

EDUCATORS' PERSPECTIVES OF THE BENEFITS AND BARRIERS OF CROSS-LEVEL
TEACHING: A COLLECTIVE CASE STUDY

by

Lela Kristina Andrews

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

The purpose of this case study was to understand the benefits and barriers of cross-level classrooms from the perspective of educators at a rural secondary school. For this study, cross-level learning is defined as a classroom that includes multiple grade bands who are working together in a classroom setting to learn a specific set of standards or objectives (Peñafiela & Tomàs, 2014; Scamati, Kent, & Mackenzie, 1993). This research study operated within the collaboration theory identified by Lev Vygotsky that highlights the value of collaborating with others to gain a greater understanding of a particular task or process that the learner could gain independently through socialization and partnership allowing for the formation of deeper comprehension of instructional content (Cicconi 2014; Vygotsky1978). This case study was set in a rural community in the Southern United States and examined 15 teachers' perspectives of cross-level classrooms through the data collection tools of teacher interviews, classroom observations, and the examination of lesson plans and instructional materials and resources. Qualitative data analysis methods were used to comprehend, synthesize, theorize, and recontextualize the data to create new understandings of how educators' respond to cross-level classrooms and their perceptions of teaching in a multi-age setting (Houghton, Murphy, Shaw, & Casey, 2015; Morse, 1994). Through this case study, educators' perspectives of cross-level classrooms were examined in greater detail through interviews, observations, and lesson plans to determine their views of this type of nontraditional classrooms and the skills teachers felt were necessary to teach in this type of learning environment. The results of this study indicated that educators experience both benefits and barriers when teaching in a cross-level classroom.

Keywords: cross-level classrooms, secondary education, collaboration, rural setting, educators' experiences, educators' challenges

Dedication

I would like to dedicate this dissertation to my family for supporting me throughout this process. I could have never done this without my husband who was with me every step of the way.

Acknowledgments

I would like to acknowledge the work of small-town teachers with big hearts, who inspired me every day throughout this process. Teachers are a special breed of people who give so much in return for so little. Also, I want to thank Dr. Justin Necessary for his guidance throughout this process. Although the road was long, he was there every step of the way providing an uplifting spirit and hope for the finish line.

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List of Abbreviations

Collaborative Problem Solving (CPS)

International Review Board (IRB)

CHAPTER ONE: INTRODUCTION

Overview

In the United States, public education school systems have been grouping students by grade bands for the last 150 years (Fischel, 2011). Students have consistently been grouped in a way where they have little to no interaction with students in different grade levels in an educational setting; however, some teachers have approached cross-level teaching as a way of combating a traditional learning approach that may not work for all students (Broome, 2016). A multi-level approach to education provides to students increased social processes, thus increasing engagement and focus while reinforcing student independence (Farrell, 2012; Kim and Capella, 2016). However, there is little insight into the cross-level classrooms from the perspective of the teacher detailing how he or she feels about teaching in a cross-level classroom. The study will fill this gap in the literature by providing insight from educators who teach in this type of classroom, offering a deeper understanding of the tools, characteristics, and time it takes in regard to the educator. This research study will focus on the benefits and barriers of cross-level learning from the perspective of the educator. The following chapter will provide an understanding of the background of cross-level classrooms, including the historical, theoretical, and social background. The chapter will also include the situation to self, describing the assumptions and paradigm of the researcher. Lastly, it will include the problem statement, purpose statement, and research questions.

Background

The following section will review the historical, social, and theoretical background of cross-level learning. This section will include information about cross-level classroom origins, their impact on the social development of students, and how they relate to the larger theory of

collaboration. This section will also include a description of what cross-level learning is and how it fits into the larger context of a collaborative learning environment. The section also covers how cross-level classrooms have functioned in classrooms and how collaborate concepts are executed in this type of learning environment.

Historical

Over the last 150 years, students have been consistently grouped by grade level with little interaction amongst students of different grades; however, cross-level classrooms have existed as a non-traditional approach to educating students (Broome, 2016). Prior to this type of grouping, students were all housed together, regardless of their grade level. The one-room school-house style used by the Amish throughout their existence in America demonstrated that the great virtue of the one-room school was the sense of local communal participation that it engendered throughout its existence (Fischel, 2011). This same style of classroom construction was also used in Montessori schools since the beginning of the early 20th century (Hyry-Beihammer & Hascher, 2015). Cross-level classrooms have the opportunity to create a more community approach to education within a school that has been developed over time, especially in rural areas where the school is considered the center of town life (Smit, Hyry-Beihammer, & Raggl, 2015). As the world has developed, schools in larger areas have been able to increase their funding through grants, while rural schools have been forced to utilize multi-age classrooms to combat these changes, over time (Smit et al., 2015).

Social

Cross-level classrooms also have the power to encourage social growth amongst students. Students in cross-level classrooms often engage in meaningful peer interactions and collaboration in a group setting; in cross-level classrooms, older students are able to aid younger

students not only fostering academic growth, but social interaction, as well (Scamati, Kent, and Mackenzie, 1993). In cross-level classes, students at all levels learn from their social experiences through interaction with different grade levels (Scamati et al., 1993). The social value of collaborative classrooms allows students to learn through a constructivist paradigm where they are exploring knowledge through social communication across developmental ages and stages (Peñafiela & Tomàs, 2014). Through this social context, students are able to participate in a classroom environment that is similar to the context of society and interact with students outside their traditional grade-bands in order to become more aware of development of others in a social climate (Barton & Baguley, 2014).

Theoretical

Cooperative learning is the key to creating cross-level classrooms where learning is reinforced for older students and introduced to younger students in the lower grade levels (Barton & Baguley, 2014). These types of classrooms provide the opportunity to teach a variety of skills to students through group-based instruction where students learn from older peers and formulate a deeper understanding of the material through a learning environment that focuses on collaborative theory (Kallery, & Loupidou, 2016).

Collaborative learning theories focus on the understanding that students strengthen their own knowledge through interaction with others (Vygotsky, 1978). This research study utilizes a theoretical framework that focuses on Vygotsky's theory of collaboration which is utilized in cross-level classrooms. Collaborative learning can be broken down into three separate theories: collaboration, co-production, and networks (Poocharoen & Ting, 2015). Each theory involves different levels of involvement from the student and teacher from intense collaboration, co-participation, and minimal participation demonstrating the positive outcome all three categories

bring to the framework of the larger collaborative learning theory (Poocharoen & Ting, 2015). Through collaboration theory, students are able to utilize multiple modes of learning inside the same classroom. A cross-level classroom has two or more grade levels in the same classroom allowing the educator to employ more resources for their students to support a collaborative environment.

Collaboration theory uses Collaborative Problem Solving (CPS), which centers on the idea that no single individual can solve a problem alone; it takes a variety of talents and understanding to create a true depiction of all possible answers to a problem (Care, Scoular & Griffin 2016). CPS places value on social interactions and the ability to increase student understanding using more interactive mental processes which are different when working collaboratively than when students are working alone; collaborative learning includes activities such as asking questions, peer mentoring, and providing feedback (Care et al., 2016). Cross-level classrooms allow educators to use a variety of tools within the larger collaboration theory to increase student learning with multiple grade levels being taught in the same classroom. This allows for an increase in social interaction amongst students of different developmental ages; these interactions lead to an increase in student enjoyment and an increased investment in the cognitive process of the students (Camacho-Morles, Slemph, Oades, Morrish, & Scoular, 2019). Through a collaborative classroom that uses CPS, teachers can ensure students are given both high and low competency tasks to ensure all students are able to participate in order to gain greater interaction through a social context (Care et al., 2016). In order for collaborative theory to truly be effective in a collaborative learning environment, teachers and students must share in common goals and objectives throughout lessons to create a successful environment of collaboration (Retnowati, Ayres, & Sweller, 2018).

Cross-level classrooms are reminiscent of a historical understanding of the one-room schoolhouse approach to education and place students with groups of students outside traditional grade levels encouraging an increased collaboration between students and a chance for students to learn and grow from one another, both socially and academically. Students are exposed to a non-traditional setting that would not be possible through traditional grade-band grouping. This research study will determine the benefits and barriers from the educator's perspective when teaching in this type of classroom.

Situation to Self

Throughout this research study, my ontological assumptions were defined by observations that were conducted with multiple educators at practice who operate with a different view of collaborative learning. These ontological assumptions were driven by my observations of students interacting with one another in this type of classroom. These observations provided me with a view of reality of a cross-level classroom. My epistemological assumptions were that I understand that not every educator views collaborative learning and cross-level learning as beneficial to the student population, and I reported different viewpoints in regard to the collaborative atmosphere of these non-traditional classroom settings. Through these different viewpoints, I was able to build a clear picture of how a cross-level classroom teacher functions. Throughout this process, my methodology assumptions influence how I analyzed and synthesized the data to discover the themes that arise, describing what are the benefits and barriers of cross-level learning are from the educator's perspective. Because I am a classroom teacher, my axiological assumptions were that I was able to determine what knowledge gained from participants is justified and relevant in the research study.

Being a younger teacher who attended public school in a time where the lecture method was being phased out and new collaborative forms of learning were being introduced has made my learning preferences more geared toward group work and other more collective forms of learning. As a classroom teacher, I often utilize collaborative tools in my own classroom and have witnessed what I believe to be a certain amount of success with this type of learning environment. This research study will help educators, like myself, create classroom environments that are more effective for the practitioners who are facilitating them.

I conducted this research study with a constructivist paradigm with the idea that teachers' beliefs and values are shaped by our experiences and interactions with those around us (Creswell & Poth, 2018). Through a collaborative environment, we are able to interact with those around us to strengthen our own understanding of the world and how our beliefs fit within a larger context. These interactions shape how we formulate new ideas, and these ideas apply to our interactions, on a daily basis. The constructivist paradigm influenced my own understanding of how educators shape their perspectives of the benefits and barriers of cross-level learning. There is a significant gap in the research understanding teachers' attitudes towards blended classroom environments. The majority of the research has focused on the impact of cross-level classrooms on the student and how it affects his or her ability to grow, academically, while learning from older or younger students in a social setting through peer interaction (Barton & Baguley, 2014; Peñafiela & Tomàs, 2014; Scamati et al., 1993). This research will fill this gap by providing insight into how teachers view this type of learning environment and their perceptions of the benefits and barriers of cross-level learning.

Problem Statement

The problem is that it is unknown how teachers perceive the effectiveness of cross-level classroom from the viewpoint of the educator facilitating this type of classroom, where students of multiple age groups engage with one another. Historically, students have been grouped by age into separate grade bands, as they enter primary school. Over the last 150 years, students have been consistently grouped by grade level with little interaction amongst students of different grades; however, some teachers have approached cross-level teaching as a way of combating a traditional learning approach that may not work for all students (Broome, 2016). Teachers have also reported that housing multiple classes or grade levels in the same room allows students to move between grade levels, easily, while benefiting from a repetition of curriculum over multiple years (Casserly, Tiernan, & Maguire, 2019).

The issue with traditional grouping is that many students are not able to excel in the classroom because they are much more advanced than their peers or on a lower level. Casserly and Padden (2017) found that students on lower levels and those receiving special education services benefitted from cross-level classrooms because they have the ability to be more involved, due to the variety of learners in the classroom which increased their ability to interact with others, regardless of their grade level or academic standing in the classroom. Broome (2016) found that the cross-level classroom was effective for grouping based on skill levels, peer tutoring, and helped build a more cooperative attitude. By creating a more cooperative attitude through cross-level instruction, students have more ability to talk, explore ideas, and learn from each other (Yaghoub-Alamdar & Haghverdi, 2016).

When educators utilize cross-level classrooms, it creates student empowerment by allowing students to become more involved, to engage in educational processes, and to develop a

greater sense of commitment (Aiken, Heinze, Meuter, & Chapman, 2015). Through the collaborative environment created by cross-level learning, the teacher has different roles and structures than in a traditional grade level classroom. Baser, Ozden, and Karaarslan (2017) found that collaborative work contributed to students' personal developments, and students found collaborative learning helpful for their individual learning and development throughout instruction creating a different role for the educator in this type of classroom. Students in collaborative environments also learn more effectively than those in traditional classroom settings that utilize a lecture-based style of instruction making the role of the teacher much different in a cross-level classroom (D'souza & Vijaya-Kumari, 2018). In many rural schools, cross-level classrooms have been created as a necessity merging multi-age students together in order to meet financial obligations; this means students are grouped together (Jimerson, 2006; Smit et al., 2015). This means they employ small numbers of teachers who teach different grade levels in the same classroom (Hyry-Beihammer, & Raggl, 2015).

In many of these classrooms, students in multi-grade classes exhibit academic achievement that compares to students in traditional grade bands, but there is little research into the quality of instruction provided by educators in cross-level classrooms (Smit et al., 2015). Cross-level classrooms have also been found to effectively support learning when used by qualified and willing educators (Hyry-Beihammer & Hascher, 2015). Educators in these types of classrooms have much different roles than teachers in traditional classrooms; however, few studies provide insight into the benefits and barriers from the perspective of the educator, when teaching and planning for a cross-level classroom. This case study will help to better understand how educators face the task of teaching in a cross-level classroom.

Purpose Statement

The purpose of this case study was to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator; this study examines cross-level learning through the lens of the teacher. For this study, cross-level learning is defined as a classroom that includes multiple grade bands who are working together in a classroom setting to learn a specific set of standards or objectives (Marbury, Barnes, Lawsine, & Nicholson 1991; Mydland, 2011). This research study operated within the collaboration theory identified by Lev Vygotsky that highlights the value of collaborating with others to gain a greater understanding of a particular task or process that the learner could gain independently through socialization and partnership, allowing for the formation of deeper comprehension of instructional content (Vygotsky, 1978; Cicconi, 2014).

The qualitative case study was conducted in a rural setting in Alabama with teachers in grades K-12. Fifteen teachers from both the elementary and secondary setting participated in the research; 12 were chosen for participation in the final study conducting cross-level lessons in the classroom setting. Teachers were chosen through purposeful sampling. Data was collected through interviews, observations, and a review of documents such as lesson plans.

Significance of the Study

This study has theoretical, empirical, and practical significance for educators, administrators, parents, and students. The empirical significance of the study demonstrates how teachers view cross-level learning and its ability to increase student understanding of classroom material leading to academic success; the study includes further empirical research to determine if cross-level classrooms increase academic success for students and the teachers. For teachers,

it provides an understanding of experiences from other educators allowing teachers new to cross-level classrooms to become aware and ready to take on the benefits and barriers of a cross-level classroom; it will also provide valuable information on which grade-levels teachers find most conducive to cross-level learning. Teachers may also use this research study to implement cross-level classrooms to teach certain skills and standards. For administrators, the significance of the study will influence them to make decisions with the structuring of classes in their school and school district. Administrators may use the findings to create a different way of approaching classroom structuring, whereas educators may use the information to create more successful environments for their students in collaboration with classes outside their grade levels. The practical significance of the study will impact student choice to enroll in cross-level classrooms, as well as the academic success that these types of nontraditional classrooms can provide. Students and parents will use the findings to make choices for their own education that places them in the best learning environment from the perspective of the educator.

The results of this study will also have theoretical significance for researchers expounding upon Lev Vygotsky's theory of collaboration and the larger understanding of collaboration theory, as a whole (Cicconi, 2014; Vygotsky, 1978). Using Vygotsky's theory, researchers will better be able to understand how collaboration outside traditional grade bands impacts educators and their classrooms. The theoretical significance will also impact researchers understanding of cooperative learning and how teachers view the impact of students learning from one another in cross-level classrooms (Barton & Baguley, 2014).

Research Questions

This research study explored the perspectives of educators when conducting and planning for cross-level classrooms using a collective case-study research method. Data was collected

through interviews with the educators, review of classroom planning materials, and personal observations of the cross-level classrooms.

Central Question

How do teachers describe cross-level classrooms?

This question provides a detailed description of their experiences when teaching in cross-level classroom. Through the data collected in the research study, an overarching description of what cross-level classrooms will be revealed from the experience of the educator in terms of planning, management, and execution. This research question will operate through the theoretical framework that collaboration is a valuable tool to increasing the knowledge of students (Cicconi 2014; Vygotsky1978). It will also help understand the role of the teacher in this type of learning environment and what qualifications are needed to teach in a cross-level classroom (Hyry-Beihammer & Hascher, 2015).

Sub Question One

How does cross-level learning provide benefits to classroom teachers from the perspective of the educator?

Teachers are asked to expound in detail from the first question what the benefits of cross-level learning are and why. Teachers will be expected to provide to the researcher an understanding of how cross-level classrooms benefit teachers and the potential for students in this type of collaborative environment (Retnowati, Ayres, & Sweller, 2018).

Sub Question Two

What are the barriers educators face planning and executing lessons in cross-level classrooms?

Question two is similar to question one in that it asks educators to continue to expound on their instructional practice in cross-level classrooms and what barriers they face in this type of

classroom. Educators are expected to assess their own practice to provide a detailed understanding of what barriers they face in this type of nontraditional classroom and how their role in the classroom is shifted due to this collaborative environment (Smit et al., 2015).

Sub Question Three

How does cross-level learning influence instructional planning and practice?

The last research question influences the practical side of cross-level learning. Teachers are asked to provide the researcher with an understanding of how this type of classroom influences the practice of these educators through the planning phase and into the facilitating phase that occurs in the classroom setting, in order to determine the needs of educators in this setting (Broome, 2016).

Definitions

1. *Cross-level classroom*-Similar to the one-room schoolhouse perception of numerous grades housed in one room, a cross-level classroom contains students working in the same academic subject matter outside their traditional grade bands (Mydland, 2011). Grade levels within this learning environment are still housed within the same school unit; for example, students may range from 9-12 in a high school setting or 6-8 in a middle school setting (Marbury et al, 1991).
2. *Traditional Grade-Levels*- These are defined as the grade students are assigned when they first enter school at the elementary level. For example, primary school enrolment begins during the calendar year in which a child turns six years old, with the school year starting in mid-September; the eldest children in a school year are, therefore, born in January and the youngest children are born in December (Banati, Cartabia, Zanetti,

Reale, Didoni, and Constantino, 2018). These students enter school, together, and stay together in the same grade level as they progress through school.

Summary

Chapter one provides an overview of the research study topic, the problem surrounding this research study, the significance of the study, and the research questions that will drive the research study. Cross-level classrooms provide students with an opportunity to engage in a classroom with students outside their traditional grade bands (Broome, 2016). Collaboration theory defines the value of engaging with others to formulate new ideas and learn from a variety of different types of individuals in a learning environment (Vygotsky, 1978). However, it is unknown how teachers perceive the effectiveness of cross-level classroom from the viewpoint of the educator facilitating the classroom; it is not known the perspective of educators who teach in this type of classroom and what they see as the benefits and barriers of cross-level learning. Cross-level classrooms increase the ability for students to collaborate with one other because of an increase in traditional grade levels in one classroom.

