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A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

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by

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Dedication

This dissertation is dedicated to my Lord and Savior Jesus Christ. Without your love and support, this would not be possible. Thank you for guiding me through highs, lows, and storms I had to face during this long journey.

To my wife Rachel, thank you for your love, support, sacrifices, and encouragement. You believed in my dream and encouraged me to persist when things were difficult. You are the love of my life, and I am so honored to have you as my teammate in life. I love you!

To my children Savannah, Trey, and Devin, thank you for believing in your father and being supportive of my dream. I know that it was not easy, but thank you for your love and support!

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Abstract

Emergency remote learning (or remote learning) altered K-12 instruction and occurred during the COVID-19 pandemic in the spring of 2020. Mandatory lockdowns and social distancing efforts transformed face-to-face instruction into a new pedagogical model called emergency remote learning or remote learning. In this qualitative case study, I aimed to understand how third-grade language arts instruction was affected during the transition to remote learning during the COVID-19 pandemic from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers. Additionally, the researcher used Moore's (1997) transactional distance theory to investigate which strategies (methods, materials, and technologies) were successful or unsuccessful in remote learning during the spring and fall of 2020. I found that the transition to emergency remote learning was a continual trial, error, and refinement process. As emergency remote learning days extended past 21 days, content from instructional packets started to run out, and teachers scrambled to devise creative alternatives. In addition, teachers observed that the language arts experience of students was directly impacted by the location where they were participating. Students participating from home were less likely to engage in learning versus students participating on campus during emergency remote learning.

Keywords: emergency remote learning, elementary language arts, COVID-19, remote learning

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Chapter 1: Introduction

Emergency remote learning (or remote learning) altered K-12 instruction and occurred during the COVID-19 pandemic in the spring of 2020. Mandatory lockdowns and social distancing efforts transformed face-to-face instruction into a new pedagogical model called emergency remote learning or remote learning. Many teachers had no prior experience with online instruction preceding the mandatory school closures and remote learning associated with the pandemic (Trust & Whalen, 2020). Inexperienced in an online teaching model, elementary teachers were forced to transform classroom materials, curriculum, and teaching paradigms in a matter of days (Fauzi & Khusuma, 2020; Trust & Whalen, 2020; Wang et al., 2021). In particular, elementary language arts instruction had to quickly adapt instructional methods, materials, and assessments into digitized formats to meet the needs of students in remote locations.

Coker (2020) stated, “schools can transform instruction, including when schools resume face-to-face, into a much more efficient, student-centered environment” (p. 82). As schools have continued to transition back to face-to-face learning, the impact of remote learning continues to influence the K-12 pedagogical model and the role of the teacher. Although school systems across the United States experimented with online learning before the COVID-19 pandemic, the successful implementation of remote learning has influenced the adoption of hybrid learning models and online learning days for school closings (Coker, 2020; Richman, 2014). The lessons learned from remote learning could positively affect K-12 education for decades to come. Therefore, it was necessary to explore the challenges and successes of remote learning to strategically prepare elementary language arts teachers to adapt and respond to the changing

learning needs of students during future emergencies, weather closings, and pandemics (Christensen & Alexander, 2020).

Background

The KHS (pseudonym) school district is a private boarding school located in the Eastern United States, serving financially disadvantaged students throughout the United States in grades Pre-K through 12. The school absorbs all costs associated with caring for disadvantaged students, such as food, shelter, clothing, medical, dental, and psychological care.

The student school day is organized into academic and residential components within three separate divisions known as Elementary, Middle, and Senior. Students in grades Pre-K through grade 4 attend school within the Elementary Division, grades 5–8 attend the Middle Division, and grades 9–12 attend the Senior Division. Students live in residential units called residential homes, where approximately six to eight students live with two residential care providers. All residential homes are equipped with technology, device chargers, headphones, and Wi-Fi internet access.

A staff of 45 full-time teachers and two building administrators serve students in grades Pre-K to grade 4 in the elementary school building known as KHS Elementary. Each elementary student is provided with a school-issued iPad furnished with educational applications and accessories, such as headphones, for face-to-face and virtual instruction participation.

COVID-19

The COVID-19 virus originated in Wuhan, China, and impacted central Asia in December 2019 (WHO, 2020). Approximately one month later, the U.S. Centers for Disease Control and Prevention (CDC) detected the first case of COVID-19 in the United States in January 2020 (Holshue et al., 2020). COVID-19 quickly spread across the globe in January 2020,

causing the World Health Organization (WHO; 2020b) to recommend social and physical distancing efforts to prevent the spread of the virus.

Schools across the globe responded by transitioning to emergency remote learning or remote learning in February 2020 for an indefinite time (Daniela & Visvizi, 2022). Burke and Ločmele (2022) define remote learning as "fully remote teaching solutions for instruction or education that would be otherwise delivered face-to-face or as blended or hybrid courses, and that will return to that format once the crisis has abated" (p. 16). In other words, remote learning is a temporary learning solution activated during emergencies when meeting in person is impossible and involves solutions, such as packets and using technology, to facilitate asynchronous and synchronous learning.

Emergency remote learning had traditionally been a localized or regional phenomenon before the COVID-19 pandemic; however, educators had to adapt from the familiarities of face-to-face instruction to a new and unfamiliar form of online instruction with "unprecedented speed" unlike any other time in history (Hodges et al., 2020). UNESCO (2020) reported over 1.37 billion students and nearly 60.2 million teachers in 200 countries worldwide were no longer in the classroom by March 2020.

KHS Transitions to Remote Learning

By March 2020, an estimated 55.1 million students across the United States were affected by school closures, forcing schools to adapt to a new remote learning model (Clausen et al., 2020). At the beginning of March 2020, KHS school district administrators prepared teachers for a possible shift to emergency remote learning. KHS elementary teachers prepared and distributed instructional packets for students to complete asynchronously in a residential home setting. At

the end of the week, students in grades 3 and above packed their school-issued devices in their backpacks if they needed to participate in synchronous instruction through Google Meet.

Two days after the state's governor announced a statewide mandate closing all public schools for two weeks, the KHS school district transitioned to emergency remote learning. As a private boarding school serving underprivileged youth from across the United States, KHS had more flexibility and options than most schools. Therefore, the KHS administration issued a communication to parents providing them with the option of having their child stay on campus in a residential home or return home. Approximately 30% of families picked up their child, while the remaining 70% of students stayed on campus with their residential care provider in a residential home.

Emergency remote learning started as a temporary measure to curb the pandemic; however, it evolved into a long-term situation that continued through the remainder of the 2019-2020 school year. Several challenges began to emerge for elementary teachers and students. First, teachers condensed their curriculum into one-size-fits-all instructional packets containing 21 days of lessons that students needed to complete independently. Inexperienced in virtual learning, most elementary teachers scrambled to prepare engaging digital lessons as emergency remote learning continued past 21 days. Secondly, the initial transition to emergency remote learning assumed that students would remain on campus throughout virtual learning; however, many students were displaced off-campus as families picked up their children and brought them home. In addition, approximately 30% of students were no longer on campus, which created logistical challenges for collecting and distributing additional assignments across the United States. Efforts were made to mail iPads and mobile hotspots for Wi-Fi access; however, due to high demand, a limited number of students received mobile hotspots. As the dynamics and needs

of students during remote learning changed, KHS administrators and teachers adjusted instruction and infused more technology into instruction, which required students to participate in synchronous and asynchronous learning.

Statement of the Problem

All students enrolled at KHS Elementary come from financially disadvantaged backgrounds and begin standardized testing in language arts instruction in third grade. Research indicates that low-income students consistently underperform their peers on standardized tests (Davis, 2019; Jensen, 2009; Ladd, 2012; Neuman, 2013). In addition, low-income students are more likely to experience cognitive lags, spend less time reading at home before entering kindergarten, and are twice as likely to have learning difficulties than their affluent peers (Davis, 2019; Jensen, 2009; Ladd, 2012; Neuman, 2013). Vocabulary and reading comprehension are performance indicators of success on standardized tests; however, low-income students consistently lag behind their peers in exposure to vocabulary within the home environment (Hart & Risley, 1995).

Emergency remote learning (or remote learning) altered how third-grade language arts instruction occurred at a private residential elementary school in the Eastern United States during the COVID-19 pandemic in the spring and fall of 2020. Inexperienced with an online teaching model, third-grade language arts teachers quickly adapted and transformed classroom materials, curriculum, and teaching paradigms to meet the needs of students in remote locations within a matter of days (Fauzi & Khusuma, 2020; Trust & Whalen, 2020; Wang et al., 2021). The pandemic created unprecedented challenges for elementary teachers, learning support teachers, administrators, and residential care providers tasked with supporting elementary language arts instruction in virtual learning environments.

The emergency remote learning experience could be best described as “building the plane while trying to fly” as teachers had to adapt to new responsibilities and unexpected challenges (Sayman & Cornell, 2021, p. 197). New technologies and video conferencing tools designed for adults became the primary method of classroom instruction (Coker, 2020; Wang et al., 2021). Classroom materials were quickly digitized, and face-to-face instructional strategies were converted into synchronous and asynchronous activities (Asanov et al., 2021; Borup et al., 2020; Kaden, 2020; Mutch, 2021). Grading and attendance policies were revised, and teachers became adept at providing technical assistance and solving logistical challenges (Asanov et al., 2021; Borup et al., 2020; Kaden, 2020; Mutch, 2021). Teachers were forced to find creative ways to communicate and collaborate with caretakers to support instruction in a home setting, address challenging student behaviors, and support the emotional well-being of children within virtual classrooms (McFayden et al., 2021; Wang et al., 2021).

As KHS Elementary transitioned back to face-to-face learning, emergency remote learning continued to influence instructional strategies, methods, and technologies to support students. The lessons learned from the spring and fall of 2020 will continue to impact the future of pedagogy, professional development, and responses to emergencies where remote learning is warranted to respond to weather closings, natural disasters, emergencies, and health outbreaks (Coker, 2020; Christensen & Alexander, 2020; Mutch, 2021; Wang et al., 2021). Therefore, it was necessary to explore the challenges and successes of remote learning through the lens of third-grade language arts teachers, learning support teachers, administrators, and residential care providers to support teaching and learning.

Purpose of the Study

The purpose of this qualitative case study was to identify how emergency remote learning affected third-grade language arts instruction at a private residential elementary school in the Eastern United States from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers. The research study aimed to understand how third-grade language arts instruction was affected during the transition to remote learning during the COVID-19 pandemic. Additionally, the study investigated which strategies—methods, materials, and technologies—were successful or unsuccessful in remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

Research Questions

The following questions guided the qualitative research design, data collection, and analysis:

RQ1: How did the transition from face-to-face to remote learning affect third-grade language arts instruction at a private boarding school during the initial stages of the COVID-19 pandemic in the spring of 2020 from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

RQ2: How have certain instructional methods, materials, and technologies been successful or unsuccessful during remote learning through the lens of transactional distance theory and from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

Definition of Key Terms

Bitmoji classroom. A virtual classroom designed in Google Slides depicting a fictional classroom scene greeted by a cartoon image of the teacher (Ligon IV, 2021). Bitmoji Classrooms served as a virtual hub for students filled with hyperlinks to helpful classroom resources, such as Zoom links, schedules, teacher contact information, homework assignments, and virtual libraries.

Emergency remote learning. This research study will use emergency remote learning and remote learning interchangeably. Burke and Ločmele (2022) define emergency remote learning as "fully remote teaching solutions for instruction or education that would be otherwise delivered face-to-face or as blended or hybrid courses, and that will return to that format once the crisis has abated" (p. 16). In other words, remote learning is a temporary learning solution activated during emergencies when meeting in person is impossible and involves solutions such as packets and using technology to facilitate asynchronous and synchronous learning.

General education teachers. General education teachers are responsible for teaching language arts, mathematics, social studies, reading, and writing (Steed & Leech, 2021). For this research study, General education teachers will refer to 3rd-grade language arts teachers.

Hybrid learning. The combination of face-to-face and virtual instruction during the Fall of 2020, which created a learning environment where teachers were simultaneously responsible for students inside a classroom and virtually (Corzo-Zavaleta et al., 2023).

Learning support teachers. Teachers who are responsible for providing special education services, instruction, supporting student needs, and meeting with parents and students to author and ensure IEP and 504 plans are being followed (Steed & Leech, 2021).

Theoretical Framework

This dissertation was grounded in Moore's (1997) transactional distance theory and analyzed the impact of emergency remote learning on third-grade language arts instruction during the spring and fall of 2020. This theory is based on distance learning theory and the works of Michael G. Moore (1973), who theorized that a separation exists between instructors and learners in distance learning environments. The separation of psychological and pedagogical distance is known as transactional distance. Batita and Chen (2022) describe it as "the separation between teachers and learners is more pedagogical and psychological, rather than merely geographical" (p. 548). Moore (1997) posited that the transactional distance or separation between a learner and teacher is impacted by the interplay of three elements: dialog, structure, and autonomy.

