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Teacher Perception of Synchronous Hybrid Learning in a Rural Elementary School

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TEACHER PERCEPTION OF SYNCHRONOUS HYBRID LEARNING IN A RURAL ELEMENTARY SCHOOL

By
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Approval Page

This dissertation was submitted by Lisa LaMonica Moore under the direction of the persons listed below. It was submitted to the Gardner-Webb University College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Abstract

TEACHER PERCEPTION OF SYNCHRONOUS HYBRID LEARNING IN A RURAL ELEMENTARY SCHOOL. LaMonica Moore, Lisa, 2022: Dissertation, Gardner-Webb University.

The purpose of this qualitative research was to gain understanding from teachers regarding their experiences with providing instruction in a synchronous hybrid learning environment in a rural elementary school during the 2020-2021 school year. This study reveals the role of teacher perception in education, the evolution of technology as an instructional tool, defines synchronous hybrid learning, and describes how it is evolving at the elementary school level. Through the investigation of this study, five teachers assigned to the same rural elementary school participated in a semi-structured interview to discuss their experiences teaching in a synchronous hybrid learning environment. The participants shared their experiences during three interview phases and ensured validation in the content by reviewing the integrity of the interpretation of their responses. During the interviews, I submitted to bracketing to set aside personal experiences and attitudes while the phenomenon was being investigated (Husserl, 1970). Mezirow's (1997) transformative learning theory was the theoretical framework chosen to investigate the relationship between teacher perceptions of trends in education and their perceived success in providing adequate instruction to their students. During the duration of the recorded interviews, notes were taken and responses were transcribed. Themes were generated from the analysis of significant statements to develop textural and structural descriptions of the participants' experiences with the use of MAXQDA Analytics Pro software (Creswell & Poth, 2018). Results from this study revealed that the participants

perceived their ability to provide adequate instruction in a synchronous hybrid learning environment to be difficult due to limited internet access throughout the district, lack of professional development and training on how to provide distance learning instruction, and insufficient support from the home environment. The study discussed the transformation of technology as a learning resource used to supplement hands-on activities to the use of technology as the primary mode of lesson development, instructional delivery, and student interaction. Participants stressed the importance for adult stakeholders to be trained in aiding with student learning and providing structure in the distance learning environment. Furthermore, participants shared the need for hiring additional employees dedicated to providing instruction solely to distance learners and troubleshooting technical issues to minimize distractions from face-to-face learners.

This study informs school leaders of teacher perceptions of synchronous hybrid learning in a rural elementary school. The findings guide educational leaders in planning and redesigning instructional strategies used in synchronous hybrid learning to increase teacher efficacy and student success. The information discovered in the study provides a framework for district leaders, administrators, and instructional coaches to follow when supporting teachers with the tools they need to be successful. For effective implementation of synchronous hybrid learning, teachers must be equipped with adequate training and resources. Likewise, students must be provided equitable learning opportunities despite their learning environment. Addressing the needs of educators providing synchronous hybrid learning instruction allows stakeholders to reflect upon the current state of instruction in relation to student success.

Keywords: teacher perception, distance learners, synchronous hybrid learners

Table of Contents

Chapter 1: Introduction

Beginning in the late 1700s, one-room schoolhouses began to appear in cities and towns. Teachers were often men who were farmers, surveyors, and innkeepers; these men taught students to the capacity of their own education during their slow seasons of work (Public Broadcasting System [PBS], n.d.). Grammar schoolteachers would provide instruction to the level of content that they learned when they were in school. Due to the increase in public schoolhouses and demands for teachers throughout the country during the 1800s, women were invited to teach the students in one-room schoolhouses with up to 60 students. The school curriculum included reading, writing, basic arithmetic, limited history, geography, farming, and apprenticeship skills to support the economic needs for that particular time period. Resources used were primers of childish virtues; the Bible; Webster's Blue-Backed Speller; and later, McGuffey's Readers (PBS, n.d.). As studies were conducted and improvements were made to education, teaching began to evolve with the use of best instructional strategies for education. Marzano et al. (2001) identified nine categories of best instructional practices:

- identifying similarities and differences
- summarizing and notetaking
- reinforcing effort and providing recognition
- homework and practice
- nonlinguistic representation
- cooperative learning
- setting objectives and providing feedback
- generating and testing hypotheses

- providing questions
- questions and advance organizers (Liebhardt, 2020; Marzano et al., 2001).

To improve learning experiences for students and support best instructional practices, the integration of technology began to enter nearly 25% of all high school classrooms across America in the late 1980s (California State University, n.d.). A decade later, the internet, combined with technology, was widely used to support digital teaching and learning. In traditional learning environments, tech-rich instruction, as mentioned by Maxwell (2016), became prevalent as the demands for integrating technology in the classroom increased. Technology at the elementary school level was primarily used to allow students to complete the same task, at the same time, at the same pace, in the same place (Maxwell, 2016). Computer devices and the Internet were used to support traditional instruction to enhance learning experiences (Maxwell, 2016). Harasim (2012) defined the use of technology to enhance traditional face-to-face or distance education as "adjunct mode online learning" (p. 28).

Traditional modes of instruction integrated with adjunct mode online learning in elementary education abruptly transformed on March 14, 2020, when North Carolina Governor Cooper issued Executive Order No. 117. Governor Cooper declared a stay-at-home order, which required schools to close due to the spread of COVID-19 (Executive Order No. 117, 2020), causing most North Carolina public school systems to transition from traditional face-to-face learning in the classroom to online distance learning. Unexpectedly, integrating technology in the elementary classroom quickly transformed from Harasim's (2012) adjunct mode online learning into distance learning where technology became the primary mode of instruction.

Approximately 7 months later, on October 5, 2020, Governor Cooper lifted the stay-at-home order for students in kindergarten through fifth grade so they could return to the traditional face-to-face educational setting in public schools. Governor Cooper gave parents the opportunity to choose between sending their children to school in a traditional face-to-face setting or having their students remain learning online (WECT Staff, 2020). The opportunity for parents to choose between face-to-face or distance learning led to educational environments with both types of learners in need of instruction. Once again, teachers quickly transformed their instructional practices into an environment where they could provide instruction to face-to-face learners and distance learners simultaneously. This phenomenon, known as *synchronous hybrid learning*, quickly dominated the educational setting within elementary public schools across the state of North Carolina, beginning in the 2020-2021 school year (Dorn et al., 2020).

As the changes from teaching in a traditional face-to-face setting evolved to synchronous hybrid learning, Mezirow's (1997) transformative learning theory could be observed in teacher perceptions of this new way of teaching. Transformative learning occurred among teachers as they reflected upon their instructional strategies and gained insight into the benefits and challenges of the implementation of synchronous hybrid learning. Transformation within themselves as educators transpired as they reflected upon elements needed to improve synchronous hybrid learning experiences for their students (Mezirow, 2000). Sharing teacher perspectives of their experiences with synchronous hybrid learning can help district leaders and administrators remove barriers that hinder successful teacher instruction in this type of learning environment. In turn, improvement plans can be devised to increase student academic achievement in a synchronous hybrid

learning environment.

Statement of the Problem

The North Carolina State Board of Education holds high expectations that teachers will empower students to accept academic challenges to prepare them to be able to "pursue their chosen path after graduating high school, and to become lifelong learners with the capacity to engage in a globally collaborative society" (North Carolina Department of Public Instruction [NCDPI], 2021, State Board of Education section, para. 2). To ensure that teachers prepare students to be globally competitive in the 21st century, the North Carolina Teacher Evaluation Process (2018) measures teachers' capabilities to advocate for positive change in policies and practices affecting student learning. Public school teachers are expected to participate in the implementation of initiatives to improve the education of students (North Carolina Educator Effectiveness System [NCEES], 2017. In the past, professional development provided at the local level equipped elementary teachers to adequately advocate for their students and schools.

Recently, elementary teachers were placed in unfamiliar circumstances due to Governor Cooper's Executive Order 117 (2020), where they were required to provide instruction in synchronous hybrid learning environments in elementary schools. The unfamiliarity of teaching in a synchronous hybrid learning environment hindered teachers' capabilities to advocate for their students. This new unfamiliar way of teaching allowed transformative learning to occur among educators. Mezirow (2020) defined transformative learning theory as stages in cognitive restructuring and integration of experience, action, and reflection. He stated that to make sense of a new experience, we think critically upon the new experience, and we make an interpretation of it (Mezirow,

1990). Transformative learning allows for teacher learning and teacher change based on teacher perceptions, attitudes, and beliefs of the experience (DiBiase, 2000).

The teacher perception and learning process, as described by DiBiase (2000), is a personal journey that brings about a result of learning and developmental growth. In fact, Wright (2017) conducted a meta-analysis of teacher perceptions of technology as it was integrated into the classroom. Wright (2017) found that teacher perception was the primary criterion in creating an enhanced learning environment with the integration of technology. In the same way, teacher perception led to barriers in teaching and learning if the perception of technology integration was negative (Wright, 2017).

Keeping in mind that teacher perception influences teacher developmental growth, the purpose of the present study was to research teacher beliefs and attitudes toward synchronous hybrid learning in a rural elementary school, based on their personal experiences. I studied teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the elementary classroom, the factors needed to increase student academic success in a synchronous hybrid learning environment, and the things administrators at the district and school levels can do to improve the synchronous hybrid learning experience for teachers and students.

Context of the Problem

In a North Carolina rural school district, there are 5,714 students enrolled in 19 public schools. There were 1,404 students, 25% of the student population, who were distance learners. Teachers in kindergarten through 12th grade provided synchronous instruction for both traditional learners and distance learners in each of their classes (see Appendix A). Teachers who provided instruction for students in Grades 3-12 were

expected to meet grade-level proficiency expectations, despite learning loss due to COVID-19 (NCDPI, 2020). Teachers struggled to provide equitable educational opportunities for distance learners when compared to face-to-face students in a synchronous hybrid learning environment. Teachers argued that there was a lack of preparation and training to support individualized instruction to distance learners, and therefore they felt ill-equipped to meet state expectations (Luthra, 2021).

Although there is research on adults learning in a synchronous hybrid learning environment, there is currently a gap in research to support the needs of elementary teachers providing instruction to students in a synchronous hybrid learning environment. A study on teacher perceptions of synchronous hybrid learning in a rural elementary school can provide educators with the knowledge of the benefits and challenges of teaching face-to-face and distance learners simultaneously. The present investigation includes teacher perceptions of strategies that could be used to improve synchronous hybrid learning and ways in which educational leaders could better prepare educators for teaching in a synchronous hybrid learning environment in the future.

Purpose Statement

The purpose of this qualitative study was to investigate elementary teacher perceptions of synchronous hybrid learning in a rural elementary school. To the present time, there has been a limited amount of research conducted on adults learning in a synchronous hybrid learning environment; however, there is a lack of research pertaining to synchronous hybrid learning for students and teachers in elementary schools. This study provides research on the role of teacher perceptions in education and the evolution of technology as an instructional tool; it also defines synchronous hybrid learning,

describes how it is evolving, and discusses strategies used to deliver synchronous hybrid instructional lessons. I investigated teacher perceptions of teaching in a synchronous hybrid learning environment, teacher perceptions of elements that are needed to provide quality instruction to synchronous hybrid learners, and teacher perceptions of lessons learned to improve synchronous hybrid learning at the elementary level.

Research Questions

In this study, I investigated teacher perceptions of synchronous hybrid learning in a rural elementary school in order to gain knowledge of how effectively it was implemented this past year, what elements are needed to improve the learning environment, and how district and school-level leaders can support teachers. To understand teacher perceptions of synchronous hybrid learning in a rural elementary school, I used 1 year of data from five teachers to answer the following questions:

1. What are teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the 2020-2021 school year?
2. What are teacher perceptions of elements needed to improve the synchronous hybrid learning experience for teachers and students?
3. What are teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers? (Creswell & Creswell, 2018, p. 124).

Theoretical Framework

There are several factors that influence teacher perceptions of synchronous hybrid learning in a rural elementary school. For this project, I studied the role of teacher

perceptions in education, defined synchronous hybrid learning, and described how it is evolving. I discussed strategies used to deliver instructional lessons and examined the evolution of technology as an instructional tool in the learning environment. I have investigated teacher perceptions of teaching in a synchronous hybrid learning environment, teacher perceptions of elements that were missing for teachers to provide quality instruction to synchronous hybrid learners, and teacher perceptions of lessons learned to improve synchronous hybrid learning at the elementary level. I considered what district leaders, administrators, and instructional coaches could do to support teachers. I also correlated how Transformative learning theory occurred within educators as they reflected upon elements needed to improve synchronous hybrid learning and implemented strategies to improve learning experiences for students (Mezirow, 2000).

Significance

Schools are currently being required to teach children beyond the walls of the schoolhouse. School districts are seeing an increase in students opting for either private schools, homeschooling, or virtual academies. Public school sectors need to compete with a variety of school environments to provide equitable instructional opportunities to both face-to-face learners and distance learners. To improve distance learning instruction while maintaining high-quality instructional skills for face-to-face learners, teachers need to be properly trained with the skills to implement a synchronous hybrid learning environment. The significance of this study was to investigate teacher perceptions regarding experiences of synchronous hybrid learning in elementary schools. This research includes teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the elementary classroom, the factors needed to increase student

academic success, and the things administrators at the district and school levels can do to improve synchronous hybrid learning.

Role of the Researcher

I am currently an elementary school principal in a rural elementary school in the North Carolina public school system. I have a combined 11 years of experience teaching in elementary schools with the Florida public school system and North Carolina public school system. I hold a BS degree in elementary general education in kindergarten through Grade 6. I also hold a master's degree in educational leadership, and I served in school administration with the North Carolina public school system in middle school and high school as an assistant principal for an additional 9 years. My major roles as an elementary school principal include evaluating instructional and facilities personnel; conducting professional development to support instructional personnel; facilitating local and state assessments; evaluating student progress through local and state assessments; facilitating a multi-tiered system of support for individual students; coordinating school transportation for students; and creating a safe and inviting environment for students, parents, and community members. As I have completed my EdD in educational leadership, I aspire to be a public school district leader. Since completing my dissertation on a topic educators are facing today, the information discovered in the study can affect teacher efficacy and student academic growth.

Definitions

Asynchronous Online Learning

Allows students to view instructional materials each week at their convenience. Students may view instructional videos to learn key concepts. Students who need

repeated instruction may view instructional videos multiple times to understand the learning material (Scheiderer, 2021).

Distance Learning

Education in which students and teachers are physically separated during instruction and technology is used to facilitate communication between the two parties (Berg & Simonson, 2016). Distance learning is also known as *e-learning* and *online learning* (Berg & Simonson, 2016).

Hybrid Learning

An educational environment where the teacher is providing instruction to online and face-to-face students. Instruction can be provided to both groups at the same time, or online students can be provided asynchronous instruction while face-to-face students learn in the traditional setting (Boyarsky, 2020).

Synchronous Learning

When students are required to participate online and in class at specific scheduled times each week. Students participate in live instruction with a teacher and discussions with their peers (Scheiderer, 2021).

Synchronous Hybrid Learning

A technology-based learning environment in which face-to-face students and online distance learners participate in learning activities simultaneously (Raes et al., 2020).

Teacher Perception

Teacher reflective thinking process on the instruction provided to students and their learning (Vagle, 2009).

Chapter 1 Summary

In summary, I conducted a qualitative study to investigate teacher perceptions of synchronous hybrid learners in a rural elementary school. In turn, the information learned is used to create a simple framework for administrators to follow in order to provide teachers with the tools they need to be successful in providing instruction to their synchronous hybrid learners. Chapter 2 discusses past research on the impact teacher perception has on the learning environment, the transformation of technology in the classroom, and synchronous hybrid learning. Chapter 3 describes the methodology and processes that are used to investigate teacher perceptions of synchronous hybrid learning in a rural elementary school. Chapter 4 explains the research found during the investigation conducted by me. I compare my research to the research found in previous studies. Chapter 5 includes final conclusions, limitations on the study, and suggestions originated from teachers for the successful implementation of a synchronous hybrid learning environment.

Chapter 2: Literature Review

I presented literature based on the theoretical framework mentioned in Chapter 1 to conduct a qualitative study of teacher perceptions of synchronous hybrid learning in a rural elementary school. Teacher perception occurs when a teacher participates in reflective thinking concerning the instruction they provided to support student learning (Vagle, 2009). For the sake of this study, Bonakdarian et al. (2010) explained that a synchronous hybrid learning environment engages face-to-face and online students in learning activities simultaneously. I investigated teacher perceptions of how effectively synchronous hybrid learning was implemented during the 2020-2021 school year, teacher perceptions of the elements needed to improve the quality of synchronous hybrid learning experiences for students and teachers, teacher perceptions of what lessons were learned to improve the synchronous hybrid learning experience, and teacher perceptions of what district leaders, administrators, and instructional coaches can do to support teachers.

I felt this topic was relevant to elementary school teachers due to trends that have developed since the oncoming of COVID-19 demanding educators to provide instruction in a variety of learning environments. On March 14, 2020, North Carolina Governor Cooper issued Executive Order No. 117 (2020), which closed schools due to the spread of COVID-19. Prior to the executive order, there was a high level of positive teacher perception of school leadership and professional development pertaining to meeting the needs of students with online instruction. According to the 2020 North Carolina Teacher Working Conditions Survey (NCTWCS), more than three fourths of public school teachers agreed that working conditions were sufficient in promoting a work environment that supported instructional practices for improved academic performance. Table 1 shows

NCTWCS results for the 2019-2020 school year, before COVID-19.

Table 1

NCTWCS Results Before COVID-19 and the Mandate to Offer Distance Learning Opportunities

Individual item analysis	Percentage of teachers who agree or strongly agree with the statement
7.1C School leadership consistently supports teachers	79%
7.1D Teachers are held to high professional standards for delivering instruction	93%
7.1E School leadership facilitates using data to improve student learning	94%
7.1G Teachers receive feedback that can help them improve teaching	86%
8.1G Teachers have sufficient training to fully utilize instructional technology	75%
8.1L Professional development enhances teacher's ability to implement instructional strategies that meet diverse student learning needs	85%
8.1M Professional development enhances teachers' abilities to improve student learning	87%
9.1C Teachers work in professional learning communities to develop and align instructional practices	92%
9.1D Provided supports (i.e., instructional coaching, professional learning communities, etc.) translate to improvements in instructional practices	86%

Immediately after Governor Cooper's executive order, educators including district leaders, school leaders, instructional coaches, and teachers perceived themselves as being ill-equipped to provide online instruction to distance learners. Almahasees et al. (2021)

conducted a study with an online survey of 50 faculty members and 280 students. While they found online distance learning to be useful during the pandemic, they found it was considerably less effective than providing face-to-face instruction (Almahasees et al., 2021). Almahasees et al. reported that teachers and students experienced challenges in adapting online instruction for students with special needs. In addition, teachers and students experienced a lack of interaction and motivation, problems with technology, internet issues, privacy concerns, and security breaches (Almahasees et al., 2021). In the same study, advantages discovered to distance learning included self-learning, low costs, convenience, and flexibility (Almahasees et al., 2021).

North Carolina traditional school leaders appeared to lack the necessary background knowledge and adequate training in distance learning to provide consistent support to teachers through professional development. Furthermore, school leaders were not trained to evaluate and offer teachers effective feedback on their instructional practices provided to distance learners. Most public school administrators were unfamiliar with effective online instructional strategies because they were not trained on effective online instructional practices with NCEES.

In reflecting upon the NCTWCS (2020) results, most teachers employed with the North Carolina public school system felt equipped to utilize technology in the traditional classroom setting before they were required to provide online instruction to distance learners as the primary means of communication. Furthermore, positive teacher perception on utilizing technology to provide instruction declined as teachers were required to create a virtual classroom. Teachers faced obstacles in maintaining educational best practices for providing quality instruction to their students with varying

technology equipment and internet access. In addition, teachers had to work with varying parental abilities in instruction and technology to assist their students in learning activities. Almahasees et al. (2021) found that 60% of teachers were comfortable providing online instruction to their students, while 40% of teachers were not comfortable. In fact, according to the study, 66% of teachers had technical training on providing online instruction, while 34% had not received any prior training (Almahasees et al., 2021). Instructional coaching supports such as professional development and professional learning communities were limited to the base knowledge the instructional coaches and school leaders obtained through available research and resources. Due to the inability of leaders to support teachers, morale declined, and in turn, teacher perception of the capability to provide effective instruction decreased among teachers.

I conducted this study on teacher perceptions of synchronous hybrid learning in a rural elementary school. First, I collected data pertaining to teacher perceptions of how effective synchronous hybrid learning was implemented during the 2020-2021 school year. Then I investigated teacher perceptions of elements that were missing and needed to improve the synchronous hybrid learning experience for teachers and students. Finally, I investigated teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools and the things that district leaders, school-level administrators, and instructional coaches can do to support teachers.