The purpose of this research study was to better understand the benefits and barriers of cross-level teaching from the perspective of the educator. Educators were asked to share their ideas and experiences on the theoretical side of the collaborative classroom, as well as the practical side of planning for this type of non-traditional classroom. This research study is significant to teachers, administrators, parents, and students because it provides a deeper understanding of cross-level classrooms and their values and challenges from the educator's perspective. The study also addressed the significant gap in the literature because there is little to no research detailing educator's perceptions of cross-level learning and how he or she deals with each phase of teaching in this nontraditional classroom environment. The method of the study was a qualitative case study

conducted in a rural setting in Alabama with teachers in grades K-12. Purposeful sampling was used to locate 15 teachers in both elementary and secondary classrooms and data will be collected using interviews, observations, and a review of documents such as lesson plans.

CHAPTER TWO: LITERATURE REVIEW

Overview

This literature review provides a theoretical understanding and overview of the benefits of collaboration in the modern secondary classroom. The body of research highlights the value of collaborative learning through the use of cross-level classrooms. However, there is a significant gap in the literature failing to highlight how educators deal with this type of nontraditional learning environment and their perspectives on the topic of cross-level learning. This research study operates within the collaboration theory identified by Lev Vygotsky that highlights the value of collaborating with others to gain a greater understanding of a particular task or process than the learner could gain, independently, through socialization and partnership allowing for the formation of deeper comprehension of instructional content (Cicconi, 2014; Vygotsky, 1978). This research study examines the impact of cross-level learning through the perspective of the teacher and reflections on how this type of collaborative classroom impacts the instructional flow of a lesson.

The literature examines in depth how collaboration has changed over time as society has shifted toward a more inclusive environment. Collaboration theory is discussed as it begins to become open towards students of all different backgrounds creating more diverse classroom environments. The literature review also examines how technology has shaped the way teachers and student utilize technology as a tool for increased collaboration in the classroom. Lastly, the literature review examines prior research surrounding collaboration theory and how it has been examined in different settings and the possible benefits it provides to students.

Theoretical Framework

The theoretical framework in this qualitative research study will be utilized in order to guide the research process. The role of the theoretical framework in this research study is to provide support for the study and a lens through which the study can be viewed (Galvan, 2017). This literature review will examine Lev Vygotsky's theory of collaboration which claims that cognitive development stems from a co-development experience with other children in an educational setting (Vygoysky, 1978). Through the evaluation of cross-level classrooms that place a strong emphasis on collaboration, the researcher will be able to understand teachers' perspectives of the benefits and barriers that present themselves when teachers utilize this type of classroom structure to teach multiple grade levels in one setting. The evaluation will also provide a deeper understanding of how this type of collaborative classroom impacts the design and content of the lesson.

After reviewing the literature, there were several themes that arose centering around the value of collaborative classrooms. Collaborative classrooms allow students to excel, both academically and socially, through interaction outside the traditional classroom setting. The benefit to the conceptual framework of collaborative learning is that it allows the students to be situated in a social and material context where their experiences and the culture of the experience provide the teaching through increased interactions with other students in the classroom (Tickle, 2017). Researchers have continued to explore collaborative learning environments through a variety of platforms that create a student-centered approach to education that moves away from a traditional lecture approach that was used, previously, in elementary and secondary settings (Clinton, 2019). The process of collaborative learning in a group setting involves a change of shared mental models among members of a group or network demonstrating the value

collaborative learning lends to a shared understanding of gained knowledge (Poocharoen & Ting, 2015). Vygotsky's theory of collaboration can be broken down into the three categories of collaboration, co-production, and networks to better understand how collaboration affects large groups of people participating in a common goal inside cross-level classrooms (Poocharen & Ting, 2015).

Each category of collaboration includes different levels of involvement of the actor from intense collaboration, co-participation, and minimal participation demonstrating the positive outcome all three theories bring to the framework of the collaborative learning theory (Poocharoen & Ting, 2015). Understanding the different factors that are a part of collaboration theory provides a framework for the cross-level classroom and its value to the student, as well as a greater understanding of how all members of a cross-level classroom collaborate with one another through a variety of roles; it also provides an understanding how the teacher facilitates the multiple roles required in a cross-level classroom (Colbry, Hurwitz, & Adair, 2014).

Vygotsky's (1978) framework also focuses on the need for varying abilities inside the classroom environment. These varying academic abilities allow students to work with one another creating situations where the more capable peer used his or her knowledge to support lower achieving learners (Roberts, 2016). This form of collaborative learning helps the more capable student and the less capable student learn, simultaneously, as they work through instructional material together learning from one another as they complete assignments. In cross-level classrooms, students of varying abilities and grade levels work consistently side by side using their academic levels to learn from one another as they grapple with instructional material; students use their varying levels of ability to influence the learning process and use one another as resources in their learning. Collaboration often results in the use of higher cognitive

processes for the learners in a classroom (Ciconni, 2014). Collaborative learning theory impacts the social and cognitive aspects of the learning experience for the student allowing him or her to gain deeper understanding of educational material and the world around him or her through a collective experience within a group of learners. Through a collaborative learning experience, students are exposed to varying abilities of learners forcing them to utilize their own knowledge as a small part of the larger collaborative knowledge.

Collaborative Problem Solving

Collaborative Problem Solving (CPS) is a subset of the larger context of collaboration theory and centers on the idea that no single individual can solve a problem alone, and it takes a variety of talents and understanding to create a true depiction of all possible answers to a problem (Care, Scoular & Griffin, 2016). CPS is defined as an interdependent collection of individuals working towards a common goal where members share individual and mutual responsibility for the outcome (De Montjoye, Stopczynski, Shmueli, Pentland, & Lehmann 2014). CPS places value on social interactions and their ability to increase student understanding because their mental processes are different when working collaboratively than when working alone; collaborative foundations that stimulate an increase in knowledge include activities such as asking questions, peer mentoring, and providing feedback (Care et al., 2016).

Through CPS, students are able to solve problems within a group that they otherwise would not be able to solve on their own, by utilizing individual skill sets and applying them to the group, as a whole. Using CPS, students in cross-level classrooms have the ability to work through problems with a variety of different types of students outside their traditional grade-bands allowing for an increase in learning achievement for students who participate in this type of learning environment (Hwang, & Chen, 2019). In a CPS classroom settings, students are able

to develop concepts different from what they have previously learned through metaphorical explanations provided by other members of their learning environment (Hayashi, 2018). This type of collaborative environment provides students the opportunity to interact with others that who may not share the same perspective of a particular instructional topic; students are also able to use their background knowledge and prior experience through their own educational experiences to bring new ideas to the learning experience. Similarly, cross-level classrooms utilize CPS through a collaborative setting across grade levels in order to foster deeper thinking and understanding of topics because of different viewpoints. Cross-level classrooms bring together learners of differing abilities and place them in a collaborative setting allowing for classroom learning and standards to be approached through CPS.

CPS in context to the larger collaboration theory of Vygotsky will frame this research study by demonstrating the potential for cross-level classroom to increase the cognitive development, as well as directly impacting the perspective of the educator facilitating the classroom through the strengths that CPS provides (Camacho-Morles, Slempe, Oades, Morrish, & Scoular, 2019). Students in cross-level classrooms will utilize CPS, daily, due to the interaction across grade-levels. Through the setting cross-level classroom creates, students will be able to solve problems and discuss ideas while bringing in their various perspectives fostering learning through collaboration. CPS will also be used by the teacher in a cross-level classroom when creating lessons that rely on the need for cooperation amongst groups to increase learning. More research is still needed to better understand how teachers adapt to and structure this type of learning environment.

Game Theory

Game theory is identified as a subset of the larger collaboration theory where social interaction through ideas and contradiction create conflict within groups to aide in the development of learning (Beltadze, 2016). Game theory centers around students working collaboratively or competitively to solve a problem or to reach a common goal, while increasing the learning outcomes for each student (Elbeck, DeLong, & Zank, 2016). Game theory focuses on the concept that when there is a problem to be solved, students must combine a cognitive task that cannot be solved by one, then collaborate with others with a variety of sub-skills in order to make the complex problem more understandable (Scoular, Care, & Awwal, 2017).

Game theory stresses the importance of utilizing individual skills and talents in the context of a larger setting or group in order to increase learning and retention; within these group settings, individuals are able to present their best assets in order to problem solve with the larger group. This theory fits within the larger theoretical framework of collaboration theory because it provides a modern interpretation of how collaboration can be adapted to meet the needs of learners who are more comfortable with a technological approach to learning. Game theory is also reflective of practices that exist in the real world, preparing students for collaboration work in their future careers where collaboration is utilized to increase production and success. Through collaboration, students not only learn academic skills, but they learn how to work together replicating a team structure that often exists within companies and corporations (Scoular et al., 2017).

Game theory also allows students to actively participate in learning as a member of a small society or group supporting the value of cross-level classrooms that display a more realistic cross section of society by grouping students outside traditional grade bands and abilities, allowing them to not only increase their academic performance, but make sense of the world

around them through interactions with different types of people (Gerkushenko & Gerkushenko, 2015). Game theory supports the theoretical framework of collaboration theory that defines the phenomenon of cross-level learning from the perspective of the educator that will be studied in this research. Game theory allows students in collaborative learning settings to coordinate with one another to solve problems using their individual skills, increasing their greater potential as a group, which is in correlation to the larger theoretical framework of the research study (Beltadze, 2016).

Utilizing game theory in a cross-level classroom forces educators to use a different pedagogical approach to educating students using this collaborative technique that requires active participation from all members of the group. In game theory, traditional teaching methods are challenged, and students' participation becomes active as both a learner and a peer tutor as groups combine individual skills and talents to solve problems and complete tasks (Kangas, Koskinen, & Krokfors, 2016). In game-theory-centered classrooms, students gain a deeper understanding of content because the game play involves social interactions with their peers and working collaborative with other for a common goal (Szymanski & Benus, 2015). Prior research has shown that using games in the classroom can unite the class by developing affinity between students and providing unexpected student motivation and focus that inspires students to build deeper knowledge in context to what they are learning (Gee, 2003; Stieler-Hunt & Jones, 2017). Through the use of game theory, students are provided an extended opportunity to develop their social skills through relationships built throughout the gaming process as they work together to solve complex problems (Stieler-Hunt & Jones, 2017).

Collaboration and Inclusion

Collaborative theory also extends to the more specialized theory of inclusion that is often discussed, when dealing with students who receive special education services within the general education setting. Inclusion education is a multi-dimensional concept that celebrates and embraces diversity, highlights social justice and equity issues, and reveals to students a social model of education that exposes students to others of varying educational abilities (Hornby, 2015). This definition demonstrates the value of allowing lower-achieving students who receive special education services to interact and work alongside general education, and advanced students to achieve common goals reflecting the interactions of a real-world society; it also has the power to increase peer relationships that would not have been fostered in a traditional classroom setting, due to separate of traditional grade bands and academic abilities (Schwab, 2015).

Inclusive theory centers on the goal that all children are educated in a setting where they are able to achieve an education that mimics the real world and allows students with disabilities to participate in the same environment as their non-disabled peers (Jahnukainen, 2014). This theory benefits students of all educational levels because it allows them to interact and understand those who are different from them, thus replicating experiences in the real world, creating an increase in the physical integration of students in an inclusive classroom (Jahnukainen, 2014). Students who receive special education services are provided valuable skills and experiences through inclusive environments that allow them to interact with students outside the special education classroom (Mulholland & Oconnor, 2016). This setting develops understanding across different academic achievement levels to foster an environment where all students have the opportunity to participate in the classroom creating a more real-world approach to the educational environment.

Inclusion creates an image of society inside the safety of the classroom setting, much like cross-level classrooms in that cross-level classrooms allow students to interact with students outside their traditional grade bands, simulating the real world and what society will look like when they enter the workforce and become members of their community; students in a cross-level classroom are exposed to a variety of different students with varying academic abilities strengthening their understanding of life beyond the classroom. The theory of inclusion is a specialized subset of the collaboration theory that will drive this research study by focusing on understanding how a collaborative cross-level classroom impacts the educator because it is his or her job to meet the needs of all learners in a classroom, regardless of their academic level. Through group work in inclusive classrooms, such as cross-level classrooms, students are supported, academically and socially, encouraging them to work with one another to complete tasks and utilize the skills of those around them to solve problems and increase their academic knowledge, while strengthening their social skills (Frykedal & Chiriac, 2017). Teachers in inclusion classrooms must create lessons that meet the needs of learners who are on or above grade level alongside students who are receiving special education services that may be significantly below grade level. This scenario is similar to a cross-level classroom where teachers must meet the educational and social needs of multiple grade levels with a variety of educational standards.

Inclusive classrooms are centered on collaboration between students across boundaries that include academic, cultural, and social boundaries. In an inclusive classroom that brings together different types of learners, students are educated through modes that include understanding who they are, exploring who they want to be, and sharing with others (Dover & Rodriguez-Vails, 2018). This type of learning environment is the center of a cross-level

classroom where diverse students are paired together to create a deeper learning experience for both learners across grade levels. Because inclusive classrooms and cross-level classrooms are heterogenous, it is expected that these classrooms will enable the social participation of all students, regardless of their achievement level through collaborative efforts on the part of the teacher and students (Garrote, 2020). Inclusion classrooms like cross-level classrooms are geared towards the increase in collaboration across different factors for the benefit of teachers and students. However, there is still little understanding about how educators achieve the learning balance in this type of setting and what skills are needed to meet the needs of all learners in an inclusion classroom, successfully.

Collaborative Theory in Technology

Through a variety of advancements, collaboration theory has changed to involve the technology shift, inside and outside the classroom. Collaborative technology theory is when students work in a collaborate environment in an online platform (Toven-Lindsey, Rhoads & Lozano, 2015). Technology collaborative theory is defined as learning networks that encompass data, information, knowledge, and meaning through an environment that uses online technology to ensure students are engaging with one another in a social online digital platform, similar to a physical classroom (Toven-Lindsey, Rhoads & Lozano, 2015). Through this platform, students work in online groupings in order to solve problems and complete coursework, mimicking a physical classroom collaborative setting with specific adaptations for online learning. Students use a variety of online platforms to achieve virtual collaboration and communicate that create a platform on a device that is similar to a classroom setting.

As more students continue to pursue online education, the technology collaboration theory has become much more significant in the educational sector allowing teachers to adapt to

changing modes of education. The strategies in this learning theory ensure that students utilize critical inquiry and engagement in social networking sites and interest-based communities, in order to replicate physical learning communities through an online platform that mimics collaborative environments in traditional classrooms (Toven-Lindsey et al., 2015). Technology collaboration has caused educators to create a new pedagogical approach to collaboration through an online platform. As technology becomes an integral part of the education process, collaborative knowledge creation practices have shifted alongside it to create opportunities for students to work intentionally and effectively, both individually and together in solving ill-defined problems to create new solutions through different technology platforms (Lakkala, Toom, Ilomäki, & Muukkonen, 2015).

Technology collaboration theory creates an extended experience of the classroom where collaboration is still attainable for students participating, without the constraints of a physical classroom through the use of digital tools that are infused into education to create greater learning outcomes for students (Scalise, 2016). Students are still able to utilize tools that develop their skills working together, but through a larger platform and with a larger sample of students from different locations. This type of learning environment creates a global learning experience where learning is turned into a more collaborative endeavor, using technology to locate new information and integrate it into their own knowledge through a digital platform (Domalewska, 2014). Technology collaboration theory demonstrates the evolution of Vygotsky's collaboration theory as students begin to utilize more technology, inside and outside the classroom as tools of collaboration. Technology collaboration theory still uses students' experiences with other to create learning experiences, much like Vygotsky's original theory but moves student interactions to virtual exchanges that serve as opportunities to develop

instructional skills. The focus of this research study will be on understanding the benefits and barriers educators face when teaching in a modern cross-level classroom conducted through the lens of a collaborative framework that includes technological tools utilized by teachers in this type of learning environment.

Collaboration Theory in Prior Research

Several research studies have used Vygotsky's theory as the framework that drives their study. Walshaw's (2016) research focused on a Vygotskian approach to a classroom in which a connection between the teacher's activities and the students' activities in the classroom culminated into an increase in academic knowledge, stressing the value of the educator in a classroom driven by Vygotsky's theory. The importance of the educator in a collaborative environment demonstrates the value the theoretical framework of Vygotsky's theory of collaboration in this research study which focuses on understanding how educators view cross-level classrooms and what skills are needed in this type of nontraditional learning environment. Daneshfar and Samran (2018) also utilized the framework of Vygotsky's theory of collaboration and applied it to the way students are assessed through the claim that engagement in cultural connections and social environment are the key sources of development for students, both academically and socially. When students work together in groups, their growth is influenced by the members of their classroom and the collaborative learning that they experience, together, as they work together to solve problems. This learning format is the basis for cross-level classrooms and reinforces the theoretical framework of collaboration that will be used in this research study to examine the benefits and barriers of cross-level learning from the perspective of the educator.

Vygotsky's theory was utilized as the framework for Bailey, Werth, Allen, and Sutherland (2016) research study focusing on the use of multi-age classrooms in rural education to meet the needs of elementary students through grouping based on looping. The study centers on the idea that students learn from their experiences they have with others and the relationships they create through their classroom environments; thus, the multi-age classrooms can be utilized to provide new opportunities for learning and growth that single grade level classrooms may not have the opportunity to offer (Vygotsky 1978; Bailey, Werth, Allen, & Sutherland, 2016). The focus on the nontraditional approach of multi-age classrooms in rural areas demonstrates how collaborative environments that utilize cross-level learning can impact the growth of both teachers and students as they work alongside different groups of students outside their traditional grade bands to build greater understanding.

Collaborative multi-age classrooms have also been studied in classrooms with younger students where they are often grouped together across age groups. Piescor (2017) used Vygotsky's collaborative framework when studying young children interacting with one another. The study centered on the idea that through consistent play with others, younger children will reach beyond typical age milestones, both behaviorally and cognitively (Vygotsky 1978; Piescor, 2017). Students were observed using community engagement across age groups to make connections and see relationships between concepts, ideas, and activities during play with others outside their age bracket (Piescor, 2017). Cross-level classrooms that contain multiple age levels of students provided students the chance to learn from those around them, as well as teach other students to solidify their understanding. In this multi-age setting, the teacher was used to support and facilitate the learning of the students through a supportive position where he or she

encourages students to play across age levels and interact with others outside their traditional grade band (Piescor, 2017).

Vygotsky's collaborative approach to education has also been used to support students as they leave high school and make the transition to college. Goggin, Rankin, Geerlings, and Taggart, (2016) used the framework of Vygotsky to study underperforming students who had the possibility for potential success as they matriculated from high school to college. Their study utilized collaborative efforts to help students facilitate a growth in their learning using collaborative intervention in order to prepare them to move into collegiate study (Goggin et al.,2016). Through this framework, educators and tutors were able to assess students to meet their needs and providing the necessary support using a variety of academic tools on different levels. This research study setting is similar to a cross-level classroom in that it utilizes multiple educational levels to support learners by modeling the acquisition of knowledge and engaging in academic discourse.