Dialog

Dialog refers to the purposeful interaction and communication between a teacher and learner within a distance learning environment (Batita & Chen, 2022; Falloon, 2011; Moore, 1997). Giossos et al. (2009) expand the definition of dialog to include "clearly defined educational targets, cooperation and understanding on the part of the teacher, and, ultimately, it culminates in solving the learners' problems" (p. 2). In other words, distance learning environments can include synchronous and asynchronous communication methods to facilitate dialog between teachers and learners (Batita & Chen, 2022). Synchronous communication occurs in real-time through phone calls, video conferencing applications, text messaging, and instant messaging. Asynchronous communication does not occur in real-time and provides flexible communication methods, such as written learning objectives and feedback, email communication, and discussion boards.

Moore (1997) theorized that the "transitional distance" between teachers and learners maintains an inverse relationship with dialog. For example, as the dialog between a teacher and learner increases, the perceived psychological or transaction distance decreases (Moore, 2018). In other words, increased dialog bridges the psychological gap between teachers and learners across geographical distances.

Saba and Shearer (2018) suggested that dialog is influenced by a variety of factors, such as "the content or subject matter, which is studied, by the educational philosophy of the educator, by the personalities of educator and learner, and by environmental factors, the most important of which is the medium of communication" (Location No. 419). Additionally, Moore (1997) argued that not all tools are equal and advocated that some tools can be used to "manipulate" and "increase dialogue between learners and their teachers, and thus reduce the transactional distance" (Moore, 1997, p. 2). For example, Bacon and Liu (2021) found synchronous communication was more effective than asynchronous communication in an elementary classroom during remote learning. Synchronous communication tools that replicated face-to-face interactions increased student participation and developed a stronger connection between teachers and learners (Bacon & Liu, 2021).

Structure

Moore (1997) wrote that transactional distance "refers to the psychological or communicative space that separates instructor from the learner in the transaction between them, occurring in the structured or planned learning situation" (Moore, 1997, p. 1). The structure of a learning environment determines how responsive or rigid learning objectives, teaching methods, materials, and assessments are in satisfying the individual learner's needs (Batita & Chen, 2022; Moore, 1997; Reyes, 2013).

Falloon (2011) indicated that structure "includes aspects such as the extent to which course goals and objectives are pre-prescribed, the pedagogical model used in teaching the course (e.g., teacher- vs. student-centered), the nature of course assessment, and the ability of the course to accommodate individual student needs" (p. 190). According to Saba and Shearer (2018), in a highly structured distance learning environment, "the objectives and the methods to be used are determined for the learner and are inflexible" (Location No. 426). In other words, highly structured courses tend to be more rigid, teacher-centered, and less flexible to the needs of learners than courses that are less structured (Batita & Chen, 2022).

Autonomy

Moore (1997) described learner autonomy as "the extent to which in the teaching/learning relationship it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program" (p. 6). In other words, autonomy is the amount of perceived control the learner has in "what to learn, how to learn, and how much to learn" (p. 68). Moore's original theory was based on adult learners, who "tend to set their own learning goals and pursue achieving such goals on their own" (Saba & Shearer, 2018, Location No. 426). He theorized that as the amount of transactional distance between learners and teachers increases, the greater the amount of learner autonomy is needed to participate in the course or distance learning environment (Moore, 1997).

Transactional Distance

Transactional distance theory states that the quality of teaching and learning experience in distance learning is influenced by the interplay of dialog, structure, and autonomy within each interaction or transaction between learners and teachers (Moore, 1997). Saba and Shearer (2018) wrote that "realizing that dialogue, structure, and autonomy determine the degree of separation

between the learner and the educator in time and space, Moore defined transactional distance as a function of these three variables" (Location No. 433).

Falloon (2011) stated, "Moore's theory asserts that an inverse relationship exists between these three factors, in that increases in one can lead to corresponding decreases in others" (p. 190). An inverse relationship exists between dialog and structure (Moore, 1997). For instance, when a distance learning course is highly structured and teacher-learner dialog is low, a high amount of transactional distance is created between the teacher and learner (Moore, 1997). Thus, the amount of autonomy required for learners to successfully navigate the course or learning environment increases (Moore, 1997).

Moore's theory has primarily considered distance learning in higher education environments; however, the COVID-19 pandemic introduced transactional, physical, and psychological distances between teachers and students in K-12 environments through school closures, social distancing, and remote learning and has created a need for educators to understand how to better use technology as a vehicle for asynchronous and synchronous learning (Asanov et al., 2020; Borup et al., 2020; Coker, 2020; Gillis & Krull, 2020; Kirshner, J, 2020; Malkus, 2020; Sayman & Cornell, 2021; Trust & Whalen, 2020). Transactional distance theory provides a valuable lens for understanding educators' perspectives in remote learning in elementary language arts instruction during the COVID-19 pandemic.

The increased reliance on technology for communication, collaboration, and online interaction between teachers and elementary students during remote learning created a need to understand distance learning within the context of the elementary classroom through the lens of transactional distance theory (Alston et al., 2017). Therefore, this theory provided a lens for understanding the professional development and pedagogical shifts needed for third- and fourth-

grade teachers to support students and maintain a relationship between structure, dialog, and transactional distance (Moore, 2018).

Summary

In conclusion, the global COVID-19 pandemic created unprecedented challenges for schools worldwide, including teachers, administrators, and residential care providers at KHS Elementary. Therefore, I aimed to investigate further how remote learning influenced the pedagogical strategies, methods, and materials used by third-grade teachers in virtual and face-to-face learning environments through Moore's transactional distance theory. Additionally, I wanted to understand which instructional strategies and tools have been successful or unsuccessful in remote learning and how the experiences of teachers, residential care providers, and administrators could shape future professional development and remote learning models. The COVID-19 pandemic taught us how little control we truly have and how quickly global issues can impact local communities and schools. Therefore, researchers need to explore the successes and challenges of remote learning to prepare for future emergencies and unexpected school closures.

Chapter 2: Literature Review

In December 2019, a new variety of coronavirus called COVID-19 originated in Wuhan, China, resulting in shortness of breath, fever, and pneumonia "of an unknown etiology" (WHO, 2020). Although the virus impacted central Asia, the U.S. Centers for Disease Control and Prevention (CDC) detected the first American case of COVID-19 in Snohomish County, Washington, on January 20, 2021 (Holshue et al., 2020). WHO formally acknowledged the outbreak of COVID-19 on January 21, 2020, which resulted in 282 confirmed cases across four countries resulting from COVID 19 and six total deaths in Wuhan, China (WHO, 2020).

On January 30, 2020, with over 9,826 confirmed cases across the globe, WHO declared COVID-19 "to be a public health emergency of international concern" (WHO, 2020a). WHO recommended social and physical distancing measures to avert the spread of the COVID-19 virus, such as transitioning schools to remote or distance learning, encouraging employers to have their employees work remotely if possible, and closure of non-essential businesses and programs (WHO, 2020b).

As a result of the rapidly spreading virus, schools across the globe transitioned to emergency remote learning or remote learning beginning in February 2020 and continuing through March 2020, impacting over 1.37 billion students and approximately 60.2 million teachers in 200 countries worldwide (Daniela & Visvizi, 2022; UNESCO, 2020). What educators, students, and parents thought would be a temporary measure to protect the public's safety turned out to be a multimonth and multiyear experience called emergency remote learning.

Emergency remote learning or remote learning is a temporary form of learning occurring during an emergency, natural disaster, weather event, or health crisis when it is unsafe for students and teachers to meet face-to-face (Ray, 2020). Although different, many techniques and

pedagogical approaches used during remote learning stem from e-learning, online learning, and distance education practices (Anderson, 2021). Remote learning often combines a variety of synchronous and asynchronous methods and materials to replicate traditional face-to-face learning, such as take-home instructional paper packets, radio, television, and online instruction (Anderson, 2021; Daniela & Visvizi, 2022). In the following literature review I investigate the significant influences of remote learning from its beginnings in distance learning through the internet age and the present experiences of teachers, students, families, and administrators during the COVID-19 pandemic.

A Brief History of Distance Learning

According to Mcvey and Mcvey (2008), the term distance learning is "the communication over a distance between teacher and student mediated by print or some form of technology designed to bridge the separation between teacher and student in space or time" (para. 1). Forms of distance learning have emerged as correspondence courses, distance education, independent learning, fully online learning, and cyber schools throughout the past three centuries (Kamal & Ansari, 2017; Mcvey & Mcvey, 2008; Wedemeyer, 1981). Ultimately, the "primary objective of distance education is to create educational opportunities for the under-represented and those without access to a traditional educational institution" (Kentnor, 2015, p. 23).

The growing societal shift toward personal growth and nontraditional learning experiences in American culture influenced the development of the first correspondence course in the 18th century (Wedemeyer, 1981). Distance learning continued to evolve in the 20th and 21st centuries with the emergence of new mediums and shifts in modern technology, such as printed media, mail service, radio broadcasting, television broadcasting, computer technology,

and the internet (Kentnor, 2015; Mcvey & Mcvey, 2008; Sleator, 2010). Technology has continued to serve as the foundational driver and delivery mechanism of distance learning, connecting the learner and educator across physical distances, fostering communication, transmitting information, and providing a flexible learning pathway (Kentnor, 2015; Pregowska et al., 2021).

Adults who desired to learn skills such as shorthand but were restricted by time, finances, geographic location, and personal responsibilities, found that distance learning was a viable solution (Kamal & Ansari, 2017). The following section discusses the major historical influences of distance learning on modern-day emergency remote learning.

Correspondence Courses

Historians credit the first distance learning course to educator Caleb Phillips, who advertised a correspondence course in shorthand for adults in the *Boston Gazette* in 1728 (Kamal & Ansari, 2017; Sleator, 2010). Phillip's course identified a growing segment of the American population known as "nontraditional learners," who desired nontraditional learning opportunities outside of time, distance, and a physical classroom (Wheeler, 2019). Correspondence courses, also known as independent study, were influenced by and functioned based on two significant advancements of technology during this era: printed media and formalized mail delivery.

The invention of the printing press by Johannes Gutenberg between 1440 and 1450 A.D. created access to print media, a medium designed to reduce production time and cost and to communicate information to the masses (Childress, 2008; Wheeler, 2019). Correspondence courses utilized print media as the primary medium for communicating and preparing instructional materials and assignments through the 19th and 20th centuries (Kamal & Ansari,

2017). Printed media reduced the time needed to prepare and distribute course materials to the masses.

As the number of adults enrolled in correspondence courses increased between 1850 and 1930, the United States Postal Service (USPS) emerged as one of the first reliable national communication networks (USPS, 2020). The USPS indirectly created a market for commercial institutions, such as Pitman Shorthand (1852) and Colliery School of Mining (1890), to develop correspondence courses and independent studies (Sleator, 2010). Course developers used formalized postal delivery as the primary vehicle for communicating and distributing course materials, collecting assignments, and connecting with learners across large distances (Kamal & Ansari, 2017; Sleator, 2010).

Instructional Radio

Radio in the 1920s and 1930s emerged as a cost-effective and efficient alternative to traditional correspondence courses by mail, providing a quicker way to disseminate educational content across large distances in real-time and larger geographical areas (Pregowska et al., 2021). The University of Wisconsin-Extension created the first federally licensed educational radio station in 1906, broadcasting college-level lectures across public radio waves (Pregowska et al., 2021).

Harran High School in New York City was one of the first K-12 public schools in the United States to adopt radio as a method of classroom instruction in 1923 (Russell, 2006). Radio increased in popularity as ownership and operation costs decreased, prompting 200 educational radio licenses to be granted to educational institutions by the Federal Communications Commission (FCC) by 1946 (Sleator, 2010). Although new mediums for distance learning continued to emerge, print-based correspondence courses continued to exist (Sleator, 2010).

Instructional Television

Researchers noted the benefits of using television and film in K-12 education during the 1920s and 1930s (Cuban, 1986). A National Education Associated (NEA) survey in 1946 reported that 37.5% of American elementary schools and 20.7% of high schools frequently used instructional films in the classroom (Cuban, 1986). Instructional television combines audio and visual technologies to create a multimedia experience for students to simultaneously see and hear educational content. New York University Dean Thomas Clark Pollack stated that television was "the greatest opportunity for the advancement of education since the introduction of printing" (Stoddard, 1957, p. 27).