Conceptual Framework

This study explored the relationship of transformative learning theory in respect to the impact teacher perception has on student achievement in correlation with synchronous hybrid learning in a rural elementary school.

Transformative learning theory nis the process of effecting change in a frame of reference (Mezirow, 1997). Adults have acquired a coherent body of experience—associations, concepts, values, feelings, conditioned responses; frames of reference that define their life world. Frames of reference are the structures of assumptions through which we understand our experiences. They selectively shape and delimit expectations, perceptions, cognition, and feelings. They set our "line of action." Once set, we automatically move from one specific activity (mental or behavioral) to another. We have a strong tendency to reject ideas that fail to fit our preconceptions, labeling those ideas as unworthy of consideration—aberrations, nonsense, irrelevant, weird, or mistaken. When circumstances permit, transformative learners move toward a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience (Mezirow, 1997).

Transformative learning includes two primary areas of learning within adults: instrumental learning and communicative learning (Western Governors University [WGU], 2020). Instrumental learning focuses on task-oriented problem-solving and evaluation of cause-and-effect relationships (WGU, 2020). Instrumental learning allows for manipulation or control over the environment or other people to strengthen efficacy in improving performance (Habermas, 1981; Mezirow, 1997). Communicative learning focuses on understanding how people communicate their emotions, needs, and desires (Mezirow, 1997; WGU, 2020). Instrumental learning and communicative learning, within the transformative learning theory framework, drive how teachers perceive the effectiveness of components in the learning environment in relation to student achievement. As teachers self-reflect to cultivate a perception of student academic

performance, they transform as educators. For example, teacher perception proved to be a factor in student achievement in a study conducted by Whittle et al. (2018). Whittle et al. conducted a semi-structured focus group qualitative study among 37 teachers. Whittle et al. found that the following factors influenced teacher perception of efficacy in influencing positive academic achievement: content knowledge, expectations of their students, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction. Teacher perspectives on learning programs motivated lesson planning and determined how well teachers executed their lessons (Whittle et al., 2018).

In a similar manner, this study investigated teacher perceptions of synchronous hybrid learning in a rural elementary school. The investigation provides researchers with an understanding of teacher perceptions on the effectiveness of synchronous hybrid learning implemented in the elementary classroom during the 2020-2021 school year; teacher perceptions of missing elements that are needed to improve the synchronous hybrid learning experience for teachers and students; teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools; and teacher perceptions of the things that district leaders, administrators, and instructional coaches can do to support teachers. The findings of the research can contribute to data-driven professional development and teacher support led by school leaders to guide transformations in the learning environment that will enhance student achievement.

Impact of Teacher Perceptions on the Learning Environment

Transformative learning takes place within teachers as they self-reflect on their instructional performance, problem-solve to improve their strategies, and manipulate the

learning environment to improve student academic performance (Mezirow, 1997; Vagle, 2009). Self-reflection of instructional performance leads a teacher to form a perception of the impact their teaching strategies make on the learning environment (Mezirow, 1997). Whittle et al. (2018) proved teacher perception to be an influential factor in student achievement when they conducted a semi-structured focus group qualitative study among 37 teachers. In their study, they found that the following factors influenced teacher perceptions in a learning environment that supported positive academic achievement: content knowledge, student expectations, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction (Whittle et al., 2018).

Content Knowledge

Lappen (1999) recognized that teachers often avoid teaching curriculum standards in which they lack in knowledge. She further explained that teacher perception of content knowledge is the foundation to how teachers interpret content goals they are supposed to provide their students. Teacher perception of their content knowledge drives the formulation of their questioning, how they communicate their curriculum goals to students, and how they react to student responses (Lappen, 1999). Lappen shared her concerns that if teachers jperceive themselves as lacking content knowledge, they can become stumbling blocks to their students.

Van den Hurk et al. (2017) conducted a case study including 109 elementary school teachers. Through the study, they found that the activities teachers provided for students during their instruction were influenced by teacher perception of content knowledge. The study showed that it was not only important for teachers to be able to

transfer their content knowledge into their lessons, but they must also know how to apply this knowledge to their instruction (Van den Hurk et al., 2017). Furthermore, teacher perception of content knowledge influenced how precise and in-depth lessons were created to provide learning activities for a particular curriculum goal (Van den Hurk et al., 2017). In Whittle et al.'s (2018) study, teachers who obtained deep content knowledge formulated high-quality learning activities for students because they had a deep understanding of the content to be taught. Teachers in the study perceived their content knowledge as an influence as to how they taught (Whittle et al., 2018). In fact, one female teacher in Whittle et al.'s study summed it up by saying, "As people, we put more into what we like and enjoy, and put more time into what we know best. Where your own personal preference or greater understanding or interest lies, absolutely comes across" (p. 14).

Student Expectations

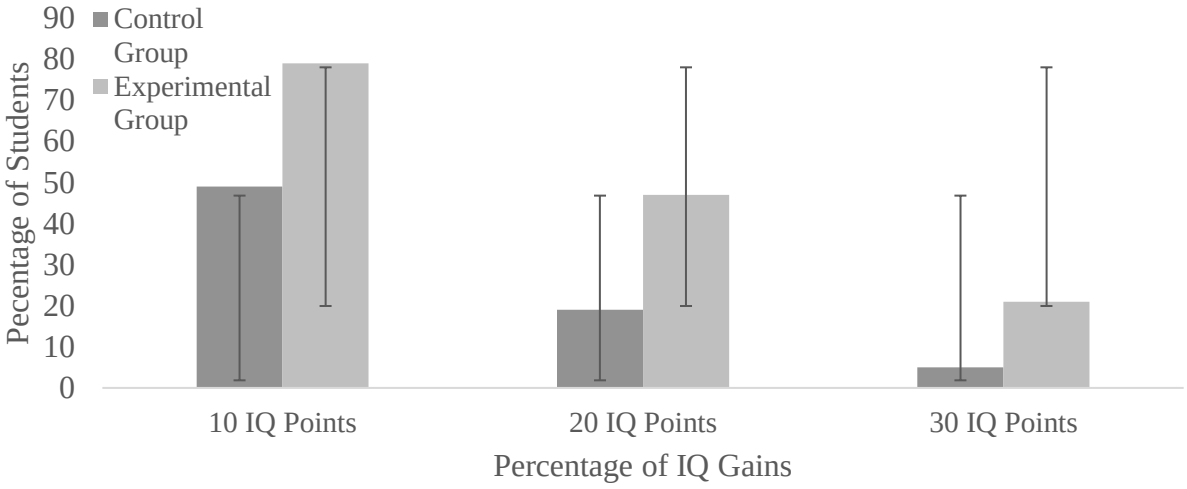
According to Whittle et al. (2018), high expectations for student achievement played a positive role in academic performance. Rubie-Davies et al. (2015) found that when teachers were trained in practicing high expectations, student achievement improved, compared to student achievement under untrained teachers. If teacher perceptions of student academic expectations were low, student academic growth was most often low (Rubie-Davies et al., 2015). Merton (1948) defined this concept as "the self-fulfilling prophecy" (p. 193). Merton described three stages to the self-fulfilling prophecy. First, a belief about the future is formed (Schaedig, 2020). In this case, a teacher's perception of a student's academic ability is determined. Second, actions are taken because one has that belief (Schaedig, 2020). A teacher's belief about a student's

learning capability causes the teacher to manipulate instruction based on the perceived academic level of the student (Rice & Wilson, 1999). Third, the results of the actions confirm the original belief (Schaedig, 2020). Rosenthal and Babad (1985) called this idea the "Pygmalion Effect: When we expect certain behaviors of others, we are likely to act in ways that make the expected behavior more likely to occur" (p. 36).

Rosenthal and Jacobson (1968) organized an experiment among elementary school students and teachers to see if teacher expectations could influence student achievement. Rosenthal and Jacobson provided elementary school students with an IQ test and informed the teachers that 20% of their students showed "unusual potential for intellectual growth" (p.19), compared to their average peers; they called this group the Bloomers (Schaedig, 2020). Teachers were unaware that students in the Bloomers group may or may not have been truly academically gifted (Rosenthal & Jacobson, 1968). Rosenthal and Jacobson found that teacher expectations were lower for the average students in comparison with the Bloomers, based on their perceptions of the students' abilities to achieve academically. Teachers created more inviting environments for the Bloomers, gave them more attention, and called on them more frequently than the average learners (Rosenthal & Jacobson, 1968). Rosenthal and Jacobson retested the children's intelligence after 8 months and found that the Bloomers' IQ scores were significantly higher than those from the so-called average group (control group), even though the Bloomers (experimental group) were randomly chosen. The Bloomers increased their average IQ by 2 points in verbal ability, 7 points in reasoning, and 4 points in overall IQ (Schaedig, 2020). Figure 1 shows the percentage of students with IQ gains in first and second grade.

Figure 1

Percentage of Students With IQ Gains in First and Second Grade



The experimental group revealed that teacher perceptions of student academic expectations altered the instruction for students, and this influenced student growth (Schaedig, 2020).

Passion and Enthusiasm for Teaching

Additional factors influencing teacher perceptions leading to student academic success are teacher passion and enthusiasm for teaching (Whittle et al., 2018). Teacher-perceived content knowledge was found to correlate with teacher passion and enthusiasm for teaching (Whittle et al., 2018). According to a teacher interview in the Whittle et al. (2018) study, perceived knowledge of content influences the level of passion and enthusiasm a teacher has for teaching. Another teacher interviewed in the study added, "personal strengths in content knowledge often influence teaching and the enthusiasm and passion they convey to students" (Whittle et al., 2018, p. 6).

To some, enthusiasm, and passion influence student success. Hargreaves (1997)

argued, “all pedagogical approaches to teaching and learning fail unless passion is created in the classroom” (p.17). To investigate the influence passion and enthusiasm have on student learning, Gilal et al. (2019) conducted a study including 300 students and teachers using two theoretical lenses: crossover theory and emotional contagion theory. They wanted to examine if a teacher’s passion for work can be transferred to a student (Gilal et al., 2019). The study concluded that the passion a teacher has for their work can be transferred to a student’s passion for learning indirectly through emotional contagion (Gilal et al., 2019). Emotional contagion is emotional transference between teacher and student, whether implicitly or explicitly (Gilal et al., 2019).

In summary, teacher perception of content knowledge influences teacher passion and enthusiasm for teaching. The level of teacher passion and enthusiasm shapes the learning environment, which in turn, affects student academic performance.

Ability to Select Appropriate Teaching Methodologies

The ability to select appropriate teaching methodologies is another factor that influences teacher perception in a learning environment that supports positive academic achievement. According to Munawaroh (2017), teaching methods refer to strategies teachers use to present academic subject matter in a way that connects with their students. A classroom setting comprises a variety of ability levels among students. An effective teacher must be given the opportunity to apply instructional methods in accordance with individual student needs (Munawaroh, 2017). In a quantitative study conducted in STKIP PGRI Jombang, Indonesia, 108 vocational high school students were divided into three classes so researchers could analyze the influence teaching methods and student learning environments have in relation to student achievement (Munawaroh, 2017). The results

concluded that 62.6% of student academic achievement was influenced by factors relating to teaching methods and learning environments, whereas 37.4% of students were affected by factors not related to teaching methods (Munawaroh, 2017).

To sum it up, positive teacher perception in a learning environment that reinforces academic achievement is influenced by the freedom and ability teachers must have in selecting appropriate teaching methods to meet individual student needs.

Use of Reflective Practices to Direct Instruction

In the study conducted by Whittle et al. (2018), teachers who participated in the focus group reported that reflective practices were important in lesson planning and selecting appropriate teaching methods. Teachers found reflecting upon student feedback and assessment data to be useful in improving teacher effectiveness (Whittle et al., 2018). Direct instruction influenced by teacher-perceived need for improvement in instructional practices increased student academic achievement (Habermas, 1981; Mezirow, 1997). This type of reflective practice, used to improve direct instruction, is an example of transformative learning theory and is vital to the professional developmental growth of every classroom teacher (WGU, 2020). In fact, the North Carolina Teacher Evaluation includes Standard 5: Teachers Reflect on Their Practice (NCEES, 2020). Teachers are to reflect upon student learning in the classroom and how they can improve learning (NCEES, 2020). In order for North Carolina teachers to be considered proficient in their reflective practices, teachers must use research-based resources to analyze student learning outcomes with the aid of student data to improve lessons (NCEES, 2017). Based on reflective practices, a teacher's perceived opportunities for growth should be followed up by participating in professional development to meet their professional goals (NCEES,

2017). Teachers are encouraged to integrate innovative research-based teaching strategies to support 21st century initiatives to improve student academic performance (NCEES, 2017).

Summary of How Teacher Perceptions Impact the Learning Environment

According to studies that have been conducted in the past, teacher perceptions have an impact on the learning environment. Factors that influence teacher perceptions in a learning environment that support positive academic achievement include the following: content knowledge, student expectations, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction (Whittle et al., 2018). In this study, I investigated how these factors influenced teacher perceptions of synchronous hybrid learning in a rural elementary school.

Transformation of Technology in the Classroom

In recent years, the three major learning theory frameworks, cognitivism, behaviorism, and social constructivism, have evolved to overlap one another to support 21st century learning (Picciano, 2017). Current cognitive learning is different in today's world with technology integrated into the classroom. The understanding of theorists of what learning is has transformed from one in which learning is knowledge recording and absorption to one in which learning is a process of knowledge construction (Resnick, 1989). Second, Resnick (1989) said learning is knowledge-dependent; learners use current knowledge to construct new knowledge. Third, learning is adapted to the situation in which it takes place (Resnick, 1989). The integration of computers in education assisted in the transformation of learning from knowledge-as-possession to knowledge-

as-construction (Tam, 2000). According to Lancy (1990), computers are effective in developing the learner's higher-order thinking skills such as defining problems, judging information, solving problems, and drawing knowledge-based conclusions. The educational environment should stimulate learners to maximize their cognitive learning potential, whether they are learning on their own or within a social network (Tam, 2000).

To meet the learning needs of students in recent years, cognitive theory and social constructivism transformed into "communities of practice" and situated learning (Wenger, 1998; Wenger & Lave, 1991). Communities of practice, as defined by Wenger (1998), entail social learning that takes place among a group of people who collaborate to improve their understanding, share their ideas and strategies, determine solutions, and build innovations to common interests. As learners participated in communities of practice and situated learning, a natural progression of education led to the integration of technology as learners became partners in social networking and shared resources through communication platforms such as texts, images, and audio messages (Kaplan, 2021).

In addition to learning how to utilize technology in the classroom, changes in future-ready expectations used to prepare students to be globally competitive morphed into 21st century learning expectations. Stauffer (2020) listed 21st century skills that work together with the integration of technology to support the Information Age to include critical thinking, creativity, collaboration, communication, information literacy, media literacy, flexibility, leadership, initiative, productivity, and social skills. Learners were expected to master core subjects and 21st century themes in the areas of English, reading or language arts, world languages, arts, mathematics, economics, science, geography,

history, government, and civics (Stauffer, 2020).

Adjunct Mode Online Learning

In traditional learning environments, tech-rich instruction, as mentioned by Maxwell (2016), became prevalent as the demands for integrating technology in the classroom increased globally. Tech-rich instruction allowed learners to complete the same task, at the same time, at the same pace, in the same place. Computer devices, along with the internet, were used to support traditional instruction only to enhance traditional learning experiences (Maxwell, 2016). Harasim (2012) referred to the term "adjunct mode online learning" (p. 28) to describe the use of technology to enhance traditional face-to-face or distance education. Adjunct mode learning does not replace traditional learning strategies, nor does it serve as a large portion of a grade within a course. Instead, learners utilize internet resources to enhance course-related research and broaden group discussions through forums or conferences (Harasim, 2012).

Blended Learning

According to Harasim (2012), during the early 1980s, adjunct mode online learning evolved into an educational setting where online learning increased to fulfill traditional face-to-face learning requirements and expectations. Adjunct mode transformed into blended learning, where course requirements were a mix of face-to-face traditional activities and web-based online activities; learners had some control over the time, place, and pace in which the activities were completed (Maxwell, 2016). Blended-learning environments take on many different forms, such as station rotation, lab rotation, flipped classroom, or individual rotation (Christensen et al., 2013). Station rotation is generally used in elementary classroom settings in order to allow the learner to

participate in student-led online learning; the students rotate to each station while the teacher works with small group instruction. This allows the teacher to provide the students with data-driven individualized instructional resources they can engage in at their own pace to obtain new knowledge (White, 2019). Lab rotation is like station rotation, with the exception that the learners rotate to a designated computer lab to receive their online instruction (White, 2018a). A flipped classroom requires the learner to utilize digital resources outside of the classroom through the use of an outside platform. Additional content is taught through this platform while students are in their own places. When students meet face-to-face in the traditional setting, students are involved in active collaborative problem-solving (Cabi, 2018). Individual rotation allows learners to be scheduled on a rotation customized to meet their individual needs, with at least one learning modality to include the use of online learning for a particular subject area (White, 2018b).

Distance Learning

Berg and Simonson (2016) defined distance learning, otherwise known as distance education and online learning, as including "physical separation between teacher and student" during instruction and the use of a variety of technologies to facilitate student-teacher and student-student communication (para. 6). Distance learning benefits adult learners who are unable to attend face-to-face educational opportunities in the traditional setting. Distance learning in kindergarten through 12th grade is used to allow homeschool students access to centralized instruction (Berg & Simonson, 2016). Picciano (2017) stated that most distance learning theories are derived from the three major learning theories: behaviorism, cognitivism, and social constructivism. Picciano

discussed three widely accepted distance learning, or online learning, theories:

- Community of Inquiry: based on the idea of three distinct "presences," which include cognitive, social, and teaching. The three components overlap each other as teachers and students share ideas, information, and opinions. Students participate in online interactive platforms such as discussion boards, blogs, wikis, and videoconferekncing (Garrison et al., 2010).
- Connectivism: Students learn by navigating and recognizing the constant shift and change in information. The learner's responsibility is to develop and create knowledge rather than disseminate it (Siemens, 2004).
- Online Collaborative Learning (OCL): Learners are considered knowledge builders (Harasim, 2012, p. 89). According to Harasim (2012), "OCL theory directs its attention on collaborative learning, knowledge building, and Internet as a means to reshape formal, non-formal, and informal education for the Knowledge Age" (p. 81). Three phases of knowledge construction are included in OCL:
    1. Idea generating, which is the brainstorming phase;
    2. Idea organizing, which allows ideas to be compared, analyzed, and categorized through discussion and argument; and
    3. Intellectual convergence, which occurs in intellectual synthesis and consensus through a joint product such as an essay, project, or assignment (Harasim, 2012, as cited in Picciano, 2017).

Current Trends in Technology Use in the Classroom

On March 16, 2020, the use of technology in the elementary classroom quickly

evolved when Governor Cooper issued Executive Order No. 117 (2020), requiring public school buildings to close and instruction to take place online. Instructional coaches and school-level administrators immediately researched resources to support K-12 students in a distance learning educational setting. Then, on October 5, 2020, Governor Cooper lifted the stay-at-home order for students in kindergarten through fifth grade, allowing them to return to the traditional face-to-face setting in public schools. With the lift of the stay-at-home order for elementary students, Governor Cooper provided parents the choice between sending their children to the traditional face-to-face setting or allowing them to continue distance learning (WECT Staff, 2020). With the governor's order in place, teachers quickly transformed their classrooms into learning environments that provided instruction to face-to-face learners and distance learners simultaneously. This phenomenon, known as synchronous hybrid learning, quickly dominated the educational setting within elementary public schools across the state of North Carolina during the 2020-2021 school year (Dorn et al., 2020).

Synchronous Hybrid Learning

Synchronous hybrid learning as a pedagogical approach was implemented in colleges and universities beginning around 2015 (University of the Fraser Valley, 2018). Wang et al. (2017) described a synchronous hybrid learning environment as simultaneously delivering a lesson to students in a face-to-face setting and an online setting. Synchronous hybrid learning is also referred to as blended synchronous learning by educators and researchers (Lakhal et al., 2021).