Educating students is more than an academic endeavor; it also includes psychological growth through relationships with other students. Eun (2016) focused on better understanding how Vygotsky's framework for collaboration through psychological interactions and how these interactions solidify the growth mindset, over time. Teachers and students use collaborative dialogue on a daily basis in the classroom to work through problems. This dialogue not only teaches the student a new concept, but it teaches the students how to use collaborative skills to solve problems as they move through education and life. Similarly, a cross-level classroom teaches students how to work with others in an academically and socially-diverse environment learning from those around them in order to improve their own skill sets creating an environment that supports Vygotsky's collaborative theory.

Prior research has also been done using Vygotsky's framework to better understand how collaborative learning environments influence students' perceptions towards diversity. Loes, Culver, and Trolan (2018) found that students became more open to the diversity of other students because collaborative learning activities encouraged students to work with others whose backgrounds, perspectives, and skills were different from their own. Because of collaborative group work, students were able to work with students of varying abilities and perspectives to create a deeper appreciation for others and learn more about diversity (Loes, Culver, & Trolan (2018). In cross-level classrooms, students of diverse backgrounds and varying academic levels are given the opportunity to work with one another in order to be exposed to other perspectives and build knowledge through this exposure inside the framework of Vygotsky's collaborative theory.

Collaborative Theory and This Research Study

Through the collaborative theories discussed above that include CPS, inclusion theory, and game theory, the framework for the research study is extended to include a larger understanding of the value of collaborative classroom from the perspective of the educator. The cross-level classroom approaches the educational experience of both the teacher and the student through a collaborative environment where students of different grade levels are placed in a classroom, together, to engage in learning. Through these experiences, students are encouraged to use their peers as a means for understanding and work across grade levels to create a deeper understanding, but there is little examination into how educators can foster this type of learning environment, successfully.

The research above indicates that a collaborative environment can increase the educational experience for students when they are able to interact with others in different grade

levels to complete an academic task. However, there is little research that examines the perspectives of the teachers who are planning for this type of learning environment and facilitating lessons in a collaborative setting that requires significant planning in classroom management; there is also little research that uses the lens of the teacher, when teaching in a cross-level classroom to better understand the effectiveness of the practice and the benefits and barriers for the educator.

Related Literature

The following section will examine the literature related to cross-level classrooms. The literature review will focus on the following topics: historical background, cross-level classrooms in the United States, the benefits of cross-level learning, the opportunities provided by cross-level classrooms, and cross-level classrooms and social growth. Each section will be discussed in relation to this research study which is examining the benefits and barriers of cross-level learning from the perspective of the educator. Each section will be broken down into smaller subsections, in order to provide a detailed overview of studies that have been conducted dealing with cross-level classrooms in order to demonstrate a gap in the literature for this research study.

Historical Background

The following section includes information on the historical background of cross-level classrooms as they have developed over time, particularly in the United States. This section provides an overview of the multi-age classroom in early educational systems, such as the one-room schoolhouse and the one-room schoolhouse instructional approach that existed through the early 20th century. It also describes how this model of learning has been adapted to fit within the modern educational system in elementary, secondary, and post-secondary educational settings.

One-room schoolhouse instructional approach. Over the last 150 years, students have been consistently grouped by grade level with little interaction amongst students of different grades; however, some teachers have approached cross-level teaching as a tool to combat a traditional learning approach that may not work for all students (Broome, 2016). Fischel (2011) studied the current one-room school-house style which began in the early 19th century and has continued into the present, used by the Amish and other communities, and found that the great virtue of the one-room school of the past was the sense of local communal participation that it engendered. Since the early 20th century, schools that center on teaching methods such as Montessori schools have also utilized multi-age classrooms that mimic the one-room schoolhouse setting (Huf & Raggl, 2015; Petersen 1972). Schools that use the Montessori method of instruction group students in three-year age groups, in order for younger students to learn from older students creating a one-room school-house approach to education (Montessori 1966; Ruijs, 2017). A one-room school-house instructional setting has been a tool that has been utilized by educational systems and teachers in various ways throughout educational history for necessity, but also to the benefit of students (Fischel, 2011; Huf & Raggl, 2015).

Some Montessori schools are increasing their three-year age groups to include middle school students which has traditionally not occurred in this type of setting. In the Montessori classroom, students are provided with experiences appropriate to their developmental levels and each individual student is met at their level in a group setting similar to a one-room schoolhouse (Breiman & Coe, 2016). The Montessori setting focuses on using the multi-age classroom to use previous experiences, applying previous knowledge, and seamlessly moving into new levels all inside the same three-year classroom (Breiman & Coe, 2016). This type of nontraditional classroom setting demonstrates how the one-room schoolhouse approach to education is still

used as the primary mode of educational grouping in schools that offer differing approaches opposed to grouping by age.

Relationship between the one room schoolhouse and cross-level classrooms. This historical description of the one-room schoolhouse instructional setting is similar to cross-level classrooms in the present and depicts the evolution of multi-age classrooms throughout history. Over time, the one-room schoolhouse has evolved into the one-room school-house instructional model where two or more classrooms are combined together into one classroom with one instructor facilitating both courses, simultaneously (Davis, 2014; Pulcini & Dennett, 2017). Cross-level classrooms take this same approach to the secondary and elementary classroom and follow the one-room school-house instructional model where multiple learners are grouped together across traditional grade bands in order to increase cognitive development through social interactions that lead to a deeper understanding of academic content (Kallery, & Loupidou, 2016). Students in this type of educational setting are provided the opportunity to work with students outside their traditional grade bands to formulate new experiences in a collaborative environment that is not provided through traditional grouping (Bailey et al., 2016).

Cross-level classrooms are a more modern approach to the one-room schoolhouse where students are grouped across two grade levels such as third and fourth grade together. Through this grouping, students may have the opportunity to have the same teacher, over a two-year period, strengthening the relationship between teachers and their students and fostering a deeper understanding of each student's individual learning style and ability. Cross-level classrooms also mimic the one-room schoolhouse through the use of collaboration across age levels to teach students through interaction and collaboration. Younger students have the opportunity to learn from older students, while older students can set themselves as the more capable peer solidifying

their understanding of the material by teaching others (Huf and Raggl, 2015). The cross-level classroom places the teacher as the creator of the learning material that allows each group of students to grow, both socially and academically, emphasizing the need for a deeper understanding of how the teacher meets the needs of this type of learning environment with extended needs for multiple grade levels.

Cross-Level Classrooms in the United States

The following section contains information about cross-level classrooms used in the United States. These classrooms are often constructed as a way to meet the needs of learners in an efficient way; special education and inclusion classrooms are also classroom environments where students of different grade levels and abilities interact. Lastly, this section reviews how cross-level classrooms have been adapted for use in the higher education setting and how institutions of higher learning are using cross-level classrooms to benefit students.

Multi-age classrooms. Most schools in the United States do not have cross-level classrooms, but they are often found in common rural communities where resources are limited and in other countries where schools lack funding. Multi-grade classes are traditionally associated with small rural schools where pupil numbers are too small to be taught as separate classes or there is a limited amount of teachers (Casserly & Padden, 2018). Cross-level classrooms are also common in special education with inclusion classrooms where special education students are in the same classroom as their non-disabled peers in the least restrictive environment (Jahnukainen, 2014).

In inclusive classrooms in the United States, students with special education needs are placed in classes with students who do not receive special education services, creating an environment with different levels of learners who interact with one another. Special education

inclusion is generally associated with higher academic performance for students, with and without disabilities, and with higher graduation rates for students without disabilities demonstrating the value of multi-level classrooms in the United States, and the need for further research on cross-level classrooms focusing on how the educators perceive this type of learning environment (Wrestling, 2018).

School systems throughout the world are turning to multi-age classrooms in order to meet the educational and social needs of their students. Schools in rural areas have chosen to adopt multi-age classrooms similar to the one room schoolhouse in order to foster an increase in knowledge through academic looping where students are paired with the same teacher, over two years, combining grade levels. In this type of one-room schoolhouse classroom setting, students in two different grade levels are instructed, simultaneously, by one teacher fostering a more in depth understanding of students needs and an increase in student collaboration (Bailey et al., 2016). This adaptation allows for teachers, students, and parents to increase their collaboration with one another through multi-age grouping and strengthen their relationships, as they move through the educational process.

Multi-age classrooms in higher education. Higher education institutions have also begun using cross-level classrooms to combat low enrollment for certain courses. The one-room schoolhouse instructional model allows colleges to combine two or more classes under one teacher to combat low enrollment numbers, providing a new and innovative approach to cross-level learning in the college setting (Davis, 2014; Pulcini, & Dennett, 2017). Higher education has also seen the creation of multigenerational learning environments that include a multiage cross-section of society in a classroom setting, due to the increase of a focus on life-long learning in the United States amongst older students (Sanchez & Kaplan, 2014). This type of educational

dynamic is indicative of a cross-level setting where students are bringing multiple perspectives to the classroom because of their differing ages and life experiences. Through this type of intergenerational cross-level setting, students are engaged in a more robust learning experience for both older and younger students; older students place a higher value on social interactions and their relationships with other members of their classroom creating an increase in communication between different age groups in the classroom (Heffernan, Cesnales, & Dauenhauer, 2019).

As elder nontraditional students enroll in college classes, the potential for intergenerational classroom instruction has increased. The growth of the baby boomer population and a growing interest in lifelong-learning opportunities among older adults have created new models of multigenerational education where traditional students are paired with older students outside their normal interactions to foster intellectual growth based on varying perspectives (Dauenhauer, Heffernan, & Cesnales, 2018). Some colleges have begun reserving spots in traditional classes for older students to ensure there is a multigenerational aspect to each course. Through the addition of older students, prior research studies have found that the interactions between younger and older students promoted social relationships between the learners and an exchange of knowledge and insights across generations that would not have been provided in a traditional college classroom (Dauenhauer, Heffernan, & Cesnales, 2018). Schools of higher education have been able to utilize cross-level learning to their benefit in order to promote greater collaboration amongst students of different ages, strengthening their understanding of material through an intergenerational lens.

The Benefits of Cross-Level Classrooms

Cross-level classrooms provide a variety of benefits for both students and teachers. This section describes the academic and peer interaction benefits that are provided to students who participate in cross-level environments and the gaps that still exist for educators. It also describes the students' exposure to diversity, due to an increased interaction amongst multiple grade levels in the cross-level classroom and how this exposure benefits student academic and social growth.

Student benefits in cross-level classrooms and educator responses. Different grade levels may contain learners on different academic levels causing students to struggle when they are below grade level, and those above grade level to become bored and disengaged with the content; cross-level classrooms can be a productive approach to combining academic levels as opposed to grade levels, but Broome (2016) found that many teachers did not feel confident with this approach to teaching. Many teachers have not been properly trained or given guidance on how to implement effective lesson plans with students of different grade levels, despite the recognized value of multi-level education. Teachers who were active in multi-age classrooms needed more professional development helping them manage the need to differentiate instruction, plan appropriately for different grade levels, and increase collaboration among members of their class through effective classroom management (Broome, 2016).

Cross-level classrooms have been found successful for learners in strengthening their social skills and developing empathy, but these types of learning environments place a high value on the educator and his or her impact on this type of learning, demonstrating a need to understand the benefits and barriers of cross-level learning from the perspective of the educator (Anderson, 2018). Because cross-level classroom are not a common occurrence in traditional educational systems, an increase in training for educators is a necessary response to ensure they

are able to effectively use the multi-age grouping, effectively; further research is also required to better understand teachers' responses to this type of classroom environment and how they facilitate lessons for multiple grade levels, simultaneously (Bailey et al., 2016).

Peer interaction in cross-level classrooms. Teaching academic skills to students in a cross-level classroom leads to an increase in independence and self-motivating behavior in this type of collaborative classroom (Farrell, 2012). For a cross-level classroom to be successful, the students must approach their learning with a positive attitude towards the material that they all will be learning at a different pace. As certain students excel, those students can provide positive mentorship for students who struggle with a particular skill, through peer tutoring and interaction (Farrell, 2012). In these multi-age settings, older students naturally gravitate to a position of semi-authority over younger students making themselves available to assist in the learning of younger students and provide mentorship similar to the teacher/student relationship (Huf and Raggl, 2015). However, students need to be generally engaged and focused on the success of themselves alongside their peers to function in a cross-level classroom approach and reap the benefits of this type of learning environment (Farrell, 2012).

In cross-level classrooms, students work closely with one another across traditional grade bands to increase interaction with one another to initiate the learning process. The value of this type of peer interaction can be seen in younger classroom settings where more capable peers are able to model tasks or behaviors during their interactions with younger students (Anderson, 2018). Through these peer interactions, students are exposed to others who are more capable than themselves allowing them to learn from those around them in an organic way. Peer interaction in cross-level classrooms provide students with opportunities to build beneficial

relationships with others, position themselves as experts on certain topics, and practice collaborative problem solving and reasoning with their peers (Peterson, 2016).

Diversity in cross-level classrooms. Students who are educated in multi-grade classes that have a more heterogeneous mixture of students exhibit academic achievement comparable to that of their counterparts in single-grade classes (Smit et al., Hyry-Beihammer, & Raggl, 2015). To ensure the success and benefits of cross-level learning, educators must be willing to become familiar with the diversity of all students in the classroom and utilize areas of adaptation that include content, grouping, and individualization to ensure cross-level classrooms are successful to all grade levels (Smit et al., Hyry-Beihammer, & Raggl, 2015). Cross-level classrooms are grounded on the idea that heterogeneity is normal and valuable and that the desire for students to be the same will not benefit instruction; cross-level classrooms, similarly, focus on supporting peer learning and fostering cognitive and social development through the exploration of the learning process in regard to differentiation for each and every learner in the classroom (Hyry-Beihammer & Hascher, 2015). Cross-level classrooms are a successful tool in educating students from a diversity standpoint, but more research is needed to understand the benefits and barriers of this type of learning from the perspective of the educator and what can be done to provide support for the teacher, in order for them to be successful in cross-level classrooms (Broome, 2016).

Opportunities Provided by Cross-level Classrooms

Cross-level classrooms provide opportunities different from those in the traditional classroom setting. This section reviews the various innovative opportunities that cross-level classrooms provide to students, including a more real-world exposure to society in a school

setting. It also examines how cross-level classrooms increases interaction amongst students and the benefits of these interactions.

Cross-level classrooms as an innovative approach to education. Cross-level classrooms can create an opportunity for success for students who are not excelling in the traditional classroom because they allow underperforming students to mimic older or higher achieving students through peer modeling and observation (Ansari, 2017; Veenman, 1999). Schools have recently begun focusing on the fact that school effectiveness increasingly unifies collaborative frameworks by paying more attention to and incorporating factors that operate at the school and classroom levels; this approach toward effectiveness explicitly considers the potential for interactions across grade levels as a means to increase educational effectiveness (Martinez, 2012).

As schools are working increasingly to improve test scores, they are often willing to try new approaches outside the traditional way of presenting information in the classroom and trying other options such as cross-level classrooms. Traditional grade level separation often distorts student success and places students in specific grade bands with little chance to move fluidly between grade levels, limiting students' ability to learn from and with peers of different ages (Martinez, 2012). By creating cross-level classrooms and embracing this non-traditional setting, students are exposed to a more differentiated approach to instruction due to the knowledge of their education differences prior to the beginning of the course and are exposed to a higher level of innovation (Hyry-Beihammer & Hascher, 2015). Cross-level classrooms provide students with an innovative approach to learning allowing for increased success in the classroom.

Many schools have chosen cross-level classrooms as a means of looping students where they are continuously with one teacher over a two-year period meaning two grade levels are

always together. This innovative approach to the cross-level classroom provides students the benefit of building longer relationships over time with their teachers and peers as they move through the multi-age classes together (Bailey et al., 2016). Multi-age classrooms that use looping as an innovative approach to education ensures that younger children can observe older and more skilled children in the classroom and mimic their behaviors and actions and older children can scaffold younger children allowing them to solidify their own learning (Ansari & Purtell, 2018).

Cross-level classrooms as a reflection of society. Cross-level classrooms provide students the opportunity to experience a real-world setting where students are able to experience and formulate different expectations for different age groups in a setting similar to society (Kallery & Loupidou, 2016). When students enter higher education or the workforce, they will be expected to be able to interact with others in a collaborative environment that will include members of different academic backgrounds (Heffernan et al., 2019). Education is the optimum place to introduce the theoretical concept of collaboration and diversity in order for it to become normative and embedded when students leave school (Ridley & Smith, 2016). Collaborative environments allow for students to become normalized to a way of learning and understanding that is outside the traditional classroom setting but will prepare them for the future in college or career. Cross-level classrooms utilize this principle by allowing interaction of students to extend across traditional grade bands creating a more realistic educational experience that is more reflective of the intergenerational interaction of society, preparing them to enter society (Ridley & Smith, 2016). The value of cross-level classrooms is that they provide students an opportunity to become more aware of others who are not in their traditional grade bands, allowing them to

strengthen the understanding of community through non-traditional peer interaction (Anderson, 2018).

Cross-level classrooms created with multi-age collaboration in mind provide the opportunity to foster a family atmosphere within the community where students work effectively in a learning environment similar to a familial structure (Wiechmann, Conn, & Thorpe, 2019). In multi-age classrooms, students are exposed to more interactive environments that are safe and nurturing due to the increase in diversity and flexibility in the cross-level setting (Bailey et al., 2016). These types of classrooms provide the students with a non-traditional approach to education allowing for a subset of society to foster growth, as opposed to chronological age grouping that is commonly used in education.

Cross-level Classrooms and Social Growth

Cross-level classrooms provide students the ability to interact with students across multiple grade bands outside their traditional grouping and foster relationships with students through academic collaboration. These types of classrooms allow for an increase in social interaction that, otherwise, would not occur in the traditional classroom with grade-band grouping. The following section discusses peer interaction in cross-level classrooms and how it contributes to social growth for students who are members of a multi-age classroom, with a variety of learners from different age groups.

Cross-level learning through peer interaction. Students are often paired together across abilities and grade level to increase their social and developmental skills; through these pairings, social interaction plays a significant role in the younger students' learning and social skill development when working with older students (Xu, 2018). Cross-level peer tutoring enables children to be active learners through their interactions with younger and older students,

allowing growth to be fostered in an environment rich in collaboration with members of a multi-age class (Xu, 2018). Cross-level classrooms often utilize peer interaction in order to increase instructional learning in the classroom with students working with one another to complete assignments; these classrooms support a collaborative environment where students build knowledge, improve thinking skills, develop social and communication skills, increase tolerance, and accept diversity while interacting with their peers (Jin & Kim, 2018) Peer-tutoring has also been utilized across grade levels to increase students retention and growth of academic skills alongside social skills; peer-tutoring across grade levels is an instructional approach that produces beneficial outcomes when incorporated into other modes of instruction and increases students enjoyment of learning (Greene, Tiernan, & Holloway 2018). Through peer interactions, such as those in cross-level classrooms, students who work together across traditional grade bands are able to develop social skills alongside academic growth through non-traditional interaction (Greene et al., 2018; Xu, 2015).