The University of Iowa became the first educational institution to use instructional television to broadcast college courses on closed-circuit television in 1934, providing students the flexibility to attend classes from different locations (Pregowska et al., 2021; Sleator, 2010). Public K-12 school systems in Los Angeles (1939) and Philadelphia (1947) followed, offering courses on closed-circuit television (Cuban, 1986; Russell, 2006). Although instructional television adoption in K-12 and higher education increased in the 1930s and 1940s, most schools found the cost of ownership and the limited amount of educational programming prohibitive (Cuban, 1986; Haran, 2015; Russell, 2006). Even if institutions had instructional film and television, many teachers felt uncomfortable using the equipment, found it difficult to infuse into the curriculum, and could not access equipment when needed (Cuban, 1986).

The demand for instructional television in K-12 education increased drastically in the 1950s and 1960s. Americans were growing discontent with public education and overcrowded classrooms, funding, quality of education, and the future security of the United States (Cain & Latts, 2021; Cuban, 1989; Saettler, 2004). School reformers proposed broadcasting the highest-

quality teachers on television to large groups of students in cafeterias or auditoriums to reduce costs (Cain & Latts, 2021). However, most school districts across the country declined to replace teachers with this instructional model.

Philanthropic investments from the Ford Foundation in 1955 and the passage of the National Defense Education Act in 1958 influenced large-scale deployments of television in K-12 schools (Saettler, 2004). According to Saettler (2004), the Ford Foundation donated approximately $70 million towards funding instructional television in schools between 1955 and 1965.

Consumer demand for household televisions increased from 3.8 million in 1950 to 60.5 million in 1955 (Edgerton, 2007). Educational programming on television was virtually nonexistent until a 1965 report by the Carnegie Commission on Educational Television recommended the establishment of public television and radio broadcasting networks (Edgerton, 2007; Jaksic-Lowe, 2017). Congress passed the Public Broadcasting Act in 1967, establishing the Corporation for Public Broadcasting (CPB; Pregowska et al., 2021). CPB provided low-cost educational programming to children around the country.

Satellite Television

With the emergence of satellite television in the 1980s and 1990s, television programming in K-12 and higher education institutions evolved into options for providing distance learning (Lacina & Book, 1991). According to Schlosser and Simonson (2009), distance learning is an "institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors" (p. 1). Satellite television involved producing educational content from a television studio, broadcasting it to a satellite, and accessing it through satellite equipment in individual

homes or schools (Lacina & Book, 1991). One of the first educational satellite television programs Learn/Alaska was launched in 1980, providing six hours of daily instruction to approximately 100 remote villages in Alaska (Pregowska et al., 2021).

K-12 schools used satellite television to solve staffing shortages and economic challenges in the 1980s and 1990s. For example, the University of Oklahoma developed a satellite television network to support rural school districts throughout Oklahoma facing staff and funding shortages during an oil crisis in the 1980s (Lacina & Book, 1991). Schools that could not afford to staff a teacher in a specific subject area could use satellite television as an inexpensive alternative, paying for a satellite dish and a small subscription fee (Lacina & Book, 1991). Students participating in the distance learning program had access to a live 1-800 hotline to call in, ask questions, and interact with instructors in real time (Lacina & Book, 1991).

Online Education

Throughout the 1980s and 1990s, schools continued to use a combination of instructional mediums to provide students with distance learning, including satellite television, interactive television, audio teleconferencing, and printed materials (Howley & Harmon, 1996; Lane & Cassidy, 1996). However, the convergence of affordable personal computers, tablet devices, and the internet expanded learning to reach across geographic boundaries, creating digital tools to connect students and teachers anywhere in the world (Collins, 2001; Kentnor, 2015; Pregowska et al., 2021). The emergence of computer technology powered by the internet created new possibilities for distance education and fully online learning (Collins, 2001; Kentnor, 2015; Lane & Cassidy, 1996; Pregowska et al., 2021).

Experimental online learning programs in K-12 education emerged in the 1980s and 1990s to provide primary and secondary students with distance learning opportunities. For

instance, the Star Schools Project emerged from a grant funded by the U.S. Department of Education to assist K-12 schools in funding, developing, and operating computerized distance learning or distance education programs (Lane & Cassidy, 1996). Researchers of the program noted increased student performance and engagement, a decreased financial burden, flexible learning options for students, and positive transformations in pedagogy (Lane & Cassidy, 1996).

Researchers have found that online education programs have increased student achievement and engagement, decreased financial burden, created personalized learning options for students of all ability levels, and positively transformed pedagogy (Howley & Harmon, 1996; Lane & Cassidy, 1996; Wicks, 2010). The success of experimental online learning programs like the Star Schools Project inspired additional online learning models. For instance, the Florida Virtual School was one of the first statewide virtual schools established in 1997, offering online distance education to students across Florida in grades 6–12 (Wicks, 2010). According to the Common Core of Data (2020) published by the National Center for Education Statistics, more than five million students were enrolled in 9,364 registered, fully and partially virtual schools in the United States during the 2019-2020 school year.

The number of online learning opportunities in K-12 schools increased dramatically in the 2000s and 2010s. The number of statewide supplemental courses, district-level supplemental courses, single-district cyber schools, multidistrict cyber schools, charter-based cyber schools, and blended learning programs increased and emerged as legitimate alternatives to traditional instruction (Watson et al., 2004; Wicks, 2010). Over 1.5 million primary and secondary students in the United States participated in online or blended learning in 2009-2010 (Wicks, 2010).

Before the 2019-2020 school year, researchers knew very little about applying distance learning and fully online learning in K-12 settings (Anderson, 2021). According to Anderson

(2021), “Until approximately 2020, systematic study of the use and effectiveness of distance education has focused almost exclusively on higher education. A recent research synthesis suggests that fewer than 5% of the studies have addressed K-12 education” (p. 19). However, by the end of the spring of 2020, schools across the globe became well-versed in the best practices of distance and fully online learning, as the phenomenon known as emergency remote learning evolved from distance education.

The COVID-19 pandemic in the spring of 2020 forced approximately 60 million primary and secondary students in the United States to quickly transition to fully online emergency remote learning in a matter of weeks (Becker et al., 2020). Teachers scrambled to apply three centuries’ worth of adult distance learning research and application to K-12 education (Anderson, 2021). Perhaps the best analogy to describe many teachers’ experiences is the following: “building the plane while trying to fly” (Sayman & Cornell, 2021, p. 197). What emerged was a real-time educational experiment facilitated by four primary methods of instruction: take-home instructional packets, radio, television, and online instruction (Anderson, 2021).

A History of K-12 Emergency Remote Learning

Remote learning, also known as emergency remote learning, refers to “fully remote teaching solutions for instruction or education that would be otherwise delivered face-to-face or as blended or hybrid courses, and that will return to that format once the crisis has abated” (Burke & Ločmele, 2022, p. 16). Remote learning applies features of distance learning and fully online learning to generate a temporary instructional model, which typically occurs during emergencies, where safety concerns prevent students and staff from learning inside a conventional face-to-face classroom (Ray, 2020). In other words, remote learning is a temporary

learning solution activated during emergencies when meeting in person is impossible and involves solutions to facilitate asynchronous and synchronous learning (Malkus, 2020).

Instruction is designed to adapt to the needs of students and the community, occurring synchronously or asynchronously through various tools and technologies, such as instructional paper packets, online learning modules, video conferencing, instructional videos, radio broadcasting, and television (Coker, 2020; Christensen & Alexander, 2020; Mutch, 2021; Trust & Whalen, 2020; Wang et al., 2021). The following section discusses the history of remote learning and its transition from a temporary localized decision to a globalized phenomenon.

Localized Emergency Remote Learning

Schools across the United States experience annual disruptions to traditional face-to-face learning caused by emergencies, extreme weather conditions, natural disasters, and sickness outbreaks. Research indicates that economic crises can also affect school attendance (Jacoby & Skoufias, 1997). Schools frequently turn to closures, delays, and virtual learning days when it is unsafe for students and staff to attend school physically.

Weather closings and delays due to snow and ice commonly occur in parts of the Midwestern and Eastern portions of the United States. The decision to close or delay school due to inclement weather is typically a localized decision made by administrators within individual school districts. It varies according to geographic location, road conditions, and weather conditions. School administrators also have to abide by state regulations created by state departments of education, which determine the legal number of school days students must attend. Additional school days may be added to the school year to meet this requirement. Many school systems have adapted by building snow-makeup days into the district's calendar to compensate for missed instructional days due to inclement weather (Milman, 2014).

The increased availability of the internet and technology in the home and classroom inspired schools to implement virtual or eLearning days that require students to attend school virtually, accessing assignments and materials online (Milman, 2014). In 2011, the state of Ohio passed a bill allowing school districts to substitute three virtual calamity days per school year, where students could attend school online or receive emergency instructional packets rather than extending the school year with additional makeup days (Milman, 2014; Richman, 2014). The district would receive credit for offering a virtual instructional day, thus eliminating the need to make up for the school closure. By 2014 legislators in Pennsylvania, Indiana, Illinois, and West Virginia passed similar legislation, which provided schools with the option of using eLearning days during weather closings (Richman, 2014).

Regional Emergency Remote Learning (Katrina)

Local school districts typically decide to close schools; however, Hurricane Katrina became one of the most widespread disruptions to education in American history in August of 2005. Causing an estimated $81.2 billion in damage, Hurricane Katrina displaced over one million people and closed hundreds of schools across the Gulf Coast region (Levitt & Whitaker, 2009; Winters, 2007). Entire communities and schools were decimated and uninhabitable, families were torn apart and displaced, and learning was disrupted for thousands of students across Louisiana, Texas, Alabama, Mississippi, and Florida (Winters, 2007). Even communities as far as Tennessee, Kentucky, Ohio, Pennsylvania, and New Jersey were affected by extreme weather and flooding originating from the storm (Winters, 2007).

In the hardest-hit areas like New Orleans, residents were evacuated and relocated to other parts of the United States (Levitt & Whitaker, 2009). An estimated 230,000 primary, secondary, and postsecondary students from the Gulf Coast were affected and forced to migrate to schools

and communities in 23 different states (Winters, 2007). The sudden influx of students migrating to schools in other states made schools scramble to increase staffing, purchase supplies and textbooks, provide mental health services, and support student academic needs (Winters, 2007).

Students returning to their communities following Hurricane Katrina adapted to new living situations, school conditions, and a lack of resources (Alvarez, 2010). For instance, entire communities were destroyed, allocating residents to temporary shelters, trailers, and cruise boats (Alvarez, 2010). Entire school systems along the Gulf Coast were displaced, and buildings were destroyed or unsafe to operate, forcing schools to find alternative locations for educating students. Tents and trailers replaced buildings, and classrooms emerged from emergency shelters (Winters, 2007). Extreme conditions within communities along the Gulf Coast limited access to electricity, food, and gasoline, forcing teachers to use alternatives to computers and technology in the classroom (Alvarez, 2010).

Most school systems in the region did not have large-scale crisis plans to prepare for students who could not immediately return home (Godfrey, 2009). For instance, thousands of school records were destroyed during the hurricane, forcing schools to consider modernizing systems to provide digital access to student records (Godfrey, 2009; Winters, 2007). Although Gulf Coast residents are encouraged to have emergency preparedness kits for hurricanes and natural disasters, many schools did not have emergency instructional packets and resources available for students during Hurricane Katrina (Winters, 2007).

Schools had to quickly learn to adapt instruction to meet students' academic, social-emotional, and mental health needs within communities destroyed by natural disasters (Alvarez, 2010; Winters, 2007). For instance, teachers within New Orleans schools were forced to teach multiple grade levels in one classroom, handle increased discipline issues, and address student

substance abuse while meeting academic standards (Alvarez, 2010). However, teachers within these communities found writing and oral storytelling as a "positive vehicle to help individuals alleviate some of the traumatic stresses" over several months (Alvarez, 2010, p. 33).

The aftermath of Hurricane Katrina emphasized the need for K-12 and higher education institutions to develop contingency plans for ensuring student and staff safety while continuing education (Lipke, 2005; Henderson, 2005). Plans were developed for streamlining communication, developing an effective chain of command, providing options for displaced students and faculty members, adapting learning to the needs of students, and planning for extended closures (Lipke, 2005). However, many contingency plans were focused on singular short-term events limited to specific geographic locations, not long-term global pandemics (Lipke, 2005; Henderson, 2005).

Global Emergency Remote Learning

Emergency remote learning had traditionally been a localized or regional phenomenon before the COVID-19 pandemic; however, the rapid and globalized nature of the COVID-19 pandemic forced educators across the world to adapt and innovate how learning occurs within the constraints of mandatory school closures and social distancing (Tam & El-Azar, 2020). Goldstein et al. (2020) state, "There is no precedent in educators' memories for what is happening right now. Schools have weathered disruptive events like Hurricane Katrina and the California wildfires, but those disasters were limited to shorter periods and smaller regions" (para. 13).

Mandatory lockdowns forced the entire world to displace the familiarities of face-to-face instruction and replace it with an unfamiliar, remote teaching model, requiring educators to redesign their curriculum within days (Fauzi & Khusuma, 2020; Wang et al., 2021). Throughout

the spring of 2020, entire school systems were forced to transform the curriculum, teaching methods, and strategies overnight from face-to-face instruction to online remote learning models.