Raes et al. (2020) admitted that there were few studies investigating the use and effectiveness of synchronous hybrid learning at the elementary school level. Their own

meta-analysis, in line with the Preferred Learning Items for Systematic Reviews and Meta-Analysis, included 47 studies pertaining to the benefits, challenges, and current design principles involved in setting up synchronous hybrid learning in higher education and adult learning institutions (Raes et al., 2020). In the meta-analysis, researchers consistently advised to be reserved in confidence about synchronous hybrid learning, which promotes a more flexible, engaging learning environment compared to fully online or fully on-site instruction (Raes et al. 2020). Raes et al. found that although there are benefits to synchronous hybrid learning, there are also various challenges, both pedagogical and technical in nature. In a qualitative case study by Romero-Hall and Vicentini (2017), the results concluded that the study habits of adult distance learners improved in a synchronous hybrid learning environment; however, there were pedagogical challenges distance learners had to surmount during synchronous hybrid instruction (Romero-Hall & Vicentini, 2017). Challenges distance learners experienced included the lack of “interactions, relationships, and communication exchanges between distance learners, their face-to-face counterparts, and the instructor" (Romero-Hall & Vicentini, 2017, p. 141).

Benefits of Synchronous Hybrid Learning

Wang et al. (2017) classified the benefits of synchronous hybrid learning or blended synchronous learning into three categories: practical benefits, educational benefits, and economic benefits.

Practical benefits of synchronous hybrid learning begin with its increasing affordability, with the advancement of computer-mediated communication technologies such as emails, blogs, instant messaging, text messaging, videoconferencing, and internet

forums (Wang et al., 2017). With simple technology, teachers can set up a synchronous hybrid classroom without financial support when an alternative to the traditional face-to-face learning environment is needed (Wang et al., 2017). In addition, synchronous hybrid learning allows for K-12 schools, colleges, and universities to grant greater educational access and equitable learning experiences for both economically privileged and underprivileged students living in remote geographical areas or for students who cannot physically participate in class (Bower et al., 2015). Synchronous hybrid learning offers flexibility and convenience to students, as they can choose to participate in classroom instruction in a traditional face-to-face setting or online (Wang et al., 2017). With this approach to teaching, online students reduce their feelings of isolation as they get a sense that they are in a "real" classroom with their instructor and peers (Zydney et al., 2019).

Educational benefits to synchronous hybrid learning can compare to that of face-to-face learning. In an analysis conducted by Francescucci and Rohani (2018), the performance and engagement of 698 postsecondary students were compared in a face-to-face learning environment and in a synchronous hybrid learning setting. The study concluded that an educational benefit of synchronous hybrid learning is the flexibility for students to customize their participation in class instruction to meet their individual needs in a convenient location, whether face-to-face or online at another location (Francescucci & Rohani, 2018). In Watts's (2016) comparative study between asynchronous learning and synchronous learning, data were analyzed from 12 studies dated between 2000 and 2015. The findings indicated that although asynchronous learning had its academic benefits for adult learners, synchronous hybrid learning was more apt in preventing a gap in communication between the online student and the teacher, as discussed in Moore's

(1973) theory of transactional distance.

The theory of transactional distance hypothesizes that distance learning can lead to gaps in communication between student and teacher, as well as a student and their peers, due to space and separation that results from asynchronous learning (Moore, 1973). The real-time interaction and engagement between an online student and teacher in a synchronous hybrid learning environment eliminate the communication gap often experienced in asynchronous learning (Watts, 2016). Synchronous hybrid learning permits an increase in shared perspectives among peers and gives room for immediate feedback from the teacher (Wang et al., 2017; Watts, 2016). In addition, a simultaneous learning environment allows for an online student to feel connected with their teacher and peers in both online and face-to-face settings (Watts, 2016).

Synchronous interaction and collaboration proved to show greater academic growth in final project grades, final exam grades, and final course grades by decreasing cognitive load and reducing ambiguity (Duncan et al., 2012; Rockinson-Szapkiw & Wendt, 2015; Strang, 2013). A study recently investigated by Lakhal et al. (2020) revealed that synchronous hybrid learning provided adequate academic and social integration when instructors utilized appropriate pedological strategies to meet students' individual needs. This flexibility and social integration allowed for academic instruction to continue with synchronous hybrid learning, as it supported North Carolina public elementary schools to allow students and parents the option of learning face-to-face or online in the 2020-2021 school year during the COVID-19 pandemic (Dorn et al., 2020; Lakhal et al., 2020).

Economic benefits of synchronous hybrid learning include the capability of

education institutions to increase student enrollment and student-teacher ratio without increasing institution costs (Wang et al., 2018). Students can benefit financially from attending synchronous hybrid classes to eliminate transportation costs related to traveling to a face-to-face classroom setting (Dey & Bandyopadhyay, 2019; Wang et al., 2018).

Challenges of Synchronous Hybrid Learning

Synchronous hybrid learning has challenges for students and teachers. In a cross-case analysis, seven studies involving synchronous blended learning, otherwise known as synchronous hybrid learning, in university settings were analyzed (Bower et al., 2015). The cross-case analysis reported challenges of synchronous hybrid learning from the teacher perspective to include performing multiple roles while providing instruction (Bower et al., 2015). Such roles included presenting academic content while acting as a facilitator, engaging students face-to-face and online, monitoring progress of both student groups, and simultaneously providing immediate feedback to face-to-face learners and online learners (Bower et al., 2015; Wang et al., 2018). Previous studies have also found that synchronous hybrid learning course designs require more physical and social preparation than courses delivered in a single mode (Zydney et al., 2019). The lack of professional development provided to train teachers to effectively plan for lessons warranted them to feel unsupported by institutional leaders, resulting in a decline in teacher efficacy (Lakhal et al., 2021). Furthermore, a teacher's lack of training and level of technology skills may hinder the quality of instruction that is received by the online student (Lakhal et al., 2021).

Challenges of synchronous hybrid learning from the perspective of students may include a feeling of isolation and exclusion from their peers as they are physically

separated from the class (Cunningham, 2014). According to Lakhal et al. (2021), educational institutions must provide students with the proper technology resources for synchronous hybrid learning to be a success. When online learning platforms are not user-friendly, students can become frustrated and miss educational opportunities that their face-to-face counterparts are experiencing (Lakhal et al., 2021). If an instructor must stop class to troubleshoot a technical issue for an online student, instruction comes to a halt, and momentum is lost (Lakhal et al., 2020). Lags in instruction for online students may cause barriers between online students and face-to-face students, which can hinder student participation in class (Wang et al., 2018).

Chapter 2 Summary

The transformative learning theory framework drives how teachers perceive the effectiveness of components in a learning environment in relation to student achievement (WGU, 2020). Their reflection leads to manipulation of the environment and people within it to increase student performance (Habermas, 1981; Mezirow, 1997). As teachers self-reflect to cultivate a perception of student academic performance, they transform as educators. Whittle et al. (2018) found that the following factors influenced teacher perceptions of efficacy in influencing positive academic achievement: content knowledge, expectations for their students, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction. Teacher perspectives on learning programs motivated teacher lesson planning and determined how well they executed the lessons (Whittle et al., 2018).

Before March 16, 2020, North Carolina public school teacher perceptions of their capability to provide adequate instruction to meet the needs of their students with the use

of technology were positive. In fact, according to NCTWCS (2020), more than three fourths of the teachers agreed that working conditions were sufficient in promoting a work environment that supported instructional practices for improved academic performance. NCTWCS also showed that 75% of teachers felt they had sufficient training to fully utilize instructional technology. In that respect, technology was integrated into adjunct mode online learning to enhance the traditional setting of a face-to-face classroom (Harasim 2012); however, teacher efficacy declined as teacher perceptions of providing instruction changed overnight due to a worldwide pandemic. On March 16, 2020, the use of technology in the elementary classroom quickly evolved when Governor Cooper issued Executive Order No. 117 (2020), requiring public schools to close and instruction to take place online. Instantaneously, teachers had to change their instructional strategies and mode of teaching with the use of technology, as it transitioned from adjunct mode online learning in a traditional setting to distance learning with students joining class from home. In August 2020, teachers transitioned from distance learning to blended learning, where half of their students were taught new knowledge in the traditional face-to-face setting while the other half worked asynchronously at home. Groups rotated settings every other day of the week. Then, on October 5, 2020, Governor Cooper lifted the stay-at-home order for students in elementary schools, allowing them to return to the traditional face-to-face educational setting (WECT Staff, 2020). Regarding returning to the traditional setting, and in light of the health concerns over COVID-19, Governor Cooper allowed parents to choose to send their children to school face-to-face or remain learning from home through remote learning (WECT Staff, 2020). Once again, teachers quickly transformed their classroom environments to support synchronous

hybrid learning where they simultaneously instructed face-to-face and online students.

Currently, there is a lack of research pertaining to synchronous hybrid learning for students and teachers in elementary schools. I examined elementary teacher perceptions of synchronous hybrid learning in a rural elementary school. I investigated teacher perceptions of how effective synchronous hybrid learning was implemented during the 2020-2021 school year; teacher perceptions of the elements that were missing and are needed to improve the synchronous hybrid learning experience for teachers and students; and teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools, including what district leaders, administrators, and instructional coaches can do to support teachers. Hopefully, this research will be used as a resource to inform educational leaders about the benefits and challenges of synchronous hybrid learning environments in elementary schools. In turn, the results will provide educational leaders with strategies to improve the synchronous hybrid learning environment.

Chapter 3 comprises an explanation of the qualitative phenomenological research methodology used to conduct the study. I describe five elementary school teachers' experiences of synchronous hybrid learning in a rural setting (Creswell & Creswell, 2018). Chapter 3 also includes the methods, researcher's role, participants, data collection, and data analysis found in the study.

Chapter 3: Methodology

A qualitative approach was used for this phenomenological study (Izzo, 2019). The purpose of this phenomenological study was to describe teacher experiences as they transitioned from traditional face-to-face instruction to providing instruction to both face-to-face learners and distance learners simultaneously (Creswell & Creswell, 2018). To be specific, this study aimed to explore teacher perceptions of synchronous hybrid learning in a rural elementary school. A phenomenological research methodology is designed to help researchers understand the experiences of several individuals experiencing the same phenomenon (Creswell & Creswell, 2018). Through a phenomenological research methodology, researchers gain understanding of each participant's individual and shared experiences (Izzo, 2019). A phenomenological semi-structured interview was considered the most appropriate means through which to answer the research questions pertaining to this study (Padilla-Diaz, 2015). Since trends in education have been pushing towards utilizing technology as a means for providing classroom instruction, synchronous hybrid learning has become an integral part of effective teaching strategies to meet the needs of face-to-face students and distance learners at the same time. A phenomenological study can inform researchers on teacher perceptions of their experiences with teaching in a synchronous hybrid learning environment in a rural elementary school (Padilla-Diaz, 2015).

The study was designed to analyze the answers to the following questions:

1. What are teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the 2020-2021 school year?
2. What are teacher perceptions of elements needed to improve the synchronous

hybrid learning experience for teachers and students?

3. What are teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches can do to support teachers?

The use of a quantitative survey research approach to investigating teacher perceptions of synchronous hybrid learning in a rural elementary school was omitted. I believed a numeric description of trends, attitudes, or opinions of a group of teachers would not be as informative as asking open-ended questions in interviews with a phenomenological research design (Creswell & Creswell, 2018). Instead, a phenomenological semi-structured interview with open-ended questions and answers allowed me to capture the universal essence of the study (Creswell & Poth, 2018).

Research Design

A qualitative research design has the capability to explore the perceptions and experiences of elementary school teachers concerning synchronous hybrid learning in rural elementary school classrooms. Creswell and Poth (2018) defined qualitative research as a situated activity that locates the observer in the world. Qualitative research allows the researcher to study people or things in their natural setting, in an attempt to make sense of, or interpret, a phenomenon in terms of the meanings people bring to them (Denzin & Lincoln, 2011). Based on the research questions I investigated, I captured teacher perceptions of teaching in a synchronous hybrid learning environment in a rural elementary school through explicit interview questions associated with those experiences (Creswell & Poth, 2018). This qualitative research provides insight into teacher perceptions of synchronous hybrid learning in a rural elementary school with the use of a

phenomenological study (Creswell & Poth, 2018). Creswell and Poth described a phenomenological study as a common meaning or "essence" for several individuals based on their lived experiences of a phenomenon. The primary purpose of a phenomenological study is to "reduce individual experiences with a phenomenon to a description of the universal essence" (Creswell & Poth, 2018, p. 75).

Research on teacher perceptions of synchronous hybrid learning among adults is limited because the phenomenon is a recent pedagogical development in secondary education, beginning in 2015 (University of the Fraser Valley, 2018). Moreover, there is a gap in current research of the topic at the elementary school level. The focus of this study describes the essence of "what" the teachers experienced as they provided synchronous hybrid learning strategies to elementary students and "how" they experienced it. The phenomenological approach utilized by me is a hermeneutical study, otherwise known as a descriptive phenomenological study (Creswell & Poth, 2018). I investigated experiences that elementary teachers had in common as they lived through the experience of teaching in a synchronous hybrid learning environment (Creswell & Poth, 2018; Padilla-Diaz, 2015). In addition, perceptions of how effective the implementation of synchronous hybrid learning was, elements needed for a successful implementation, and lessons learned from their experiences were investigated. Participant input was used to create an instructional support system for elementary school teachers providing instruction in a synchronous hybrid learning environment. In order to conduct the study, I chose participants using Patton's (1990) purpose sampling, in order to focus on common meanings and create underlying themes attributed to the phenomenon being studied.

Participants

The elementary school chosen for this study is in a North Carolina rural school district. The school district has a total student population of 5,714 pupils. There are 11 elementary schools, three traditional middle schools, three traditional high schools, one middle and high alternative school, and one early college high school. The school district lies over 456 square miles and is surrounded by the Sauratown Mountains. The elementary school included in the study has a total of 207 students in kindergarten through fifth grade. Economically disadvantaged students make up 66.1% of the student population. Approximately 35% of students are African American, 10% are Hispanic, and 55% are Caucasian. Average minority percentages are high in this elementary school, compared to the county's total population averages of 4.1% African American, 3.3% Hispanic, and 93.7% Caucasian. I included elementary teachers from this school to participate in the study because they provided instruction to a diverse student population while sharing one educational phenomenon.

The participants included in the semi-structured interview for this study included a purposive sampling of five elementary teachers within the rural elementary school chosen by me (Padilla-Diaz, 2015). I selected each of the participants based on the following criteria: They were assigned to the same school, they had no experience teaching distance learners prior to the pandemic, and they taught in a synchronous hybrid learning environment during the 2020-2021 school year. The elementary school teachers selected for the study taught in different grade levels and included an academically or intellectually gifted (AIG) teacher and an exceptional children (EC) teacher. My goal was to have full participation from the selected participants to help me understand the essence

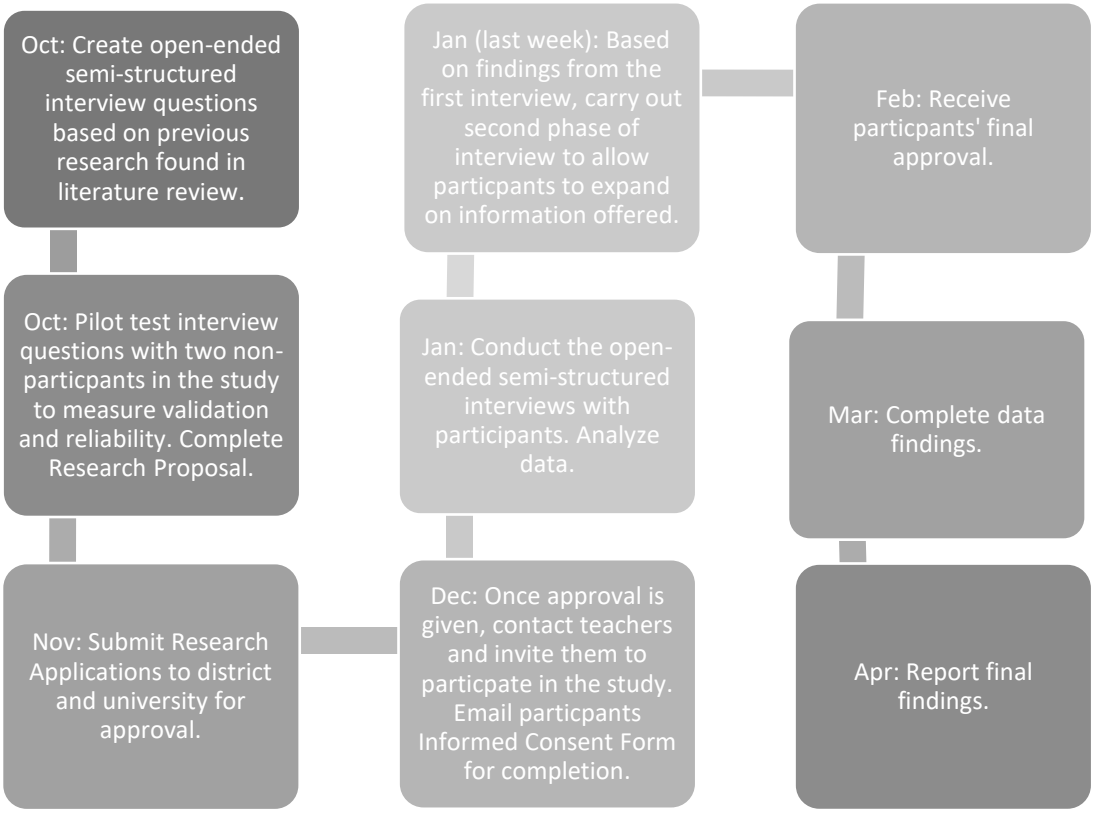
of the phenomenon (Padilla-Diaz, 2015).

Procedures

Several steps were taken prior to collecting data for this research study. To begin, I met with the superintendent to receive permission to conduct the study using an elementary school within his assigned school district (see Appendix B). Then I met with the chief academic officer for the district to discuss the research plan and the viability of the study. They created a timeline to ensure that data collection would not interfere with regular school procedures and teacher obligations. Next, I consulted with my dissertation chair to schedule a meeting with the dissertation committee. I measured the validity and reliability of the semi-structured interview questions by conducting a pilot test interview with two educators not participating in the study (Gani et al., 2020). Afterward, I obtained validation of the interview questions and permission from the Gardner-Webb University Institutional Review Board (IRB) to conduct the study. Once the IRB permitted me to investigate the study, I requested and received consent from the participants in the study by sending an electronic form of the IRB Letter of Consent Form (Appendix C) along with a recruitment letter (Appendix D) through email. Figure 2 represents the procedures from generating the interview questions to reporting the data findings.

Figure 2

Procedures Flowchart



As noted in Figure 2, the research procedure began with creating and validating the reliability of the open-ended, semi-structured interview questions. Teachers then were contacted through email, and consent was received from the participants in the study. Next, Phase 1 interviews were conducted, and follow-up interviews were completed to allow participants to expand on their experience. Afterward, I received the participants' final approval for their interview findings. I analyzed the data and reported the results to the participants and the superintendent of the study school (Gani et al. 2020).

Instrumentation

I utilized the instrument most used to collect data in a qualitative phenomenological study, a semi-structured interview with open-ended questions (Padilla-

Diaz, 2015). The semi-structured interview allowed for participants in this study to represent their reality as experienced with the phenomenon in detail (Padilla-Diaz, 2015). An effort was made to choose participants with purposive sampling to ensure commonalities in school assignment, lack of experience teaching distance learners prior to the pandemic, and teaching assignment in a synchronous hybrid learning environment during the pandemic (Creswell & Poth, 2018). Interview questions were predetermined concerning teacher perceptions of teaching before and during 1 year of synchronous hybrid learning in a rural elementary school. A question was asked to capture teacher beliefs on what district and school leaders can do to improve support systems for elementary teachers providing synchronous hybrid instruction to students. Finally, participants were asked if they have additional comments or advice they would like to share that would benefit the study.

Phase 1: Interview Questions

Interview questions were asked to gain understanding of teacher perceptions of providing instruction in a traditional setting prior to changes made in education due to the pandemic. Participant responses allowed me to analyze transformative learning that took place throughout the experience. The participants were originally going to be asked the following questions:

1. Describe the perception that you had about your ability to teach in a rural elementary school before the pandemic? You may include your perception of self-efficacy with:
    - Content knowledge
    - Student expectations

- Enthusiasm and passion
- Ability to select appropriate methodologies
- Use of reflective practices

2. Describe the utilization of technology in your instructional practices prior to the pandemic?
3. Describe the perception that you have about your ability to teach in a rural elementary school during the pandemic? You may include your perception of self-efficacy with
    - Content knowledge
    - Student expectations
    - Enthusiasm and passion
    - Ability to select appropriate methodologies
    - Use of reflective practices
4. Describe the utilization of technology in your instructional practices during the pandemic?
5. What is your perception of how effective synchronous hybrid learning was implemented in the 2020-2021 school year?
    - What are the benefits?
    - What are the challenges?
6. What are your perceptions of the elements that are missing to improve the synchronous hybrid learning experience for teachers and students?
7. What is your perception of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators,

and instructional coaches do to support teachers?