Cross-level classrooms also provide students and teachers with a dialectical approach to educational material through social interactions. In cross-level classrooms teachers and students of different grade levels engage in critical discussions and interactions with one another through reflection, action, and committed involvement in order to build their knowledge (León & Castro, 2017). These interactions help students and teachers to foster social growth and development through exchanges with classmates outside their traditional grade bands providing more diverse opportunities to learn from collaborative classroom discussions and experience different viewpoints from older or younger students. In cross-level classrooms, students are encouraged to be active participants with one another placing them in a different classroom role where social interaction between peers allows students to take control of the learning process for themselves

come to a deeper and conceptual understanding of material because of this interaction and discourse (Edwards & Mercer, 1987; Roberts, 2016).

Cross-level learning and student empowerment. Teachers who utilize cross-level classrooms allow for student empowerment by encouraging students to become more involved, to engage in educational processes, and to develop a greater sense of commitment when working with students across grade levels (Aiken et al., 2015). A collaborative learning environment is not only beneficial for the student body, as a whole, but is also beneficial to the individual student; collaborative work contributes to students' personal development fostering individual learning through a collaborative environment that encourages students to learn from one another, outside traditional instructional methods (Baser, Ozden, & Karaarslan, 2017). In cross-level classrooms students have the opportunity to take ownership over their roles in the collaborative environment because they are pushed outside their traditional age grouping and exposed to other learners of varying academic and social abilities.

Prior research indicates that collaboration continues to empower student learning after the lesson ends and into the individual learning experience; students bring lessons learned from the collaborative environment and interaction with their peers into their independent coursework leading to student empowerment, alone, as well as with others (Aiken et al., 2015; Baser, Ozden, & Karaarslan, 2017). Through this increased student empowerment, students are able to build extended knowledge that stretches beyond individualistic learning. Cross-level classrooms create an environment where learning and interaction in the classroom move onto the shoulders of the students participating in the lessons across traditional grade bands. Students are active learners in this type of setting, with teachers facilitating the learning environment and encouraging

students to take control of their own learning, providing empowerment through collaboration with learners from different grade levels.

In a collaborative classroom, students are given a variety of opportunities to utilize their skills with others in order to solve complex problems. Through this experience, students come to better understand their own capabilities and what skills set them apart from other students. León, J. J., & Castro, C. M. (2017) found that collaboration fosters involvement and teamwork as well as a responsibility in dialogic bases with other students because of this active participation is ensured and students are engaged in discussion while taking responsibility for their learning. Through this type of learning experiences, students were able to identify their place in the larger group and take responsibility for their part in the group, creating an environment of increased student empowerment because of student ownership. Students in cross-level classrooms are also given this opportunity through a multi-grade setting where students collaborate to create deeper understanding. These types of classrooms foster empowerment, but more research is needed to better understand how teachers ensure these nontraditional environments allow all students the opportunity to create classroom identities when they participate in collaborative efforts with other students.

Summary

Current research studies stress the value and importance of collaborative learning theory and the importance of students supporting one another in an educational setting where each student brings different perspectives to the learning environment. Numerous studies have found the significance of students working alongside their peers in a collaborative environment in order to solve problems or work towards a common goal. Utilizing the conceptual framework of collaboration theory created by Lev Vygotsky, this research study examines cross-level learning

through the lens of collaboration in order to better understanding the benefits and barriers of cross-level learning from the perspective of educators (Vygotsky, 1978). This framework centers on the idea that students working together learn from one another to solve problems, as well as solidifying their own understanding of instructional material.

Collaboration in cross-level learning centers on social interaction and cognitive learning where students work alongside one another allowing them to experience real-world interactions while increasing their cognitive functions (Tickle, 2017). Related literature shows how cross-level classrooms have developed, over time, through a variety of classroom settings throughout all educational levels. In these collaborative classrooms, several benefits to these classrooms have been identified such as peer interaction, student empowerment, increased inclusion, and social growth as a result of a multi-age classroom. It has also been identified that there are various challenges that arise for the teacher in a cross-level or multi-age classroom resulting in extended research in this area to better understand the educator's perspective of the benefits and barriers of cross-level classrooms.

The goal of this case study was to understand the role of the cross-level approach to learning within the larger theory of collaborative learning through the eyes of the educator who must facilitate and plan for this type of classroom. There is still a need to better understand the role of the educator and how he or she executes instructional content within the framework of cross-level collaborative learning (Kaendler, Wiedmann, Rummel, & Spada, 2014). Minimal research exists on understanding how teachers adapt to a cross-level classroom and what skills are necessary to meet the needs of learners in this type of classroom setting. This research study helps to fill the gap in the related research on collaborative learning and provides a deeper

understanding of the benefits and barriers of cross-level learning from the perspective of the educator and how this type of classroom impacted his or her role in the classroom.

CHAPTER THREE: METHODS

Overview

The following chapter includes the research design of the current study detailing the qualitative nature of the study and the approach of a collective case study to better understand educators' perspectives of cross-level classrooms. Also included are the research questions, setting, and participants. All procedures of the research study are detailed and described in such a way that the research study could be replicated by another researcher. Because the study is qualitative, the researcher's role as the instrument in the study is also described through researcher's bias. The role of the researcher also includes the assumptions and paradigm of the researcher. All forms of data collection and analysis are described in detail. Lastly, chapter three includes the methods that will be used to establish trustworthiness and the ethical considerations for the research study.

Design

The following section includes the qualitative method, case study design, and collective case study approach used in this research study. The method used in this study was qualitative and examine the phenomenon of cross-level learning (Creswell & Poth, 2018). The design used was a case study, in order to provide illumination from individual experiences (Yin, 2018). The approach was a collective case study incorporating multiple experiences of different educators.

Method

This research study was a qualitative study because the phenomenon of cross-level classrooms from the perspective of the educator needed to be understood and explored in depth in order to add to the current body of research and provide understanding of how teachers view this type of learning environment (Creswell & Poth, 2018). This qualitative study filled the gap

in the research by giving insight into the views of teachers and what they deem to be the benefits and barriers of cross-level learning. This study was also conducted in a neutral setting where the information is gathered from participants who have personal experiences with cross-level classrooms and offered their own knowledge, in order to build understanding more effectively (Creswell & Poth, 2018). Through the qualitative research process, inductive reasoning was used in order to determine themes that arose through the voices of those participating in the research study (Creswell & Poth, 2018). Because the method was qualitative, the researcher was the main instrument in the study analyzing multiple methods of data collection collected from the perspective of the participants and will provide an in-depth contextual understanding of the phenomenon (Creswell & Poth, 2018). Qualitative research was the most effective choice for this research study because examining teachers' perspectives helped create meaning behind cross-level classrooms and provides a more in-depth picture of the phenomenon (Patton, 2015). Quantitative method research would provide only numerical data and would not allow for personal responses to be evaluated. Mixed method research would combine both the numerical data with personal insights and not allow for teachers' personal responses and feelings to provide the clear contextual understanding of the topic that is needed to understand the benefits and barriers of the phenomenon.

Design

The case study design was the most effective for this research study because the goal of the study was to explain and understand cross-level classrooms from the perspective of the educator; by using the case study design, the experiences of the educators using cross-level classrooms were more detailed and in depth which allowed the researcher to focus on specific cases in greater detail in order to understand how teachers view cross-level classrooms and

provided a much more in depth understanding of the phenomenon (Yin, 2018). Because the research study was a case study design, a contextual understanding of cross-level classrooms in rural settings was studied in detail, gaining a more individualistic understanding of the phenomenon. The study examined a contemporary phenomenon that occurs in the real world in many classrooms around the United States through the perspective of those who are active participants in cross-level classrooms (Broome, 2016; Casserly & Padden, 2017; Casserly, Tiernan, & Maguire, 2019; Yin, 2018). Other designs considered included phenomenological and ethnography, but these were not chosen because despite providing an understanding of the phenomenon in a real-world context from educators, these approaches are broader. The case study approach allowed the researcher to examine specific cases in greater detail to better understand how teachers felt about cross-level classrooms by looking at each case in great detail to delve deeper into the phenomenon and its context (Yin, 2018).

Approach

For this research, I chose to conduct a collective case study because cross-level classrooms are a real existence in many rural schools in the United States, in both elementary and secondary classrooms (Broome, 2016; Casserly & Padden, 2017; Casserly et al., 2019; Creswell & Poth, 2018). Because the case study was a collective case study, multiple viewpoints, specifically from educators in different grade levels participating in the study, were examined through the data collection instruments in order to gain deeper insight into what educators felt were the benefits and barriers of cross level learning; through a collective case study, diverse cases were represented in order to provide a larger picture of the phenomenon of cross-level classrooms (Creswell & Poth, 2018).

Research Questions

Central Question

How do teachers describe cross-level classrooms?

Sub Question One

How does cross-level learning provide benefits for classroom teachers from the perspective of the educator?

Sub Question Two

What are the barriers educators face planning and executing lessons in cross-level classrooms?

Sub Question Three

How does cross-level learning influence instructional planning and practice?

Setting

This research study was conducted at Franklin High School (pseudonym) and Franklin Elementary School (pseudonym) which make up the entirety of the school system. Franklin Elementary School serves students in grades K-6 with 400 students in total, while Franklin High School serves students in grades 7-12 with 500 students in total. The schools are classified as Title 1 with 65% of the students receiving free and reduced lunch (in-text citation).

Franklin Elementary School houses students in grades K-6; 50% of the students are Black, 49% are White, and 1% are Asian (Williams, 2017). The school is considered Title 1, with 74% of students receiving free and reduced lunch (Williams, 2017). Franklin Elementary School's organizational structure has one principal and one assistant principal who work together on curriculum and discipline, as well as other school issues. The school has one counselor for all students at the school. There are 24 teachers in grades K-6 with one teacher who serves as a reading coach and one teacher who serves as a technology integration coordinator.

The demographics of Franklin High School are: 57% White, 41% Black, less than 1% Asian, and less than 1% Hispanic (“Franklin High School Student Body”, 2019). Franklin High School is known in the region for its excellence in extracurriculars such as football. The school has a small student population and is located in rural Alabama, two hours away from any major metropolitan city in Alabama. Franklin High School has an organizational structure with one principal and two assistant principals for all students in grades 7-12. The school has two counselors with one servicing students in grades 7-8 and the other servicing students in grades 9-12. Each department is made up six or less teachers with one teacher teaching all students in one grade level. This school was chosen because teachers often utilize cross-level learning because of necessity.

Franklin High School is located in a community with a total population of 3,913 people, with a median household income of 34,910 dollars. Seventy-seven-point two percent of the population hold a high school graduate certificate or higher, and 8.6% of people in the community are living below the poverty line (U.S. Census Bureau, 2019). The majority of people in the community where Franklin High School is located work in the pine and timber industry or paper mills, as a result of the timber industry.

Participants

I used purposeful sampling to locate educators at Franklin High School who had at least 5-10 years of experience in the classroom. First, I solicited teachers who were interested in participating in the study through a simple online google form. Purposeful sampling was then used to remove bias and locate information-rich cases; participants were chosen from different subsets of the school community to ensure that a variety of departments and different subject areas were represented until thematic saturation was reached (Patton, 2015). This means

educators were chosen from different educational departments and included a variety of educators, both male and female from different racial backgrounds. The sample size included 15 teachers with 12 used in the final research. Seven teachers were from Franklin High School and five teachers were from Franklin Elementary School. Pseudonyms were assigned to all participants in the research study to protect their identities and maintain confidentiality through the research study process (Patton, 2015). Permission and consent were gained from all participants prior to observations, interviews, and reviews of lesson plans and other instructional documents.

Procedures

Prior to beginning the research process, site approval was gained (Appendix A); Institutional Review Board (IRB) approval will also be obtained (Appendix B). Participants were elicited through an electronic format to locate educators with 5-10 years of experience in the classroom. Fifteen teachers were chosen to participate in the research study with 12 being used in the final data collection. Emails were sent out to all the teachers to determine initial interest for participation. Teachers were then emailed a Google form to confirm participation. Purposeful sampling was used to finalize the sample size by removing teachers who did not have 5-10 years of experience. Informed consent was obtained from all educators participating in the research study (Appendix C).

Observations were conducted to see how teachers managed multiple grade levels, as each educator taught a cross-level lesson. Prior to each lesson, the researcher reviewed other documents such as lesson plans and instructional material to gain a deeper understanding of the planning process needed to facilitate a cross-level classroom; these plans demonstrated how teachers differentiated for multiple grade levels in one classroom through different instructional

methods. Lesson plans were examined to see how teachers plan to execute multiple standards, at one time. Observational data was then recorded by the researcher detailing all observations throughout the course of the lesson, as well as any other information noted by the researcher. Interviews were then conducted asking teachers a set of questions in order to determine the benefits and barriers of cross-level learning from an educator's perspective. All interviews were conducted with the same question set and were recorded by the researcher with audio recording equipment to ensure accuracy. Interviews took place each teacher's classroom during their designated planning time to ensure they were confidential; each interview lasted approximately 60 minutes.

The Researcher's Role

I conducted this research study with a constructivist paradigm with the idea that beliefs and values are shaped by people's experiences and interactions with others (Creswell and Poth, 2018). Because I am a younger educator, my education and experience as a student has been centered on a more collaborative environment in the classroom, as opposed to the more traditional lecture forms of instruction. I have been teaching secondary English for 10 years in a variety of school settings that include urban, suburban, and rural areas. As an educator, I frequently used cross-curricular and cross-grade level project-based learning to foster student growth and create deeper discussions amongst the student population. I became aware of cross-level classrooms because of the necessity for them in schools that lacked funding or resources to provide teachers for traditional grade bands. As an educator, I have always had a passion for listening to my fellow educators and providing them support and resources to improve their experiences. After listening to teachers in cross-level classrooms discuss what their classroom was like, I wanted to fully understand the benefits and barriers for being an educator in this type

of non-traditional classroom. My intent was to observe teachers, analyze their resources, and record their thoughts and feelings to better understand their experiences so that future educators and school communities are aware of the benefits and barriers of this type of classroom.

I will be a human instrument in this case study analyzing multiple methods of data collected from the perspective of the participants to provide a contextual understanding of cross-level classrooms through the lens of the teacher (Creswell & Poth, 2018). As the researcher, I have a professional relationship with all educators participating in the research study. All the participants in the research study were teachers at Franklin High School or Franklin Elementary School and service grades k-12. My relationship to the participants is that of a colleague and fellow faculty member in the same school system. I am acquainted with all participants in a staff relationship as a peer and fellow educator at the research sites. I do not hold any authority or power over any of the participants in the study.

To ensure there is validity in the research and to minimize bias, I will use an external coder. The external coder will be a member of the academic community and is also engaged in doctoral research. The external coder will not be acquainted with any of the participants in the research study and will be provided access to all data collected throughout the research study. I will then compare my own findings against those of the external coder to ensure that there is no bias in the research.

Data Collection

The following section includes the data collection methods that will be used in this case study. To collect data in this research study, I used the following data collection methods: interviews, observations, and evaluating other documents. Other documents included all physical artifacts used to plan and create cross-level lessons, including both instructional

materials and lesson plans. All data collection tools provided valuable information on how teachers felt about cross-level lessons, their ability to conduct them in the classroom, and how they planned for cross-level lessons. As educators execute cross-level lessons, I conducted three observations to study the phenomenon in the field. After the lessons and observations were conducted, educators participated in one-on-one interviews after facilitating and executing cross-level lessons.

Interviews

Interviews were used to obtain deeper insight into the perspective of the educator teaching in a cross-level classroom. Interviews were conducted in each teacher's classroom during their planning time to ensure confidentiality. Interviews were conducted in an open-ended format with 14 questions that provided guidance to the 60-minute interview while allowing the interviewee to share his or her opinions, freely (Yin, 2018). Interviews were considered short interviews and lasted approximately one hour and were conducted in a way where strict wording encouraged the participant to provide fresh commentary about cross-level classrooms (Yin, 2018). Throughout the interview process, I asked the participants main questions that deal primarily with the research questions and used probes to go into greater detail allowing the participant to provide their own perspectives and explanations; the goal of the interviews was to not only determine benefits and barriers from the perspective of the educator, but to understand why they felt this way (Rubin & Rubin, 2012).

Standardized Open-Ended Interview Questions (Appendix D)

1. Introduce yourself.
2. Please give me a detailed description of how you plan a cross-level lesson (SQ3).

3. Of the different steps in the planning process of a cross-level lesson, what would you say is the most difficult for you in the planning phase (SQ2)?
4. What made this step the most difficult? Explain the difficulties and why you think this step was the most difficult (SQ2).
5. How do the barriers and difficulties impact your role as the teacher when facilitating a cross-level lesson (SQ2)?
6. Of the different steps in the planning process of a cross-level lesson, what benefits are there in the planning phase (SQ1)?
7. What in your opinion created these benefits (SQ1)?
8. How do these benefits impact the role the teacher plays in the classroom (SQ1)?
9. Of the different steps in the planning process, what would you say is the most difficult for you in the facilitating phase (SQ3)?
10. How do you plan for a cross-level lesson? Describe your lesson plans and how you differentiate your materials for both grade levels (SQ3)?
11. What caused the difficulties in facilitating and executing this part of the lesson (SQ3)?
12. How do educators benefit from cross-level types of lessons? Please describe the benefits in detail that you have experienced (SQ1).
13. What are the barriers you experience in planning a cross-level lesson (SQ2)?
14. What are the barriers you experience in facilitating and executing a cross-level lesson (SQ2)?
15. Cross-level lessons utilize a great deal of collaboration; explain how this type of classroom affects the role of the educator (CQ).
16. Describe how teaching in a cross-level classroom has affected you as an educator (CQ).

17. What other things do you think would be important for me to know about planning and facilitating a cross-level lesson or working in a cross-level classroom (CQ, SQ1, SQ2, SQ3)?

Questions 1 and 2 are knowledge questions and provide a brief overview of the educator's experience in the classroom and a detailed description of how a teacher creates a cross-level lesson (Patton, 2015). These questions are very straight forward and were used to build a rapport between the researcher and interviewee and determined the steps the interviewee goes through to create a cross-level lesson.

Research has shown that teachers who utilize cross-level classrooms allow for student empowerment encouraging students to become more involved, to engage in educational processes, and to develop a greater sense of commitment (Aiken, Heinze, Meuter, & Chapman, 2015). Therefore, it is important to better understand the perspective of the educators who plan, create, and execute these lessons. Questions 3 through 14 are open-ended questions that allowed the interviewee to express his or her opinions and describe their thoughts and feelings on how educators plan and execute cross-level lessons. Questions 9 and 10 focused on the planning phase and asked the interviewee to provide explanations and details for how he or she accommodates and differentiates for different learners across grade levels in a cross-level classroom (Hyry-Beihammer & Hascher, 2015).

Question 15 allowed the interviewee to express his or her own opinion through the perspective of an expert in their field. Research has shown that increased collaboration in the classroom leads to an increase in cognitive processes for the students, but there is little to no research that provides insight into collaboration from the perspective of the educator (Ciconni,

2015). Question 16 gave educators a platform to share their own insight into cross-level learning and the impact this type of classroom structure has had on them as an educator.