Educators have had to adapt from the familiarities of face-to-face instruction to a new and unfamiliar form of online instruction with “unprecedented speed” unlike any other time in history (Hodges et al., 2020). As the pandemic has progressed, the elementary education teaching model has continued to evolve with the changing needs of students, the increased number of COVID cases in school communities, and mounting pressures in schools to have both face-to-face and virtual learning options.

According to UNESCO et al. (2021), the three most popular modes of remote learning during COVID-19 were online learning, instructional packets, and television. Each country’s response was influenced by economic level, geographic location, and social class, creating a digital divide between those with and without access to the internet and devices (Anderson, 2020; UNESCO et al., 2021). For instance, 95% of American K-12 students participated in online learning, and 89% received take-home instructional packets (UNESCO et al., 2021). Elementary students were more likely to use instructional packets (Anderson, 2021; UNESCO et al., 2021). In contrast, secondary students were more likely to participate in synchronous instruction through video conferencing tools, such as Zoom, Google Meet, and Microsoft Teams (Anderson, 2021; UNESCO et al., 2021).

Even after schools started to reopen in the fall of 2020, questions about student and staff safety emerged. Although remote learning became a global phenomenon, plans to return to classrooms across the United States were highly variable. For instance, school communities and teacher unions across the country, including Chicago, Mississippi, and Florida, raised concerns about student and staff safety (Anderson, 2021). Schools faced difficult decisions about returning

to the classroom in the fall of 2020. An estimated 60% of schools remained online, 20% returned to entirely in-person instruction, and 20% participated in a hybrid model (Anderson, 2020). Schools using a hybrid model typically offered in-person instruction two days per week, online instruction two days per week, and one day was devoted to deep cleaning.

Unpacking the Remote Learning Experience

Remote learning altered K-12 instruction and created a new pedagogical model called emergency remote learning. Many teachers had no prior experience with online instruction preceding the mandatory school closures and remote learning associated with the pandemic (Trust & Whalen, 2020). Inexperienced in an online teaching model, teachers were forced to transform classroom materials, curriculum, and teaching paradigms in a matter of days (Fauzi & Khusuma, 2020; Trust & Whalen, 2020; Wang et al., 2021). The following section discusses several themes emerging from research during the COVID-19 pandemic from the perspective of students, families, teachers, and administrators.

Pedagogical Shift

The COVID-19 pandemic forced entire school systems to shift from a face-to-face learning model to an entirely online or hybrid pedagogical model almost overnight. Malkus (2020) discovered that 30% of schools surveyed moved to emergency online remote learning within a week of school district closures, while 28% of school districts reopened within three weeks or more. According to UNESCO et al. (2021), 95% of American K-12 students participated in online learning, and 89% received take-home instructional packets. Elementary students were more likely to use instructional packets, while secondary students were more likely to participate in synchronous and asynchronous instruction (Anderson, 2021; UNESCO et al., 2021).

Methods. Educators had to quickly adapt teaching methods and materials to an online format to meet the needs of students, often with little to no training (Alston et al., 2017; Asanov et al., 2021; Baran & Alzoubi, 2020; Borup et al., 2020; Russo et al., 2021). Administrators encouraged teachers to be creative and adapt the curriculum to address fundamental and essential academic standards (Borup et al., 2020). New responsibilities and unexpected challenges emerged, such as digitizing resources, adapting face-to-face methods into synchronous and asynchronous activities, revising grading and attendance policies, providing technical assistance, and solving logistical challenges (Asanov et al., 2021; Borup et al., 2020; Kaden, 2020; Mutch, 2021).

Remote learning forced teachers to replace face-to-face instruction with printed instructional packets, radio broadcasts, telelearning, asynchronous education, and synchronous learning (Asanov et al., 2021; Borup et al., 2020; Kirshner, J, 2020). Researchers found that asynchronous techniques may be more accessible, but synchronous techniques like Zoom conversations better replicate face-to-face instruction, increase engagement, and facilitate classroom discussion (Gillis & Krull, 2020). Researchers have found that synchronous instruction in postsecondary environments is an effective tool for improving student attitudes, boosting participation, increasing completion of assignments, boosting test performance, and fostering positive learning communities (Collis, 1996; Schullo et al., 2007). However, little research has been devoted to understanding the impact of synchronous instruction on elementary students during remote learning. A mixed-method Australian research study did find that 55% of elementary math teachers felt that remote learning impeded their ability to implement specific face-to-face learning strategies in an online format (Russo et al., 2021).

Instructional practices and policies shifted to evolve and respond to new developments in remote learning (Coker, 2020; Sayman & Cornell, 2021). For instance, teachers had to find new and creative ways to communicate with parents, address challenging student behaviors, and support the emotional well-being of children within their virtual classrooms (McFayden et al., 2021; Wang et al., 2021). Becker et al. (2020) found that approximately 41% of teachers offered office hours, and 31% had individual meetings with families and students.

Technology. New technologies emerged as alternatives to face-to-face instruction. Becker et al. (2020) reported that teachers used synchronous video conferencing tools, such as Zoom, Google Meet, and Microsoft Teams, to replicate face-to-face classroom instruction (Becker et al., 2020). Video conferencing tools were also used to provide office hours and one-on-one virtual meetings between teachers and students (Becker et al., 2020). Elementary teachers had to quickly transform instructional strategies and learn how to engage young learners through video conferencing tools designed for adults with little to no experience working with these platforms (Coker, 2020; Wang et al., 2021).

Teachers experimented with asynchronous learning strategies to provide personalized learning experiences to provide students with the flexibility to work at their own time and pace. This was especially useful for households where multiple children had to share devices. Asynchronous activities include watching prerecorded videos, participating in online discussion forums, completing online assignments, completing instructional paper packets, and using websites to practice academic skills (Anderson, 2021; Becker et al., 2020; UNESCO et al., 2021). Learning Management Systems (LMSs) were also used to develop asynchronous activities for students to learn at their own paces, such as discussion forums, learning modules, and opportunities to provide peer feedback (Baran & AlZoubi, 2020).

Remote learning evolved during the spring of 2020, causing many educators to grow more comfortable with online learning pedagogy and technology tools. The pandemic forced school districts to enhance their remote-learning strategies, techniques, and offerings throughout the 2019-2020 school year (Coker, 2020; Malkus, 2020). For instance, Malkus (2020) found that 34% of schools surveyed used instructional packets or asynchronous platforms, such as Google Classroom and Canvas, at the end of March 2020. However, by the end of May 2020, 44% of school districts used synchronous instruction, while 86% used asynchronous instructional tools. The pandemic forced schools to continue to offer different schooling models for the 2020-2021 school year, such as hybrid instruction, modified face-to-face, and online instruction (Coker, 2020; Malkus, 2020).

Addressing Student Mental Health. Although entire school communities were closed and transitioned to remote learning for the safety of their students and staff, an increased number of students struggled with anxiety and depression (Alvarez, 2020; Asanov et al., 2020; Borup et al., 2020). Social distancing efforts limited most interactions between students and teachers through technology, such as cell phones, tablets, laptops, and Chromebooks. Face-to-face instruction was disrupted by a new model called remote learning and created challenges to students, families, and teachers' emotional, social, and mental well-being (Becker et al., 2020). For instance, Sprang and Silman (2013) found that one-third of children ages 12 to 17, who were quarantined and isolated due to pandemic illnesses or natural disasters, developed post-traumatic stress disorder (PTSD). Symptoms of PTSD include anxiety, depression, lack of concentration, and insomnia (Di Petro et al., 2020; Sprang & Silman, 2013).

As frontline workers, teachers were in direct contact with students and families, exposing them to many challenges households faced during remote learning. Schools responded to

challenges in different ways, often reducing rigor, adjusting policies, and accommodating student needs during such a unique time. Coker (2021) discovered that most American schools lowered expectations and adjusted academic rigor. Students experienced higher levels of engagement in situations where teachers considered and addressed the emotional needs of students (Borup et al., 2020; Gillis & Krull, 2020). For instance, Gillis and Krull (2020) instituted flexible assignment options, granted extensions on assignments, and fostered unique discussion opportunities for students to connect.

A school district in the Mountain West region of the United States discovered that student engagement increased through intentional relationships with teachers, peers, and administrators modeled through the affective, cognitive, behavioral (ACE) framework, which was used to analyze collected data (Borup et al., 2020). Baran and Alzoubi (2020) found how the design of an online learning experience impacted the student experience. For instance, human-centered design is one approach that aided in the smooth and effective transition from face-to-face to remote learning during the COVID-19 pandemic (Baran & Alzoubi, 2020). Human-centered design is built on three principles—building empathy, pedagogical problem solving, and developing an online community of inquiry (Baran & Alzoubi, 2020).

Teacher Professional Development

Teacher professional development is a vital aspect of the teaching profession because it provides educators with tools, strategies, and knowledge to educate students better. Remote learning exposed a significant gap in teacher preparation, explicitly involving technology integration, online learning theory, and remote learning best practices (Borup et al., 2020; Gillis & Krull, 2020; Trust & Whalen, 2020). One study found that educators were left feeling "overwhelmed and unprepared" for several reasons (Trust & Whalen, 2020, p. 191).

Teachers with prior online learning experiences experienced more success, less stress, and increased student engagement (Gillis & Krull, 2020; Trust & Whalen, 2020). Ingersoll (2004) found that younger teachers tend to have more experience using technology in the classroom because they are often exposed to higher levels of technology in teacher preparation programs and through personal experience. Unfortunately, only one-third of K-12 educators surveyed reported that they had some experience with remote teaching before the COVID-19 pandemic in the spring of 2020 (Trust & Whalen, 2020).

Most educators often had to learn how to design online learning environments and adapt materials to digital format, often without adequate training and support (Borup et al., 2020). School leaders were inundated with managing the unprecedented challenges of managing a school during a pandemic, which made it challenging to support staff with the challenges of remote learning. Trust and Whalen (2020) revealed that 23% of teachers went to an administrator for guidance and resources in their national study. Administrators encouraged teachers to be creative and adapt the curriculum to address fundamental and essential academic standards (Borup et al., 2020).

Educators had to find creative ways to get the support they needed to teach remotely (Borup et al., 2020; Christensen & Alexander, 2020; Trust & Whalen, 2020). For example, Trust and Whalen (2020) found that 68% of teachers asked for help from another colleague, 63% conducted independent internet searches, and 24% turned to social media. Although there was pressure to adapt to online learning quickly, Malkus (2020) found that 30% of schools shifted to remote education in a week, while 28% took three weeks or more to allow teachers to prepare.

As the needs of students changed during remote learning, so did the professional development needs of educators (Borup et al., 2020; Christensen & Alexander, 2020). Borup et

al. (2020) found a just-in-time coaching model and personalized professional development models were more successful for teachers integrating technology than traditional one-size-fits-all professional development. One school found that a customized approach to professional development, which focused on pedagogy and infusing technology into the classroom, successfully prepared teachers for the challenges of online learning (Christensen & Alexander, 2020).

Learning Loss and Reduced Instructional Time

The COVID-19 pandemic created logistical and academic challenges for schools based on lost instructional time due to closures, student absences, and student truancy (Asanov et al., 2020; Coker, 2020; Malkus, 2020, Malkus 2020a). Schools across the globe struggled with getting all students to attend online instruction for several reasons.

School Closures. Mandatory social distancing efforts and quarantines forced mandatory lockdowns and school closures worldwide (Asanov et al., 2020; Coker, 2020; Malkus, 2020; Malkus, 2020a). United States public schools closed on average eight instructional days during the spring of 2020 due to school cancellations, time to prepare for remote learning, and teacher professional development and training (Malkus, 2020a). Malkus (2020) discovered that 30% of schools surveyed moved to emergency online remote learning within a week of school district closures, while 28% of school districts reopened within three weeks or more.

Absenteeism. Schools across the globe experienced high levels of student absenteeism and truancy (Asanov et al., 2020; Coker, 2020; Malkus, 2020, Malkus 2020a). Geographic location and socioeconomic status influenced attendance (Asanov et al., 2020; Coker, 2020; Malkus, 2020). Urban students living in poverty experienced higher levels of absenteeism during remote learning (Coker, 2020). For example, the Chicago public school system stated, “77% of

students logged on, only 85% completed at least one assignment per week," with the rates for students receiving Special Education services estimated to be much higher (Coker, 2020, p. 80). Malkus (2020) found that an estimated 40% of Los Angeles Unified School District students did not participate in remote learning. In comparison, in Clark County, Nevada, teachers could not contact 35% of students within the district during the spring of 2020. These numbers correlate with national estimates of 18% to 25% of students being truant or absent during the remainder of the 2019-2020 school year (Malkus, 2020).