8. Do you have additional comments that you would like to share with the researcher?

Phase 2: Verify Interview Information

A second interview session was conducted for me to verify the information obtained in the first phase of interviews (Padilla-Diaz, 2015). During this session, participants were given the opportunity to expand on information previously offered.

Phase 3: Approval

I shared the compiled information obtained from Phase 1 and Phase 2 of the interview process. Participants were given the opportunity to approve the analysis and final report.

Data Collection and Analysis

Data collection processes vary among methods used to gather and measure information based on interests (Office of Research Integrity, n.d.). Data collection is established systematically to "answer research questions, test hypotheses, and evaluate outcomes" (Office of Research Integrity, n.d., para.1). Methods chosen to collect and analyze data should maintain accuracy and honesty (Office of Research Integrity, n.d.).

To begin, a pilot test of the interview questions was conducted with two educators to validate the instrument. The two educators in the pilot test interview did not participate in the actual research study. One of the pilot test participants was an African American female second-grade teacher who was experienced in providing instruction to distance learners prior to the pandemic. She currently holds a teaching position at the study school. The other pilot test participant was a Caucasian male district test coordinator

employed in the district of the study school, with no experience in providing instruction to distance learners.

The participants of the pilot test critiqued the interview questions to ensure they were written in a sufficiently clear manner to ensure validity and allow for reliable data. They suggested I omit the following:

Interview Question 1: You may include your perception of self-efficacy with

- Content knowledge
- Student expectations
- Enthusiasm and passion
- Ability to select appropriate methodologies
- Use of reflective practices

Interview Question 3: You may include your perception of self-efficacy with

- Content knowledge
- Student expectations
- Enthusiasm and passion
- Ability to select appropriate methodologies
- Use of reflective practices

Interview Question 5: Describe

- What are the benefits?
- What are the challenges?

This content was removed from the interview questionnaire in order to ensure that I submitted to “bracketing” and refrained from guiding participant answers to sync with previous research found on the study’s topic (Husserl, 1970).

Participants having experienced the phenomenon of teaching in a synchronous hybrid learning environment in a rural elementary school were selected and interviewed for the study. Participants were interviewed individually during a recorded Google Meet session, so I could review the interview as needed. Each participant was familiar with the Google Meet platform because it was used to provide instruction to their distance learners during the pandemic. During the interviews, I submitted to bracketing, in which personal experiences and attitudes were set aside while the phenomenon was being investigated (Husserl, 1970). I conducted interviews with five participants who were experienced in synchronous hybrid learning in a rural elementary school. I used active listening skills and notetaking during the duration of each interview (Bevan, 2014). Questions pertaining to their experience as an elementary teacher providing instruction in a traditional face-to-face setting and a synchronous hybrid learning setting were investigated. Each participant received a transcribed copy of their interview for their review.

A second interview was scheduled. During the second interview, each participant had the opportunity to make additional comments to each question they answered in the first interview. They also had the opportunity to share additional information with me during this time. Each participant received an updated version of their transcribed interview by email (Izzo, 2019). I "analyzed the data and highlighted significant statements, sentences, or quotes that provide an understanding of how the participants experienced the phenomenon" (Creswell & Poth, 2018, p.105). Themes were generated from the analysis of significant statements to develop textural and structural descriptions with the assistance of the MAXQDA Analytics Pro software (Creswell & Poth, 2018). The common experiences heard in each of the participants' interviews became the

essence or common descriptor of the study (Creswell & Poth, 2018). Afterward, a third conference was scheduled for participant approval of the final report (Izzo, 2019). The understanding of the essence of the phenomenon experienced was written and compared with previous research (Creswell & Poth, 2018).

Validity and Reliability

Preventative measures established to ensure validity and reliability of the study by engaging two validation strategies were conducted as suggested by Creswell and Poth (2018). First, I made use of a variety of resources to provide corroborating evidence to introduce an idea or perspective (Carter et al., 2014). As data were collected, I coded the information to find common themes within the interview responses and provided validation to their findings (Creswell & Poth, 2018). The MAXQDA Analytics Pro software was used by me to organize and decode themes threaded throughout participant interviews. Next, I ensured the validity of the study by receiving approval of the credibility of the interpretations of participant responses and findings (Bazeley, 2013). In this case, the participants played a major role in confirming how well the data interpretation represented their experiences (Hayes & Singh, 2012). I assessed and reported the essence or findings interpreted in the patterns of the codes.

Chapter 3 Summary

This study investigated perceptions of teachers providing instruction with synchronous hybrid learning strategies in a rural elementary school. The perceptions of elementary teachers were analyzed to shed a light on elements needed to improve learning experiences for teachers and students in a synchronous hybrid learning environment. In the chapters that follow, I share the findings that were analyzed and

documented. Chapter 4 investigates the research questions with the research design, and I provide an in-depth account of the findings of the study. Chapter 5 is a summary of the study; additional analysis of the findings is included, and I make comparisons to studies discussed in the literature review.

Chapter 4: Results

The results acquired from the research study, as well as a summary of the findings, are presented in this chapter. The purpose of the study, description of the participants, research questions, and research design are reviewed before reporting pertinent findings of this study.

Purpose of the Study

The purpose of this study was to investigate elementary teacher perceptions of synchronous hybrid learning in a rural elementary school. Currently, there is limited research conducted on adult students learning in a synchronous hybrid learning environment and even less research available pertaining to students in kindergarten through fifth grade. I provide previous research on the role of teacher perceptions in education, discuss the evolution of technology as an instructional tool in the learning environment, define synchronous hybrid learning, describe how it is evolving, and provide strategies currently used to deliver synchronous hybrid instructional lessons. Conducting semi-structured interviews with teachers who implemented synchronous hybrid learning in a rural elementary school during the 2020-2021 school year allowed me to gain knowledge of teacher perceptions of synchronous hybrid learning. Investigating teacher perceptions of teaching in a synchronous hybrid learning environment, teacher perceptions of elements needed to provide quality instruction to synchronous hybrid learners, and teacher perceptions of lessons learned to improve synchronous hybrid learning at the elementary level can provide guidance to district leaders, school-level leaders, and instructional coaches in planning and providing meaningful professional development to elementary teachers within the school district.

Description of the Participants

The elementary school chosen for this study is in a rural school district in the state of North Carolina. The school district has a total student population of 5,714 pupils. Spread over 456 square miles, there are 11 elementary schools, three traditional middle schools, three traditional high schools, one middle and high alternative school, and one early college high school. The research took place in one of the rural elementary schools within the district. I included elementary teachers from this school to participate in the study due to them providing instruction to a diverse student population while sharing the educational phenomenon of providing synchronous hybrid instruction during the 2020-2021 school year. There are 207 kindergarten through fifth-grade students enrolled in the study school. The school employs 10 regular education teachers, one EC teacher, one English language teacher, one speech pathologist, and four encore teachers. Table 2 provides the demographic statistics of the study school.

Table 2

Demographics of Study School

Demographics	County-wide	Study school
African American	4.1%	35%
Hispanic	3.3%	10%
Caucasian	93.7%	55%

In the study school, approximately 35% of students are African American, 10% are Hispanic, and 55% are Caucasian. Average minority percentages are high in this elementary school, compared to the county's total population averages of 4.1% African American, 3.3% Hispanic, and 93.7% Caucasian. In addition, economically disadvantaged students make up 66.1% of the student population.

The participants included in the semi-structured interview for this study included a purposive sampling of five elementary teachers within the rural elementary school (Padilla-Diaz, 2015). I selected each of the participants based on the following criteria: They worked at the same school, they had no experience teaching distance learners prior to the pandemic, and they taught in a synchronous hybrid learning environment during the pandemic. The elementary school teachers selected allowed me to gain an understanding of teacher perceptions from a variety of grade levels and an AIG teacher and EC teacher. My goal was to have full participation from the participants to help me understand the essence of the phenomenon (Padilla-Diaz, 2015).

Of the 17 teachers and specialists assigned to the study school, five teachers with the criteria needed to conduct the investigation volunteered and were selected to participate in the study. Each participant was assigned to the study school during the 2020-2021 school year. All participants lacked professional development and experience teaching distance learners prior to the pandemic. Each participant taught in a synchronous hybrid learning environment in a rural elementary school during the pandemic in the 2020-2021 school year. Table 3 gives detailed attributes and teaching assignments of the participants during the 2020-2021 school year.

Table 3

Attributes and Teaching Assignments of the Research Participants

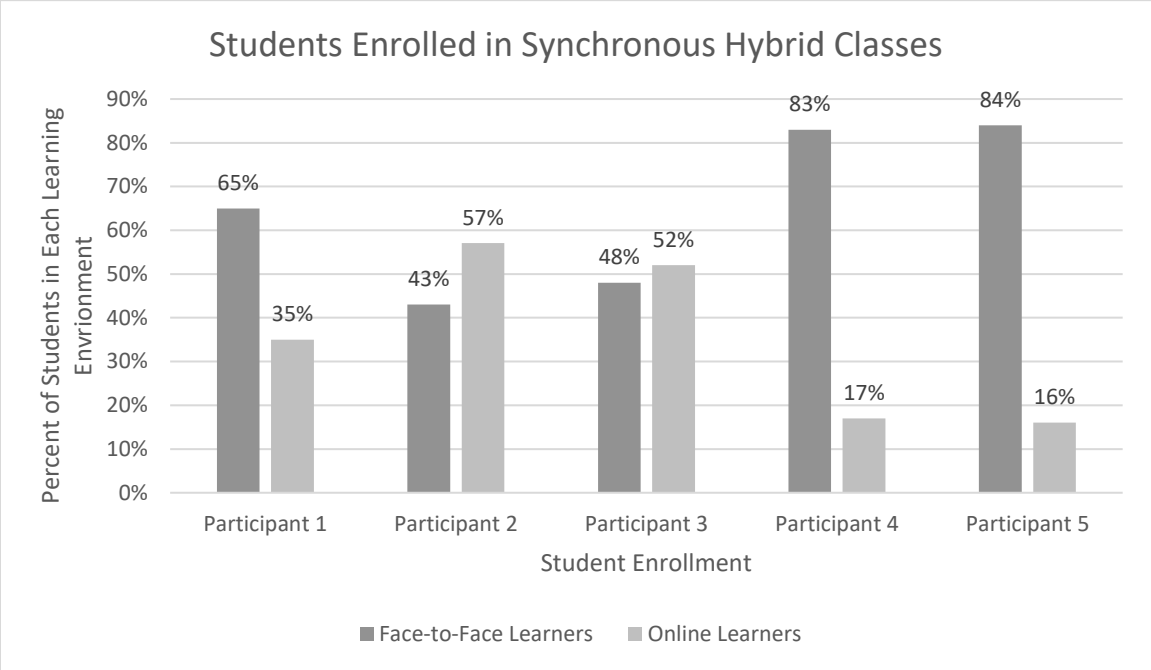
Participant	Number of years in education	Number of years teaching at study school	Teaching assignment in 2020-2021	Number of students enrolled in class	Number of face-to-face students in 2020-2021	Number of distance learners in 2020-2021
1	13	13	First grade/second grade combination	19	13	7
2	27	5	Third grade	21	9	12
3	7	7	Second grade	23	11	12
4	24	24	Fourth/fifth grade combination including AIG students	24	Fluctuated between 0 and 20	Fluctuated between 4 and 24
5	17	2	Kindergarten through fifth-grade EC students	25	21	4

The participants were all career-status teachers, with experience in education ranging from 7 years to 27 years. Years employed at the study school range from 2 years to 24 years. All participants in the study were Caucasian. There were four female participants and one male participant, which was to be expected, since elementary schools are predominantly female, according to the National Center for Education Statistics (2021). During the 2020-2021 school year, one participant taught a first- and second-grade combination class, one taught a second-grade class, one taught a third-

grade class, one taught a fourth- and fifth-grade combination class as well as the fourth- and fifth-grade AIG students, and one teacher taught the EC students, which included kindergarten through fifth grades. The approximate percentages of the number of face-to-face learners compared to the number of distance learners in each of the participants' classes are shown in Figure 3.

Figure 3

Learning Environment of Students Enrolled in Participant Classes



Participant 1 had twice as many face-to-face learners as distance learners. Participants 2 and 3 had approximately half the number of enrolled students learning face-to-face and half learning online. The number of face-to-face and distance learners in the class belonging to Participant 4 fluctuated throughout the year. At the beginning of the year, all 24 students were distance learners. As the year progressed, students transitioned to face-to-face learning in the traditional setting. At the end of the 2020-2021 school year, only four of 24 students remained distance learners. Participant 5 had

approximately one fifth of their students participating in distance learning, compared to face-to-face learning.

Research Questions

By means of this study, trends in teacher perceptions of synchronous hybrid learning in a rural elementary school were investigated through the point of view of five elementary school teachers. All five teachers taught in a synchronous hybrid learning environment during the 2020-2021 school year in the same rural elementary school. The study investigated trends among the five participants in their perceptions of how effectively synchronous hybrid learning had been implemented during the 2020-2021 school year; the elements that were missing to improve the synchronous hybrid learning experience for teachers and students; lessons learned to improve synchronous hybrid learning in elementary schools; and the things district leaders, administrators, and instructional coaches could do to support teachers. Participants in this study participated in an interview including eight questions to help me understand the essence of the phenomenon (Padilla-Diaz, 2015).

Three research questions were used to frame and create the eight interview questions asked to each participant. Answers to the interview questions were analyzed and used to find trends within the study. The research questions used to guide this study were as follows:

1. What are teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the 2020-2021 school year?
2. What are teacher perceptions of elements needed to improve the synchronous hybrid learning experience for teachers and students?

3. What are teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers?

The eight questions that were asked during the interview to support the research questions are listed below:

1. Describe the perception that you had about your ability to teach in a rural elementary school before the pandemic.
2. Describe the utilization of technology in your instructional practices prior to the pandemic.
3. Describe the perception that you have about your ability to teach in a rural elementary school during the pandemic.
4. Describe the utilization of technology in your instructional practices during the pandemic.
5. What is your perception of how effectively synchronous hybrid learning was implemented in the 2020-2021 school year?
6. What are your perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students?
7. What is your perception of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers?
8. Do you have additional comments that you would like to share with the researcher?

Overview of Interview Responses

The five teachers who participated in the study answered all eight open-ended questions in the interviews with a phenomenological research design (Creswell & Creswell, 2018). The phenomenological semi-structured interviews included open-ended questions and answers to allow me to capture the universal essence of the study (Creswell & Poth, 2018).

During Phase I of the interview process, I recorded the responses to the interview questionnaire. I then transcribed each of the participants' responses from the recorded interview (see Appendix E). During Phase 2 of the interview process, each participant of the study received a copy of their transcribed interview. Responses were discussed and expanded upon (Padilla-Diaz, 2015). One participant requested that additional comments be added to the final question, "Do you have additional comments that you would like to share with the researcher?" The participant wanted to further explain the need for lessons on social media etiquette to protect students from cyberbullying since the public school system was providing every student with a technology device. According to this participant, social media cyberbullying had increased since technology was being utilized more often for learning. After adjusting the transcriptions, I coded the transcribed responses according to keywords associated with previous research and phrases used to answer the questions (see Appendix F). Table 4 displays the frequency in which themes were coded during the interviews among the five participants using the MAXQDA Analytics Pro software program (2022).

Table 4

Code Frequency Table of Emerging Themes

Parent code	Code	Coded segments (all documents)
Technology		18
Distance Learning/Remote Learning	Relationship with Students	3
Technology	Pre-pandemic Usage	10
Technology	Supplement	5
Technology	Procedures	5
Technology	Activities	12
Face-to-Face Learning	Hands-on activities	5
Face-to-Face Learning	Relationship	1
Distance Learning/Remote Learning		7
Teacher Perception		11
Pre-pandemic	Positive	10
Pre-pandemic	Negative	0
Teacher Perceptions	Pre-pandemic	5
Teacher Perceptions	Pandemic	3
During Pandemic	Positive	2
During Pandemic	Negative	7
Synchronous Hybrid Learning	Benefits	0
Synchronous Hybrid Learning	Challenges	5
Technology	Internet Issues	7
Challenges	Parent/Guardian/Caregivers	12
Parent/Guardian/Caregivers	Lack of training	1
Learning Activities	Synchronous	1
Learning Activities	Asynchronous	1
Equal/Equitable for all students		5
Elements Needed		14
Ways to Improve		15
Class Dynamics		2
Distance Learning/Remote Learning	Effectiveness	5
Technology	Student Participation	1

Note. Source: MAXQDA Analytics Pro, 2022.

Parent codes are the main topics or assignment of codes that participants mentioned in their responses to the interview questionnaire (MAXQDA Analytics Pro,

2022). The codes represent subcodes to the parent codes (MAXQDA Analytics Pro, 2022). The coded segments represent the frequency a particular code or subcode was found in the research documents (MAXQDA Analytics Pro, 2022).

Emerging Themes

I used the codes in Table 4 to generate common themes among participant interview responses to each of the questions in the interview questionnaire. In response to the interview questions, a total of 14 parent codes and 22 subcodes were established. Within the codes, there were nine major themes consistently discussed during the interview sessions with participants. I presented the responses in a narrative form to exhibit how themes were developed. The first two questions provided me with a foundation of participant self-efficacy and use of technology pre-pandemic. Questions 3 and 4 provided me with an understanding of self-efficacy and the use of technology during the 2020-2021 school year. Three questions provided the framework for the study. One question was provided to give participants an opportunity to share additional information related to their experiences with synchronous hybrid learning in a rural elementary school.

Interview Question 1: Describe the Perception That You Had About Your Ability to Teach in a Rural Elementary School Before the Pandemic.

To begin with, I asked each participant, “Describe the perception that you had about your ability to teach in a rural elementary school before the pandemic”; this was asked in order to build a correlation between teacher self-efficacy at the rural elementary school and the 2020 NCTWCS that was taken before the pandemic. Before March 16, 2020, North Carolina public school teacher perceptions of their capabilities to provide

adequate instruction to meet the needs of their students with the use of technology were positive. According to NCTWCS (2020), more than three fourths of the teachers agreed that working conditions were sufficient in promoting a work environment that supported instructional practices for improved academic performance. Table 5 displays the frequency that the participants in the study had positive perceptions about their ability to teach in a rural elementary school prior to the pandemic.

Table 5

Frequency Table of Teacher Perceptions of Ability to Teach Pre-Pandemic

	Frequency	Percentage	Percentage (valid)
Teacher perception	5	100.00	100.00
Pre-pandemic	5	100.00	100.00
Positive	5	100.00	100.00
Documents with code(s)	5	100.00	100.00
Documents without code(s)	0	0.00	-
Analyzed documents	5	100.00	-

Note. Source: MAXQDA Analytics Pro, 2022.

All five participants responded to the question with positive teacher perceptions of self-efficacy. Three of five teachers used the term “confident” to describe the perception they had about their teaching ability. Two of the five teachers mentioned they had the ability to build relationships with their students and understood how to meet their educational needs. Participant 1 described her ability to teach pre-pandemic: “I felt very successful, I felt I had a strong ability to build relationships with my students, understood the different methods that I needed to use to meet them. It was a good feeling.” Participant 2 said, “I felt very confident and secure in teaching.” Participant 3 thought she had “a pretty good handle on what the students needed.” Participant 4 said, “I felt very

solid. I felt good about the teaching and the ability to be creative." Participant 5 stated that she felt "pretty confident."

The responses from Interview Question 1, teacher perceptions about the ability to teach in a rural elementary school before the pandemic, were unanimously positive. To describe their confidence, the following themes were identified: strong relationships with students, providing lessons on individual student needs, and the ability to be creative.

Interview Question 2: Describe the Utilization of Technology in Your Instructional Practices Prior to the Pandemic.

I asked each participant to "describe the utilization of technology in your instructional practices prior to the pandemic" in order to gain an understanding of how technology was being used in their instruction before the pandemic. The participants shared their experiences with technology in an adjunct mode in the classroom to supplement their lessons using learning videos, games, and online programs. All five participants utilized smart boards or interactive boards to deliver instruction to their students. Participant 4 utilized six Chromebook devices to provide leveled reading online learning activities in stations. Participants 3 and 4 stated that technology use before the pandemic was "limited" in their classrooms. Participants 1 and 2 shared concerns related to the idea that elementary-aged students are kinesthetic learners, and the use of technology should be balanced out with hands-on activities.

Common themes discovered while investigating Interview Question 2 included using technology in adjunct mode to supplement and enhance lessons and using technology to support centers or stations. The utilization of technology was limited because the participants felt it should be used in conjunction with hands-on activities.

Interview Question 3: Describe the Perception That You Have About Your Ability to Teach in a Rural Elementary School During the Pandemic.