Question 17 is a closing question that allowed the interviewee to add any information that he or she felt motivated to share. This last question provided the interviewee the opportunity to share anything that may have been left out in the interview process or something additional that was important; it also gave the interviewee the last word and final thoughts of the interview process (Patton, 2015; Rubin & Rubin, 2012).

Observations

Observations were used to gain deeper insight into how teachers facilitate and lead cross-level lessons. I conducted three observations with each teacher participating in the research study. Two of these observations were announced and one of these was unannounced. All notes were recorded on the observation template (Appendix E). Reflections about the lesson were also recorded throughout the observation in order to provide additional information about the phenomenon (Yin, 2018). During these observations, I examined how teachers interacted with the different grade levels and how teachers managed multiple grade levels in one classroom setting. I also observed how teachers presented information such as grade-level standards, grade-level objectives, and grade-level-oriented assignments. Teachers were observed to see how they interacted with different grade-levels and how students responded to this interaction.

Documents

Documents included lesson plans and any other materials teachers used to plan and execute the lessons. I examined the lesson plans to see how teachers planned for cross-level lessons. All documents that were used will be physical artifacts that demonstrate the use of the phenomenon in the classroom (Yin, 2018). I examined teachers' lesson plans to determine if

they incorporated multiple standards from different grade levels and courses of study in the planning phase. I also examined these artifacts to determine if objectives are laid out for different grade levels in a cross-level classroom lesson plan and how teachers differentiated the lessons for different grade levels. Documents examined also included instructional materials presented to students in the class in order to better understand differentiation in a cross-level classroom (Hyry-Beihammer & Hascher, 2015).

Data Analysis

Data analysis tools were used in this research study in order to formulate the data dealing with educators' perspectives of cross-level classrooms into findings. The tools used in this research study include interviews, observations, and other documents. These three tools were used to collect data which was triangulated to better understand the benefits and barriers of cross-level learning from the perspective of the educator. The approach to the analysis utilized coding and locating thematic categories, bracketing, and memoing in order to solidify the data analysis process (Yin, 2018). The case study data was analyzed across the cases of the participants using the method of the stages of analysis that include comprehending the data, synthesizing, theorizing, and recontextualizing (Houghton, Murphy, Shaw, & Casey, 2015; Morse, 1994). In each of these stages, data went through the process of coding the data to create greater understanding of the material, organizing the data to create meaningful analyses, comparing the data across different cases, then developing coherent explanations from the data gathered (Houghton et al., 2015; Morse, 1994).

Educators were interviewed after completing the instructional lesson to determine their responses to their lessons and the planning process. After interviews were recorded, I transcribed all interviews on separate word processing documents. I then highlighted key words

and phrases that were used by the interviewee for each interview question. These key words and phrases were then placed in a word processing tool and grouped according to the themes that arose from the data (Yin, 2018). In order to do this, I used the analytical technique of explanation building where the goal of the analysis was to build an understanding of the phenomenon through the narratives provided by multiple cases (Yin, 2018). Each category or theme was color coded to create organization and separation in the data when creating codes in order to emphasize the main themes that arose.

Following the coding of the interviews, observational data was recorded in a separate document and the technique of bracketing was used to remove any personal interpretations of the observations (Patton, 2015). This was necessary because as a classroom teacher, I needed to ensure that my own techniques and ways of facilitating my classroom were not influencing my own assumptions about the teacher during his or her observations (Patton, 2015). After this, I located key words that fit into the themes created by the interviews and sorted with the correct group or theme using a separate color code in the same word processing document.

Documents including lesson plans, classroom material used in lessons, and any other documents teachers used in their lessons were analyzed to see how teachers planned for cross-level classrooms. Memoing was used to create notes on the documents provided by the educators. Memoing is the process of making notes or jotting down information in response to the data itself (Yin, 2018). Memoing was done directly on to the lesson plans and classroom materials used in lessons provided by the teachers. These notes were later recorded in a word processing document and plugged in to the larger overarching themes document with their own separate color. Creating the codes in this way ensured that there was a clear chain of evidence

triangulating all data sources from interviews, observations, and documents showing the overall themes that arose, as well as the individual data collection method (Yin, 2018).

Trustworthiness

This section describes the methods that will be used to establish trustworthiness in this research study. This section addresses credibility, dependability, transferability, and confirmability and how these characteristics will be established in this research study. The elements of trustworthiness will help to ensure authenticity in the study and maintain reflexivity of the researcher throughout the research process (Patton, 2015).

Credibility

Credibility establishes dependability and trustworthiness with the researcher and helps establish the reality of the research that is plausible (Lincoln & Guba, 1985; Tracy, 2013). To achieve credibility in this research study, I used a member check to create buzz words, short phrases, and summaries that were used throughout the cross-level lesson (Lincoln & Guba, 2011; Amankwaa, 2016). This helped to create a rapport with the interviewees creating a relationship of open dialogue. I also allowed interviewees to review the information in order to ensure there were no mistakes. These efforts ensured that all information was credible and accurate throughout the research process.

Dependability and Confirmability

Dependability and confirmability ensure that the data is accurate and minimizes researcher bias throughout the research process (Patton, 2015). I used an audit trail to ensure that all data was organized. All data was recorded throughout the research study in an organized and confidential method to maintain the anonymity and confidentiality of the participants (Amney, 2015). Member checks were also used throughout the research process allowing the participants

to review the interview transcripts and observational data for accuracy. All data was kept confidential and used pseudonyms for the participants.

Transferability

Transferability allows readers of the research to find connections and contextual meaning in the research study and apply them to their own world and experiences (Tracy, 2013). The researcher addressed her own personal biases that may be brought into the research. To achieve transferability, I examined how these biases may influence the perception of the data collected, and how these biases may shape the decisions made throughout the research process (Amankwaa, 2016). I used these understandings to determine how the research process would be reflected in other contexts throughout the state in rural communities where funding for teachers is limited. Data was also triangulated across multiple data collection tools to achieve transferability (Yin, 2018).

Ethical Considerations

As the researcher, I complied with the guiding principles laid out in The Belmont Report (Office for Human Research Protections, 2016). Informed consent was obtained for all participants in the research study. Participants completed a consent form and signed off on their agreement to participate in the study; this form allowed the participants to remove themselves from the study, at any time. The study was conducted in a way that maximized the benefit of the participant and minimized any harm. All participants in the study were provided anonymity with all names and personal information being confidential. Once data was collected and analyzed, the researcher presented both the negatives and positives of the findings. Confidentiality protocols were used to ensure that all information was protected throughout the research process (Patton, 2015). These protocols included: all data throughout the research process was kept in

a confidential location under lock and key and any documents that were electronic remained confidential through the use of electronic password protection. Data will be kept for three years after the completion of the study and then destroyed.

Summary

This chapter provides a detailed overview of the methods, data collection tools, and design that will be used in this qualitative collective case study. The case study used interviews, observations, and other documents as data collection methods. The researcher served a variety of roles throughout the research process including producing observation tools and interview protocols, interviewing participants, and analyzing data. Fifteen educators participated in the research study with 12 used in the final research; all names and personal information remained confidential throughout the research process. The researcher maintained trustworthiness through member checks, audit trails, and reflexivity to ensure credibility, dependability, conformability, and transferability. Ethical considerations adhered to the Belmont Report ensuring all participant risks were minimized throughout the research process, and all information was kept confidential.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this case study was to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator; this study examined cross-level learning through the lens of the teacher. This chapter includes the results of the data analysis including an overview of the participants in the study, the overall themes that arose through data analysis, and how these themes provided deeper insight into the research questions. The thematic development is broken down by research questions and is further separated into the greater themes that arose through the data analysis process.

Participants

The following section provides descriptions of all the participants in the research study. Each description provides background into the experience of the teacher, as well as the grade level make-up of the cross-level classroom. Each participant description also includes the standards that each teacher is responsible for teaching in their classroom.

Richard

Richard is certified in physical education and health and has 12 years of teaching experience in the secondary school setting. He is currently the Comeback Academy teacher at the school. His classroom includes students in grades 9-12 working in multiple different subject areas. This goal of his classroom is to help students earn credits they are missing in order to help them return with their cohort or complete their degrees at an accelerated rate because of extenuating circumstances. In his classroom, each student is working on a different course on a different grade level. Richard is responsible for helping each student master different skills and standards across grade levels and subject areas.

Mark

Mark is certified in physical education and health and has been teaching for 25 years. He teaches health and driver's education, simultaneously, to students in different grade levels. Students in his classroom range from grades 10-12. Mark is responsible for ensuring students master standards of driver's education, health, and literacy across grades 10-12.

Katherine

Katherine has been teaching for fifteen years in the career technology department. Her classroom contains students in grades 9 and 10, where she is responsible for business education standards and literacy standards for both 9th and 10th grade students. In her classroom, she must teach a variety of standards that differ from each grade level for both 9th and 10th grade students. Her standards also include technical math standards, across both grade levels.

Samuel

Samuel has been teaching for 12 years in the math department and has taught both middle and high school students, throughout his teaching career. His classroom currently consists of 9th and 10th grade students who are working with both geometry and algebra standards. Samuel also has a special education teacher in his classroom who provides extra support for students in need of special education services. Because there are special education students in his classroom, he is also responsible for teaching the standards labeled "essentials" for students who are on different graduation pathways.

Laura

Laura has been teaching special education for almost twenty years and has experience at both the elementary and secondary level. Currently, she teaches in a self-contained classroom at the elementary school where her students range from kindergarten to sixth grade. She has two

aides who provide additional support for students who are in need of extended services. Because she is a special education teacher, she is also responsible for standards dealing with life skills, in addition to math and reading standards.

Sarah

Sarah has been teaching special education for twenty-two years and has worked with students from kindergarten to twelfth grade. Her classroom currently contains students from fifth to eighth grade who require extended assistance in reading and math. She has one aide in her classroom who provides additional support to students. Because she is a special education teacher, she is also responsible for standards dealing with life skills, in addition to math and reading standards.

Olivia

Olivia has been teaching for fifteen years in the secondary setting. Her classroom contains students in both 9th, 10th, and 12th grade students, taking two different health classes. She is also expected to incorporate the literacy standards for both 9th, 10th, and 12th grade students, alongside her curriculum standards. Her standards include a variety of courses that build on one another in the same classroom.

John

John has been teaching for fifteen years and is certified in both English and physical education. His classroom consists of students in grades 9-12, taking two different courses in kinesiology. He is also expected to incorporate the literacy standards for each grade level in his classroom.

Joseph

Joseph has been teaching for eight years and teaches all music classes, as well as being the band director. His classes include students in grades 6-12 and include three or more different courses, depending on the grade and skill level of the student. He is also expected to incorporate literacy standards into his lessons.

Haley

Haley has been teaching for 18 years and teaches all courses in the family and consumer sciences department. Her classes consist of students in grades 9-12 taking a variety of courses in the subject area, depending on their grade level. She is also responsible for incorporating the literacy standards for all students based on their grade level.

Luke

Luke has been teaching for six years and teaches a variety of courses in the history department. Luke's classroom consists of students in 8th and 9th grade, each taking different halves of the course subject area. He is also responsible for teaching the literacy standards for each grade level.

Kaitlyn

Kaitlyn has been teaching for 12 years in the arts department. Her classroom includes students in grade 9-12 and contains a variety of courses in one classroom. Typically, the classroom contains two separate courses grouped together. She is also responsible for teaching the literacy standards for each grade level.

Results

The following section contains the results of the data analysis process. The results are broken down by the research questions starting with the central question, then going deeper into

the sub questions. The findings are further explored by breaking down the results between the data collection instruments of interviews, observations, and the examination of other documents.

Theme Development

The purpose of this case study was to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator. Data was collected through interviews, observations, and the evaluation of other documents, including lesson plans and classroom materials. Interviews were recorded and transcribed key words and phrases were then placed in a word processing tool these codes were analyzed until themes arose from the data (Yin, 2018). The analytical technique of explanation was used where the goal of the analysis was to build an understanding of the phenomenon through the narratives provided by multiple cases (Yin, 2018). Observational data and data from other documents were recorded and then separated into the larger themes. The initial group of codes were analyzed alongside the research questions and then reviewed to ensure they were refined to clearly focus on the experiences of the educator, when teaching in a cross-level classroom and remove any themes that were similar or redundant (Yin, 2018).

Through the coding process, 16 themes arose; table 1 provides a list of the 16 themes and narrative data that supported each of themes. Table 2 provides a further break down of the thematic statements by individual participants. The themes are discussed in detail with each research question. Teachers reported an increased workload and difficulties with time management. They also felt that their relationships with students were strengthened and provided increased opportunities for their students. Educators felt that a cross-level classroom allowed for increased social maturity amongst their students and increased collaboration in their classrooms. In order to be successful in this type of classroom, teachers reported that they needed to master

effective teaching practices and maintain an organized classroom. To ensure educators were meeting the needs of all learners, they needed to have adaptive lesson plans. Negative themes that arose were teachers reported a lack of time and resources, gaps in learning, and lack of physical supplies. Because of cross-level classrooms, teachers expressed that they had difficulties with student engagement and increased planning and preparation time. To meet these needs, teachers reported an extended workday and missing educational standards. Teachers needed to maintain effective classroom layouts and structures and detailed planning for all standards for a cross-level classroom. These 16 themes allowed me the opportunity to construct a narrative understanding cross-level classrooms from the perspective of the educator supported by observations and other instructional documents: the 16 themes are discussed in detail below.

Increased Workload and Time Management

Throughout the data collection analysis process, several themes arose defining how teachers described cross-level classrooms. In interviews, teachers consistently described this type of classroom setting as difficult for the teacher because of the extended work burden placed on the teacher. Teachers were faced with the challenge of meeting the needs of multiple grade level learners with the same planning and prepping time, as teacher who only had one grade level. Teachers were forced to go above and beyond the role of the traditional classroom teacher because they needed to provide more material, daily, to meet the needs of students in a multi-grade-level setting; this left many teachers working outside traditional school hours and into the weekends in order to meet the demands of this type of classroom, often using their own personal resources for classroom materials.

During interviews it was made clear that teachers felt that they did not have enough time to complete the necessary tasks to teach in this type of classroom. Sarah describes this type of

classroom as “hard because you do not have time to do everything, so time management becomes a significant factor because we have to pick and choose what is the most important, so somethings get put off till later in the semester, and ultimately it might not get done”. Samuel described it as a situation that is hard because “older students have the background of algebra and younger students have not been exposed to that material this means I have to do extra work just to make sure the younger ones have the background to fill that gap”. Laura described it as more complicated than a traditional classroom because “I have to work on a more student to student basis and constantly change and develop materials myself on the nights and weekends and give up family time just to meet the needs of all the kids”. All of the teachers felt that there were significant gaps that were difficult to fill because of the different grade levels. This challenge was further exacerbated with multiple courses being housed in one classroom, leaving teachers to have to stretch themselves in order to work towards meeting the needs of all the learners in their classrooms.

Strong Teacher/Student Relationships and Increased Opportunities

Despite the difficulties, teachers also described this type of classroom as rewarding because of the ability to formulate extended relationships with students due to the ability to have students multiple years, as they move through grade levels. Teachers felt like they needed stronger relationships to make the classrooms run smoothly because there of the extreme differentiation going on in this type of classroom where students have to be able to work independently. Teachers had to be able to relinquish more control to students because of the need to teach multiple courses in one classroom, so while the teacher was working with one group of students, the other group was working independently or collaboratively. Teachers who had stronger relationships with students were able to allow students to work independently, more

often, without classroom interruptions. Richard said that teaching in this type of classroom is “a whole-person learning environment because in this type of classroom, I focus on getting to know students and meet them where they are and develop one-on-one relationships that I did not get to make in my other job.” Joseph, who has the opportunity to teach the same students for two years or more, states, “In here we can kind of have a good time because I know the kids, and they know me. They know my humor and know how I joke around, but because we know each other, we can laugh and then get back to work”. Because of the need for stronger relationships, teachers in cross-level classrooms are able to develop deeper connections with the students in their classrooms.

Katherine noted that this type of classroom develops deeper meaning because it mimics a more real-world environment because students are not only with their grade bands; she said:

I feel like they experience real life in this type of classroom. I mean in the real world; you will have to work with people you don't always like or know really well. In here, everybody works with everybody. They learn skills that they can use in life by going outside their comfort zone.

Katherine stated that throughout the course of the semester, every student will work, at least once, with everyone else in the classroom. She wanted to make sure that all students had the opportunity to interact with all different types of people in order to strengthen their ability to work well with others. Because of this real-world interaction Katherine is able to create lessons that utilize collaboration across grade levels giving students the opportunity to engage with one another to complete tasks similar to a business environment or career setting that mimics a real-world environment.

Increased Social Maturity

Teachers reported that in cross-level classrooms, older students were often able to boost the maturity level of their younger counterparts by modeling expected behavior and leadership skills leading to less discipline problems for the teacher. John reported that “The older students tend to set the tone and the younger ones fall in line”. Because of this, he reported that he had no behavior problems in his cross-level classes and very rarely had to use his classroom discipline plan. Joseph, whose class includes six different grade levels enrolled in three different courses said, “The seniors tend to be my leaders, I can rely on them to help the younger ones understand what I expect.” Both teachers saw older students modeling the correct classroom and school behaviors, so younger students could see the expectations through students to whom they respected.

This increase in social maturity and behavior meant that the teacher was able to spend more time on direct instruction and less time dealing with behavior issues and general interruptions. Kaitlyn stated:

Students who have had me before understand what I want and can explain it to the others without me having to stop and explain constantly to make sure the younger ones understand; they are kind of like my mini-teachers in a way and I love them for it.

Teachers consistently reported that older students were able to bridge the gap with younger students making classes flow smoothly taking the classroom management burden off the teacher. Students were able to utilize the resources of their peers when the teacher was not immediately available.

However, this phenomenon of leadership was not always reported by the teacher. One teacher reported that she consistently had discipline issues because of the cross-level classroom. Haley felt that students in different grade levels were not able to work well with one another and

that they spent the majority of their time off task because of this. Haley felt that older students did not accept a leadership role and were not a significant advantage to create a student-led atmosphere that aids the teacher in her presentation of the material. She said that older students negatively affected the younger students through their off-task behavior pulling the younger students in a direction of misbehavior.

Increased Collaboration

Teachers also reported that cross-level classroom led to an increase in student collaboration through intentional grouping and unintentional support. In some classrooms, students were intentionally grouped across grade levels, so the older students could provide support to the younger students. Samuel stated, "I usually pair older students with the younger ones. That way the older ones can give them some support." Samuel said, "A lot of times, they can get through the material, better, by helping one another anyway without me in the mix." He referred to this as peer tutoring and usually chose the groupings in order to ensure each group had a higher and lower learner paired together, with hopes that the older student would be able to provide support.

Some teachers also reported an increase in unintentional collaboration because of the need to provide one-on-one support in a cross-level classroom. Katherine stated:

Sometimes I have to walk around and meet with each student to gauge where they are at, and that might mean I can't answer all your questions right now leaving you to look to your classmates for help and not always rely on me to meet your needs. I mean I can't be everywhere at once.

