ed.). Routledge.

Van Manen, Max. Phenomenology of Practice Meaning-Giving Methods in Phenomenological Research and Writing. Walnut Creek, California: Left Coast Press, 2014. Print.

van Manen, M. (2016). Researching lived experience: Human science for an action sensitive pedagogy. New York, NY: Routledge.

Van Overschelde, J. P., & Wiggins, A. Y. (2019). Teacher preparation pathways: Differences in program selection and teacher retention. *Action in Teacher Education, 42*(4), 311–327. https://doi.org/10.1080/01626620.2019.1656116

Verkuyten, M., Thijs, J., & Gharaei, N. (2019). Discrimination and academic (dis)engagement of ethnic-racial minority students: A social identity threat perspective. Social Psychology of Education, 22, 267–290. https://doi.org/10.1007/s11218-018-09476-0

Wake, J. D., Guribye, F., & Wasson, B. (2018). Learning through collaborative design of location-based games. *International Journal of Computer-Supported Collaborative Learning*, *13*(2), 167–187. https://doi.org/10.1007/s11412-018-9278-x

Wallace, H. (2020). Planning in professional learning teams: Building trust, common language and deeper understanding of pedagogy. *The Australian Educational Researcher*, *48*(2), 377–395. https://doi.org/10.1007/s13384-020-00394-9

Wankel, L. A., & Wankel, C. (2016). Integrating Curricular and Co-Curricular Endeavors to Enhance Student Outcomes [E-book]. Emerald Publishing Limited. https://doi.org/10.1108/9781786350633

Wang, M.-T., & Hofkens, T. L. (2019). Beyond classroom academics: A school-wide and multi-contextual perspective on student engagement in school. *Adolescent Research Review*, *0*(0), 0. https://doi-org.ezproxy.liberty.edu/10.1007/s40894-019-00115-z

Webley, K. (2012). Why it's time to replace no child left behind. *Time, 179*(3), 40-44.

Wenger E. (1996). How we learn. Communities of practice. The social fabric of a learning organization. *The Healthcare Forum Journal*, *39*(4), 20–26.

Wentworth , J., & Davis, J.R. (2002). Enhancing interdisciplinarity through team teaching. In C. Hayes, (ed.) Innovations in Interdisciplinary Teaching (pp. 16-37). CT: The Oryx Press.

Wheelan, S. A., Åkerlund, M., & Jacobsson, C. (2020). Creating Effective Teams: A Guide for Members and Leaders (Sixth ed.). SAGE Publications, Inc.

Will, M. (2021). Teachers Are Not OK, Even Though We Need Them to Be. *Education Week.*

Willms, J. D., Friesen, S., & Milton, P. (2009). What did you do in school today? Transforming classrooms through social, academic, and intellectual engagement. (First National Report) Toronto, Canada: Canadian Education Association. Retrieved from: https://files.eric.ed.gov/fulltext/ED506503.pdf

Wirkala, C., & Kuhn, D. (2011). Problem-based learning in K–12 education. *American Educational Research Journal*, *48*(5), 1157–1186. https://doi.org/10.3102/0002831211419491

Woods, S. C., Cromley, J. G., & Hackmann, D. G. (2020). Relationships between the middle school concept and student demographics. *Journal of Educational Administration*, *58*(3), 265–281. https://doi.org/10.1108/jea-04-2019-0071

Xhomara, N. (2019). Influence of school leadership style on effective teaching and teacherstudent interaction. *Pedagogika*, *132*(4), 42–62. https://doi.org/10.15823/p.2018.132.3

Ye, Y. H., & Shih, Y.-H. (2021). Development of John Dewey's educational philosophy and its implications for children's education. *Policy Futures in Education*, *19*(8), 877–890. https://doi.org/10.1177/1478210320987678

Zahilah Mohamed Zaki, F., Wong, S. L., & Ridzwan Yaakub, M. (2019). A review of common features incomputational thinking frameworks in K-12 Education. *IOP Conference Series: Materials Science and Engineering*, *551*(1), 012063. https://doi.org/10.1088/1757-899x/551/1/012063

Zalaznick, M. (2022). Team Teaching. *District Administration*, 14–15.

Zappe, J. (2017, January 23). How Great Leaders Pull and Push To Success. TLNT. https://www.tlnt.com/how-great-leaders-pull-and-push-to-success/

Zuo, M., Hu, Y., Luo, H., Ouyang, H., & Zhang, Y. (2021). K-12 students' online learning motivation in China: An integrated model based on community of Inquiry and Technology Acceptance theory. *Education and Information Technologies*, *27*(4), 4599–4620. https://doi.org/10.1007/s10639-021-10791-x.