Participants were asked, "Describe the perception that you have about your ability to teach in a rural elementary school during the pandemic"; this was in order to provide me with an understanding of their self-efficacy for teaching during the 2020-2021 school year. Table 6 replicates the frequency of participant responses.

Table 6

Frequency Table of Teacher Perceptions of Ability to Teach During the 2020-2021 School Year

	Frequency	Percentage	Percentage (valid)
Teacher perceptions	5	100.00	100.00
During pandemic	5	100.00	100.00
Negative	4	80.00	80.00
Positive	2	40.00	40.00
Documents with code(s)	5	100.00	100.00
Documents without code(s)	0	0.00	-
Analyzed documents	5	100.00	-

Note. Source: MAXQDA Analytics Pro, 2022.

Participants 1 and 2 felt that they provided students with engaging activities that met their curriculum requirements but might not have met individual student academic needs. Both participants struggled with technology issues and obtaining full online student participation. Participant 1 mentioned that she felt "pretty good" with the students with whom she had a relationship prior to the 2020-2021 school year, but it was difficult to meet individual student needs for those with whom she did not have a prior relationship. Participants described their teaching ability as "difficult and limited." Participant 4 said their experience teaching during the 2020-2021 school year was like

"an engine that seized up and you can't even go anywhere. It was evident that I needed more technology. I wished I had been using it more in the classroom."

Challenges the participants met while providing instruction to students in a rural elementary school included lack of opportunity to set rules and procedures with distance learners; limited internet access for students; lack of proper internet speeds; lack of parent/guardian home support; varied parent schedules, which made it difficult to schedule time with students; students not being familiar with the Chromebook; and the fact that teachers and students were learning together.

For Interview Question 3, the main theme detected in participant responses to their perceptions of ability to teach in a rural elementary school was that it was difficult and limited when beginning a new school year in a synchronous hybrid learning environment. Reasons for the difficulty in teaching during the pandemic included insufficient internet access and speed, unfamiliarity with how to use technology provided to the students, and lack of parent/guardian support.

Interview Question 4: Describe the Utilization of Technology in Your Instructional Practices During the Pandemic.

I asked participants to describe the utilization of technology in their instructional practices during the pandemic in order to understand the transformation of the use of technology in the elementary classroom during the 2020-2021 school year. All five participants moved from an adjunct mode of technology instruction that was used to supplement and enhance lessons to using technology as a primary mode of instruction. Participant 1 described the experience as "the sole way of teaching students. Technology was used for producing the lesson, for first introducing the lesson, and for students to

share their work with me that they have done after the lesson." Each of the participants used the platform, Google Classroom, to house their assignments for both face-to-face learners and distance learners. Participant 4 shared their experience with technology in relation to the online classroom platform in describing its use to build "cohesion and structure for the students and to myself for planning." The teachers provided asynchronous and synchronous learning activities to keep distance learners engaged in the same activities as their face-to-face peers. Participant 3 utilized programs to turn worksheets they used in the classroom into workable online documents as well as to turn online documents into activities that the students could use in the classroom. The key for Participant 4 was finding quality online tools and programs to use. Participant 5 summed up her use of technology as "vast." She stated that she "relied on technology a lot in order to create an interactive environment."

For Interview Question 4, the theme most observed within participant responses to describe the utilization of technology in instructional practices during the pandemic was the transformation of utilizing technology in adjunct mode to using technology as the primary mode of instructional delivery and communication. As participants expanded on the utilization of technology, they discussed technology used to plan lessons, to provide learning activities, to create a virtual classroom structure, and to allow for an interactive learning environment.

The participants were asked Interview Questions 5, 6, and 7 to guide me in the investigation of teacher perceptions of synchronous hybrid learning in a rural elementary school. The three research questions were used to shape and frame the context of the study.

Interview Question 5: What is Your Perception of How Effectively Synchronous Hybrid Learning was Implemented in the 2020-2021 School Year?

I posed the question, "What is your perception of how effective synchronous hybrid learning was implemented in the 2020-2021 school year," in order to gain an understanding of the effectiveness of synchronous hybrid learning according to participant experiences of teaching students in a rural elementary school during the 2020-2021 school year. Table 7 shows the frequency with which issues were discussed during participant interview responses for the question.

Table 7

Frequencies of Issues Interfering With Effective Synchronous Hybrid Learning

	Frequency	Percentage	Percentage (valid)
Activities	5	100.00	100.00
Parents/guardians/caregivers	4	80.00	80.00
Procedures	4	80.00	80.00
Challenges	3	60.00	60.00
Internet issues	3	60.00	60.00
Effectiveness	2	40.00	40.00
Relationship with students	2	40.00	40.00
Equal/equitable for all students	2	40.00	40.00
Student participation	1	20.00	20.00
Lack of training	1	20.00	20.00
Documents with code(s)	5	100.00	100.00
Documents without code(s)	0	0.00	-
Analyzed documents	5	100.00	-

Note. Source: MAXQDA Analytics Pro, 2022.

Each of the participants in the study stated that the quality of effectiveness of the implementation of synchronous hybrid learning during the 2020-2021 school year was "limited," or, as Participant 4 put it, "haphazard." The participants felt they did the best they could with what they had, but the distance learners (remote learners) were not as

successful as face-to-face learners because of the inability to participate in class meets and complete assigned activities. Four of the five participants noted that the parents/ guardians/caregivers who were with distance learners during the school day contributed to the effectiveness of the implementation of synchronous hybrid learning. Participant 1 stated, “A lot of elementary school students stayed with caregivers during the school day. Oftentimes, it was a grandparent who was unable to help their student get on to the internet or use their Chromebooks effectively.” Participant 4 noted, “students at home had parents with varying spectrums of ability to assist their students with online participation and assignments.” The participant had students with “parents who weren’t helping at all, or children with grandparents who couldn’t help, to parents who were doing all the work for the children.” Parents with multiple elementary students had a tough time keeping up with different class schedules, just as parents working from home did not have sufficient time to help their students. Participant 2 said, “You cannot totally rely on the computer or the person on the computer to teach a student. The students need hands-on instruction, especially in elementary school.” This participant found that students who returned to the traditional face-to-face learning environment did three to four times better than those who remained distance learners (remote learners).

Participants struggled with setting up classroom procedures to support clear student expectations because teachers were responsible for teaching two classroom settings at the same time. Participant 5 said, “with kids at home and in the classroom, it was too difficult to keep everyone in an activity at the same time.” Participant 3 felt that “the rules were different, and consequences were different. Online students needed to be much more responsible and diligent about their work, and without constant supervision,

most students strayed from their work." Participants felt that their own attention was "diverted" in different ways during a lesson, causing both face-to-face students and online students to lag behind.

Another issue causing synchronous hybrid learning to be less effective than what was desired was lack of internet access for some students. It was noted by Participant 1 that "a lack of internet access was not necessarily a poverty issue; it was due to living in a rural area where internet services were unavailable in some locations." Participant 1 saw the lack of internet services as symptomatic of unequal and inequitable educational opportunities for some students.

For Interview Question 5, which covered participant perceptions of how effective synchronous hybrid learning was implemented during the 2020-2021 school year, themes discussed among participants included a limited ability to provide instruction to distance learners, the lack of distance learning support from an adult at home, the lack of hands-on experiences with instruction, the struggle to create a structured learning environment, and the lack of adequate internet access to students in all living locations.

Interview Question 6: What Are Your Perceptions of Elements Missing That Are Needed to Improve the Synchronous Hybrid Learning Experience for Teachers and Students?

I asked the question, "What are your perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students?" This was in order to attain awareness of the elements needed to improve the synchronous hybrid learning experience for teachers and students. The most common theme discussed with all five participants in the interviews pertaining to Interview

Question 6 was providing a trained adult to work with the distance learners. The participants agreed that an educator solely assigned to distance learners was needed for synchronous hybrid learning to be successful, but this was not available at the study school. Instead, teachers relied on parents and caregivers to fill in the gap. Participants said that parents and caregivers needed to receive specialized training on how to utilize technology and online learning programs to support instruction for distance learners. Participants felt that distance learners needed equal opportunities for hands-on learning experiences similar to those practiced by their face-to-face peers that teachers working in a classroom could not provide for them. The participants further agreed that teachers needed to be trained on how to provide quality direct instruction while maintaining equality and equitability among both distance learners and face-to-face learners throughout the school day.

Participants noted that additional elements needed to improve the synchronous hybrid learning experience for teachers and students were comprised of components related to technology and the internet. Elementary students at home needed specialized assistance with technical issues without diverting attention away from the face-to-face learners. Again, an educator assigned solely to distance learners was needed to troubleshoot technical issues without interrupting the instruction of the teacher for the face-to-face students. Participant 5 said,

> In order to be proactive in mitigating potential technical issues, the study school was in need of updated technology including new Chromebooks, updated learning programs, and internet access and speeds that will allow for real-time responses so there is not a lag in responses between teachers and students.

In addition, Participants 3 and 5 included the need for consistent classroom management plans to encourage proper behavior, positive reinforcement, and necessary consequences to support equitable expectations for all students in the synchronous hybrid learning environment. Participant 3 felt that "while both groups of students in a synchronous hybrid learning environment are not learning the same way, distance learners still need to be held responsible as much as the students in person, just maybe in a different way." Participant 5 added, "We need greater parental involvement to make sure that the kids are there and that they're behaving appropriately as if they were in a classroom and not in their homes."

Themes discovered within Interview Question 6, elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students, included a trained adult to work solely with the distance learners, equal opportunities for hands-on learning experiences, the maintenance of equality and equity with face-to-face peers, a technician available to troubleshoot technical issues, and consistent classroom management plans.

Interview Question 7: What is Your Perception of Lessons Learned to Improve Synchronous Hybrid Learning in Elementary Schools; and What Can District Leaders, Administrators, and Instructional Coaches do to Support Teachers?

I asked participants the question, "What is your perception of lessons learned to improve synchronous hybrid learning in elementary school; and what can district leaders, administrators, and instructional coaches do to support teachers?" This was in order to attain knowledge of the benefits and challenges of synchronous hybrid learning and of what support teachers needed to improve the learning environment. When asked

Interview Question 7, participant responses correlated with the previous question, “What are the elements missing that are needed for successful implementation of synchronous hybrid learners in elementary school?” Participants 2 and 3 mentioned that an additional educator and parent engagement were needed to improve synchronous hybrid learning for elementary schools. Participant 2 was adamant in saying that “the parent has to be a teacher too. There’s got to be that hands-on engagement if they’re at home.” The participant went further to say, “Administrators need to provide distance learners with supplies and manipulatives to work with, just as the face-to-face learners have in the traditional classroom.”

Participants 1 and 4 mentioned the need for continued use of an online platform to support synchronous hybrid learning for both groups of students. Participant 1 stated, “Online resources should be researched and provided to teachers to support the lesson’s platforms. In addition, resources should provide easy access to those lessons and should be user-friendly when turning in assignments.” Participant 1 also felt that “district leaders should work with county and town commissioners to figure out ways to get internet access with real-time speed to all students.”

Other ways to improve the synchronous hybrid learning environment in elementary schools were to increase teacher planning time, give distance learners extended time to complete assignments, and lower teacher expectations. Finally, Participant 5 plainly stated, “It has to be either everybody is at home, or everybody is at school. Having just a few kids from your class at home and everybody else in the classroom is impossible.”

Interview Question 7 provided themes relating to lessons learned to improve

synchronous hybrid learning in elementary schools and things that district leaders, administrators, and instructional coaches can do to support teachers. Themes included providing an additional educator to provide instruction and troubleshoot technical issues with distance learners, hands-on resources being sent home for distance learners, continued use of an online platform, and internet access with real-time speed for all students throughout the district.

Interview Question 8: Do You Have Additional Comments That You Would Like to Share With the Researcher?

When asked if participants had additional comments they would like to share with me, one participant reiterated the importance of parental support at home and the need for students to have supplies to allow for hands-on learning activities to supplement online learning activities. Participant 5 felt the urgency to provide professional-led training on providing awareness of social media cyberbullying. The participant found a correlation in an increase of cyberbullying among their students with an increase in use of individually assigned Chromebooks.

Themes derived from Interview Question 8 were the importance of student support at home, the need for schools to provide hands-on resources to supplement online learning, and training on awareness of social media cyberbullying.

Table 8 exhibits themes identified from interviewing rural elementary school teachers about their perceptions of synchronous hybrid learning and displays a summary of correlations between interview questions, research questions, and themes that emerged from participant responses.

Table 8

Correlation Between Interview Questions and Themes

Interview questions	Emerging themes
Interview Question 1: Describe the perception that you had about your ability to teach in a rural elementary school before the pandemic?	• Perception was positive. • Responses used to describe confidence before the pandemic included the following themes: strong relationships with students, provided lessons on individual student needs, and the ability to be creative.
Interview Question 2: Describe the utilization of technology in your instructional practices prior to the pandemic?	• Using technology in adjunct mode to supplement and enhance lessons • Using technology to support centers or stations • Technology was limited because the participants felt that it should be used in conjunction with hands-on activities.
Interview Question 3: Describe the perception that you have about your ability to teach in a rural elementary school during the pandemic?	• Difficult • Limited • Reasons include insufficient internet access and speed, unfamiliarity with how to use technology provided to the students, and lack of parent/guardian support.
Interview Question 4: Describe the utilization of technology in your instructional practices during the pandemic?	• Technology as the primary mode of instructional delivery and communication • Technology used to plan lessons, to provide learning activities, to create a virtual classroom structure, and to allow for an interactive learning environment
Interview Question 5: What is your perception of how effective synchronous hybrid learning was implemented in the 2020-2021 school year?	• Limited ability to provide instruction to distance learners • Lack of distance learning support from an adult at home • Lack of hands-on experiences with instruction • Struggle to create a structured learning environment • Lack of adequate internet access to students in all locations. • Attention diverted between two groups of students
Interview Question 6: What are your perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students?	• Trained adult to work solely with the distance learners • Equal opportunities for hands-on learning experiences • Maintain equality and equity with face-to-face peers. • Technician available to troubleshoot technical issues • Consistent classroom management plans
Interview Question 7: What is your perception of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers?	• Additional educator to provide instruction and troubleshoot technical issues with distance learners • Hands-on resources sent home for distance learners • Continued use of an online platform • Internet access with real-time speed for all students throughout the district

(continued)

Interview questions	Emerging themes
Interview Question 8: Do you have additional comments that you would like to share with the researcher?	• Emphasis in need for student support at home • Need for schools to provide hands-on resources to supplement online learning • Need for training on awareness of social media cyberbullying

Summary of Findings

The theme developed in Interview Questions 1 and 3 was that participant perceptions about their abilities changed from being positive before the pandemic to negative during the pandemic. Before the pandemic, participants felt confident in their relationships with their students, their ability to provide individualized instruction, and their ability to be creative in the classroom. During the pandemic, participants felt their ability to teach was limited. Issues with internet access and speed, lack of professional development and training on how to utilize technology and online resources, along with lack of parent or guardian support at home made implementing individualized and equitable learning opportunities for all students challenging.

Based on Interview Questions 2 and 4, the theme discovered was the utilization of technology transformed from an adjunct mode before the pandemic to the primary mode of instruction during the pandemic. Participants struggled with providing equitable classroom structure, appropriate online resources to support individualized learning, and hands-on learning experiences for distance learners.

Themes that emerged from Interview Question 5 reflected participant perception of how effective synchronous hybrid learning was implemented during the 2020-2021 school year. Participant responses were consistent with the challenges mentioned in Interview Question 4. Themes that surfaced in discussions were limited ability to provide instruction to distance learners, lack of support from parent or guardian, lack of hands-on

experiences for distance learners, struggle to create a structured learning environment, and lack of internet access for some students.

Participant responses in Interview Questions 6 and 7 were consistent with one another. The themes found in the responses to Interview Question 6, participant perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students, included needing a trained adult to work solely with the distance learners, an additional educator or technician at hand to troubleshoot technical issues and provide hands-on resources to support learning activities for distance learners, the maintenance of equity and equality in instructional opportunities for face-to-face learners and distance learners, and consistent classroom management plans for both face-to-face learners and distance learners. Themes established with Interview Question 7, perceptions of lessons learned to improve synchronous hybrid learning in elementary schools and what district leaders, administrators, and instructional coaches can do to support teachers, included some common themes found in the responses to elements missing that are needed to improve synchronous hybrid learning for teachers and students. Common themes included an additional educator to focus on providing instructional and technical support to distance learners and hands-on resources needing to be sent home to support student engagement in learning activities. Other themes discovered within the responses to Interview Question 7 included the need for continued use of an online classroom platform to support instruction and learning resources and access to internet services with real-time speed for all students throughout the school district.

When given the opportunity to share additional information concerning their

experiences with synchronous hybrid learning in a rural elementary school during the 2020-2021 school year in Interview Question 8, participant responses formed the following themes: an emphasis on the need for student support dedicated to online learners, the need for schools to provide hands-on resources for distance learners, and the need for training on awareness of social media cyberbullying.

In Chapter 5, a summary of this research project is discussed, along with a reflection and comparison of the research studies that were discussed in Chapter 2. Furthermore, recommendations for future research are provided.

Chapter 5: Discussion

The purpose of this research study was to gain an understanding of teacher perceptions of synchronous hybrid learning in a rural elementary school. Five teachers assigned to the same rural elementary school participated in a semi-structured interview to share their experiences in providing instruction to students in a synchronous hybrid learning environment. The study revealed the essence of teaching experiences contributed to synchronous hybrid learning as perceived by the teachers participating in the study. The study laid a foundation by gaining knowledge of teacher perceptions of their ability to provide instruction pre-pandemic in a traditional setting, in comparison to their ability to provide instruction amid the COVID-19 pandemic during the 2020-2021 school year. In the same way, the study allowed teachers to share their experiences in the utilization of technology in their instructional practices, both pre-pandemic and during the pandemic. This study provides an understanding of how effective synchronous hybrid learning was implemented in the rural elementary school during the 2020-2021 school year; what elements were missing that are needed to improve synchronous hybrid learning; what lessons were learned to improve synchronous hybrid learning; and what district leaders, administrators, and instructional coaches can do to support teachers.

Three research questions were used to frame and create the eight interview questions that were asked to each participant. Answers to the interview questions were analyzed and used to find trends within the study. The research questions used to guide this study were as follows:

1. What are teacher perceptions of the effectiveness of synchronous hybrid learning implemented in the 2020-2021 school year?

2. What are teacher perceptions of elements needed to improve the synchronous hybrid learning experience for teachers and students?
3. What are teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers?

This chapter includes five sections. The first section consists of a summary of the findings, in addition to a review of the supporting theory discussed previously in the research. The second section examines the implications and recommendations for practice. The third section reviews the delimitations and limitations of the study. The fourth section proposes recommendations for further research. The fifth section presents my reflections and closing views of the study.

Summary and Supporting Theory

By way of this research study, teacher perceptions of synchronous hybrid learning in a rural elementary school were investigated in relation to the 2020-2021 school year amid the COVID-19 pandemic. Findings from this research provide information pertaining to learning environment conditions that educators are facing today and that affect teacher efficacy and student academic growth. This phenomenological study was used to describe teacher experiences as they transitioned from traditional face-to-face instruction to providing instruction for both face-to-face learners and distance learners simultaneously (Creswell & Creswell, 2018). The study helped develop an understanding of each participant's individual and shared experiences with synchronous hybrid learning through the use of a semi-structured interview (Izzo, 2019; Padilla-Diaz, 2015).

Recently in education, there has been a push toward utilizing technology as a

means for providing classroom instruction. Synchronous hybrid learning has become an integral part of effective teaching strategies to meet the needs of face-to-face students and distance learners at the same time. With the changes in instructional practices, teacher perceptions of their abilities to provide quality education changed as transformation in instructional strategies was in demand. The theoretical framework chosen to explore the relationship between teacher perception, changes in the utilization of technology, and the implementation of synchronous hybrid learning was Mezirow's (1997) transformative learning theory. The transformative learning theory framework prompts how teachers perceive the effectiveness of components in a learning environment in relation to student achievement (WGU, 2020). Their reflection leads to manipulation of the environment and the people within it in order to increase student performance (Habermas, 1981; Mezirow, 1997). As teachers self-reflect to cultivate a perception of student academic performance, they transform as educators. In this case, teachers volunteered to become participants in the study and shared their perceptions of teaching in a synchronous hybrid learning environment in a rural elementary school. The participants in the study changed their perceptions of their ability to provide quality education to all their students from a positive one, where they felt confident, to a negative one, where they felt their work was difficult and their ability was limited.