Laura also saw a similar increase in unintentional collaboration because of the need to provide direct instruction to each student. She said:

“Sometimes, I have to use stations or centers for that one-on-one or pull-out time. This helps the students develop independence skills where they can’t ask me for help and have to look somewhere for that help. It is just like the real world. I am not always going to be there to guide you. Being independent and teaching these kids how to cope on their own is also a necessary skill.

For Laura, this was done through a “center technique” where students moved through centers, while the teacher was at a center table doing one-on-one instruction. Laura said because these centers are done so frequently, especially in elementary classrooms, students understand the expectations and, generally, collaborate with very few issues or interruptions.

Effective Teaching Practices

All of the teachers, except for one, reported that cross-level classrooms made them better teachers. Many teachers felt that the experiences of cross-level classrooms forced them to become more organized and more prepared with their planning and facilitating. They also reported a more intuitive approach to teaching making them more aware of what practices were effective and those that were not. Olivia stated:

Over the years, I have figured out what works and what doesn’t. Look back here at all these binders. These are all the things I have done, over the years, so I know if I exactly where something is, if I need to pull a certain lesson or find something that I think will be helpful to my students.

Katherine stated, “A course is only as good as its teacher. I am constantly looking for new things and creating new lessons to improve my student’s learning, and I know how to multi-task and do all these things to create the best learning environment.” Both Katherine and Olivia reported that

they often had to create their own lessons, instead of using premade lessons that are readily available through online resources.

One teacher reported that she did not feel that teaching in a cross-level classroom made her a better teacher. Haley said that she did not care that there were multiple grade levels in the classroom and that she was not going to do extra work for the students. She felt that the addition of multiple grade levels placed an extra burden on the teacher that was not necessary and was too much to expect one person to do. Because of this, she stated that she continued to do the same lessons each year, regardless of the student population of her classroom. Throughout her interview, she expressed the sentiment that cross-level classrooms were an extremely difficult situation with which she was not willing to deal.

Organized Classrooms

Throughout all the observations, it was clear that cross-level classrooms require organized teachers. While watching these types of settings, teachers were consistently well prepared and kept their lesson plans and materials extremely organized. Teachers were able to locate and pull information, quickly, as needed and think on their feet. Teachers utilized physical lesson plans at which they could look at on paper as opposed to online documents. Laura reported that having physical copies of her lesson plans helped her stay more focused and kept the material organized; she said, “I like to have a hard copy, it just keeps my thinking straight, and I can see where I’m going.” I also observed teachers being flexible and adjusting to the needs of their students by scaffolding older material that they had done, earlier in the semester. Because students had different perspectives from different grade levels, these teachers had to adapt to student questioning, quickly, to provide each student with a more in-depth learning experience. Teachers also had to adapt to the social and cognitive maturity of each

grade level by using vocabulary that was more specific towards their current knowledge. This could be seen through small individual conferences with each student during independent work time, where teachers circulated throughout the classroom and used this physical movement to help students better understand the material. Teachers consistently moved from student to student, using teacher questioning as a formative assessment in order to determine the mastery of content standards.

Teachers were also observed allowing students ample time to ask questions and prompted them, consistently, to clarify anything they did not understand. After providing instruction to each grade level, teachers would allow students time to clarify the material with the teacher or other students in the classroom. Occasionally, teachers had to encourage students to ask questions when they were uncomfortable expressing their lack of understanding. Some teachers encouraged the use of partner work for students to strengthen their knowledge of the material and content standards. Because of this adaptability, organization was extremely important. Katherine stated that she had “years of lessons saved and ready to reuse to help students plug those gaps.” Similarly, Samuel reported the need to have a variety of material organized and on hand for students who may not have been taught the material, yet, or failed to fully grasp the content; he stated, “I usually have stuff from one or two years back on hand. Because this is math, everything builds as you go along.”

Adaptive Lesson Plans

Because of the need for extended organization in a cross-level classroom, teachers’ lesson plans were much more organized than the lesson plans of teachers who only teach one grade level. Most teachers’ lesson plans contained all standards that were being taught on a daily basis. Laura, Richard, and Sarah all created individualized lesson plans for each student in their

classroom, each week. They did this by creating notebooks for each student and adding the lesson plans each Monday to the notebook. Richard would use these plans, each day, to see exactly what the students needed to master. Each morning, he would reevaluate the daily plans and make changes and additions to his lesson plans to show what material had been mastered or what needed to be added; because of this, Richard said that his lesson plans were “flexible and fluid and changed frequently” to meet the needs of the students. He also said that his plans were not “set in stone” and that his “plans can change.” if necessary. Sarah would re-evaluate her plans, on a weekly basis, and make changes to meet the needs of her learners sometimes “reworking” plans to “make sure my plans are accurately reflecting our learning.”

Other teachers had more broad lesson plans that adhered to the standards and contained the instructional strategies that would be used, each day, with all grade levels. Olivia and Luke used a spread sheet format, mapping out each day as a schedule of activities. Luke felt that this structure of lesson plan allowed him to “make notes on my plans and edit in real time” to ensure material is getting covered. Because of the extended process of teaching in a cross-level classroom, the cross-level classroom made the teacher become more organized and clearer on creating lesson plans and materials that were differentiated and were more individualized, on a daily or weekly basis.

Two teachers’ lesson plans that were reviewed were not detailed and did not contain a great deal of differentiation. Haley and Mark both reused the same lesson plans, from year to year, if they were teaching the same content area. Mark stated that he, “knew the material,” so there was no need to create new lesson plans, each year, because he was able to use his knowledge from the previous years to adapt to the student population. Haley felt the same way and continued to reuse her lesson plans, each year, when asked to turn them in to her department;

she felt that creating cross-level lesson plans was too time consuming and difficult and stated that she would not spend time outside of the school day in order to create plans that include multiple standards for each grade level.

Lack of Time and Resources

Throughout the interviews, it was clear that time, resources, and content knowledge were significant barriers to planning and executing lessons in this type of classroom. Teachers consistently stated that they did not have enough time to effectively plan, coordinate, make copies, and grade material for all students in a cross-level classroom along with all the other duties expected of them, including coaching and sponsoring clubs and organizations. By having multiple grade levels, teachers had to spend more time preparing for lessons than teachers who only teach one grade level, at one time. Teachers who did not have planning periods, such as coaches, were extremely pushed for time and were often having to complete their planning and preparing phases before school or after practices, late in the evenings. Teachers felt like the workload in this type of classroom was extremely heavy and required a significant sacrifice outside of school hours to teach in this type of classroom setting, successfully. Teachers had to be willing to use their own personal time to meet the needs of a cross-level classroom, in both planning and preparation.

Time management was a significant issue that arose for teachers of cross-level classrooms. Sarah stated, “There is just not enough time to get everything done for the students and do all the other things that I have to do like put in grades and communicate with parents. It’s just a lot for one person to do.” Laura expressed similar concerns stating, “I have to spend a significant amount on the nights and weekends working on lessons. You can ask my daughter and husband; Sunday night, I am sitting on the couch still printing out things my students need

for the week.” Most teachers reported that they were consistently bringing schoolwork home because they were not able to complete it all at school.

Gaps in Learning

Because of the amount of work multiple grade levels places on the teacher, educators felt that, occasionally, items had to be overlooked, or they were forced to pick and choose which standards were the most important for students to learn, causing some standards to be either not taught or quickly passed over. Sarah stated:

“There may be days where we are able to only really focus in on one standard and some other things fall to the wayside, but I have to be ok with that and now what my kids need the most and what is going to benefit them in life.”

Laura felt the same way saying:

The workload is so high that there is really no way I can get to everything that needs to get done each day. I have to be flexible on a day-to-day basis and use my experience to make sure they are getting what is most important.”

Laura said that she looked at the standards and did her best to adapt them to her student population and create plans that were centered on the most important standards.

Lack of Physical Supplies

Many teachers also felt that they were not provided enough resources from the school on how to teach in this type of classroom setting. This included lack of materials and professional development on teaching in this type of classroom setting. Because of cross-level classes, teachers needed to have more physical material than in a traditional class, which many teachers did not have. Some teachers were given virtual or online materials causing them to have to

spend extra time locating the resources and making copies for their students. John reported that this created a greater burden on the teacher because he said:

I am having to spend extra time looking through the online books, then printing off material for each grade level, then making copies for each grade level, where if I had a traditional book for each student this would not be as much of a problem.”

Teachers in this type of classroom are also in need of multiple pacing guides and plans for each grade level, leaving the teacher to create extra pacing guides for one classroom. Samuel stated, “I am having to basically create my own material and plan and use other teachers as resources to help me gather the materials I need for all students in the classroom.” Teachers reported that a cross-level classroom takes a more creative approach from the teacher in order to locate material that will meet the needs of this type of non-traditional classroom.

Something as simple as the number of copies given to each teacher or the amount of classroom funding money caused a problem for teachers in cross-level classrooms. Richard stated, “It doesn’t make sense for me to have the same number of copies as the P.E. teacher. I am having to print more materials.” Funding was also a concern for teachers because their materials included multiple grade levels, meaning they needed to purchase more items for their classrooms. Olivia felt that it was unfair that all teachers got the same stipend to buy materials when cross-level classrooms, such as hers, needed extra things to meet students’ needs. Because of this problem, teachers were either having to limit their purchases or use their own resources to purchase items they felt necessary for teaching multiple grade levels.

Difficulties with Student Engagement

Throughout the observations, it was clear that to be effective in this type of classroom, rigid organization was needed, as well as multi-tasking skills to keep all students engaged. As

teachers were moving around the room working with students, it was essential that the other students be engaged in their learning material. In some observations, as teachers were pulled back and forth from grade levels, some students became distracted with their work and were off task. Samuel stated that the younger students, sometimes, needed more help to master the content which, occasionally, left the older students “off-task with their independent work.” Kaitlyn said she also, occasionally, had problems maintaining engagement when trying to meet the needs of all grade levels; she said, “I can’t be everywhere at once, so some students have to work on their own, and, unfortunately, some of them don’t know how to.” John expressed the same concern that “some students need extra help” causing some of the other students to “lose focus or get distracted,” when working to meet the needs of all learners in the classroom.

Teachers who were not well prepared did not succeed in keeping students engaged throughout the class period, across grade-levels. Teachers who did not differentiate material across grade levels were also not effective and increasing student understanding or mastering the standards. One teacher reported that she did not care if the students got the material or not, so she was not invested in the success of her classroom environment.

Increased Planning and Preparation Time

After examining lesson plans and other documents used in a cross-level classroom, it is clear that it takes more work to create lesson plans for this type of classroom because of the need for differentiation. Lesson plans for a cross-level classroom include multiple standards from different courses of study, as well as multiple instructional strategies that will be used. Teachers also have to differentiate the materials in their lesson plans that they will be using for each lesson across grade levels. This means they may be creating or printing off multiple documents for each grade level, on a daily basis. Sarah stated, “Sometimes, I have to create my own material

because nothing else works and that takes a long time.” Olivia also felt that she spent a great deal of time in her planning and preparing because “getting things ready for different groups of students in this one classroom is time-consuming.” Because of the differentiation, teachers must spend extra time creating materials and making copies for multiple grade levels. Teachers must create separate materials for separate grade levels, placing an extra burden on the teacher.

Haley and Mark both reported that they did not create separate materials for each grade level because they felt that it was an undue burden placed on the teacher. They both continued to reuse documents from the past that were readily available for classroom instruction. They did not use materials that they created for the purpose of meeting the needs of their students.

Extended Workday

Throughout the interview process, teachers made clear that teaching in a cross-level classroom takes more planning than a traditional classroom. Meaning teachers were left to work many hours outside the traditional school day to plan for this type of classroom; this is due to the need to plan for multiple grade levels with multiple standards. Olivia stated:

“When I am getting my lessons together, I have to look at three different sets of standards and make sure my lessons are centered on all of these standards, which is really hard.

We only have one semester to get all this information in, and it’s just hard to teach and plan for. I spend a lot of time after school getting everything together.”

Kaitlyn expressed the same opinion stating:

I am forced to take a step back and gauge the class and see what really can they learn.

Who are they as a class? I then have to plan for the class and not necessarily for the standards; I am not sure this is the best way, but it is something I have to do in this type of classroom. This leaves me having to rework my plans and create new ones which

pretty much fills up my planning time and time after school.

Sarah reported, “I have to spend a lot of time after school taking care of planning and looking for materials that will meet the needs of my students. If I can’t find anything, then I end up making it myself which takes more time.” Samuel, who also has extracurricular duties outside the classroom, expressed the inability to find time to do everything needed to plan lessons and locate, create, and print materials for a multi-grade level classroom. He stated:

I just don’t have time to do everything I need to do for this class and keep up with it all. I feel like I need an extra planning period just to prepare for this class. Thank goodness, I have teachers around me that can help me with resources.

Luke, who is also in charge of numerous extracurricular activities, does not have a planning period because of his coaching responsibilities; he said, “I have to manage my time well inside the classroom, which means I have to make sure that I use my time appropriately, so I can get all of my responsibilities done, while still teaching an effective lesson.”

Missing Educational Standards

The larger theme also arose that teachers were having to pick and choose certain standards that they felt were the most necessary for students to master and would be the most beneficial as they moved through school. Teachers were forced to focus on a smaller number of standards that they knew they could effectively teach to students because of the extended needs of a cross-level classroom leaving them to only plan for the necessary standards. John stated, “When I am looking at all these standards, I am thinking and picking which ones mesh together and are the most important.” This means that some standards are not taught to the students because of the time it takes to teach in a cross-level classroom. Luke said:

We have so many standards for both grade levels, that it is physically impossible for me to create lesson plans for all of them. I have to decide what is essential and what is not.

What is not gets left or I give a handout that covers what is missed.

Samuel, who teaches math, expressed the same sentiment and referred to what the school administrators call the power standards or the ones that are absolutely essential for students to master so they are able to move into the next math course; he stated that all classroom instructional first begins on these essential standards to ensure students are given the opportunity to master what is deemed as the basics of the subject area that provide the scaffolding needed to move to the next course.

Effective Classrooms Layout and Structure

During observations, several items were observed as a necessity for instructional planning and practice in a cross-level classroom. Teachers who were successful in this type of classroom utilized their lesson plans to guide their lessons and had materials clearly organized by differentiation. This meant the teachers had materials laid out prior to the beginning of the class in separate locations for different grade levels and also for special education students. Students were aware where the materials for their grade level was located and were able to follow directions and move quickly and quietly to the correct location of where resources were located.

Successful cross-level teachers observed had clear expectations for their students and followed their discipline plans in order to create a classroom environment that flowed smoothly with little distractions or breaks in the lesson. Teachers had expectations for their classroom structure and followed it. Joseph used PowerPoint every day to clearly define his “daily goals and expectations.” Olivia also had her board clearly labeled for different groups of students where they could see their “learning targets and our schedule for each week” in order to create

structure for her students. Katherine used similar techniques but used technology resources to “direct students to where they need to be” and “give them a map” for their daily learning activities.

Teachers in cross-level classroom who were successful used their lesson plans to guide their lessons. Lesson plans were in an accessible location where the teacher could reference them, frequently, throughout the course of the lesson. Teachers were observed checking the plans, frequently, to stay organized on which standard was being covered for each grade level providing the teachers a way to ensure specific standards were mastered based on grade levels. Because of this use of lesson plans, lessons were highly organized and flowed using before, during, and after strategies for learning.

The teacher who was not successful did not utilize her lesson plans during the lessons and spent time lecturing and then presented students with handouts to complete with little interaction with the different grade levels. She did not move around the room to check for understanding or to make sure students were on task. She also did not utilize peer interactions in order to support student learning across grade levels. She did not spend time meeting with students, individually, in order to check for understanding.

Detailed Planning for All Standards

Lesson plans in a cross-level classroom are longer and more detailed than those in a traditional classroom. Richard, who previously worked in a traditional classroom setting, stated that the lesson plans he created for his cross-level classroom were “more in-depth and broken down.” Cross-level lesson plans include an extended list of standards that are being taught on a daily basis; this means they include multiple standards across grade levels toward which the teacher is geared, on a daily basis. Olivia stated that she had to integrate “three separate

standards into one plan” in her weekly lesson plans. Because of the extended standards, lesson plans also included extended tasks that were being completed by different students in a cross-level classroom. To meet this challenge, Sarah used color-coding on her plans to help her “break down each week’s standards and see where everybody’s at.” This was also manifested in the before, during, and after-strategy sections of the lesson plan template where teachers were planning for different groups of students. This also included the need to create and maintain multiple materials for each lesson that students in different grade levels were using while working alongside one another.

Research Question Responses

Central question: How do teachers describe cross-level classrooms? The purpose of the central research question is to understand how educators feel about a cross-level classroom. Teachers were given the opportunity to present their thoughts and feelings about this type of classroom in a one-on-one interview. Table 1 demonstrates the responses teachers had when discussing cross-level classrooms in the interview process. This central research question provided the teacher with the ability to give their own input about the classroom as a first-hand practitioner in this type of non-traditional classroom. During interviews, teachers were candid with their responses and discussed in detail both the positive and negative aspects of this type of learning environment. Teachers were clear that there were benefits to this type of classroom, but that it also created struggles. Themes arose from the data collection that demonstrated both the benefits and barriers of this type of learning environment.

The themes of increased workload and time management and increased planning and preparation time demonstrated the challenges that educators faced when preparing and working in this type of classroom. All but two of the participants expressed, during the interview process,

that they felt extended demands placed on them because of working in this type of classroom. Most teachers felt that they were doing extra work with not enough time during the school hours to get this work done; teachers reported that they often struggled to keep up with the material for a cross level classroom and had to work extended hours to fill this gap. For example, Laura said that because of the extended workload, she was forced to work outside regular school hours; she said, “I have to work on a more student to student basis and constantly change and develop materials, myself, on the nights and weekends and give up family time just to meet the needs of all the kids”. Several teachers reported similar statements and felt that lack of time during the school day to complete the necessary tasks for a cross-level classroom led to an increase workload for the teacher, in both the planning and facilitating phase of teaching.

Despite the barriers that teachers reported, they also expressed positive aspects to teaching in a cross-level classroom. The themes of stronger teacher/student relationships and increased opportunities, effective teaching practices, and organized classrooms provided an understanding of the benefits teachers felt they gained from teaching in a cross-level classroom. Several teachers felt that teaching in a cross-level classroom made them a better teacher because they were forced to use different classroom techniques and strategies to improve their ability to work with multiple grade levels; this led teachers to be more organized. Teachers expressed that they needed to use different techniques and practices to ensure they were able to convey information to their students. Katherine stated, “A course is only as good as it’s teacher. I am constantly looking for new things and creating new lessons to improve my student’s learning, and I know how to multi-task and do all these things to create the best learning environment for my students.”