Teachers countered absenteeism and found that constant communication between teachers, students, and parents was essential during remote learning. In a study by Borup et al. (2020), teachers successfully provided office hours, daily check-ins with students, and personal contact with families every other week. Teachers used a variety of methods to check-in with families during remote learning, such as email, phone, and text messages (Borup et al., 2020; Goldstein et al., 2020). One school utilized a Google Form which collected information from teachers about student concerns and lack of participation, so school administrators could follow up with families (Borup et al., 2020).

Learning Loss. Experts suggest that students experienced learning loss, also known as a Covid slide, during the pandemic because of lost instructional time associated with modified assignments, canceled instructional days, student absences, truancy, and so on (Anderson, 2020; Asanov et al., 2020; Coker, 2020; Malkus, 2020, Malkus 2020a). Research about learning loss has focused extensively on the impact of several months of summer vacation; however, COVID-19 was one of the first times when learning loss was associated with the school year (Cooper et al., 1996; Di Petro et al., 2020; Kim & Quinn, 2013).

In a meta-analysis conducted by Cooper et al. (1996), elementary and middle school students experienced approximately one month's worth of learning loss in reading and math achievement over summer break. Cooper et al. (1996) also discovered a correlation between test scores and socioeconomic status. The test scores of low-income students tend to drop between spring and fall, while middle-class and affluent students remain the same in math and show a slight improvement in reading (Cooper et al., 1996)

Bielinski et al. (2020) discovered that learning loss significantly affected reading and mathematics achievement scores in grades K–5. Students in kindergarten experienced the most significant losses in reading achievement, while grades K–5 students experienced similar losses in mathematics (Bielinski et al., 2020). A Norwegian study found that student performance on national exams decreased significantly during the pandemic on quality of writing and hand-writing fluency (Skar et al., 2021).

Reduced Instructional Time. Researchers have found that remote learning significantly reduced academic rigor and impacted student performance, as the number of hours students spent learning decreased (Asanov, 2020; Coker, 2020; Malkus, 2020; Malkus, 2020a). Decreased learning time was inevitable. Less instructional time may be one of the factors associated with learning loss or the Covid slide (Di Petro et al., 2020).

Reich et al. (2020) analyzed the recommendations from each of the 50 state education departments in the United States. They found that most recommended three to four hours' worth of instructional time for secondary students and less than three hours for elementary students (Reich et al., 2020). A significant number of schools in the United States reduced academic course load, lowered expectations, eliminated grades, reduced the number of instructional days, and did not enforce truancy policies (Coker, 2020; Malkus, 2020; Malkus, 2020a). According to

a 2020 survey (Jacobson, 2020, as cited in Coker, 2020), an estimated 22% of students spent less than an hour on daily online learning assignments, while Huber and Helms (2020) estimated that 18% of students spent less than two hours a day on schoolwork.

Inequities

The COVID-19 pandemic revealed deep-seated inequities in communities and school systems across the globe involving lack of high-speed internet, access to devices, financial constraints, and quality of education (Alvarez, 2020; Perrin, 2019; Russo et al., 2021). Experts suggest that the pandemic magnified a digital divide between students with and without access to the internet and devices (Anderson, 2021). Depending on geographic location, families found high-speed internet extremely difficult or easy to access. Sadly, the rapid shift to online remote learning created financial hardship for many families who did not have access to a computer or tablet. Consequently, remote learning exposed several examples of inequity in access to learning and materials across the globe.

High-Speed Internet and Devices

Although many families were supplied with materials to support learning from home by their schools, one in five families did not have access to high-speed internet and a device to complete school assignments (Becker et al., 2020; Vogels et al., 2020). The Detroit public school system, one of the poorest school districts in Michigan and throughout the United States, found that 9 out of 10 students did not have access to a tablet, laptop, or internet access (Williams, 2020). Approximately one-third of families stated their children would have to turn to cell phones to participate in online learning and complete assignments because of a lack of devices or multiple people sharing devices in the home (Goldstein et al., 2020; Vogels et al., 2020).

Access to high-speed internet access became necessary for students to participate in online learning; however, many students did not have access to high-speed internet because of where they lived (Asanov et al., 2020; Perrin, 2019). For instance, rural Americans were less likely to have access to broadband internet, less likely to own a smartphone, and access to an additional computer or tablet (Perrin, 2019). Approximately 40% of families felt it was very likely to turn to public Wi-Fi in public facilities and parking lots to have a reliable internet connection (Vogels et al., 2020).

Schools were challenged to find ways to provide technology tools, infrastructure, devices, high-speed internet connections, and learning management systems for students and teachers to participate in remote learning (Clausen et al., 2020). Schools responded through partnerships with local businesses and bydistributing digital devices to needy families (Ali & Herrera, 2020). For instance, the Miami-Dade County Public Schools distributed more than 80,000 mobile devices and 11,000 mobile Wi-Fi hotspots to students in need (Goldstein et al., 2020).

Teachers had to address the challenges of student access by finding creative ways to provide instruction and materials during remote learning for students with and without devices and internet access (Asanov et al., 2021; Coker, 2020; Di Petrio et al., 2020; Trust & Whalen, 2020). For instance, teachers who had students without quality internet access mailed, delivered, and even emailed assignments to students (Asanov et al., 2021). Some teachers turned to phone calls and text messages to interact with families, communicate assignments, and answer questions (Goldstein et al., 2020). In a study by Baran and AlZoubi (2020), teachers emphasized building a positive online learning environment through various strategies, such as teacher videos, individual check-ins, and discussion forums where they can share personal experiences and challenges during the pandemic.

Financial Burdens. The COVID-19 pandemic created financial hardships for families that experienced lost wages due to government closure and state mandates. Becker et al. (2020) discovered that one in four parents had to spend additional money to purchase devices or internet access to support remote learning in their homes. Alvarez (2020) found that families struggled to juggle basic survival needs with buying internet access and having access to technology devices (Alvarez, 2020).

Families learned to be creative when accessing online learning. Low-income families were more likely to suffer financial burdens, share devices, or learn to be creative when accessing online learning materials (Asanov, 2020; Vogels et al., 2020). Asanov (2020) found that many families used smart television applications to access online learning materials. Alvarez (2020) found that many families turned to smartphones to access the internet and learning materials; however, it created difficulties for accessing some materials and large file sizes.

Quality of Education. Researchers discovered the quality of remote instruction received by students was influenced by many demographic factors, such as gender, income level, race, and geographic location (Asanov et al., 2020; Borup et al., 2020; Gillis & Krull, 2020; Kirshner, J, 2020; Malkus, 2020). Students living in high-poverty areas experienced differences in how instruction occurred (Coker, 2020; Malkus, 2020). For instance, Malkus (2020) found that school districts with high poverty levels were more likely to provide students with instructional paper packets. In comparison, school districts with lower poverty levels provided students with access to online learning through asynchronous and synchronous instruction (Malkus, 2020).

Learning Disabilities. Students with learning disabilities experienced significant learning challenges during remote learning (Becker et al., 2020; Coker, 2020; Grandits & Wagle, 2021). The pandemic forced many children receiving special education services to go without

assistance because of the unprecedented nature and challenges of remote learning. For example, Becker et al. (2020) discovered that only 59% of students, who received school-based services before COVID-19, continued during remote education.

School districts were challenged to quickly transform from face-to-face to fully online instruction, which resulted in a scaled-down curriculum and reduced time spent on assignments (Coker, 2020). Unfortunately, students with learning disabilities experienced increased frustration, less engagement, decreased structure, fewer routines, and increased demands on parents to support their children (Becker et al., 2020; Coker, 2020). For instance, parents of adolescents with ADHD had less confidence in managing remote learning and more challenges supporting home learning and home-to-school communication (Becker et al., 2020). For example, 31% of parents of adolescents with ADHD with an individualized education program (IEP) or receiving academic accommodations (504 Plan) reported remote learning to be very challenging (Becker et al., 2020).

Family Involvement. Social distancing efforts and mandatory school closures forced families to remain at home and generated a reliance on adults as co-teachers to provide additional support for their children (Borup et al., 2020; Goldstein et al., 2020). Parents struggled to navigate the responsibilities of having multiple children participating in online learning, because students often had to share spaces and devices with other family members, internet access, financial concerns, family members getting the virus, mental health concerns, job loss, and parents had to balance their jobs and child's education in a remote setting (Becker et al., 2020; Craig, 2020; Reimers, 2022).

Although many parents in the United States were forced to work from home during the pandemic, less than 30% of parents could work from home, which was largely influenced by

race, ethnicity, and income level (Bureau of Labor and Statistics, 2019; Gould & Shierholz, 2020). According to the U.S. Bureau of Labor Statistics (2019), minority parents are less likely to work from home, while parents earning higher income are more likely to work from home. An estimated 60% of parents in the United States, France, Germany, Italy, and the U.K. were unable to find alternative childcare during the pandemic and were forced to stay home or quit their jobs (Krentz et al., 2021).

Researchers have also identified a positive correlation between students' cognitive skills and parents' cognitive abilities and educational levels (Anger & Heineck, 2010; Holmand et al., 2008). Holmand et al. (2008) suggest that parents who are more educated are more effective at helping their children with homework and assignments. Additionally, Saylor et al. (2004) found that the more educated parents tended to spend more time with their children and are more likely to be active in their child's education.

Conclusion

In conclusion, the global COVID-19 pandemic has created unprecedented challenges for schools worldwide. The rapid transition to online education created obstacles to providing teachers with adequate training and resources to meet the challenges of remote learning. Remote learning created unexpected challenges, such as student mental health, financial burdens on families, and lost instructional days, forcing school districts to adjust their policies and procedures. The COVID-19 pandemic has taught us how little control we truly have and how quickly global issues can impact local communities and schools. Therefore, researchers need to explore the successes and challenges of remote learning to prepare for future emergencies and unexpected school closures.

Chapter 3: Research Method

This qualitative case study investigated how the transition to emergency remote learning affected student autonomy in third-grade language arts instruction during the initial stages of the COVID-19 pandemic in the spring and fall of 2020. Additionally, the study investigated how specific instructional strategies and technologies were successful or unsuccessful from the perspective of teachers, administrators, and residential care providers. The following chapter examines the research design methodology, analysis methods, participants, limitations, delimitations, and ethical considerations.

A qualitative research approach aims to gain a deeper understanding of a problem or phenomenon through the perspectives of individuals or groups within a natural setting (Creswell, 2013; Creswell & Creswell, 2018; Hancock & Algozzine, 2017). Qualitative research is commonly used in social sciences and education to gain profound and meaningful insights into human experiences and social problems (Creswell, 2013). Data compilation typically involves collecting descriptive information through text, imagery, document analysis, and interviews, which helps illustrate the experiences of individuals within a study (Saldaña, 2011).

However, qualitative research can pose several limitations. For instance, qualitative research samples tend to be smaller than quantitative samples, and these samples focus on specific populations, which provide limited generalizations (Creswell, 2013; Creswell & Creswell, 2018; Saldaña, 2011). Additionally, it may be difficult to replicate and control variables when data is collected in a natural environment during a specific period (Creswell, 2013). Finally, researchers play a primary role in interpreting, analyzing, and determining relevant data, which could be subject to bias and alternative interpretations (Creswell, 2013).

Research Questions

The following research questions guided the study:

RQ1: How did the transition from face-to-face to remote learning affect third-grade language arts instruction at a private boarding school during the initial stages of the COVID-19 pandemic in the spring of 2020 from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

RQ2: How have certain instructional methods, materials, and technologies been successful or unsuccessful during remote learning through the lens of transactional distance theory and from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

Research Design and Method

Case study methodology provides a valuable framework for understanding a phenomenon through the constraints of place and time (Stake, 1995). The following dissertation employed a qualitative single-case exploratory design to understand how the phenomenon of emergency remote learning impacted student autonomy in third-grade language arts instruction during the spring and fall of 2020.

Case study methodology is commonly used in social sciences, education, and "practicing professions" as a way to explain the causations of interventions and programs which may be "too complex for survey or experimental methods" (Yin, 2014, p. 18). Hancock and Algozzine (2017) suggest case studies are most effective when investigating "a contemporary phenomenon within its natural context using multiple sources of evidence" (Hancock & Algozzine, 2017, p. 15). Researchers gather multiple sources of qualitative data to triangulate, illustrate, and describe a phenomenon rather than testing a hypothesis (Stake, 1995; Yin, 2014).

Furthermore, exploratory case study design refers to a case study methodology used to understand how certain events occur and influence outcomes (Hancock & Algozzine, 2017). According to Baxter and Jack (2008), exploratory case studies are beneficial in "situations in which the intervention being evaluated has no clear, single set out outcomes" (p. 548).