APPENDIX A

IRB Approval Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

May 1, 2023

Emily Holloway
Christine Saba

Re: IRB Exemption - IRB-FY22-23-1455 A PHENOMENOLOGICAL STUDY OF MIDDLE SCHOOL TEACHERS' EXPERIENCES WITH INTERDISCIPLINARY CROSS-CURRICULAR LEARNING

Dear Emily Holloway, Christine Saba,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

APPENDIX B

CONSENT FORM

Title of the Project: A phenomenological study of cross-curricular teaching in the middle school
Principal Investigator: Emily Holloway, Doctoral Candidate, School of Education, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a teacher in west-central Virginia and have taught for more than two years in the K-2 public education setting with teaming. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to describe the experience of public middle school teachers using cross-curricular lessons while teaching core academics. Exploring the lived experiences of educators who implement cross-curricular interdisciplinary activities, and their teaching models are key to understanding this phenomenon. The research questions that will guide this study are:

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming?

- Q1: What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming?
- Q2: What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming?
- Q3: What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming?
- Q4: What challenges do middle school teachers who are teaming with cross-curricular context-based academics face?

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in an individual interview with the researcher, in-person or via zoom. The interview will take approximately one hour and will be scheduled at a mutually agreeable time. The interview will be recorded and transcribed by the researcher.
2. Participate in a focus group with other middle school teachers who are currently teaming with cross-curricular academics, in person or via Zoom with the researcher. The focus group will take approximately an hour and will be scheduled at a mutually agreeable time

with other participants. The focus group questions will be recorded and then debriefed by the researcher.

3. Participate in a 45-minute lesson observation by the researcher. This observation will be known by the teacher, but may not be scheduled to allowed for the real view of what is happening in the classroom. During the observation, the researcher will take notes about the classroom, lesson, and students.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study. Participation in the study may have benefits for middle school academic planning and scheduling for teaming with cross-curricular academics.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.
Please be advised that I am a mandatory reporter for the University. If in the course of the study I become aware of child abuse, child neglect, elder abuse, or intent to harm self or others, then I will be required to make a report to the University Title IX Personnel.

How will personal information be protected?

- The records of this study will be kept private. In any sort of report that might be published, information that will make it possible to identify a participant will not be included. Research records will be stored securely, and only the researcher will have access to the records.
- Participants and the school will be assigned pseudonyms.
- Individual interviews will be conducted in a location where others will not easily overhear the conversation.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.
- Data will be stored on a password protected external drive and stored in a locked filing cabinet and will be deleted after three years per federal regulation.
- Interviews and Focus Groups will be audio and video recorded and transcribed. Recordings will be stored on a password protected eternal USB drive and will be deleted after three years. Only the researcher will have access to these recordings.
- The researcher cannot guarantee confidentiality during participation in focus groups. The researcher will discourage participants from violating confidentiality in the instructions given during the onset of focus groups; however, members may share what was discussed with persons outside the focus group.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/ phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Emily Holloway. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted]. You may also contact the researcher's faculty sponsor, Dr. Christine Saba at [redacted].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record/video-record/photograph me as part of my participation in this study.

_____

Printed Subject Name

_____

Signature & Date

APPENDIX C

Recruitment Letter

Dear Potential Participant,

As a graduate student at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to describe the lived experiences of middle school teachers participating in teaming with cross-curricular lessons. An emphasis on exploring middle school teacher perceptions and experiences in the teaming classroom will be reviewed. I am writing to invite you to patriciate in my study.

Participants must be a current middle school teacher who is currently teaching in a teaming model with a minimum of two years teaching experience. All participants must be teachers in central-western Virginia. Participants, if willing, will be asked to take part in a one-on-one, audio-recorded, in-person interview and take part in a video-recorded focus group. Both the interview and focus group should take approximately one hour to complete. Participants, if willing, will also be asked to participate in a 45-minute classroom observation by the researcher. Names and other identifying information will be requested as part of this study, but participant identities will not be disclosed.

To participate, please complete the pre-screening survey. If you meet the participation criteria, a consent form will be sent to you via email to complete and return. The consent document contains additional information about my research. Once the consent form is signed and returned, I will contact you to schedule an interview.

To participate, please visit the screening survey: https://forms.gle/VMHiKEqm27F1eMLx6

I sincerely appreciate your consideration of participation in this study. If provided with the opportunity, I look forward to working with you and learning about your experiences.

If you know of individuals who qualify and may be interested in participating in the study, please forward them this invitation.

Please feel free to contact me via phone or email with any questions before choosing to participate in the study.

Sincerely,

Emily Holloway
Doctoral Candidate
[redacted]

APPENDIX D

SCREENING SURVEY

The purpose of this phenomenological study will be to describe the experience of middle school teachers using cross-curricular activities through interdisciplinary teaching. This survey is designed to determine your eligibility to participate in the study.