Teachers also expressed that they felt that cross-level classrooms created stronger relationships with their students. In cross-level classrooms, teachers were often able to teach the same students more than once, strengthening the bond between teacher and student. Teachers spoke fondly of their students and the importance of the bond that was fostered between them. Richard said, “I focus on getting to know students and meet them where they are and develop one-on-one relationships that I did not get to make in my other job.” Most teachers expressed similar sentiments and responded during the interview process that despite struggles, they enjoyed the ability to mentor and help their students grow over multiple years in a cross-level classroom. Joseph felt that cross-level classrooms fostered a productive classroom atmosphere; he said, “They know my humor and know how I joke around, but because we know each other we can laugh and then get back to work.” Most teachers conveyed during interviews that they truly enjoyed the relationships they were able to build in a cross-level classroom, and how these relationships contributed to their classrooms.

Sub question one: How does cross-level learning provide benefits to classroom teachers from the perspective of the educator? Sub Question one allowed the educators to express what they felt were the benefits to teaching in a cross-level classroom. During the interview process, teachers were able to express what benefits they experienced for themselves and their students. Most teachers felt that there were a great deal of benefits when teaching in cross-level classrooms. Through the interview process, teachers discussed that they viewed cross-level classrooms as places that encouraged them to use effective teaching practices, foster stronger student/teacher relationships, increase student relationships, increased social maturity of the students, and more effective classroom layouts. Throughout the interview process, many teachers felt that cross-level classrooms encouraged their students to work together when the

teacher was not available. In cross-level classrooms, teachers were often having to work with specific groups of students leaving students to complete independent activities with their peers. Teachers in cross-level classrooms had to utilize students as resources in their classroom increasing collaboration; Katherine felt that cross-level classrooms increased collaboration; she said, “Sometimes I have to walk around and meet with each student to gauge where they are at, and that might mean I can’t answer all your questions right now leaving you to look to your classmates for help and not always rely on me to meet your needs.”

Most teachers also felt that cross-level classrooms increased the social maturity of their students and spoke about how younger students often increased in maturity when they were around older groups of students. Because cross-level classrooms included older students, teachers felt that these older students were classroom leaders who helped them increase the success of their lessons through their leadership role. Kaitlyn explained that the older students really help younger students by providing support with expectations; she said, “Students who have had me before understand what I want and can explain it to the others without me having to stop and explain constantly to make sure the younger ones understand; they are kind of like my mini-teachers in a way and I love them for it.” Most teachers expressed this same benefit where their older students were leaders and helped to increase the social maturity of their younger students.

Sub question two: What are the barriers educators face planning and executing lessons in cross-level classrooms? Sub question two allowed educators to discuss what barriers and difficulties they faced when teaching in a cross-level classroom. In the interview process, educators were able to discuss their struggles and the struggles they saw with their students. In cross-level classrooms, teachers were responsible for multiple standards across grade levels.

Because of this, they felt that there were significant barriers to teaching in this type of classroom. Teachers felt that they had an increased workload and struggled with time management and often had increased workload extending the school day in order to meet all the needs of planning and executing lessons in a cross-level classroom. Because teachers had to plan for multiple grade-levels, they felt that their workload was doubled taking up more time than a traditional teacher. Olivia spoke during the interview about the difficulties of this type of classroom and expressed the same feelings, as most teachers, about the increased workload placed on cross-level teachers; she said, “When I am getting my lessons together, I have to look at 3 different sets of standards and make sure my lessons are centered on all of these standards, which is really hard. We only have one semester to get all this information in, and it’s just hard to teach and plan for. I spend a lot of time after school getting everything together.”

Because teachers had more work to do for planning and teaching for multiple grade-levels in one classroom, most teachers felt that they were not able to teach all the educational standards that they were supposed to teach leading to gaps in the learning of their students. Most teachers felt that they had to leave out standards throughout the course in order master other standards that are more important. Luke discussed the difficulty with planning and executing lessons for multiple grade levels; he said, “We have so many standards for both grade levels, that it is physically impossible for me to create lesson plans for all of them. I have to decide what is essential and what is not. What is not gets left or I give a handout that covers what is missed.” Teachers felt that they had to use their experience and choose the standards that were most important for students to really focus on in their cross-level classrooms. Laura spoke about the difficulty in teaching all the standards in a cross-level classroom; she said, “workload is so high that there is really no way I can get to everything that needs to get done, each day. I have to be

flexible on a day-to-day basis and use my experience to make sure they are getting what is most important.”

When teachers were forced to work with multiple standards and multiple groups of students, they were forced to move around the classroom working with different groups of students in order to ensure they were mastering the standards specific to them. Because of this, teachers expressed that they, sometimes, had issues with student engagement. Most teachers felt that as they moved around the classroom, students that were not receiving direct instruction were off task as a result. Most teachers recognized this potential issue that resulted from teaching in a cross-level classroom with a variety of standards. Samuel said in his classroom, this occurs when he is working to provide one-on-one instruction with students who need specific gaps filled that are not focused on in cross-level lessons; he said, “I can’t be everywhere at once, so some students have to work on their own, and, unfortunately, some of them don’t know how to.” Because of the teacher having to multi-task between different sets of standards, some students were left to work independently and became off-task without consistent interaction with the teacher.

Because teachers were working with multiple sets of standards in a cross-level classroom, most educators were not satisfied with the physical resources provided to them by their school and department. Teachers in cross-level classrooms planned and prepared for two sets of standards, often with multiple resources used throughout a lesson in order to meet the needs of all their learners. This extended need of resources left teachers unsatisfied with their lack of materials and funding. Teachers in cross-level classrooms expressed dissatisfaction with the resources allocated to them by the school because they were receiving the same things as traditional classroom teachers, when their situation called for more materials. Richard said, “It

doesn't make sense for me to have the same number of copies as the P.E. teacher. I am having to print more materials." Most teachers felt the same way about lack of physical resources for their classroom creating a barrier to locating, creating, and printing classroom materials for a cross-level classroom.

Sub question three: How does cross-level learning influence instructional planning and practice? Sub question three focused on how teaching in a cross-level classroom influenced teachers planning and practice in a cross-level classroom. Teachers in cross-level classroom planned for different standards across grade levels and put these plans into practice in their classrooms. Because of this, most educators reported that they needed more adaptive lesson plans with detailed planning for all educational standards across grade levels. Most teachers expressed, in interviews, that they created detailed plans to create a map of what they were teaching for all the grade-levels in their classroom. Sarah said that she broke down the standards, on a weekly basis, and used these plans to drive her instructional practice. Because these plans were extended they also had to be adaptable to meet the needs of the learners, in case material was not able to be covered because of the extended standards of cross-level classrooms. Richard said that his plans were "flexible and fluid and changed frequently" to meet the needs of all learners in a cross-level classroom. As plans changed, teachers reported that they would then rework their instructional practices and plans to make sure they were covering the material for the different student groups in their cross-level classroom.

When teachers were creating their plans, they also used their classroom structure and layout to enhance their practice when implementing their cross-level lessons. During interviews, educators discussed how they used their classroom as a tool for educational practice to support student learning in their classroom. Olivia created a system where students' learning

targets and goals were visible for each group of students in order to ensure students understood the plan and the goal, on a daily basis. Katherine also created an effective classroom structure to support her instructional practice by using technology resources to ensure her plans were executed effectively during her lessons. She said that her classroom layout and structure helped to “direct students to where they need to be” and support effective classroom practice.

Summary

This chapter provides an overview of the participants involved in the study and gives insight into their classroom settings, including the grade level make up, as well as the material for which each teacher is responsible for teaching. The participant description also includes their background and years of experience as an educator. The chapter includes the thematic development of the data collected and breaks down the results of the data collection in sections, based on the central research question and the sub-research questions. The chapter further breaks down the findings into the understandings discovered through the three data collection instruments: interviews, observations, and other documents that include lesson plans and other materials needed for the lesson. The chapter examines both the positive and negatives aspects discovered through the data collection process about cross-level learning.

Table 1

Themes Chart with Narrative Data

Themes	Quotes
Increased Workload and Time Management	<p>“Teaching is hard because you do not have time to do everything, so time management becomes a significant factor because we have to pick and choose what is the most important, so somethings get put off till later in the semester, and ultimately it might not get done”.</p> <p>“older students have the background of algebra and younger students have not been exposed at all to that material this means I have to do extra work just to make sure the younger ones have the background to fill that gap.”</p> <p>“I have to work on a more student to student basis and constantly change and develop materials myself on the nights and weekends and give up family time just to meet the needs of all the kids”</p>
Strong Teacher/Student Relationships and Increased Opportunities	<p>“a whole person learning environment because in this type of classroom I focus on getting to know students and meet them where they are and develop one-on-one relationships that I did not get to make in my other job”.</p> <p>“In here we can kind of have a good time because I know the kids, and they know me. They know my humor and know how I joke around, but because we know each other we can laugh and then get back to work.”</p> <p>“I feel like they experience real life in this type of classroom. I mean in the real world, you will have to work with people you don’t always like or know really well. In here, everybody works with everybody. They learn skills that they can use in life by going outside their comfort zone.”</p>
Increased Social Maturity	<p>“The older students tend to set the tone and the younger ones fall in line.”</p> <p>“the seniors tend to be my leaders, I can rely on them to help the younger ones understand what I expect.”</p> <p>“Students who have had me before understand what I want and can explain it to the others without me having to stop and explain constantly to make sure the younger ones understand; they are kind of like my mini-teachers in a way and I love them for it.”</p>
Increased Collaboration	<p>“I usually pair older students with the younger ones. That way the older ones can give them some support.”</p> <p>“A lot of times, they can get through the material better by helping one another anyway without me in the mix.”</p> <p>“Sometimes I have to walk around and meet with each student to gauge where they are at, and that might mean I can’t answer all your questions right now leaving you to look to your classmates for help and not always rely on me to meet your needs. I mean I can’t be everywhere at once.”</p> <p>“Sometimes, I have to use stations or centers for that one-on-one or pull out time. This helps the students develop independence skills where they can’t ask me for help and have to look somewhere for that help. It is just like the real world. I am not always going to be there to guide you. Being independent and teaching these kids how to cope on their own is also a necessary skill.”</p>
Effective Teaching Practices	<p>“Over the years, I have figured out what works and what doesn’t. Look back here at all these binders. These are all the things I have done over the years, so I know if I exactly where something is if I need to pull a certain lesson or find something that I think will be helpful to my students.”</p> <p>“A course is only as good as it’s teacher. I am constantly looking for new things and creating new lessons to improve my student’s learning, and I know how to multi-task and do all these things to create the best learning environment for my students.”</p> <p>“I am always trying to learn something new to help my kids.”</p>
Organized Classrooms	<p>“years of lessons saved and ready to reuse to help students plug those gaps.”</p> <p>“I usually have stuff from one or two years back on hand. Because this is math, everything builds as you go along.”</p> <p>“I like to have a hard copy, it just keeps my thinking straight, and I can see where I’m going.”</p>
Adaptive Lesson Plans	<p>“flexible and fluid and changed frequently”</p> <p>“reworking”</p> <p>“plans can change”</p> <p>“make notes on my plans and edit in real time”</p> <p>“make sure my plans are accurately reflecting our learning”</p>
Lack of Time and Resources	<p>“There is just not enough time to get everything done for the students and do all the other things that I have to do like put in grades and communicate with parents. It’s just a lot for one person to do.”</p> <p>“I have to spend a significant amount on the nights and weekends working on lessons. You can ask my daughter and husband; Sunday night, I am sitting on the couch still printing out things my students need for the week.”</p>
Gaps in Learning	<p>“there may be days where we are able to only really focus in on one standard and some other things fall to the wayside, but I have to be ok with that and now what my kids need the most and what is going to benefit them in life.”</p>

	<p>“the workload is so high that there is really no way I can get to everything that needs to get done each day. I have to be flexible on a day to day basis and use my experience to make sure they are getting what is most important.”</p>
Lack of Physical Supplies	<p>“I am having to spend extra time looking through the online books, then printing off material for each grade level, then making copies for each grade level, where if I had a traditional book for each student this would not be as much of a problem.”</p> <p>“I am having to basically create my own material and plan and use other teachers as resources to help me gather the materials I need for all students in the classroom.”</p> <p>“It doesn’t make sense for me to have the same number of copies as the P.E. teacher. I am having to print more materials.”</p>
Difficulties with Student Engagement	<p>“off-task with their independent work”</p> <p>“I can’t be everywhere at once, so some students have to work on their own, and unfortunately some of them don’t know how to.”</p> <p>“lose focus or get distracted”</p>
Increased Planning and Preparation Time	<p>“Sometimes, I have to create my own material because nothing else works and that takes a long time.”</p> <p>“getting things ready for different groups of students in this one classroom is time-consuming”</p>
Extended Workday	<p>“When I am getting my lessons together, I have to look at 3 different sets of standards and make sure my lessons are centered on all of these standards, which is really hard. We only have one semester to get all this information in, and it’s just hard to teach and plan for. I spend a lot of time after school getting everything together.”</p> <p>“I am forced to take a step back and gauge the class and see what really can they learn? Who are they as a class? I then have to plan for the class and not necessarily for the standards; I am not sure this is the best way, but it is something I have to do in this type of classroom. This leaves me having to rework my plans and create new ones which pretty much fills up my planning time and time after school.”</p> <p>“I have to spend a lot of time after school taking care of planning and looking for materials that will meet the needs of my students. If I can’t find anything, then I end up making it myself which takes more time.”</p>
Missing Educational Standards	<p>“When I am looking at all these standards, I am thinking and picking which ones mesh together and are the most important.”</p> <p>“We have so many standards for both grade levels, that it is physically impossible for me to create lesson plans for all of them. I have to decide what is essential and what is not. What is not gets left or I give a handout that covers what is missed.”</p>
Effective Classrooms Layout and Structure	<p>“daily goals and expectations”</p> <p>“learning targets and our schedule for each week”</p> <p>“direct students to where they need to be”</p> <p>“give them a map”</p>
Detailed Planning for All Standards	<p>“more in-depth and broken down.”</p> <p>“three separate standards into one plan”</p> <p>“break down each week’s standards and see where everybody’s at.”</p>

Table 2
Thematic Statement Results

Themes	Richard	Mark	Katherine	Samuel	Laura	Sarah	Olivia	John	Joseph	Haley	Luke	Kaitlyn
Increased Workload and Time Management			x	x	x	x	x		x		x	x
Strong Teacher/Student Relationships and Increased Opportunities	x		x		x	x		x	x			x
Increased Social Maturity			x					x	x			x
Increased Collaboration			x	x		x						x
Effective Teaching Practices			x	x	x	x	x				x	
Organized Classrooms	x		x	x	x	x	x		x		x	x
Adaptive Lesson Plans	x		x	x	x	x	x		x			
Lack of Time and Resources				x	x	x	x		x		x	x
Gaps in Learning				x	x	x						x
Lack of Physical Supplies				x	x	x	x	x			x	
Difficulties with Student Engagement		x								x		
Increased Planning and Preparation Time			x		x	x	x		x		x	x
Extended Workday			x	x	x	x	x		x		x	x
Missing Educational Standards				x	x	x		x		x	x	x
Effective Classrooms Layout and Structure	x		x	x	x	x	x		x			x
Detailed Planning for All Standards	x		x		x	x	x					

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this case study is to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator; this study examines cross-level learning through the lens of the teacher. This chapter includes a summary of the findings, the implications brought to light by the current research, practical and methodological implications for cross-level classrooms, a brief outline of the study, as well as its limitations. It also includes recommendations for future research.

Summary of the Findings

Throughout the data collection process, three instruments were used to collect data. These included interviews, observations, and the examination of other documents including lesson plans and differentiated materials. Several themes arose when analyzing the data from the perspective of the educator. All teachers felt that teaching in a cross-level classroom was a challenge for the teacher. They felt that this type of nontraditional classroom placed an extra burden on teachers that added more work when it came to planning, grading, and teaching in this type of classroom. Teachers reported that creating lessons plans for cross-level classrooms was a detailed and time-consuming endeavor due to the need to expand lesson plans to include standards, tasks, and differentiation for all grade levels in the classroom. Teachers were forced to look at multiple state standards, as well as literacy standards and look for ways to incorporate all of these standards into their plans and courses of study. Two teachers reported that because of the difficulty of creating these lesson plans, that they chose not to create plans to meet the needs of their students and continued to reuse plans from year to year to meet the basic requirements of the administration placed on teachers. These teachers expressed that they did

not feel obligated to use time outside of their allotted planning time in order to create lesson plans that accurately reflected the needs of their classrooms. Teachers felt the need to work outside of school hours to be effective and successful in a cross-level classroom.

Teachers also stated that they felt cross-level classrooms created deeper relationships with their students because of the need to form strong bonds in order for this type of classroom to run smoothly and efficiently. Teachers needed to be able to trust students to work independently, as well as in groups allowing the teacher to move around the room to meet the needs of all learners. Because of the diversity of the classroom environment across grade levels, students were able to engage in interactions with older and younger students that mimic real world relationships. When they move into their careers, they will work with all different types of people from all ages.

Teachers in cross-level classrooms also felt that the collaboration across grade levels had the potential to create leadership opportunities for older students in order to help teachers better facilitate the lesson with smoother transitions between each grade level. Some teachers expressed that older students were able to take younger students under their wings and provide guidance creating a strong leadership environment where older students modeled correct behavior in the classroom. These relationships between students then allowed the teacher time to work with students that may need extra help without interruptions because of the successful classroom management aided by these student leadership roles. However, one teacher indicated that she did not see strong leadership from their older students or a push towards social maturity through modeling proper classroom behavior.

Teachers also felt that cross-level classrooms increased student collaboration. Teachers were able to pair older students with younger students to provide extended support. Teachers

needed to frequently move around the room to make sure all the needs of learners were met leading students to ask for help from their peers when the teacher was not available. Sometimes, this was an intentional grouping, or it was an unintentional situation because of the teacher doing pull-out instruction with students one-on-one.

All teachers, except one, felt that teaching in a cross-level classroom made them a better teacher because they were forced to become highly organized in their planning and practice, regardless of their personality traits dealing with organization. Teachers were reliant on their organized lesson plans to keep them on track and guide them through lessons structured to cover standards from multiple grade levels. Teachers reported that they were constantly revising their practices, learning from their mistakes, and engaging with other teachers to discover practices and material that could help their students. However, one teacher reported that she did not feel that a cross-level classroom improved her teaching ability or efficacy. She felt that this type of classroom stretched the teacher too far and placed an ever-increasing burden on the teacher creating more stress.

Throughout the cross-level lessons, teachers were constantly observed being highly flexible in their approach to teaching the material. Teachers were more focused on student needs and used the students to guide the learning process. Teachers were constantly walking around the room checking to see where each group of students were at with the assignment and allowed time for questioning in order to ensure each grade level was understanding the material being taught. Teachers were also referring to their lesson plans which were much more detailed than traditional lesson plans and included extended standards sections for all grade levels, as well as literacy standards across grade levels. Plans also included differentiated materials that were used for each grade level, as well as a variety of instructional strategies.