Researchers are discovering that remote learning during the COVID-19 pandemic was complex and highly variable; thus, it is imperative to understand how the pandemic affected learning through the perspectives of educators and students (Asanov et al., 2020; Borup et al., 2020; Coker, 2020; Gillis & Krull, 2020; Kirshner, J, 2020; Malkus, 2020). In this dissertation I gathered qualitative data through semistructured interviews, focus group interviews, and document analysis to triangulate data and understand the phenomenon of emergency remote learning in third-grade language arts instruction. Data were collected from general education teachers, learning support teachers, school administrators, and residential care providers.

Institutional Context

The following dissertation investigated the emergency remote learning experience at KHS Elementary (pseudonym), a private boarding school in the Eastern United States. As one of three schools in the KHS school district, KHS Elementary serves financially disadvantaged students throughout the United States. KHS Elementary has 45 full-time teachers and two building administrators serving Pre-K through fourth-grade students. Students attend KHS Elementary during the school day and reside in a private residential home with six to eight other students after school hours. Each residential home is staffed with two residential care providers who supervise and provide primary care to all students.

According to Stake (1995), case studies are a practical methodology for researchers with access to a site and participants willing to share their experiences. I had access to willing

participants in the natural environment where they experienced the phenomenon (Creswell & Poth, 2018). I gathered quantitative data from adults responsible for teaching and supporting third-grade language arts instruction in a classroom environment or residential home.

Population and Sample

Patton (2015) stated that qualitative research emphasizes small sample sizes "selected purposefully to permit inquiry into and understanding of a phenomenon in-depth" (p. 52). Purposeful sampling is a qualitative method used to intentionally select site locations and individuals to ensure a rich collection of data (Billips, 2020). In this research study I used several purposeful sampling methods to ensure a rich collection of data from multiple perspectives.

Furthermore, I used criterion sampling to gather rich-quality data about student autonomy in third-grade language arts instruction impacted by emergency remote learning (Patton, 2015). Criterion sampling is a purposeful sampling method used to ensure that all participants were involved in supporting third-grade language arts instruction during the transition to remote learning at KHS Elementary in the spring and fall of 2020 (Patton, 2015). The following research study consisted of the following participants:

1. Three third-grade general education teachers at KHS Elementary who taught third-grade language arts instruction during emergency remote learning in the spring and fall of 2020.
2. Two third-grade learning support teachers at KHS Elementary who taught Tier 2 and Tier 3 third-grade language arts students with learning disabilities in the spring and fall of 2020.

3. Four KHS School District administrators who supported and supervised third-grade language arts teachers and learning support teachers during the spring and fall of 2020.
4. A focus group of five residential care providers at KHS Elementary, who were responsible for monitoring and supporting third-grade students in a residential home during spring and fall of 2020.

If additional information or resources were needed to extrapolate information because of unexpected findings and data points, I would use an opportunistic sampling method (Patton, 2015). Opportunistic sampling "differs from convenience sampling in that an unanticipated opportunity presents itself and is worth taking advantage of" (Patton, 2015, p. 310). After careful data analysis, I determined that an opportunistic sampling method was unnecessary.

Data Collection Procedures

A case study is a qualitative research methodology used to analyze "a single unit or system bounded by space and time," impacting future policy decisions, procedures, and research studies (Hancock & Algozzine, 2017, p. 9). Qualitative case studies are valuable for extracting a more profound and detailed understanding of a phenomenon from the perspective of a specific population (Hancock & Algozzine, 2017). Simons (2009) suggested three data collection methods in qualitative case study research: interviews, observations, and document analysis. The following section describes how I gathered data from semistructured interviews, focus group interviews, and document analysis to triangulate data sources and ensure validity (Gagnon, 2010).

Semistructured Interviews

Interviews are a standard method for collecting qualitative data in case studies (Simons, 2009). A semistructured interview design combines a structured interview protocol with the flexibility to ask additional follow-up questions of participants during the interview (Galletta, 2012; Saldaña & Omasta, 2018). I conducted two semistructured interviews with each of the four general education teachers, two learning support teachers, and four school administrators. Each interview lasted an hour and occurred in the participant's classroom, office, or through a private Zoom meeting.

The following interview preparation strategies, as outlined by McNamara (n.d.) were used to ensure interview quality and confidentiality:

1. Agreed on an interview setting with few distractions.
2. Described the intent and objectives of the interview.
3. Explained how the interviewer maintained and established confidentiality.
4. Described the interview structure and the projected amount of time it would take.
5. Shared the interviewer's contact information.
6. Provided an opportunity to answer the interviewee's questions and concerns.
7. Received consent to record the interview.

In addition, Harding (2013) recommended conducting pilot interviews to improve the quality of interview questions before a research study. I conducted two pilot interviews with two fourth-grade teachers, who were not participating in the research study. After analyzing the pilot interviews, I adjusted and rewrote several interview questions to establish an updated interview protocol.

An email invitation was sent to candidates with information about the research study, requirements, and an invitation to participate. Once I received permission, I scheduled an individual follow-up meeting with each participant to share an overview of the research purpose and process. Meetings occurred face-to-face in a private office or classroom or online through Zoom. The purpose of the meeting was to describe each participant's rights and responsibilities, answer participant questions, and gather a signed participation consent form. I notified participants of their rights and that they could cease participation at any time without penalty or consequence.

After the information meeting, I scheduled participants for the first of two one-hour interviews. Each interview occurred within each participant's classroom or office to ensure the person's comfort level. If a classroom or office environment was unavailable, interviews occurred in a private conference room located on-site. In situations where a participant could not meet on-site, interviews occurred through a private Zoom meeting. An Outlook Calendar invitation was sent to participants confirming the time and location of the interview and with a Zoom link if necessary.

The first interview collected participant background information and their experiences with third-grade language arts instruction during the transition to emergency remote learning in the spring of 2020. Afterward, I aksed participants to share three artifacts for document analysis through the lens of transactional distance theory (Moore, 1997). I then conducted a second one-hour interview with participants to ask additional follow-up questions and examine their experiences with third-grade language arts instruction in the fall of 2020.

Teacher Interviews. I conducted semistructured interviews with three language arts teachers and two learning support teachers, who taught third-grade language arts during the spring and fall of 2020. I invited each teacher to participate in two separate one-hour interviews.

The objective of the first interview was to collect general information about each participant's background and their experiences with emergency remote learning before and during the spring and fall of 2020. A semistructured interview guide (see Appendix A) contained scripted open-ended questions designed to better understand each participant's remote learning experiences in the spring of 2020 (Dicicco-Bloom & Crabtree, 2006; Galletta, 2012).

The interview guide established protocols for all participants to answer questions in identical order, allowing for comparison among each participant's experiences, known as cross-case analysis (Creswell, 2013). I asked participants a series of 12 questions to understand how emergency remote learning impacted student autonomy and the effectiveness of specific teaching methods, materials, and technologies during the spring of 2020 (see Appendix A). Semistructured interviews also allowed for additional follow-up questions to be asked during the interview to clarify, build upon concepts, and gather additional information (Galletta, 2012; Saldaña & Omasta, 2018).

After the first interview, I scheduled a second interview, and I asked participants to supply three artifacts used during remote learning in the spring of 2020:

1. Pedagogical artifact: an artifact representing teaching practice during remote learning in the spring of 2020 (e.g., instructional packets or digital lessons)
2. Structure artifact: an artifact depicting ELA curriculum expectations, routines, or schedules used in the spring of 2020 (e.g., classroom expectations, schedule, list of daily assignments of routines, etc.)

3. Dialog artifact: an artifact detailing an example of communication of classroom news, events, or assignments between the educator and students and/or caregivers (e.g., a link to the Google Classroom used in spring 2020).

After the first interview, I sent a follow-up email to participants containing an Outlook calendar invitation for the second interview and a reminder of the requested artifacts. Participants had one week to send the artifacts through email or interoffice mail. I then performed a document analysis on each artifact to investigate dialog, structure, and autonomy under Moore's transactional distance theory (Moore, 1997).

The objective of the second interview was to ask additional follow-up questions from the previous interview and document analysis, as well as examine their experiences with third-grade language arts instruction in the fall of 2020. I asked participants a series of 12 questions (see Appendix D) detailing how student autonomy was affected by emergency remote learning and specific teaching methods, materials, and technologies during the fall of 2020.

Administrator Interviews. I conducted two separate one-hour semistructured interviews with four KHS School District administrators who supported and supervised third-grade language arts teachers and learning support teachers during the spring and fall of 2020. Participants included one elementary building principal, one language arts curriculum specialist, one educational technology administrator, and one special education administrator.

The objective of the first interview was to collect general information about each participant's background experiences and how they supported and supervised third-grade language arts and learning support teachers during the spring of 2020. Additionally, each school administrator had a role in coordinating an emergency remote learning plan for teachers and

students, supporting device deployment, providing professional development, and communicating with all stakeholders during the pandemic.

A semistructured interview guide (see Appendix B) contained scripted open-ended questions designed to understand each participant's remote learning experiences in the spring of 2020 (Dicicco-Bloom & Crabtree, 2006; Galletta, 2012). The interview guide established a protocol for all participants to answer questions in identical order, allowing for comparison among each participant's experiences, known as cross-case analysis (Creswell, 2013). A series of 12 questions (see Appendix B) guided participants to share their experiences and unique perspectives on the transition to emergency remote learning instruction during the spring of 2020. Semistructured interviews allowed additional follow-up questions to clarify, build upon concepts, and gather additional information (Galletta, 2012; Saldaña & Omasta, 2018). A separate semistructured interview protocol was established with Administrator 4, who served as the director of digital technologies (see Appendix F).

At the end of the interview, each administrator was asked to provide any essential documents and emails used to communicate news, information, and policies with stakeholders during the spring of 2020. Requested documents included schoolwide email communications from the principal to teachers and residential care providers, a Google Doc shared with the school community with important news and updates, and weekly reports submitted by the school principal to the director of the elementary school division.

In addition, a follow-up email was sent to participants containing an Outlook calendar invitation for the second interview and a reminder of the requested artifacts. Participants had one week to send the artifacts through email or interoffice mail. I performed a document analysison

each artifact to investigate dialog, structure, and autonomy under Moore's transactional distance theory (Moore, 1997).

The objective of the second interview was to ask additional follow-up questions from the previous interview and document analysis, as well as examine their experiences supervising and supporting third-grade language arts instruction in the fall of 2020. A series of 11 questions (see Appendix E) guided participants to share how student autonomy was affected by emergency remote learning in the fall of 2020 and the effectiveness of specific methods, materials, and technologies. I developed follow-up questions based on collected artifacts and information that needed clarification from the previous interview. Questions were developed through the lens of Moore's transactional distance theory, asking participants about structure, dialog, and autonomy (Moore, 1997).

Focus Group Interviews

I conducted a one-hour focus group interview with five elementary residential care providers, who monitored and supported multiple third-grade students in a residential home during the transition to remote learning in the spring of 2020. The focus group interview occurred through Zoom to provide residential care providers the flexibility to participate in their residential homes and during noncontracted hours. Residential care providers are typically contracted to work between the hours of 2 pm to 8 am. Therefore, Zoom provided a flexible platform for residential care providers to participate from the convenience of their home during nonworking hours.

Focus groups help understand a phenomenon through the perspective of a "single entity" or group of individuals and help facilitate a conversation among "multiple participants sharing their knowledge or experiences about a specific subject" (Dicicco-Bloom & Crabtree, 2006, p.

315). It was essential to realize that focus groups were not a replacement or timesaving approach for individual interviews; however, they helped observe group dynamics and everyday experiences within a single entity (Dicicco-Bloom & Crabtree, 2006).

An email invitation was sent to candidates with information about the research study, requirements, and an invitation to participate in a focus group interview. Once permission was received, I scheduled an individual follow-up meeting with each participant to share an overview of the research purpose and process. Meetings occurred online through Zoom. The purpose of the meeting was to describe each participant's rights and responsibilities, answer participant questions, and gather a signed participation consent form. Participants were notified of their rights and could cease participation without penalty or consequence.

After the meeting, participants received an Outlook Calendar invitation sharing the time and Zoom link to the focus group interview. The focus group interviews used the same interview preparation strategies outlined in the semistructured interview section above (McNamara, n.d.).

The objective of the focus group interview was to expand upon themes and observations discussed in semistructured interviews with teachers and administrators. Residential care providers provided a unique perspective because they were required to provide personal care and support while supporting each child's remote educational needs. A focus group interview guide (see Appendix C) contained scripted open-ended questions designed to facilitate a conversation and build an understanding of each participant's remote learning experiences in the spring of 2020 (Dicicco-Bloom & Crabtree, 2006; Galletta, 2012). A series of 10 questions (see Appendix C) guided participants to share their experiences and unique perspectives on the transition to remote learning instruction during the initial stages of the COVID-19 pandemic. Additional

follow-up questions emerged during interviews and were used to clarify, build upon concepts, and gather additional information (Galletta, 2012; Saldaña & Omasta, 2018).