Just as Whittle et al. (2018) proved teacher perception to be an influential factor in student achievement, this study did as well. Participant responses used to describe confidence before the pandemic included the following themes: They had strong relationships with students, lessons on individual student needs were provided, and they had the ability to be creative. Their responses used to describe the causes of their

difficulty and limitations were insufficient internet access and speed, unfamiliarity with how to use technology provided to the students, and lack of parent/guardian support. In the Whittle et al. study results, factors that influenced teacher perceptions in a learning environment that supported positive academic achievement included content knowledge, student expectations, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction. When participants perceived their ability to provide quality instruction as a positive experience, they demonstrated passion and enthusiasm for their students through their strong relationships with students. Their content knowledge, student expectations, ability to select appropriate teaching methodologies, and use of reflective practices to direct instruction were revealed as they provided lessons based on individual student needs and they had the ability to be creative in the classroom.

In the same way, the causes of the participants' difficulties and limitations were due to some of the elements missing that were discussed in the Whittle et al. (2018) study. Insufficient internet access and speed hindered participants' abilities to select appropriate teaching methodologies. Unfamiliarity with the utilization of technology needed to support distance learners during the 2020-2021 school year was due to their lack of content knowledge and their ability to select appropriate teaching methodologies. In addition, the inadequacy of parent/guardian support for their distance learners left participants struggling to provide appropriate student expectations. Participant 2 proclaimed, "Face-to-face learners were three to four times more successful than their distance learner counterparts." Just as stated by Habermas (1981) and Mezirow (1997), participant reflection led to the manipulation of the learning environment and the children

within it to increase student performance.

The primary manipulation created in the learning environment was the utilization of technology. With the need to provide instruction to face-to-face learners and distance learners simultaneously, participants felt the need to provide tech-rich instruction as integrating technology in the classroom increased globally (Maxwell, 2016). Before the pandemic, educators commonly referred to tech-rich instruction as lessons that allowed learners to complete the same task, at the same time, at the same pace, in the same place (Maxwell, 2016). Before the pandemic, participants used computer devices, along with the internet, to support and enhance traditional learning experiences (Maxwell, 2016). Harasim (2012) referred to this type of tech-rich instruction as "adjunct mode online learning" (p. 28) to describe this use of the Internet to enhance traditional face-to-face or distance education. Participant 1 described the use of technology in her instructional practices prior to the pandemic in this manner: "Technology was used to supplement and support the instruction. It was not the main focus." Participant 4 not only used technology in an adjunct mode to support the instruction, but the participant also utilized technology in blended learning (Christensen et al., 2013). Participant 4 established a blended learning environment by providing tech-rich individualized reading activities with the use of online programs in the format of a station rotation (Christensen et al., 2013). Participants agreed that the utilization of technology was limited because they felt it should be used in conjunction with hands-on activities. Participant 2 made this statement concerning tech-rich instruction pre-pandemic: "Elementary students are very much kinesthetic learners. They need to learn hands-on. Technology was in addition to but not the main focus of teaching."

Transformative learning theory was observed as the participants in the study shared their experiences about their perceptions of the effectiveness of components in the synchronous hybrid learning environment in relation to student achievement (WGU, 2020). Their reflection of effectiveness led to the manipulation of the environment and the people within it in order to increase student performance (Habermas, 1981; Mezirow, 1997). The manipulation of the learning environment and the children within it to increase student performance took place when the participants transformed their classrooms into a synchronous hybrid learning environment (Habermas, 1981; Mezirow, 1997) where technology became the primary mode of instructional delivery and communication. According to participant experiences, technology was used to lesson plan, provide learning activities, create a virtual classroom structure, and allow for an interactive learning environment with face-to-face students and distance learners. In fact, Participant 5 stated, “We relied on technology a lot in order to create an interactive experience for students.”

Interview Question 5 (Research Question 1) inquired about participant perceptions of how effective synchronous hybrid learning was implemented in the 2020-2021 school year; this proved to support only the challenges found in previous research. Participants perceived the effectiveness of how synchronous hybrid learning was implemented as limiting. As Bower et al. (2015) described, teachers had to perform multiple roles while providing instruction to two groups of students simultaneously. Such roles included presenting academic content while acting as a facilitator, engaging students face-to-face and online, monitoring progress of both student groups, and simultaneously providing immediate feedback to face-to-face learners and online learners

(Bower et al., 2015; Wang et al., 2017). Previous studies have also found that synchronous hybrid learning course designs require more physical and social preparation than courses delivered in a single mode (Zydney et al., 2019). Participant responses correlated with previous research as they struggled to create a structured learning environment and voiced the need for distance learning support from an additional educator or adult at home. Participant 3 said, “My attention was diverted in different ways during a lesson. And as far as teaching, my workload was much heavier because I was essentially preparing two lessons for each subject.”

Participants attributed the lack of adequate internet access to students in all locations to limited effectiveness in the implementation of synchronous hybrid learning during the 2020-2021 school year. According to Lakhal et al. (2021), educational institutions need to provide students with the proper technology resources for synchronous hybrid learning to be a success. If an instructor must stop class to troubleshoot a technical issue for an online student, instruction comes to a halt and momentum is lost (Lakhal et al., 2020). Lags in instruction for online students may cause barriers between online students and face-to-face students that can hinder students from participating in class (Wang et al., 2018). Participants in the study repeatedly emphasized the challenges they met due to the need for an additional educator, technician, or caregiver to assist distance learners with technical difficulties they faced during instruction.

Interview Question 6 (Research Question 2) sought participant perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students. Responses included the need for a trained adult to work solely

with the distance learners, equal opportunities for hands-on learning experiences, maintained equality and equity with face-to-face peers, a technician available to troubleshoot technical issues, and consistent classroom management plans for both face-to-face learners and distance learners. The need for an additional trained adult to assist and troubleshoot technical issues for distance learners coincides with previous research by Lakhal et al. (2020). Additionally, Lakhal et al. (2021) and participants alike found that educational institutions needed to provide students with the proper technology resources for synchronous hybrid learning to be a success. At the elementary level, participants felt that equitable and equal learning experiences would include not only technology resources but also hands-on resources. Participant 2 insisted, "Students have got to be able to manipulate concrete items."

Interview Question 7 (Research Question 3) sought to study participant perceptions of lessons learned to improve synchronous hybrid learning in elementary schools and the things that district leaders, administrators, and instructional coaches can do to support teachers. The responses included the need for an additional educator to provide instruction and troubleshoot technical issues with distance learners, as mentioned by Lakhal et al. (2020). Participant responses also included the need for improvement in internet access with real-time speed for all students throughout the district, similar to the findings by Lakhal et al. (2021). Once again, participant responses correlated with Lakhal et al. (2021) in stating "educational institutions need to provide students with the proper technology resources for synchronous hybrid learning to be a success" (p. 1393). Participant 1 also suggested the need for administrators to send home resources for distance learners to support opportunities for hands-on learning for them. Participant 4

further suggested that the way to improve synchronous hybrid learning was for district leaders and administrators to enforce district-wide continued use of an online classroom platform to support distance learners.

Additional information pertaining to participant experiences of teaching in a synchronous hybrid learning environment in a rural elementary school reemphasized the need for additional student support at home for distance learners, the need for schools to provide hands-on resources to supplement distance learning, and the need for training on awareness of social media cyberbullying. The need for training on awareness of social media cyberbullying was not mentioned in the previous research.

Through transformative learning theory and participant responses to the interview questions, it was revealed that teacher perspectives on synchronous hybrid learning programs motivated participant lesson planning and determined what strategies they used to execute their lessons (Whittle et al., 2018).

Implications for Practice

This study informs school leaders of elementary teacher perceptions of synchronous hybrid learning in a rural elementary school. Findings are used to guide educational leaders in planning and redesigning teacher experiences with synchronous hybrid learning to increase teacher efficacy and student success. The information learned from the study was used to create a framework for district leaders, administrators, and instructional coaches to follow when providing teachers with the tools they need to be successful. For effective implementation of synchronous hybrid learning, teachers must be equipped with adequate training and resources. In the same way, students must be provided equitable learning opportunities despite their learning environment. Addressing

the needs of educators providing synchronous hybrid learning instruction allows stakeholders to reflect upon the current state of instruction in relation to student success.

This section reflected the research results compiled in Chapter 2. Results were reviewed and compared to the findings of my research study. How findings from this study correlate with or expand upon existing research is explored as well.

Impact of Teacher Perceptions on the Learning Environment

Studies that have been conducted in the past have shown that teacher perceptions have an impact on the learning environment. Research shows that teacher perception plays a significant role in the way an educator implements a learning program or educational initiative (Anglin, 2021; Greenfield et al., 2010). Greenfield et al. (2010) conducted a qualitative analysis that included "how teachers viewed the first-year implementation of a new program" (p. 49). According to the results of the study, teacher perceptions played a vital part in the implementation of newly adopted initiatives and educational programs (Greenfield et al., 2010). Factors that influence teacher perceptions in a learning environment that supports positive academic achievement include the following content knowledge, student expectations, passion and enthusiasm for teaching, ability to select appropriate teaching methodologies, and the use of reflective practices to direct instruction (Whittle et al., 2018).

In this study, teacher perceptions of instruction with the implementation of synchronous hybrid learning were described as "difficult and limited." Reasons that explain the difficulties discovered through this study include insufficient internet access and speed, unfamiliarity with how to use technology provided to the students, and lack of parent/guardian support. Insufficient internet access and speed hindered the ability of

participants to select appropriate teaching methodologies. As Lakhal et al. (2021) found, educational institutions need to ensure that students have proper technology resources for synchronous hybrid learning to be a success for stakeholders. Unfamiliarity with the utilization of technology needed to support distance learners during the 2020-2021 school year was displayed in participant lack of content knowledge, which hindered their ability to select appropriate teaching methodologies. Participants struggled with their limited ability to utilize technology as their primary mode of instruction because they lacked formal training and professional development on how to implement learning programs via online learning platforms. Participant 1 said that "the knowledge of how to use technology effectively" was needed to improve synchronous hybrid learning in elementary school. Participant 4 added that not only teachers needed professional development, but parents and caregivers needed training as well. Greenfield et al.'s (2010) findings proclaimed that professional development increases teacher perceptions of their ability to confidently implement learning initiatives and educational programs. In addition, the inadequacy of parent/guardian support for their distance learners left participants struggling to provide appropriate expectations for students learning from home. Participants perceived additional assistance focused on distance learners to be a key indicator leading to student success. Participant 3 shared her opinion: "If synchronous hybrid learning is to be effective, it needs to have a designated educator who is assigned to online students."

As Bower et al. (2015) described, teachers in a synchronous hybrid learning environment perform multiple roles while providing instruction to two groups of students simultaneously. Such roles included presenting academic content while acting as a

facilitator, engaging students face-to-face and online, monitoring progress of both student groups, and simultaneously providing immediate feedback to face-to-face learners and online learners (Bower et al., 2015; Wang et al., 2017). Assistance from a parent or guardian at home, or an additional educator, would help alleviate the number of roles a teacher would have to perform in a synchronous hybrid learning environment; therefore, the teacher could more effectively monitor student progress and set adequate expectations for their students.

Transformation of Technology in the Classroom

The transformation of technology in the classroom is the foundation of the movement of learning from knowledge-as-possession to knowledge-as-construction (Tam, 2000). The need to integrate computers into the classroom was derived from tech-rich environments supporting the development of the learner's higher-order thinking skills, such as defining problems, judging information, solving problems, and drawing knowledge-based conclusions (Lancy, 1990). Research further noted that the educational environment should stimulate learners to maximize their cognitive learning potential, whether they are learning on their own or within a social network (Tam, 2000).

To endorse the utilization of technology in the classroom, future-ready expectations that prepare students to be globally competitive morphed into 21st century learning expectations. Stauffer (2020) listed 21st century skills that work together with the integration of technology to support the Information Age to include critical thinking, creativity, collaboration, communication, information literacy, media literacy, flexibility, leadership, initiative, productivity, and social skills. To begin the process of integrating technology in the classroom, teachers welcomed the use of tech-rich instruction, as

defined by Maxwell (2016), in an adjunct mode to enhance and support traditional learning experiences. Adjunct mode allowed learners to complete the same tasks, at the same time, at the same pace, in the same place without replacing traditional hands-on activities (Harasim, 2012). Participants in this study likewise integrated tech-rich instruction in an adjunct mode before the COVID-19 pandemic. Participant 1 shared her experience with the utilization of technology in instructional practices prior to the pandemic:

> Technology was used to supplement and support the instruction. It was not the main focus. We used it to play games and different activities like that; maybe to see instructional videos that we wanted to watch. But it was balanced out with hands-on activities.

Participant 2 said,

> I have been utilizing technology since 2002 when active boards and smart boards came out. We used technology to study cultures and their languages. I implemented it into my teaching. It was a part of, in addition to, not the main focus of because at the elementary level, students are very much kinesthetic learners. They need to learn hands-on.

Participant 3 utilized technology in an adjunct mode to "show videos supplemented by worksheets and activities." Participant 4 also utilized technology in an adjunct mode to supplement learning activities. The participant used the smart board to present enriched whole class lessons; however, the participant took the integration of technology in the classroom one step further by utilizing Chromebooks to create learning stations to supplement individualized instructional practices with the use of online reading

programs.

As the participants converted tech-rich instruction from adjunct mode into a mixture of hands-on activities supplemented with web-based online activities that allowed some learner control over time, place, and pace, blended learning was established in the learning environment. According to research, blended learning was the predominant utilization of tech-rich instruction at the elementary school level (Maxwell, 2016; White, 2019). In this study, blended learning took on the form of station rotation (Christensen et al., 2013). As reviewed earlier in Chapter 2, station rotation is generally used in elementary classroom settings to allow the learner to participate in student-led online learning as the students rotate to each station while the teacher works with small-group instruction. This allows the teacher to provide the students with data-driven, individualized instructional resources they can engage in at their own pace to obtain new knowledge (White, 2019).

A trend in the transformation of technology in education was described by Berg and Simonson (2016) as distance learning. Distance learning is defined as "distance education and online learning, to include a physical separation between teacher and student during instruction and the use of a variety of technologies to facilitate student-teacher and student-student communication" (Berg & Simonson, 2016, p. 1). In a study including 170 adult learners, there were 427 recorded declarations identified as advantageous aspects to distance learning, with 48% of the comments reflecting benefits for the adult learner (Baruth et al., 2021); however, in kindergarten through 12th grade, distance learning was commonly used as a tool to allow homeschool students to gain access to centralized instruction (Berg & Simonson, 2016). It was not a typical form of

instruction utilized by elementary teachers in North Carolina traditional public schools. Instead, student distance learners enrolled in North Carolina virtual public schools, which are run by the state education department (Fofaria, 2021).

However, unexpectedly, the transformation of the utilization of technology in the classroom changed drastically on March 16, 2020, when Governor Cooper issued the stay-at-home Executive Order No. 117 (2020), requiring public schools to close and instruction to take place online due to the worldwide spread of COVID-19. From March 16, 2020, until October 5, 2020, students in kindergarten through fifth grade in North Carolina public schools were mandated to become distance learners. In the meantime, the transformation of technology used to supplement and enhance the traditional learning environment evolved into the primary mode of instruction for all North Carolina public school teachers and students. Participant 1 shared her experience teaching during the initial stay-at-home order when North Carolina educators were required to provide only distance learning opportunities to students:

> In March, when we first transitioned, it wasn't as difficult because I already had a relationship with the children that I was instructing. But as we moved to a new school year and we started off in a remote situation, it was very difficult because I didn't have a relationship with my students. I didn't know them well. We had not set our rules and procedures, so it was much more difficult. We also had to worry about technology issues, internet access, the ability for students to have someone at home if they needed help trying to log in, or to even get on the virtual classroom, or to know what time they needed to be in the classroom.

Participant 2 felt confident in the online educational resources provided to the

students but felt like teachers “had no control of what was going on at home.” Participant 3 was often frustrated by “student struggles with internet issues.” Participant 3 shared experiences concerning students lacking adequate internet signals that led to problems with downloading assignments. The participant also faced obstacles concerning the ability of elementary students to proficiently use the Chromebooks to engage in instruction and learning activities. Participant 3 further explained, “We went into the pandemic and had to learn the online programs as the students were learning the class material as well.” Participant 4 felt like instruction came to a halt:

> Transitioning to distance learning felt like an engine seized up and you can’t even go anywhere. It’s like it wasn’t even moving. It wasn’t just like putting on the brakes, it was like the engine locked up and you just like stopped. More technology was needed to be integrated and utilized in the traditional classroom. Technology became, basically, the sole way of teaching students.

Participant 1 added, “We used it for everything. For producing the lesson, for first introducing the lesson, for the students to share their work with me that they had done after the lesson. It became everything, our main way of communicating.”

One of the latest trends in the transformation of technology in the classroom is synchronous hybrid learning. According to the University of the Fraser Valley (2018), synchronous hybrid learning as a pedagogical approach has recently been implemented in colleges and universities, beginning around 2015. Wang et al. (2017) described a synchronous hybrid learning environment as simultaneously delivering a lesson to students in a face-to-face learning environment and online learning environment. This trend in the transformation of technology in the classroom is the foundation of this

research study.

Synchronous Hybrid Learning

Again, synchronous hybrid learning is the delivery of instruction to face-to-face learners and distance learners simultaneously (Wang et al., 2017). There are few previously investigated studies related to synchronous hybrid learning, especially at the elementary level (Raes et al., 2020). In a meta-analysis including 47 studies pertaining to the benefits and challenges of synchronous hybrid learning in adult learning institutions, researchers advised "cautious optimism about synchronous hybrid learning" (Raes et al., 2020, p. 269). In a similar manner, the findings in this study would concur that limited optimism is advised when utilizing synchronous hybrid learning in a rural elementary school. In a qualitative case study investigated by Romero-Hall and Vicentini (2017), results concluded that study habits of adult distance learners were improved in a synchronous hybrid learning environment, despite the pedological challenges distance learners had to overcome during synchronous hybrid instruction. Regardless of the lack of research, pedological challenges, and cautious optimism, technology in the classroom transformed into a synchronous hybrid learning environment during the 2020-2021 school year as a way of providing instruction to face-to-face and distance learners.

In review of the previous research that was conducted by Wang et al. (2017), discussed in Chapter 2, the benefits of synchronous hybrid learning were classified into three categories: practical benefits, educational benefits, and economic benefits. Practical benefits of synchronous hybrid learning included its affordability with the advancement of computer-mediated communication technologies (Wang et al., 2017). In addition, synchronous hybrid learning allowed for greater educational access and equitable

learning experiences for both economically privileged and underprivileged students who could not physically participate in class (Bower et al., 2015). Synchronous hybrid learning offered flexibility and convenience to parents and students, as they can choose to participate in classroom instruction in a traditional face-to-face setting or online (Wang et al., 2017). Furthermore, with synchronous hybrid learning, feelings of isolation were decreased in distance learners as they got a sense that they were in a "real" classroom with their teacher and peers (Zydney et al., 2019).

In an analysis on the educational benefits of synchronous hybrid learning conducted by Francescucci and Rohani (2018), the performance and engagement of 698 postsecondary students were compared to a face-to-face traditional learning environment. Educational benefits discovered included the flexibility for students to participate in class in a location that met their needs, the decreased communication gap due to real-time interaction with distance learners, the opportunity for immediate feedback, the opportunity for shared perspectives among peers, and the possibility for distance learners to feel connected to their face-to-face counterparts (Fancescucci & Rohani, 2018; Wang et al., 2017; Watts, 2016). Furthermore, a study investigated by Lakhal et al. (2020) revealed that synchronous hybrid learning provided adequate academic and social integration when instructors utilized appropriate pedological strategies to meet students' individual needs.

Economic benefits of synchronous hybrid learning mentioned in previous research included the capability of educational institutions to increase student enrollment and student-teacher ratio without increasing institution costs (Wang et al., 2017). Students benefited financially from attending synchronous hybrid classes as they

eliminated transportation costs related to traveling to a face-to-face classroom setting (Dey & Bandyopadhyay, 2019; Wang et al., 2017).

In review of the previous research, synchronous hybrid learning had challenges that concerned both teachers and students. In a cross-case analysis of seven studies associated with synchronous hybrid learning, teachers were challenged with the necessity of performing multiple roles while providing instruction to their students (Bower et al., 2015). Such roles included presenting academic content while acting as a facilitator, engaging students face-to-face and online, monitoring progress of both student groups, and simultaneously providing immediate feedback to face-to-face learners and online learners (Bower et al., 2015; Wang et al., 2017). Previous studies have also found that synchronous hybrid learning course designs required more physical and social preparation than courses delivered in a single mode (Zydney et al., 2019). The lack of professional development provided to train teachers to effectively plan for lessons caused them to feel unsupported by institutional leaders, which resulted in a decline in teacher efficacy and hindered the quality of instruction that was received by the students (Lakhal et al., 2021).