Teachers reported that they did not have the time to complete all the necessary items that were needed to teach in a cross-level classroom. They also reported that they were low on resources such as supplies and copies that were needed to facilitate lessons. Teachers stated that they had to use time outside traditional hours to meet the needs of this type of classroom in addition to their planning periods. They were also having to work on weekends in order to ensure that they were adequately prepared for their week of lessons. Teachers who did not have planning periods because of extracurricular activities had a more difficult time finding time to plan, make copies, and grade the materials in a cross-level classroom. These teachers were forced to complete this extended work, before school or late in the evenings, after extracurricular practices.

Because of this extended time burden, teachers were forced to leave off some standards throughout the year. Teachers had to ensure that students mastered the essential standards that were necessary to move to the next grade level or subject area. This meant that teachers were having to decide which standards were the most and important and which ones could be left off or quickly presented through handouts. This meant students were left with gaps on standards that were not covered. Teachers were also limited on their resources because of school restrictions on copies and classroom money. Teachers in cross-level classrooms were given the same amount of copies and classroom money as traditional classroom teachers. This created a problem because of the need to create sets of materials for each grade level and purchase needed items for each grade level.

Teachers who were the most successful in the cross-level classroom setting were flexible and focused on their lesson plans. Throughout the lesson, they reflected on their plans and were highly organized allowing them to move quickly and efficiently throughout the lesson and meet

the needs of all learners in their classrooms. The teachers who were not effective did not have detailed lesson plans that were structured towards the needs of all grade levels in their classroom. These teachers did not utilize the resources available to them through their student population and did not foster deep relationships with their students creating a breakdown in their lesson and classroom management.

Discussion of the Findings

The purpose of this case study was to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator; this study examines cross-level learning through the lens of the teacher. Prior research has placed a majority of focus on the student participating in this type of classroom and not the teacher; limited research has focused on the perspective of the educator and has not examined the phenomenon of cross-level classroom through the lens of the teacher. This qualitative study examined 12 educators who actively teach in a cross-level classroom planning and facilitating for this type of nontraditional classroom setting. The results of this study expand on the previous research discussed in Chapter Two dealing with the role of the educator in this type of learning environment and how he or she facilitates a cross-level classroom. The discussion below focuses on the connections between this case study's findings and the empirical and theoretical research.

Theoretical

Vygotsky's theory of collaboration places a high value on the educator as the leader and facilitator in the classroom and explores how the teacher helps students utilize their learning through peer interaction, socialization, and partnership that allows for the formation of deeper comprehension of instructional content (Cicconi, 2014; Vygotsky, 1978). This is especially essential in a cross-level classroom. In the successful cross-level classroom, the educator

provides the necessary framework through organization, proper planning, and classroom management where students are provided the opportunity to engage with other students across grade levels to learn from their interactions with one another dealing with instructional material, as well as social maturity (Barton & Baguley, 2014). Students may be grouped across levels, intentionally, or allowed to naturally group themselves for collaborative learning. Through cross-level classrooms, students are able to engage with students with whom they otherwise may not have come into contact, within a traditional classroom setting creating a clearer experience of real-world interactions outside of the school setting; these findings align with prior research indicating the value of multi-ability classrooms (Jahnukainen, 2014; Schwab, 2015; Scoular et al., 2017). This interaction also provides students and teachers opportunities to stretch themselves beyond their comfort zones through interactions with older and younger students who would not have been provided in a traditional classroom setting; these findings provide additional understanding and confirms prior research in this area from the perspective of the educator by providing a deeper understanding of how he or she views the benefits and barriers of this type of classroom (Anderson, 2018; Camacho-Morles, Slempe, Oades, Morrish, & Scoular, 2019; Heffernan, Cesnales, & Dauenhauer, 2019; Peñafiel & Tomàs, 2014; Scamati et al., 1993).

This study extends the previous research on the topic by centering on what educator's feel are the benefits and barriers of teaching in cross-level classrooms; these findings provided a voice to educators allowing them to report their reflections in this type of classroom. This study diverges from previous research because it looks at Vygotsky's theory of collaboration through the lens of the teacher extending the understanding of the topic of cross-level classrooms and how teachers feel about teaching and planning for this type of classroom. Previous research

focused on the impact of cross-level classrooms on students and the benefits offered to students and did not take the teachers perspective of the benefits and barriers of teaching in this type of classroom (Jahnukainen, 2014).

This case study sheds further light on the topic of cross-level classrooms because it specifically focused on the view of teachers dealing with a collaborative classroom environment with multiple grade levels of learners. Previous research has focused on the benefits of cross-level classroom settings on students in the classroom and did not delve into the benefits and barriers educators faced with planning, executing, and facilitating lessons in a cross-level classroom. Prior studies found that cross-level classrooms were beneficial to students, but more research was needed to better understand how teachers viewed this type of classroom and the extended opportunities that this collaborative classroom created (Broome, 2016). Because of the centralized focus on the student by prior researchers, this study adds to and extends the research to include the perspective of the educator and specific benefits and barriers that they face in teaching in a cross-level classroom.

Empirical

The findings also demonstrated how collaborative theory was prevalent and necessary for teachers in a cross-level classroom. Because these teachers were forced to move throughout the classroom trying to meet the needs of multiple grade-levels, students were left to work independently or work alongside their peers in order to learn the material. Students were often utilizing their peers to help them understand the material and asking questions to one another when the teacher was busy helping other students; this supports prior research dealing with cross-level classrooms and the need for peer support as a tool used to meet the needs of learners in a cross-level or collaborative environment (Farrell, 2012; Kangas, Koskinen, & Krokfors,

2016; Xu, 2018). Cross-level classrooms relied heavily on the collaboration and interaction amongst students because of the extended workload placed on the teacher as he or she planned for multiple educational standards and worked to execute these lessons in their classrooms. Because the teacher had a greater instructional responsibility, more control was relinquished by the teacher to the students allowing them to take an active roll in their learning and collaborating with their classmates to complete their work (Aiken et al., 2015; Baser, Ozden, & Karaarslan, 2017; Kim and Capella, 2016).

The findings of this research study add to the prior research by centering on the perspective of the educator and what they perceive to be the benefits and barriers of working in a cross-level classroom. Educators reported extended classroom planning and preparation because of multiple standards as well as gaps in material covered because of the increase in material that had to be covered during instructional time; educators had to work continuously, inside and outside the classroom, to meet the needs of different grade levels. Previous research has not focused on how educators perceive this type of classroom and has not examined the different ways educators in cross-level classrooms approach their planning and teaching. The findings of this research study shed new light on exactly what teachers deal with in a cross-level classroom and allow them to share their own thoughts on exactly what it takes to work with multiple standards across different grade levels. By focusing specifically on the teacher, these findings open up a new understanding of how teachers approach the planning of cross-level lessons, how they execute these lessons, and the benefits and barriers they face as an educator of a cross-level classroom. These findings reach beyond the prior research on students and showcase the teacher as the focus of the research to better understand educators' perspectives and provide deeper insight into non-traditional classrooms.

Implications

The findings provide a better understanding of how cross-level classrooms impact teachers and demonstrated the extended workload placed on teachers that work in this type of classroom. Teachers felt that cross-level classrooms relied heavily on the ability of the teacher to manage different standards and grade levels, simultaneously. It also shows how teachers felt that teaching in this type of classroom increased their abilities as educators and strengthened their skills at organizing their lessons and classrooms in a way that ensures all students can learn the information through a combination of direct instructional and collaborative learning.

Theoretical Implications

The theoretical implications are that teachers are heavily reliant on strong relationship and collaborative undertakings utilizing students as necessary support systems that assist other students when the teacher is unable to meet their needs. Teachers expected their students to understand the behavioral expectations of the classroom and ensured they followed rules and procedures by building strong bonds with the students in their classrooms. The findings also demonstrate how cross-level classrooms utilize Vygotsky's theory by focusing on learning through instructional experiences of the material and learning through interactions with the teacher, as well as their peers. In this type of classroom setting, students are constantly working with one another and having interactions across grade levels helping to shape their understanding of the material and providing deeper insights in a collaborative environment that are not possible in a traditional classroom. The findings build on previous literature detailing the value of collaboration and demonstrate that collaboration can be a useful tool not only for students, but for educators, as well, as he or she moves through the classroom to provide direct instruction with different students across multiple grade-levels in a cross-level classroom. The findings

further enhance the research on this topic by viewing collaboration through the lens of the teacher to help him or her meet their planning and facilitating goals in a cross-level classroom; this research broadens the understanding of collaboration as a tool for which educators can plan and use as effective teaching practice to facilitate learning.

Empirical Implications

The empirical implications are that teachers felt students did benefit some from cross-level learning, but teachers were forced to choose which standards they felt were the most necessary meaning some standards were quickly passed over or not taught at all. Because of the extended requirements of teaching in a cross-level classrooms, teachers were forced to focus on the standards and materials that they felt were essential knowledge for students in the next course or grade level placing an extended responsibility on the teacher to minimize their standards. Teachers were actively conscious of what material they needed to teach in order to meet a minimum understanding of the material and standards, potentially, leading to gaps of knowledge for the student because of the increased number of standards that needed to be covered. The findings of this study enhance the literature by examining how teachers view this type of learning environment and the educational experience that it creates for the student from the perspective of the teacher. Teachers provided their understanding and perspective of their own challenges and how they felt students reacted to their educational practices as facilitators of cross-level classrooms. These findings specifically focus on the educator and his or her ability to adequately meet the academic needs of all students in a cross-level classroom and enhance the knowledge of teacher perspectives in cross-level classrooms through the lens of the educator.

Practical Implications

The findings of this study demonstrated that teachers felt teaching in a cross-level classroom placed an increased burden on the teacher because of the need to plan and prepare for multiple grade levels, daily. Teachers felt that they did not have enough time to complete the work for this type of classroom during the traditional school day and needed extended planning time in order to effectively complete all required tasks in a cross-level classroom; teachers were not satisfied with their planning and preparation time in comparison to other teachers who did not have multiple grade levels. They also expressed dissatisfaction with the amount of funding and physical resources provided to them because they felt they needed more materials than traditional classroom teachers and felt that cross-level educators should be provided with more practical items than teachers who only taught one grade level. Teachers reported that organization and planning were paramount to teaching in this type of classroom, as well as being highly flexible and engaged during each lesson. Teachers stressed that they had to adapt and be flexible with their planning and focus on student learning to ensure that educational standards were being taught effectively across all grade levels in their classrooms. Most teachers were highly organized and used this to their advantage to quickly pull and utilize resources that they thought would be beneficial to their students.

Administrators can use these findings to better understand the perspective of the teachers and their needs, as well as the potential learning gaps that may occur because of cross-level classrooms and structure and restructure schedules to better meet the needs of their student population. Administrators can also use these findings to allocate financial resources in a way that better supports teachers in cross-level classrooms by providing them the funding and resources they need to create, plan, and print materials for multiple grade levels in one classroom. These findings can also be used by administrators to ensure they create an amount of

planning time in school schedules to ensure that cross-level teachers are able to effectively create lessons that address all educational standards for all learners.

Implications for parents include understanding the increased demands on these teachers and that students may not get as much one-on-one instruction because of the multi-grade level setting. Parents are able to better understand the experience of the educator and what he or she does in order to meet the needs of learners in a cross-level classroom. Some teachers reported that they were not willing to effectively undertake the task of teaching in a cross-level classroom and chose not to actively work to meet the needs of students in cross-level classrooms; this is important for parents to understand because all educators are not willing to complete the necessary task to help all learners in a cross-level classroom leading to a lacking educational experience. These findings further enhance the literature on this topic because of the specific focus on the educator and his or her perspectives of this type of classroom providing teachers the opportunity to better understand how teachers view cross-level classrooms. These findings provide other teachers firsthand experiences and understanding from other practitioners in the field, better preparing them to teach in a cross-level classroom.

Delimitations and Limitations

In this study, I chose to only use educators who had over five years of teaching experience. This was because teaching is a skill that develops overtime through trial and error and takes many years of experience to fine tune. Teachers indicated that because of their years of experience, they had adapted to the cross-level setting and were more knowledgeable about teaching in this type of setting; they indicated that because of their experience, they had built a strong background knowledge and supportive resources that they could use for multiple grade levels in cross-level classrooms.

The limitations of this research study are that it occurred during the Covid-19 pandemic which lowered class sizes. Students were able to choose in person instruction or online learning. This meant that there were portions of students who were doing online learning that otherwise would have been a part of the classroom demographic and could have impacted observations. This study was also conducted in a rural setting where students and teachers often know one another outside of school and have other types of relationships.

Recommendations for Future Research

Future research on cross-level classrooms should be conducted in urban and suburban settings in order to see the different experiences of teachers with different student populations. Rural school communities are smaller, and students and teacher are more knowledgeable of one another and connected through relationships inside and outside school; this study needs to be replicated in an urban or suburban setting to see the similarities and differences between rural educators and urban and suburban educators and their perspectives of the benefits and barriers to teaching in a cross-level classroom. This study could also be conducted at a time after Covid-19 where all students are back in a traditional classroom setting providing a larger picture of how teachers engage with more students in cross-level classrooms. This study could also be conducted with a phenomenological approach across multiple school districts with specific grade levels to understand the shared experience of teaching in a cross-level classroom with specific grade levels; this type of approach would provide deeper insight into specific grade levels and teachers experiences with a specific age group of students. It could also be conducted in a larger school district with all teachers teaching the same grade levels in their cross-level classrooms in order to better understand their shared experience in one district teaching in a non-traditional classroom setting.

Summary

The purpose of this case study is to understand the benefits and barriers of cross-level learning for educators at a rural secondary school, from the perspective of the educator; this study examines cross-level learning through the lens of the teacher. The findings indicate that teaching in a cross-level is a difficult and time-consuming endeavor that takes a great deal of time and energy on the part of the educator. The teacher is forced to double what they would do in a traditional classroom to meet the needs of multiple grade levels in one classroom. This means teachers are creating extended lesson plans and materials spending a great deal of time outside the school day working. However, most teachers felt that teaching in this type of classroom made them a better teacher who was better able to move efficiently in their classroom in an organized way that meets the needs of all learners.

The limitations of this case study are that it was conducted during the Covid-19 pandemic where students were given the opportunity to choose virtual schooling or traditional schooling. This meant that there were some students missing from the study population who could have impacted teacher observations and how they interacted with the student population. Future research needs to be done with cross-level classrooms in urban and suburban school settings to determine if educators' experiences are different in this type of school environment compared to teachers in rural settings.

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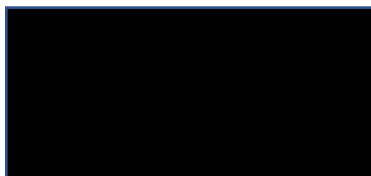
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Appendix A

Site Approval Letter

June 22, 2019



Dear 

As a graduate student in the Education Department at Liberty University, I am conducting research as part of the requirements for a doctorate degree in curriculum and instruction. The title of my research project is Educators' Perspectives of the Benefits and Barriers of Cross-Level Teaching: A Collective Case Study, and the purpose of my research is to understand the benefits and barriers of cross-level learning for educators at a rural secondary school. For this study, cross-level learning is defined as a classroom that includes multiple grade bands that are working together in a classroom setting to learn a specific set of standards or objectives. I am writing to request your permission to conduct my research in/at  High School.

The data will be used to better understand teacher perspectives of cross-level lessons. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval.

Sincerely,

Lela K. Andrews
Education Doctoral Candidate

Appendix B

IRB Approval

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

September 25, 2020

Lela Andrews

Justin Necessary

Re: IRB Exemption - IRB-FY19-20-419 EDUCATORS' PERSPECTIVES OF THE BENEFITS AND BARRIERS OF CROSS-LEVEL TEACHING: A COLLECTIVE CASE STUDY

Dear Lela Andrews, Justin Necessary:

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:

101(b):

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 can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. This form 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 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, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix C
INFORMED CONSENT FORM
EDUCATORS' PERSPECTIVES OF THE BENEFITS AND BARRIERS OF CROSS-LEVEL
TEACHING: A COLLECTIVE CASE STUDY

Lela K. Andrews
Liberty University
School of Education

You are invited to be in a research study understanding the perspective of educators who are participating in cross-level learning. You were selected as a possible participant because you have 5-10 years of teaching experience. Please read this form and ask any questions you may have, before agreeing to be in the study.

Lela K. Andrews, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to understand: What are the benefits and barriers of cross-level learning from the perspective of the educator facilitating the lesson?

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Share lesson plans and other instructional documents.
2. Be observed while teaching a cross-level lesson.
3. Participate in a 30-45 minute interview following the lesson.

Risks: The risks involved in this study are minimal.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include better understanding how the reflections of educators teaching cross-level lessons impact the larger collaboration theory.

Compensation: Participants will not be compensated for participating in this study

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Include the following in this section:
- Participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation.

- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- I cannot assure participants that other members of the focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Franklin High School. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How 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 will be destroyed, immediately, and will not be included in this study.

Contacts and Questions: The researcher conducting this study is Lela K. Andrews. 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 chair, Dr. Justin Necessary.

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 Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: 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.

Signature of Participant

Date

Signature of Investigator

Date

Appendix D

Interview Questions

Good Morning/Afternoon. Today I will be interviewing you to better understand your perspectives on planning and teaching a cross-level lesson. For the purpose of this research study, I will audio be recording the interview on an audio recording device in order to maintain accuracy. Thank you for participating in this research study.

1. Introduce yourself.
2. Please give me a detailed description of how you plan a cross-level lesson.
3. Of the different steps in the planning process of a cross-level lesson, what would you say is the most difficult for you in the planning phase?
4. What made this step the most difficult? Explain the difficulties and why you think this step was the most difficult.
5. How do the barriers and difficulties impact your role as the teacher when facilitating a cross-level lesson?
6. Of the different steps in the planning process of a cross-level lesson, what benefits are there in the planning phase?
7. What in your opinion created these benefits?
8. How do these benefits impact the role the teacher plays in the classroom?
9. Of the different steps in the planning process, what would you say is the most difficult for you in the facilitating phase?
10. How do you plan for a cross-level lesson? Describe your lesson plans and how you differentiate your materials for both grade levels?
11. What caused the difficulties in facilitating and executing this part of the lesson?
12. How do educators benefit from cross-level types of lessons? Please describe the benefits in detail that you have experienced.
13. What are the barriers you experience in planning a cross-level lesson?

14. What are the barriers you experience in facilitating and executing a cross-level lesson?
15. Cross-level lessons utilizes a great deal of collaboration; explain how this type of classroom affects the role of the educator.
16. Describe how teaching in a cross-level classroom has affected you as an educator.
17. What other things do you feel would be important for me to know about planning and facilitating a cross-level lesson or working in a cross-level classroom?

Appendix E
Observational Data Collection Chart

1. Draw a diagram of the classroom:

2. Record any indication of lesson agenda or layout identified on the board.

3. Record observations of the students in the classroom. Indicate differences between students of different grade levels.

4. Record observations of the teacher in the classroom.

5. Describe detailed description of the atmosphere of the classroom.

6. Describe student collaboration in the cross-level classroom.

7. Describe how the educator facilitates the lesson in the classroom (group monitoring, formative assessments, etc.)

8. Describe any struggles you see from the students.

9. Describe any struggles you see from the teacher.

10. Describe the successes you see from the students and teacher.