Harding (2013) recommended conducting pilot interviews to improve the quality of interview questions before a research study to refine interview questions and protocols. Therefore, I conducted pilot interviews with two residential care providers not participating in the research study. After analyzing the pilot interviews, I adjusted and rewrote several questions to establish an updated interview protocol.

Document Collection

According to Saldaña (2011), "documents are social products that reflect the interests and perspectives of their authors and carry 'values and ideologies, either intended or not'" (p. 68). Teachers and administrators were asked to contribute documents for analysis between the first and second semistructured interviews. I analyzed each document for shared values, beliefs, and themes to triangulate data from the semistructured interviews (Saldaña, 2011). Documents included links to each teacher's Google Classroom, digital materials, instructional packets for students to complete during the first 21 days of instruction, email communications, and other documents containing information about schedules, policies, and procedures.

Teacher Artifacts. I asked all third-grade and learning support teachers to contribute three artifacts from their emergency remote teaching experience in the spring of 2020. The artifacts included the following:

1. Pedagogical artifact: an artifact representing teaching practice during remote learning in the spring of 2020 (e.g., instructional packets or digital lessons)

2. Structure artifact: an artifact depicting ELA curriculum expectations, routines, or schedules used in the spring of 2020 (e.g., classroom expectations, schedule, list of daily assignments of routines, etc.).
3. Dialog artifact: an artifact detailing an example of communication of classroom news, events, or assignments between the educator and students and/or caregivers (e.g., a link to the Google Classroom used in spring 2020).

Administrator Artifacts. I asked each administrator to contribute one or more artifacts to communicate news, information, and policies with stakeholders during the spring of 2020. Requested documents included school-wide email communications from the principal to teachers and residential care providers, a Google Doc shared with the school community with important news and updates, and weekly reports submitted by the school principal to the director of the elementary school division. Each artifact provided valuable information to compare and triangulate data from semistructured interviews and focus groups, such as important news, dates, and instructions.

Interview Recordings, Transcripts, and Field Notes

I gathered audio recordings of interviews, transcripts, and field notes as part of the data collection process. Before the interview process, written consent was received from each participant to create an audio recording and written transcript of each interview. Each interview was recorded using a digital audio recorder and uploaded afterward to www.rev.com to generate a typed transcript. I stored copies of digital transcripts in an encrypted and password-protected hard drive and a backup copy was stored at www.rev.com.

I collected field notes as additional documentation and preventative measure for technical issues associated with audio recordings. Safeguards were in place to ensure the proper storage of

data during the research study and the destruction of data once the analysis is complete. For instance, recordings were stored in an encrypted and password-protected external hard drive, while handwritten notes were collected and placed in a locked filing cabinet (Dicicco-Bloom & Crabtree, 2006).

Data Analysis

The case study gathered several different data sources to triangulate data and ensure the accuracy of qualitative data. According to Yin (2014), "the analysis of case study evidence is one of the least developed aspects of doing case studies" (p. 165). An effective strategy for analyzing case studies requires researchers to use a theoretical framework to guide and interpret data (Yin, 2014). I examined data through the lens of Moore's (1997) transactional distance theory, which provided a pedagogical understanding of the dynamics between teachers, learners, and content in an online environment through the relationship between structure, dialog, and transactional distance between teachers and students (Moore, 2018). I analyzed, extracted, and examined the data using several different methods.

Transcripts Analysis

Semistructured and focus group interviews contained the bulk of the collected data. Audio from interviews was uploaded to www.rev.com and transcribed into a word-processing document to provide a written interview transcript. The transcripts were de-identified and coded using in vivo and values coding to analyze data for themes, meaning, and patterns, because it "utilizes participant's own language as a symbol system" and analyzes the language used in an interview transcript for patterns, keywords, and phrases (Saldaña & Omasta, 2017, p. 121). I analyzed transcripts using deductive coding, which uses a priori codes or predefined codes or themes (Saldaña & Omasta, 2018).

In addition, in vivo coding was used to dissect transcripts and examine every word of a transcript or document, looking for keywords and phrases to interpret its meaning (Saldaña & Omasta, 2017). I reviewed every "interview transcripts and other participant-generated texts to cull words and phrases that seem to stand out, as if they deserve to be italicized, bolded, underlined, or highlighted for visual emphasis" (Saldaña & Omasta, 2017, p. 121). I used values coding to analyze transcripts for values, attitudes, and beliefs associated with the research study (Saldaña & Omasta, 2017). Transcripts were dissected to interpret the values, attitudes, and beliefs associated with each participant's experiences during remote learning. I expected specific themes to emerge from the research, which would impact future professional development and planning for remote learning opportunities.

Document Analysis

I collected several documents and artifacts from teachers and administrators during the research process and analyzed, coded, and compared them to semistructured interviews to ensure validity and triangulate data. I utilized process to analyze each document, using gerunds *(-ing* noun) to describe what appeared to be occurring in the passage. I wrote the process codes in the margins of documents to identify actions taken by the participant, which is especially useful in understanding the decisions and actions made by teachers and administrators during remote learning (Saldaña & Omasta, 2018).

Deductive coding was used to analyze documents and artifacts using a priori codes or predefined codes or themes used to analyze documents and transcripts (Saldaña & Omasta, 2018). Fereday and Muir-Cochrane (2006) recommend creating a coding manual of broad, predefined categories based on research questions and theoretical frameworks (see Appendix G). A codebook of a priori codes (see Appendix G) was generated based on the study's theoretical

framework and research questions. For instance, I generated a priori codes from the three major components and terms of transactional distance theory and analyzed them for dialog, structure, and autonomy (Moore, 1997).

Ethical Considerations

The Belmont Report was written by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1978) and detailed several critical ethical considerations when working with human subjects. This qualitative case study used considerations from the report and additional policies and procedures for protecting human subjects. Therefore, this study had the following ethical considerations.

Before receiving full approval from KHS Elementary and Abilene Christian University's Institutional Review Board (IRB; see Appendix H), I did not collect data. A letter of consent approved by the IRB was shared with participants to establish confidentiality and communicate the nature of the research study, the role of the researcher, and each participant's rights. I also wrote an additional letter of consent to the KHS Elementary Division director to request permission to conduct research with teachers, administrators, and residential care providers at KHS Elementary.

Communicating and repeating the intent of a study is an important ethical component of research because additional data and unexpected findings may emerge (Dicicco-Bloom & Crabtree, 2006). Although I received written permission from all participants, I continued to communicate the purpose of the study and received verbal consent before each interview. Additionally, I reinforced to participants that they could disengage from participating in the study without consequence.

It is crucial to protect the confidentiality and anonymity of research study participants. According to Husband (2020), participants "should suffer no loss of professional standing, or suffer personal distress, and be treated equally to each other and without prejudice or discrimination" (p. 7). Protecting the identity of participants is paramount. Throughout the research, study participants were referred to by their position and letter, such as Administrator 1, Teacher 2, Learning Support Teacher 3, and Residential Care Provider 4. A different number in the sequence identified each participant.

Audio from all interviews was recorded for semistructured interviews and focus groups; therefore, it was essential to receive verbal and written consent before recording audio. I told participants that audio recordings would be converted into transcripts for analysis. All audio records and transcripts were stored in a secure location for the research study and will be destroyed seven years after the completion of the research study.

According to Husband (2020), "Ethical behavior in qualitative research interviews requires a reflexive and emotive human response to the individual and the circumstances" (p. 7). It was essential to understand that interview questions could unintentionally extract deep, emotional responses from participants. Therefore, it was vital to have a protocol to provide participants with resources and psychological support if interviews created unnecessary stress or increased psychological complications (Dicicco-Bloom & Crabtree, 2006).

Assumptions

The following research study contained several assumptions. First, participants understood the questions being asked of them in interviews and focus groups. Next, the responses provided by participants were an accurate and honest representation of their

experiences during remote learning in the spring and fall of 2020. Finally, my position in the organization did not influence participants' responses, interactions, and honesty.

Limitations

The research study anticipated the following limitations:

1. The study occurred during the 2022-2023 academic year and required participants to recollect experiences from remote learning during the spring and fall of 2020, which could limit the type of information collected.
2. The research study was bound to the 2022-2023 academic calendar, which created limitations on participation and possible competing interests and job responsibilities.
3. The experiences of residential care providers with students were limited to those living in a residential home on campus. At the same time, teachers and administrators included students living on- and off-campus during the pandemic.

Delimitations

I anticipated the following delimitations:

1. The scope of the research study was limited to the perspective of teachers, administrators, and residential care providers, who supported third-grade language instruction at a private boarding school during the spring and fall of 2020.
2. The remote learning experience of participants was limited to experiences occurring during the spring and fall of 2020.

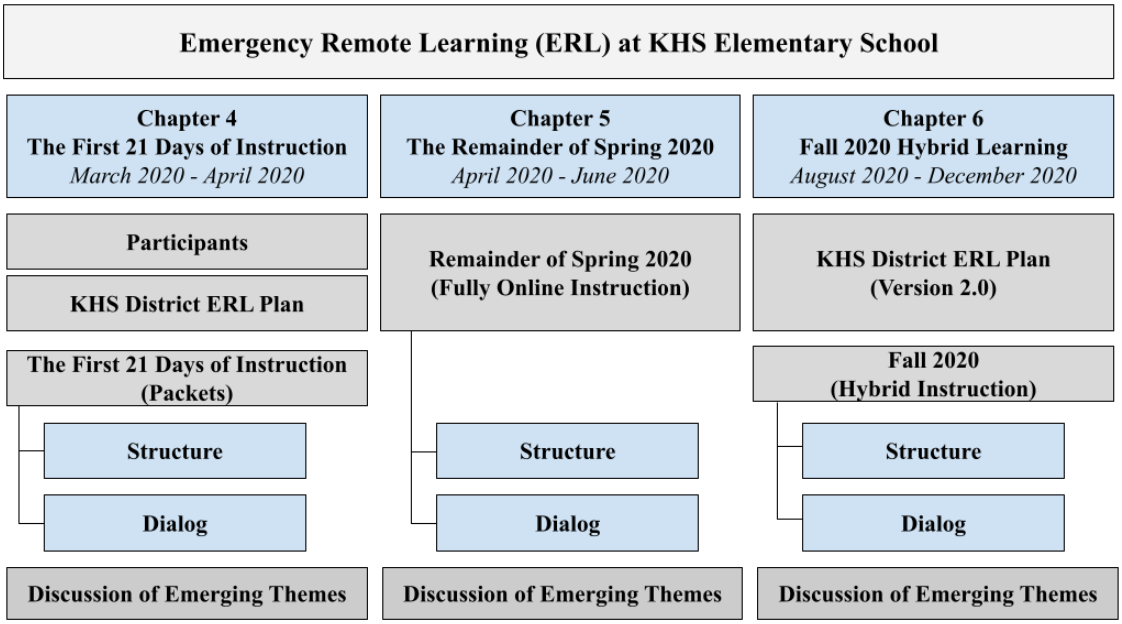
Reporting Results From the Research Study

The focus of this qualitative case study was to determine how third-grade language arts instruction was affected by emergency remote instruction at KHS Elementary during the COVID-19 pandemic through the perspectives of teachers, learning support teachers, school

administrators, and residential care providers. The proceeding chapters report findings about the KHS Elementary emergency remote learning experience through three different phases through the lens of Moore's (1997) transactional distance theory. In each chapter I discuss the structure of learning, dialog, or communication between teachers and students, and how student autonomy was affected by emergency remote learning. Figure 1 provides a graphical overview of the layout and major sections of each chapter.

Figure 1

Overview of Chapters 4–6



Chapter 4: The First 21 Days of Instruction

The initial phase of emergency remote learning at KHS Elementary school occurred during the first 21 days of emergency remote instruction from March 2020 to April 2020. Students participated in learning through the combination of instructional paper packets and optional synchronous learning sessions with teachers.

Chapter 5: The Remainder of Spring 2020

The second phase of emergency remote learning at KHS Elementary school occurred after the first 21 days of instruction had concluded from April 2020 until the final day of instruction in June 2020. Student instruction shifted from instructional packets to fully online learning. The amount of time spent in synchronous instruction increased as teachers began integrating more technology into assignments and requiring students to participate in a synchronous book study.

Chapter 6: Fall 2020

The final phase of emergency remote learning at KHS Elementary school occurred during the fall 2020 semester from August 2020 to December 2020. The semester started with two mandatory weeks of virtual learning, while students participated from their residential homes and teachers from their classrooms. Students transitioned to face-to-face instruction in a classroom setting; however, a hybrid form of virtual learning occurred if students were forced to quarantine in their residential homes after a COVID-19 virus exposure or diagnosis.