Challenges of synchronous hybrid learning from student perspectives included feelings of isolation and exclusion from their peers because, despite the ability to participate in real-time class instruction, distance learners were still physically separated from the class (Cunningham, 2014). When distance learners struggled with online platforms, students became frustrated and missed educational opportunities that their face-to-face counterparts were experiencing (Lakhal et al., 2021); however, if an instructor interrupted class to troubleshoot a technical issue for a distance learner,

instruction came to a halt, and learning momentum was lost (Lakhal et al., 2020). Lags in instruction caused barriers between online students and face-to-face students which hindered participation in class (Wang et al., 2018).

North Carolina public school elementary teachers transformed their classrooms into synchronous hybrid learning environments on October 5, 2020, when Governor Cooper lifted the stay-at-home order for students in kindergarten through fifth grade. North Carolina public elementary students were given the opportunity to return to the traditional face-to-face educational setting. With considerable health concerns regarding COVID-19, Governor Cooper allowed parents to choose the option of participating in a face-to-face traditional learning environment or distance learning from home (WECT Staff, 2020).

In accordance with previous research, the study school in my research benefitted from the affordability of synchronous hybrid learning during the 2020-2021 school year, as educators utilized resources such as emails, videoconferencing, and internet forums to support instruction for and communication with stakeholders (Wang et al., 2017). Access to free online programs allowed for equity among economically privileged and underprivileged students whether face-to-face learners or distance learners. Participants 3 and 4 used Google Classroom as an online learning platform that all their students could log into without any cost. Participant 3 used online resources to teach and make assignments and confessed,

> I used programs to turn worksheets that I was using in the classroom into workable documents online, as well as turning online documents into worksheets the kids could use in the classroom. I tried my best to keep both groups doing the

same work as much as possible, by doing that.

Educational benefits to synchronous hybrid learning discussed in both previous research and my study included the ability for teachers to provide real-time interaction with distance learners. Participant 5 explained her experience with technology in the synchronous hybrid learning environment: “We relied on technology a lot in order to create an interactive experience.” Participant 4 added, “Online resources provided cohesion and structure for face-to-face students, distance learners, and me for planning.”

Economic benefits the study school district obtained were a decrease in bus transportation needs and a decrease in supply and material costs used by face-to-face learners.

Challenges of synchronous hybrid learning discovered in this study that correlated with previous research begin with teachers performing multiple roles while providing instruction (Bower et al., 2015). Participant 3 stated that teaching in a synchronous hybrid learning environment was “very difficult.” The participant further explained, “It was almost like having two completely separate classrooms to teach at the same time. My workload was much heavier because it was essentially preparing two lessons for each subject.” Teachers also struggled due to a lack of professional development in how to deliver instruction in a synchronous hybrid classroom, what resources to use, as well as how to appropriately utilize technology (Lakhal et al., 2021). Moreover, teachers struggled to provide appropriate individualized instruction because there was not a relationship established with the distance learners. Participant 1 shared, “In the beginning of the school year, it was difficult because I didn’t have a relationship with my distance learners. We hadn’t been able to set up rules and procedures. I didn’t know them well.”

Challenges for students participating in a synchronous hybrid learning environment included issues with internet access, adult support from home, and opportunity for hands-on activities. Participant 1 noted, “Internet access is needed for all students across the district.” Participant 5 said, “Internet speeds have to be more real-time so there is not a lag in responses.” Four of five participants also shared their belief that a trained adult was needed at home and in the classroom who could assist with instruction and troubleshooting technical issues with distance learners. Also, adults assisting distance learners needed training on how to help their students because, as Participant 4 stated, “I had some parents who weren’t helping at all, or the children were with grandparents who couldn’t help to parents who were doing all the work for a child.” Participant 3 added, “I feel a level of standards and consequences should be implemented for distance learners.” Finally, participants in the study also felt that it was a challenge to meet the needs of distance learners because of the lack of opportunity for hands-on learning. Participant 2 insisted,

> If you are going to have students learning from home, you got to have parents that are willing to be a teacher too. There’s got to be hands-on instruction. They have got to be able to touch and manipulate concrete items.

According to this study, participants added their perceptions of elements needed to improve synchronous hybrid learning. The elements needed relate to the challenges they faced during the 2020-2021 school year. Elements needed concerning distance learners included internet access throughout the district; internet speeds in real-time; updated technology; a technician to troubleshoot technical issues; professional development on how to use the technology effectively; resources for hands-on instruction

provided to distance learners; adult support at home to assist with student learning; training for the adult caregiver supporting distance learners; a designated educator to focus on distance learners; and structured accountability to distance learners concerning behavior, participation, and academics.

In relation to elements needed to improve the synchronous hybrid learning, perceptions of lessons learned to improve synchronous hybrid learning and things that district leaders, administrators, and instructional coaches can do to support teachers were also discussed in this study. Suggestions from participants included collaborating with our county and town commissioners to increase internet access throughout the county, district leaders providing an additional educator to support online learners, administrators and instructional coaches providing effective learning resources and lesson platforms for distance learners that are user friendly, the provision of more time to plan for face-to-face and distance learning groups, the provision of training to parents assisting distance learners, and administrators providing hands-on supplies to be sent home to support student engagement in learning activities.

Participant 4 also shared a concern for the growing number of elementary students participating in social media due to the increase in technology access provided by the school district. Participant 4 made this statement:

> There needed to be professionals involved with parents and students concerning social media. We are spending a lot of time putting out fires on problems that generate outside of school but come in here, anyway. With students using technology more than ever, whether officially or not, but I have thought, there needs to be something done on that front or we are going to have bigger and

bigger problems that do affect academics.

In a recent study conducted by I-Safe America (2022), over 40% of children in Grades 4-8 have been bullied online. Redmond (2022) proclaimed that cyberbullying is often a repeated behavior pattern in which the cyberbullies have often been victimized themselves. Redmond went on to say that children with access to a computer can use it to cyberbully. Screen names allow them to hide their identity, giving them the freedom to say what they want to hurt someone without repercussions.

With COVID-19 and trends in education moving toward allowing parents and students to choose between attending school in the traditional face-to-face environment and online distance learning, synchronous hybrid learning will continue to be incorporated in education. This study was conducted in hopes that it will be used as a resource to inform educational leaders on the benefits and challenges of synchronous hybrid learning in elementary schools according to teacher perceptions and provide educational leaders with strategies to improve the learning environment.

Summary of Implications for Practice

The research conducted in this phenomenological qualitative study and the findings that were discovered indomitably contribute to the practice of synchronous hybrid learning in a rural elementary school setting. Undoubtedly, there were teacher perceptions confirmed through previous research and participant findings in this study. Nevertheless, there may have been some concepts that have not been investigated thoroughly. A summary of the implications pertaining to synchronous hybrid learning in rural elementary schools acquired from this study include the following:

- School district leaders should continue to collaborate with county

commissioners to install updated internet services with real-time speed throughout the county, which is needed to support distance learning.

- School district leaders should provide updated technology for students and teachers to support online instructions, resources, and instructional platforms.
- School district leaders should provide a technician to provide technical assistance and troubleshooting for distance learners and teachers; this will prevent unnecessary interruptions in the classroom.
- School district leaders should provide an educator dedicated to distance learners at every elementary school; such an educator would be intended for maintaining equity and equality in providing individualized instruction to all students.
- Administrators and instructional coaches should provide professional development conducive to providing user-friendly online resources and classroom platforms to support distance learning.
- Administrators and instructional coaches should provide professional development and assistance to teachers in creating a classroom management plan that reinforces structure, cohesion, and accountability for students and parents.
- Administrators and instructional coaches should provide training for parents, guardians, and caregivers in supporting their distance learners in order to increase academic success at home.
- Administrators should construct a schedule that allows teachers ample time to design individualized lessons that meet the academic needs of every student in

a synchronous hybrid learning environment.

- Administrators should provide hands-on manipulatives and resources to distance learners to increase student engagement with learning activities.
- Administrators and instructional coaches should provide awareness training to parents and guardians on the misuse of technology among elementary-aged students, with a focus on cyberbullying and social media.

Delimitations and Limitations of the Study

There were delimitations and limitations to consider when conducting the research of teacher perceptions of synchronous hybrid learning in a rural elementary school. The boundaries of the study were set to narrow the focus of research in order to make it manageable and relevant to the topic (DiscoverPhDs, 2020). The delimitation mainly pertained to the population of the study. Participants were restricted to include elementary teachers assigned to one rural elementary school who experienced the phenomenon of teaching in a synchronous hybrid learning environment during the 2020-2021 school year. For the purpose of this study, participants could not be selected if they had experience in providing instruction to distance learners prior to the COVID-19 pandemic. My goal was to have full participation in a semi-structured interview from a purposeful sampling of five teachers in order to gain an understanding of teacher perceptions from a variety of elementary grade levels, an AIG teacher, and an EC teacher (Padilla-Diaz, 2015). The delimitation goal involving the population to be studied was met in this study.

There were limitations to consider in this study. The potential for findings to be inaccurate in this study is to be acknowledged. To begin with, I am the principal assigned

to the study school with the participants. Participants serving at the study school may have experienced professional obstacles in providing adequate instruction to their synchronous hybrid learners. They may have felt uncomfortable sharing their true experiences during the interview if they felt there would be repercussions to their responses. Further, participants may have been concerned that their identity could be revealed and would lead to negative perceptions about their teaching ability from their district leaders. In addition, there could be varying perceptions among participants that could influence responses due to their ages, years of teaching experience, and prior knowledge on the utilization of technology among participants. Finally, during the time in which this research study was conducted, participants were growing weary, as they were still providing synchronous hybrid learning instruction to students required to participate in distance learning due to exposure to COVID-19. Their weariness could have been reflected in their responses.

Suggestions for Further Research

Suggestions for further research are reflective of the findings of this study. Several common themes or "universal essences" discovered during this study are significant (Creswell & Poth, 2018). Explaining how the findings could be used to investigate these ideas is beneficial in guiding leaders to improve instructional strategies within the learning community. Components of the study suggested for further research include exploring technology needed to sufficiently support synchronous hybrid learning in a rural elementary school, learning resources that support synchronous hybrid learning, and professional development to support the needs of teachers, parents, and caregivers.

Research Age-Appropriate Online Learning Platforms

Previous research in Chapter 2 noted there were several benefits to synchronous hybrid learning, with technology proving to be the core of its success. Wang et al. (2017) stated that with simple technology, teachers can set up a synchronous hybrid classroom without financial support. Emails, instant messaging, videoconferencing, and internet forums provide affordable computer-mediated communication technologies to stakeholders (Wang et al., 2017). Participants referred to online learning platforms in their responses to the interview questions. Online learning platforms support learning beyond the traditional school setting in providing a place to store educational resources and assignments to be completed, as well as allowing student progress to be monitored by both the student and the teacher (Oxford University Press, 2015).

Through interview responses, participants who referred to an online learning platform used it to store resources, provide instruction, assign learning activities, and provide feedback to students. Participants also discussed students interacting with the platforms to access resources, complete assignments, turn in assignments and activities, receive feedback from teachers, and monitor their own progress. One participant said using a platform like Google Classroom helped him bring some cohesion and structure for the students as well as for his planning.

On the other hand, one participant reported the need for professional development on platforms that were easy to access and user-friendly for elementary students because of the challenges she faced with her current online learning platform. Another participant said she had a hard time getting assignments to download onto her platform. The two participants who met challenges with using an online learning platform taught in the

lower grades, as opposed to the teacher with a positive experience who taught in an upper elementary grade. To support teachers and students in the synchronous hybrid learning environment, teachers need recommendations for age-appropriate online learning platforms to meet the needs of their students. The possibility of increasing student engagement with learning activities is justification for continued research.

Research Hands-on Learning Activities for Distance Learners to Increase Achievement

Throughout this study, participants shared their experience with synchronous hybrid learning to benefit the face-to-face learners more than the distance learners. In fact, one participant said that her face-to-face learners were three to four times more successful than her distance learners. In the second interview phase, the participant said that she based success on the measure of growth students made throughout the year by using beginning-of-year assessments and end-of-year assessments. She contributed the success of her face-to-face learners to the ability for them to participate in hands-on activities that allowed students to manipulate concrete items before moving to abstract and more in-depth concepts. In his research on the effectiveness of hands-on learning, Arnholz (2019) stated that the reason hands-on learning improves information retention is because it involves physiological and psychological impacts of learning. Arnholz added that hands-on learning requires both sides of the brain to be engaged in activities, thus forming strong connections to the information.

District leaders, administrators, teachers, and students would benefit from research on what resources and training are essential in increasing hands-on learning activities that can be achieved at home. The possibility of providing equal and equitable

learning opportunities to distance learners to improve academic growth supports the idea to further research this topic.

Provide Training to Support Distance Learners

With the growing use of technology and opportunities for distance learning, adult stakeholders involved with elementary distance learners need training to appropriately assist students with their education. All five participants in this study advocated for student support at home to assist with distance learning. Participant 2 repeatedly communicated that those parents/guardians and caregivers with distance learners need to "be a teacher too." In a study conducted by Garbe et al. (2020), findings indicated that parent involvement was an essential factor in student achievement and made significant contributions to the success of students learning online. The dilemma with setting instructional expectations on adults at home is the fact that they have not been trained to teach their children. By researching the "what" and "how" in training parents, guardians, and caregivers of distance learners, administrators and instructional coaches could equip parents to effectively engage in supporting their distance learners. In turn, increased academic achievement will be the result.

Conclusion

The purpose of this research study was to gain an understanding of teacher perceptions of synchronous hybrid learning in a rural elementary school. I wanted to expand the limited research previously conducted on synchronous hybrid learning. This study provides previous research on the impact of teacher perceptions in education and the evolution of technology as an instructional tool in the learning environment; it defines synchronous hybrid learning and describes how it is evolving; it also reports strategies

used to deliver synchronous hybrid instructional lessons. I conducted semi-structured interviews with teachers who implemented synchronous hybrid learning in a rural elementary school during the 2020-2021 school year. I did this in order to gain knowledge of teacher perceptions of synchronous hybrid learning. I investigated teacher perceptions of how effective synchronous hybrid learning was implemented during the 2020-2021 school year; teacher perceptions of elements missing that were needed to improve the synchronous hybrid learning experience for teachers and students; and teacher perceptions of lessons learned to improve synchronous hybrid learning in elementary schools and things that district leaders, administrators, and instructional coaches could do to support teachers. The hope is that this study will provide research findings to guide district leaders, school-level leaders, and instructional coaches in planning and providing meaningful professional development to elementary teachers within the school district.

Three research questions were presented and answered throughout this study. This was accomplished through a semi-structured interview consisting of eight interview questions. By way of the data analysis process, I acquired the knowledge needed to analyze the data, answer the research questions, and evaluate the results (Jordan, 2021). The themes formulated from the findings are listed below:

1. Teachers felt confident about their ability to teach in a rural elementary school before the pandemic. They had the ability to develop strong relationships with their students, provide individualized lessons, and be creative in their instructional practices.
2. The ability to teach during the pandemic was perceived to be difficult and

limited because of insufficient internet access and speed, unfamiliarity with how to use technology, and lack of parent/guardian support.

3. The utilization of technology in instructional practices before the pandemic was used in adjunct mode, for station rotation, and to supplement hands-on activities.
4. Technology became the primary mode of lesson development, instructional delivery, student interaction, and communication during the pandemic.
5. The effectiveness of the implementation of synchronous hybrid learning was limited due to a lack of support for students at home, a lack of hands-on resources, a lack of structure in the learning environment, inadequate internet services, and diverted attention divided among two groups of students.
6. Elements needed to improve synchronous hybrid learning included a trained educator dedicated to distance learners, a technician dedicated to troubleshooting technical issues, equity and equality in learning opportunities, and consistent classroom management plans.
7. Supports that can be added to improve synchronous hybrid learning in elementary schools are for district leaders to provide an educator dedicated to supporting distance learners, internet access with real-time speed, continued use of online learning platforms, and hands-on resources sent home for distance learners.
8. Training needs to be provided to parents and guardians on the awareness of cyberbullying and misuse of social media.

Researching teacher perceptions of synchronous hybrid learning in a rural

elementary school allowed me to reflect upon the transformation in instructional practices during the 2020-2021 school year amidst the COVID-19 pandemic. Investigating teacher perceptions of their experience with synchronous hybrid learning has made me appreciate the magnitude of hard work and dedication that was displayed among educators. The teachers who served, and continue to serve, students during this time of crisis depict the meaning of a true hero.

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Appendix A

Enrollment Summary 2020-2021

School	A Day	B Day	Plan C	C %	Total	PowerSchool Total	Last Updated	
[redacted]	514	NA	122	19.18%	636	636	3/25/2021	9:56 AM
[redacted]	69	NA	86	55.48%	155	155	3/25/2021	6 early graduates are not included in these numbers.
[redacted]	136	NA	16	10.53%	152	152	4/28/2021	
[redacted]	391	NA	15	3.69%	406	406	4/29/21	
[redacted]	112	NA	4	3.45%	116	116	4/29/21	
[redacted]	178	NA	23	11.44%	201	201	4/28/21	
[redacted]	48	NA	30	38.46%	78	78	3/23/21	
[redacted]	257	NA	20	7.22%	277	277	4/28/21	
[redacted]	113	NA	9	7.38%	122	122	3/24/2021	
[redacted]	199	NA	105	34.54%	304	304	3/24/2021	Our numbers reflect Plan A students vs. Plan C students
[redacted]	95	NA	17	15.18%	112	112	4/28/21	
[redacted]	201	NA	45	18.29%	246	246	3/15/21	
[redacted]	160	NA	10	5.88%	170	170	4/28/21	1 new enrollee
[redacted]	409	NA	18	4.22%	427	427	3/15/21	
[redacted]	172	NA	7	3.91%	179	179	4/28/21	
[redacted]	341	NA	70	17.03%	411	411	4/20/21	
[redacted]	321	NA	176	35.41%	497	497	4/21/21	early grads have been removed
[redacted]	257	NA	14	5.17%	271	271	4/28/21	
[redacted]	443	NA	278	38.56%	721	721	3/23/21	early grads have been removed
Totals	4,416	0	1,065	19.43%	5,481	5481		
Percent	80.57%	0.00%	19.43%					

Appendix B

Permission From Superintendent of Study School District

December 2, 2021

Dear Gardner-Webb University IRB,

Based on my review of the proposed research by Lisa LaMonica Moore, I give my permission for her to conduct the study Teacher Perception of Synchronous Hybrid Learning in a Rural Elementary School within the [redacted] School District, specifically located at [redacted] Elementary School. As part of this study, I authorize Lisa LaMonica Moore to conduct semi structured interviews with the teachers assigned to [redacted] Elementary School. Individuals' participation will be voluntary and at their own discretion. Participants will not be rewarded, nor will they receive disciplinary action for information they provide during the study.

We understand that participants will be personnel employed with [redacted] Schools. I authorize Lisa LaMonica Moore to utilize classrooms and her office located at [redacted] Elementary School to conduct the interviews. We reserve the right to withdraw from the study at any time if our circumstances change.

We understand that the research will include semi-structured interviews with [redacted] School personnel assigned to London Elementary School.

This authorization covers the time period beginning December 2, 2021, to May 27, 2022.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without the permission from the Gardner-Webb University IRB. If you have any questions or concerns, you may contact my office [redacted] or email [redacted].

Sincerely,
[redacted]

Superintendent

[redacted]

Appendix C

Informed Consent Form

Gardner-Webb University IRB
Informed Consent Form

Title of Study
Teacher Perception of Synchronous Hybrid Learning in a Rural Elementary School

Researcher
Lisa LaMonica Moore

Purpose
The purpose of this qualitative study to investigate elementary teachers' perceptions of synchronous hybrid learning in a rural elementary school. The researcher will investigate teacher perceptions of teaching in a synchronous hybrid learning environment, teacher perception of elements that are needed to provide quality instruction to synchronous hybrid learners, and teacher perception of lessons learned to improve synchronous hybrid learning at the elementary level.

Procedure
You are being asked to participate in a series of three semi-structured interviews. If you agree to participate, you will be contacted through email to schedule an interview at your convenience. An email with an attached Google Meet link and Informed Consent Form to review will be sent to you. Joining the Google Meet for the interview will indicate your consent to participate in the interview. You will be asked eight open-ended questions. You are encouraged to answer each question freely. Subsequent questions may be asked to elaborate on answers or parts of answers. The Google Meet will be recorded and transcribed so you may review your answers and I can analyze the data. If you would like to expand on your answers, you may do so at the time of the review. I will review the data a third time with you for final approval. You may opt out of the interview for any reason, at any time during the study. After the study, the interview transcription will be held in a secured file for three years until it is destroyed.