1. Are you currently a middle school teacher in central-western, Virginia? Yes/ No
2. How many years of experience do you have teaching middle school? Less than 2/ more than 2
3. Do you currently teach in a teaming model? Yes/ No
4. Are you interested in “voluntarily” participating in this study? Yes/ No

APPENDIX E

INDIVIDUAL INTERVIEW GUIDE

An interview guide will be emailed to the participant at the start of the interview to be referred to during the interview.

Purpose of the Study

The purpose of this phenomenological study is to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia.

Research Questions

The research questions that guide this study are:

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming?

- Q1: What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming?
- Q2: What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming?
- Q3: What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming?
- Q4: What challenges do middle school teachers who are teaming with cross-curricular context-based academics face?

Interview Questions

1. How long have you been a teacher? CRQ
2. Describe your career in teaching. CRQ
3. Describe the types of experiences with teaming you have had with cross-curricular activities. SQ1

4. Describe your challenges when working with lower academic students in your classes. SQ2
5. What are the moments like when students share their academic struggles with you? CRQ
6. Describe successful practices you use when working with cross-curricular academics among students in your classes. SQ1
7. What professional development experiences have you had that prepared you for teaming and/or interdisciplinary studies with your students as a teacher? SQ1
8. What else would you like to add to our discussion of your experiences with teaming and the interdisciplinary work with students that we haven't discussed? SQ4
9. Describe your challenges when working with lower socioeconomic status (SES) students in your classes and their abilities to apply the content to additional curriculum. SQ2
10. Describe successful practices you use when working with lower SES students in your classes. SQ1
11. Describe your challenges when working with other teachers for interdisciplinary assignments. SQ2
12. Describe successful practices you use when working with other teachers for interdisciplinary assignments. SQ1
13. What professional development experiences have you had that prepared you to work with other teachers for interdisciplinary assignments. SQ3
14. Describe a specific time you experienced the phenomenon. SQ2
15. What role do you feel teaming plays in mitigating what you experience from supporting students? SQ2

16. What else would you like to add to our discussion of your experiences of working with other teachers for interdisciplinary assignments? SQ4

APPENDIX F

FOCUS GROUP INTERVIEW GUIDE

Purpose of the Study

The purpose of this phenomenological study is to understand the lived experiences of cross-curricular academics through teaming for middle school teachers within central-western Virginia.

Research Questions

The research questions that guide this study are:

What are the lived experiences of middle school teachers who teach cross-curricular context-based academics through teaming?

- Q1: What strategies do middle school teachers find most effective for motivating students when teaching with cross-curricular context-based academics through teaming?
- Q2: What are middle school teachers' experiences in fostering relationships among students when teaching with cross-curricular context-based academics through teaming?
- Q3: What strategies do middle school teachers find most effective for engaging students when teaching with cross-curricular context-based academics through teaming?
- Q4: What challenges do middle school teachers who are teaming with cross-curricular context-based academics face?

Group Introduction

The researcher thanks you for the time you have dedicated to completing the individual interview and sharing your personal experiences related to cross-curricular context-based academics.

Guidelines

1. This interview will be recorded but it is for my personal use in transcribing and collecting data.

2. There are no right or wrong answers. Rather, there are different perspectives and experiences.
3. Actively listening.
4. Use first names.
5. One person talks at a time.
6. My role is to guide the conversation.

Questions

1. Can you identify and share differences in how your students learn today compared to your own experiences? (CRQ)
2. Did you choose to participate in the phenomenon of team teaching? (CRQ)
3. Have you had any experiences of teaming as a student when you were in school? (CRQ)
4. Think back over the past two years, what went particularly well with teaming? What are the positive experiences? (RQ4)
5. What needs improvement? What are the negative experiences? (RQ4)
6. When you think about situations of lacking motivation with students, how did offering cross-curricular activities change the motivation level with students? (RQ1, RQ3)
7. When you hear the word “cross-curricular,” what is the first thing that comes to mind? (CRQ, RQ4)
8. How do teaming and cross-curricular academics foster relationships among the students with you, the teacher? (RQ2)
9. What are your favorite subjects to teach in a cross-curricular method? (CRQ)
10. What pros and cons of teaching through teaming cross-curricular instruction do you see? (CRQ, RQ4)

11. If you were telling a colleague about teaming with cross-curricular activities, what would you say? (CRQ)
12. Please share anything about teaming with cross-curricular instruction that we have not discussed. (CRQ)
13. What are your favorite subjects to teach in a cross-curricular method?
14. What pros and cons of teaching through teaming cross-curricular instruction do you see?
15. Please share anything about teaming with cross-curricular instruction that we have not discussed.

APPENDIX G

OBSERVATION PROTOCOL

Date: _____

Time: _____

Descriptive Notes	Reflective Notes

Classroom Diagram