Time Required
It is anticipated that the study will require about 30 minutes of your time to answer the interview questions the first time. The second phase of the interview process will take an additional 15 minutes. The final phase will take 15 minutes of your time.

Voluntary Participation

Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identified state.

Confidentiality

Data Linked with Identifying Information

The information that you give in the study will be handled confidentially. Interview data will be collected and recorded via Google Meet. Your information will be assigned a code number (or pseudonym.) The list connecting your name to this code will be kept in a locked file. When the study has been completed and the data has been analyzed, this list will be destroyed with a paper shredder. Your name will not be used in any report. You may request a transcribed copy of your interview data. The transcribed copy of the data will be stored in a locked file and shredded at the conclusion of the three-year storage requirement set by the university. Recorded Google Meets will be stored in an electronic secured file. The file will be deleted permanently from the computer at the end of the three-year period. Data collected from the interviews will not be made available to other parties for the purpose of further research.

Anonymous Data

The information that you give in the study will be handled confidentially. Because of the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so, and your data will be reported in a way that will not identify you.

Risks

There are no anticipated risks in this study.

Benefits

There are no direct benefits associated with participation in this study. The study may help us to understand teacher perception of synchronous hybrid learning in a rural elementary school. Data collected will be useful for district and school leaders to guide professional development in a synchronous hybrid learning setting. The Institutional Review Board at Gardner-Webb University has

determined that participation in this study poses minimal risk to participants.

Payment

You will receive no payment for participating in the study.

Right to Withdraw from the Study

You have the right to withdraw from the study at any time without penalty. If you choose to withdraw from the study, your audio (or video) tape will be destroyed.

How to Withdraw from the Study

- If you want to withdraw from the study before, during or after the interview, you have the right to withdraw at any time. There is no penalty for withdrawing.

- If you would like to withdraw after your materials have been submitted, please contact Lisa LaMonica Moore at XXXX.

If you have questions about the study, contact:

Researcher's name: Lisa LaMonica Moore
Student Role Ed.D Candidate
School/Department, Gardner-Webb University
Researcher telephone number: XXXX
Researcher email address: XXXX

Faculty Advisor name: Benjamin Williams, Ed.D
Faculty Research Advisor: Benjamin Williams, Ed. D
School of Education, Educational Leadership- Gardner-Webb University
Faculty Advisor telephone number:
Faculty Advisor email address: bwilliams22@gardner-webb.edu

If the research design of the study necessitates that its full scope is not explained prior to participation, it will be explained to you after completion of the study. If you have concerns about your rights or how you are being treated, or if you have questions, want more information, or have suggestions, please contact the IRB Institutional Administrator listed below.

Dr. Sydney K. Brown
IRB Institutional Administrator
Gardner-Webb University
Telephone: 704-406-3019
Email: skbrown@gardner-webb.edu

Voluntary Consent by Participant

I have read the information in this consent form and fully understand the contents of this document. I have had a chance to ask any questions concerning this study and they have been answered for me. I agree to participate in this study.

_____ Date: _____

Participant Printed Name

_____ Date: _____

Participant Signature

You will receive a copy of this form for your records.

Appendix D

Recruitment Letter

Greetings,

I am requesting your assistance with my doctoral study, with a topic on teachers' perceptions of teaching in a synchronous hybrid learning environment in a rural elementary school. I am asking kindergarten through fifth grade teachers assigned to our school to participate in three interview sessions, with each being no longer than 30 minutes, to discuss your experience with teaching in a synchronous hybrid learning environment during the 2020-2021 school year.

The interview that you will participate in will consist of eight questions to help identify your perception of how well synchronous hybrid learning was implemented in our school and what is needed to improve upon the practice. Additional follow-up questions may be added, depending upon your responses. As your school principal, I am aware of the demands of your time, and will respect the need for brevity of the interviews. There will be no repercussions for not participating in the study, in the same way, there will be no benefits for participating in the study.

Participating in this research study is voluntary; you have the right to opt out of answering questions and you may ask questions pertaining to the research at any time. All information and data collected will remain confidential and destroyed as appropriate.

Participant Agreement:

Please read the attached informed consent. Your consent to participate is indicated upon replying to this email or personal contact agreeing to the terms of the informed consent form.

Sincerely,

Lisa LaMonica Moore

Principal

Appendix E

Transcribed Interviews

Study Questions

1. Describe the perception that you had about your ability to teach in a rural elementary school before the pandemic?

   Participant 1: Before the pandemic, I was very confident in my abilities to teach in a rural elementary school. Um… I felt very successful, I felt that I had a strong ability to build relationships with my students, understood the different methods that I needed use to reach them, uh, it was a very good feeling.

   Participant 2: I mean I felt, ah, very confident and secure in teaching in a rural area.

   Participant 3: Okay, well before the pandemic I thought I had a pretty good handle on teaching rural elementary students. Um, I live in this community and my daughter went to this school, and thought I had a pretty good handle on what they needed.

   Participant 4: Um, I felt very solid. Um, there's always things you could learn, there's always things you can improve on, but I felt, I felt good about the teaching and the ability to be creative. Um, I don't mean that you're purposely creative but just to be, I guess myself. Um, or maybe that's a good way to put it too or be more myself and connect with the students better. So, that's kind of where, how I felt before that. The pandemic absolutely put a torpedo in so many things, and you know, so.

   Participant 5: Good. Pretty confident.

2. Describe the utilization of technology in your instructional practices prior to the pandemic?

   Participant 1: Technology was used to supplement and support the instruction. It was not the main focus. Um, we did use it, um, to do games and different activities like that.

Maybe to see instructional videos that we wanted to watch but it was balanced out with more hands-on activities.

Participant 2: Well, um, when the active boards and smartboards first came out, um. I was teaching in Forsyth County, so I got the first um (they bought the active board), so I got the first active board in 2002. So, I have been utilizing technology since 2002. We used to study cultures. I taught second grade and there was a great website called Kids Web to Cam where we could learn about the culture and learn also the language. So, um, I utilized it a lot. I always tried to implement it into my teaching.

Researcher: So, it was implemented into your teaching. Was it the main…?

Participant 2: No, No. Because at elementary, they are very much kinesthetic learners. They need to learn hands-on. They need concrete and moving to the abstract. Um, it was a part of but not, it was an addition to, not the main focus of.

Participant 3: Prior to the pandemic, I used videos with mostly um, in-person worksheets and activities.

Participant 4: Um, using the Smartboard, I certainly did that. There were some online programs I did, like Read Works, for example, for reading but I did those as a center, or I call them a station. So, I might have had six Chromebooks in the room. Um, so technology was used but certainly very differently than what happened. I would say it was limited, looking back on it. It was limited, like I didn't even use Google Classroom before the pandemic.

Participant 5: Not as often, limited.

3. Describe the perception that you have about your ability to teach in a rural elementary school during the pandemic?

Participant 1: In the beginning, in March when we first transitioned, it wasn't as difficult because I already had a relationship with the children that I was instructing. But, as we moved to a new school year and we started off in a remote situation, it was very difficult because I had, I didn't have a relationship with my students. I didn't know them well. We had not set our rules and procedures, so it was much more difficult. We also had to worry about technology issues, internet access, the ability for students to have someone to support them at home if they needed to when they were trying to log in or to even get on the classroom, know what time they needed to be in the classroom.

Participant 2: I feel very confident. I had used a lot before. Again, it wasn't my main focus, but I had a lot of websites, a lot of educational websites. Um, I do feel like, um, for computers there were more websites that were applicable and helpful back about six years ago. Um, you know then there are now because everything is an app but um, I mean I felt very confident. But I also realized um, especially when we were totally out, back in the beginning of March 2020, when we went out. I also knew that we had no control. So, I only knew that I could come up with engaging activities, but I also knew I had no control of what was going on at home. So, I did feel very confident in what I could put out there.

Participant 3: During the pandemic, I feel like my ability to work with rural students became a little more tested as um, most students struggled with internet issues, we did here at school, as well. Um, some students didn't have strong signals or couldn't get assignments to download, and um, most were not very familiar with the Chromebooks when we went into the pandemic and had to learn the programs as they were learning the class material, as well.

Participant 4: Um, during the pandemic. Haha, I will, cause when it first hit, it was like locking down. It's like an engine seized up and you can't even go anywhere. It was like it wasn't even moving. It was very difficult initially, um but I would say too, it became very obvious to me that I needed more technology. And, I wish I had been using more technology because of the pandemic when it first came out and it did get better during the last school year but initially, it was horrible. I don't know if that answers your question. It wasn't just like putting on the brakes, it was like the engine locked up and you just like, stopped. So, yeah.

Participant 5: Difficult with the lack of internet. Lack of proper internet speeds, lack of student participation, varied parent schedules that made it difficult to schedule time for the kids.

4. Describe the utilization of technology in your instructional practices during the pandemic?

   Participant 1: It became, basically, the sole way of teaching students. Um, we used it for everything. For producing the lesson, for first introducing the lesson, for them to share their work with me that they had done after the lesson. It became everything, our main way of communicating.

   Participant 2: Well, I did both synchronous and asynchronous. So, I had remote learners and in class learners. So, I had students here and there. And I um, I really worked on trying to come up with engaging materials and making sure that um that I was available to students. I was even available to students after school. Especially, um. up until about February. I was available to students after school. So, I was there and made sure that I tried to come up with engaging lessons for them.

Participant 3: Well, I used it a whole lot more. I utilized Google Classroom to teach and make assignments. Um, I also used programs to turn worksheets that I was using in the classroom into workable documents online, as well as turning online documents into stuff the kids could use in the classroom. Um, I tried my best to keep them doing the same work as much as possible, by doing that.

Participant 4: Well again, that did morph over time, but um, with the help of some fellow teachers or even my daughter who teaches in high school, I realized immediately the first thing I needed to do was I needed a platform like Google Classroom, and I know there are a few others. I realized that was a must to bring some cohesion and structure for the students and to myself for planning. Um so, that had to quickly come online. I had to learn that very quickly, or I knew that I just wasn't going to survive it. It just wasn't going to work. Um, that was the thing that gave me structure and still does, actually. As well as, of course, finding quality online tools and programs to use.

Participant 5: Vast. We relied on it a lot in order to create an interactive experience.

5. What is your perception of how effective synchronous hybrid learning was implemented in the 2020-2021 school year?

Participant 1: I think that we did the best that we could with what we had, but what we had was very limited. Um, in the county that we are in there are many areas that do not have access to the internet and it's not just a poverty issue that people can't afford it, it's simply not available. So, that caused a big problem. We also had problems with a lot of our students were staying with caregivers. Often, it was grandparents who were unable to help their students get on to the internet or use their Chromebooks effectively. That was a big problem because they weren't able to get on and be able to be in the lesson. Even

though we were recording the lesson, there is a big difference from watching it on a recording and being able to actively participate while it's going on. That was a big problem. Also, we have parents, I had a parent in particular, that had three students in elementary school. So, she had to try to work with three different students' schedules. Ah, it was a lot, a lot of problems and I just don't know that it was equal or equitable throughout the county.

Participant 2: The results I found was um, that the kids that were in class did much better than the kids that were remote. Um, and there is a lot of factors to that too. Um, parents were working from home, so they might not have had a lot of time to spend with the students and you can't, when you are looking at a computer, you cannot totally rely on the computer or the person on the computer to teach your student. They need hands-on instruction, especially in the elementary. So, I found that the students that came back to school did much better, I mean much better. I would say three to four times better than those that were remote.

Participant 3: It was very difficult. As far as effective, effectiveness, excuse me, I don't feel like it was very effective. It was almost like having two complete separate classrooms to teach at the same time. Um, the rules were different, and the consequences were different. Um, online students needed to be much more responsible and diligent about their work, and without constant supervision most students strayed from their work. When they realized I couldn't do as much to correct them through online. In-person students seemed to lag, as well. Although, not as much because they knew my attention was diverted in different ways during a lesson. And as far as a teacher, my workload was much heavier because it was essentially preparing two lessons for each subject.

Participant 4: And that manifested in different ways, through of course, pure remote to A day B day, to then, in my situation having fourth and fifth graders who slowly came back, you know. Um, so my, if I put it in any word, it felt haphazard. Um, and while I felt more effective than when the pandemic first hit, I definitely felt more effected. But I would still say it felt haphazard. The other thing that I noticed is with students that were at home, I absolutely had some parents, the whole spectrum. Parents who weren't helping at all, or children with grandparents who couldn't help or something to parents who were doing all the work for a child. And that was a hard thing to deal with and it. I mean you could literally see it happening in Google Meets or whatnot, where you could tell the parent was right there coaching, and all that. So, I don't just mean coaching, sometimes just doing the work. So, I would say haphazard is still… I look back at last year, it felt better at the end of the year than the beginning, no doubt. I did not like A day, B day at all. That was tough.

Participant 5: It was not. Um, with kids at home and in the classroom it was too difficult to keep everyone in an activity at the same time.

6. What are your perceptions of elements missing that are needed to improve the synchronous hybrid learning experience for teachers and students?

   Participant 1: I think, like I said, the internet access across the county, updated technology, and also the knowledge of how to use that technology effectively. I think with using it after going through what we did last year, kind of being just thrown into the fire, I think we all know a little bit more about what we can do and ways that we can support our students, but I still think its not as effective as in-person learning.

Participant 2: I mean, if you are going to have students learning at home, you got to have parents that are willing, the parents are going to have to be a teacher too and there is going to have to be homeschooling. There's got to be hands on instruction. They have got to be able to touch and manipulate um, concrete items. Um, whether that's in math, um and then there also needs to be almost a direct, where um, in reading, where you are in close contact. So, parents are going to have to take over because there's got to be a lot of explanations, especially if you're going to get into figurative language, um and symbolism and meaning because you know when you are reading and you are looking at reading for meaning, then you're peeling back an onion because there's so much depth to it.

Participant 3: Okay, in my opinion, if synchronous hybrid learning is to be effective it needs to have a designated educator that's assigned to online students. Um, knowing students will have someone concentrated on them will make them, I feel, more conscientious of what they are doing and of their work. Um, I also feel their level of standards and consequences should be implemented for that set of students. Um, while they are not learning the same way, they um, still need to be held responsible as much as the ones in person. Just maybe, um, in a different way.

Participant 4: The first thing that comes to mind, is training for parents and grandparents, actually if they are involved in that. The students, the one reason, like the fifth graders that I have now or the ones that I had last year, the students are actually pretty savvy with, as far as technology. Um, but the parents and grandparents are not, or caregivers. So, I would say, if that answers your question. That is something that I think is still…when I've had students go out on quarantine or something, there is still kind of a

problem there. Um, but maybe it's a little bit better, but…So, I would say training for whoever is involved with their learning if they are not in my classroom. They do fine in here. I mean, it is definitely better to have them here.

Participant 5: Internet speeds would have to be more real-time so there is not a lag in responses. There would have to be, um, greater parental involvement to make sure that the kids are there and that they're behaving appropriately, as if they were in a classroom and not in their homes.

7. What is your perception of lessons learned to improve synchronous hybrid learning in elementary schools; and what can district leaders, administrators, and instructional coaches do to support teachers?

   Participant 1: I think our district leaders, and they are doing this, need to work with our county and town commissioners to try to find ways to get internet access to all of our students. Um, administrators and instructional coaches can help teachers research and find good resources to use to help support the lessons' platforms that work best to provide, um, students with the easiest ways to access those lessons, and turning in their information. Making it more user friendly.

   Participant 2: If we move, I almost think um, if we did have to do um, again the remote and be in-class, I would almost say you would have this certain teacher set aside to do the remote. But, in the end, you have to have a parent that is committed to really helping their child, um, and teaching. The parent has to be a teacher too. There's got to be that hands on engagement if they're at home. I mean, I think they have to have supplies. Um, I think the schools need to have supplies for students that are learning at home so they can have the manipulatives and things like that to work with. Um, because in the end, um, unless

you've got a parent that's very engaged, you can't. The one on ones, the small groups, the interaction, you really can't be in class learning unless you have a very involved parent.

Participant 3: A separate teacher for online would be the most ideal situation. If we could do something like that. But, however, allowing more time for students and um, teachers to prepare for synchronous learning. Especially teachers, outside, having more time to get lessons ready and um, also do not expect the same energy as you have in the classroom from the teachers or the students from online. Just maybe lower, I hate to say that, lower the expectations a little bit.

Participant 4: Well, I will throw this out there, um, so since we have mostly been back this year, you know, fairly normally, I think it would behoove us to be ready. Like I think, I am surprised that teachers aren't using Google Classroom or, you know what I am saying. People have gone back to the "normal" as you say. Um, and then when a student is out on quarantine or, god forbid, we actually go to, or a school could be closed, right, for a couple of weeks. I feel like, we're not, we have to think about what we have just gone through and have platforms ready to keep it moving smoothly. I don't know if I said that eloquent, but… We don't want to go through what we just went through, is where I come from. You have to think back, rather than just wish it was all normal, or wish it would go away or something.

Participant 5: It definitely has to be either everybody is at home or everybody is at school. Having just a few kids from your class at home and everybody else in the classroom is impossible.

8. Do you have additional comments that you would like to share with the researcher?

   Participant 1: I don't think so, I think we covered most everything.

Participant 2: Um, yes. I, I feel like um, I honestly feel like um, remote learning can supplement. It could supplement homeschools. People that are that are truly homeschooling, but I do not feel like it can take the place of um, it cannot take the place of in class learning. There has to be some sort of in class learning. If it's a microcosm school, that they're doing like a homeschool and they've got some kids together learning, and um, and manipulating um, you know using manipulatives, and manipulating objects, yes, great. Um but then they need the interaction. They need small group interaction, and they need interaction with an adult who knows how to break down or decompose math concepts and reading concepts.

Participant 3: No, I think I am good, thank you.

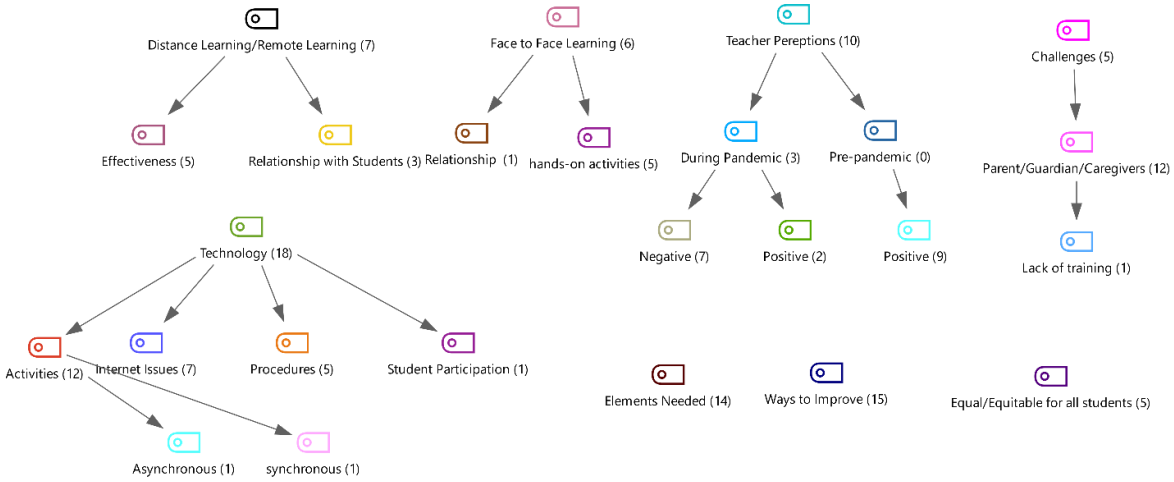
Participant 4: I don't know that this is necessary helpful for what you are trying to get out, but um, this is just a sidenote for a concern that I got. I think there needs to be professionals involved with the students and parents over social media stuff. Um, and it does affect the classroom. It does affect what is going on in these schools. We are spending a lot of time, at least in say in fifth grade on putting out fires, as they say, on problems that generate outside of here but come in here, anyway. And students using technology more than ever, whether officially or not, but I have thought, there needs to be something much more done on that front or I think we are going to have bigger and bigger problems that do effect academics.

Participant 5: No, it's good.

Appendix F

Creative Coding

MAXQDA 2020


Distance Learning/Remote Learning (7)
Effectiveness (5)
Relationship with Students (3)
Face to Face Learning (6)
Relationship (1)
hands-on activities (5)
Teacher Pereptions (10)
During Pandemic (3)
Pre-pandemic (0)
Negative (7)
Positive (2)
Positive (9)
Challenges (5)
Parent/Guardian/Caregivers (12)
Lack of training (1)
Technology (18)
Activities (12)
Internet Issues (7)
Procedures (5)
Student Participation (1)
Asynchronous (1)
synchronous (1)
Elements Needed (14)
Ways to Improve (15)
Equal/Equitable for all students (5)