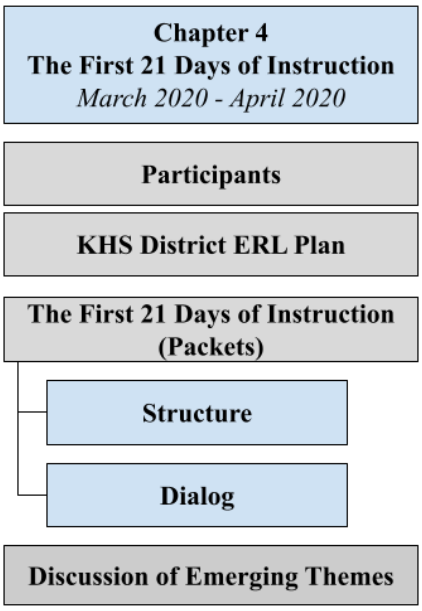
Chapter 4: The First 21 Days of Instruction

The focus of this qualitative case study was to determine how third-grade language arts instruction was affected by emergency remote instruction during the COVID-19 pandemic in the spring and fall of 2020 at one school in the Eastern United States. The study investigates emergency remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers. Additionally, I explored which strategies (methods, materials, and technologies) have been successful or unsuccessful with third-grade language arts students in remote learning and hybrid learning environments.

In Chapter 4, I discuss the initial phase of emergency remote learning at KHS Elementary, which occurred during the first 21 days of instruction from March 2020 to April 2020. I begin with a description of all research study participants. Then I describe the KHS School District Emergency Remote Learning (ERL) plan. Next, I will share how KHS Elementary transitioned to emergency remote learning and how third-grade language arts operated during the first 21 days of instruction. Specifically, I describe how the curriculum was structured and how dialog occurred between teachers and students. Finally, I discuss the major themes that emerged from data analysis, which helped answer the research questions posed in this study. Figure 2 provides a graphical overview of the layout and significant sections of the chapter.

Figure 2

Overview of Chapter 4



Participants

I utilized purposeful and criterion sampling methods to ensure that all participants were involved in teaching or supporting third-grade language arts students at KHS Elementary during the spring and fall of 2020. Four general education teachers and two learning support teachers were selected to participate in semistructured interviews because they taught third grade language arts during the pandemic. General education teachers were responsible for developing instructional packets and a modified language arts curriculum. Learning support teachers provided additional support to students receiving Tier 2 and Tier 3 special education services. Tier 2 language arts instruction is provided to students who need short-term targeted instruction to quickly address learning gaps and difficulties. Tier 3 language arts students are at two or more grade levels behind and need more time-intensive instructional support to address significant chronic learning problems.

Four school administrators participated in semistructured interviews in the research study. Each directly or indirectly supported third-grade language arts instruction at KHS Elementary during the pandemic. Administrator 1 served as the language arts curriculum supervisor and was responsible for overseeing the implementation of the language arts curriculum across grades Pre-K to 12 during the pandemic. Administrator 2 served as the building principal at KHS Elementary and supported teachers and students during the pandemic. Administrator 3 served as the director of special education and oversaw the implementation of special education services for students in grades Pre-K to 12. Administrator 4 served as the director of digital technologies and was responsible for coordinating the KHS School District's emergency remote learning plan during the pandemic.

Five residential care providers participated in a focus group interview detailing their experiences as care providers for elementary students during the pandemic. Residential Care Providers 1, 2, 3, and 4 had over a decade of experience each, while Residential Care Provider 5 had over three decades of experience. All residential care providers supervised emergency remote learning in a residential home and cared for third-grade students during the pandemic. For this qualitative case study, I investigated third-grade emergency remote instruction through the perspectives of general education teachers, learning support teachers, administrators, and residential care providers. In the following section, I provide a brief description of each participant's background, professional experiences, and current role in the KHS School District.

Administrator 1

Administrator 1 has served as the K-12 language arts curriculum supervisor for the past 10 years and oversees the implementation of language arts curriculum across all grade levels in the district. She previously taught high school language arts instruction for five years at KHS

High School and 10 years in a large urban public school district. (See Table 1 for demographics of all administrators participating in the study.)

Administrator 2

Administrator 2 has served as a school administrator in the KHS School District for the past seven years and was the building principal at KHS Elementary during the pandemic. She previously served as an elementary school principal, third-grade teacher, and first-grade teacher for 15 years in two different suburban school districts before arriving at KHS.

Administrator 3

Administrator 3 has served as the director of special education for the past eight years and oversees the delivery of special education services for students across all grade levels in the KHS School District. She previously served as a special education teacher at KHS High School for 14 years and as an emotional support teacher in two different public high schools.

Administrator 4

Administrator 4 has served as the director of digital technologies for the past five years and oversees the implementation of educational technology tools and pedagogy across all grade levels in the KHS School District. He was responsible for drafting an emergency remote learning plan for the entire school district in March 2020. He has served as a school counselor, middle-school assistant principal, and elementary assistant principal in the KHS School District over the past 20 years.

Table 1

Demographics of Administrators

Participant	Role	Years in the district	Interview or focus group
Admin 1	K-12 Language Arts Curriculum Supervisor	15	Interview
Admin 2	KHS Elementary Principal	7	Interview
Admin 3	K-12 Director of Special Education	22	Interview
Admin 4	Director of Digital Technologies	20	Interview

Teacher 1

Teacher 1 has taught third grade language arts at KHS Elementary for 10 years and has no prior experience in education. She recently transitioned into a new role as a learning support teacher at KHS Elementary. (See Table 2 for demographics of all teachers participating in the study.)

Teacher 2

Teacher 2 has taught third grade language arts for 10 years at KHS Elementary. He previously served as a learning support teacher in a suburban elementary school for five years and earned a master's degree in educational technology.

Teacher 3

Teacher 3 has taught third grade language arts for sixteen years at KHS Elementary. She previously served for two years as a long-term substitute teacher in fifth grade for the KHS School District.

Learning Support Teacher 1

Learning Support Teacher 1 has taught third and fourth grade learning support for five years at KHS Elementary. She previously served as an elementary teacher for four years at a large urban school district.

Learning Support Teacher 2

Learning Support Teacher 2 has taught third and fourth grade learning support at KHS Elementary for 17 years. She began her teaching career after working in industry for 15 years. She previously taught middle school and high school learning support for five years in urban school districts.

Table 2

Demographics of Teachers

Participant	Role	Years in the district	Interview or focus group
Teacher 1	Third Grade Teacher	10	Interview
Teacher 2	Third Grade Teacher	15	Interview
Teacher 3	Third Grade Teacher	17	Interview
LS 1	Learning Support Teacher	5	Interview
LS 2	Learning Support Teacher	17	Interview

Residential Care Provider 1 and 2

Residential Care Providers 1 and 2 have served as residential care providers for elementary and middle school students for over 11 years. They both served in the same residential home with male students in grades 2 to 4 during the pandemic. Residential Care Provider 1 had a background in education before being hired in the KHS School District. Residential Care Provider 2 did not have a background in education before being hired.

Residential Care Providers 3 and 4

Residential Care Providers 3 and 4 have served as elementary care providers for more than 10 years. They served in the same residential home with male students in grades 2 to 4 during the pandemic. Residential Care Provider 3 had a background in education before being hired by the KHS School District. Residential Care Provider 4 became interested in working in the KHS School District after a family member had served as a residential care provider several decades earlier. (See Table 3 for demographics of all residential care providers participating in the study.)

Residential Care Provider 5

Residential Care Provider 5 has served as a care provider for students in the KHS School District for over 37 years. She began her career in agriculture and made the transition to residential care after a friend invited her to apply for a residential care position. Residential Care Provider 5 was responsible for providing care to female students in grades 2 to 4 during the pandemic.

Table 3

Demographics of Residential Care Providers

Participant	Role	Years in the district	Interview or focus group
RCP 1	Residential Care Provider	11	Focus Group
RCP 2	Residential Care Provider	11	Focus Group
RCP 3	Residential Care Provider	10	Focus Group
RCP 4	Residential Care Provider	10	Focus Group
RCP 5	Residential Care Provider	37	Focus Group

KHS School District Emergency Remote Learning Plan

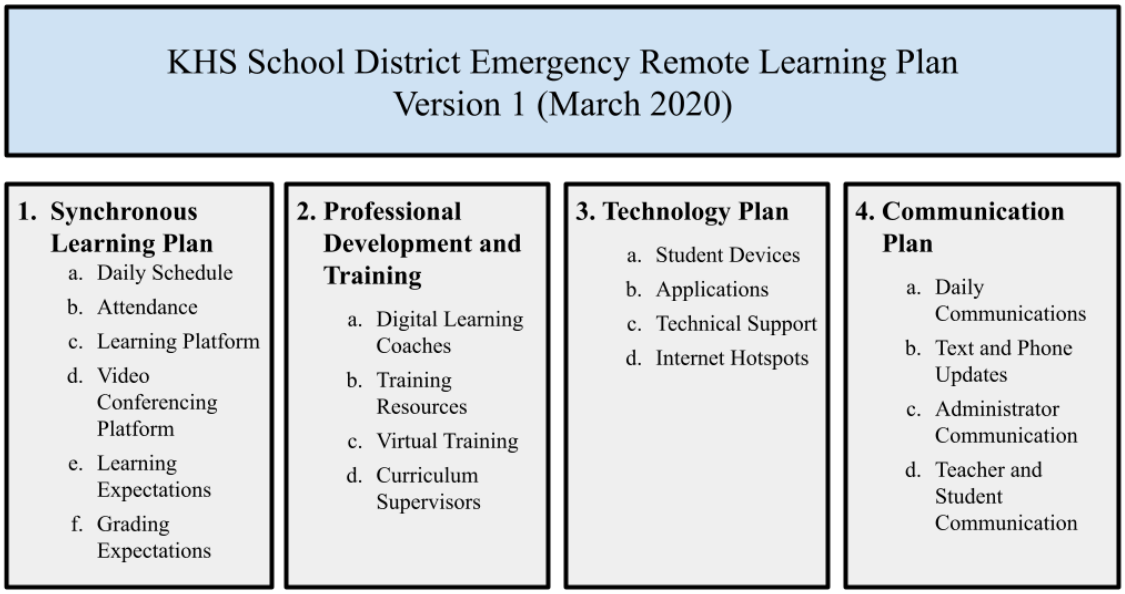
The KHS School District prepared an emergency remote learning plan in response to the growing public concern about the COVID-19 virus in February 2020. The COVID-19 pandemic was a fluid situation and the district grappled with several different variables that were constantly changing. Leaders investigated and crafted a plan based upon the Center for Disease Control (CDC) and state guidelines, advice from medical professionals, conversations with officials from other schools, and leveraging existing resources within the district.

Although district leaders finalized a framework for the KHS Emergency Remote Learning Plan in March 2020, it was structured to adapt to changing conditions and guidelines. Administrator 4 described the plan as providing "guidelines and expectations for the delivery of a real-time continuous learning environment for both students, teachers, and (residential care providers) during non-in-person instruction." The plan consisted of four components (see Figure 3):

- Synchronous Learning Plan
- Professional Development and Training
- Technology Plan
- Communication Plan

Figure 3

KHS School District Emergency Remote Learning Plan (March 2020)

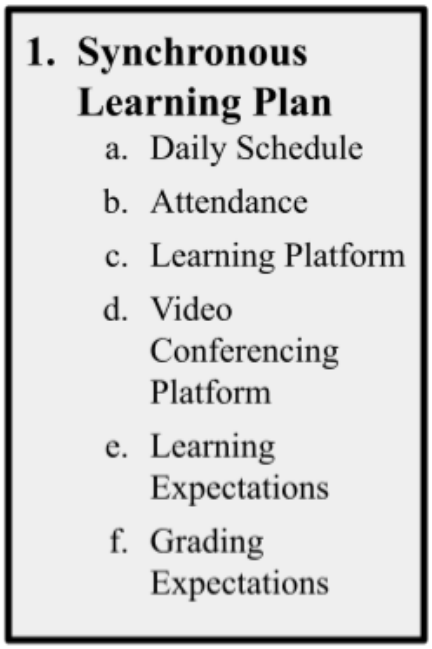


Synchronous Learning Plan

The synchronous learning plan detailed important policies and procedures to provide structure for emergency remote learning, containing grading procedures, attendance policies, learning expectations, special education services, and supported applications. Although most of the policies and procedures were similar in the primary and secondary levels, adjustments were made to coincide with the needs of elementary students. The following section highlights some of the important policies and procedures of the synchronous learning plan such as the daily schedule, attendance, learning platform, video conferencing platform, learning expectations, and grading expectations. Figure 4 provides a summary of the major components of the KHS Emergency Remote Learning Synchronous Learning Plan.

Figure 4

KHS Emergency Remote Learning Synchronous Learning Plan



Daily Schedule. A daily schedule was developed to provide structure and stability for students participating in virtual instruction on- and off-campus from Monday to Friday. The school day began at 7:45 am with a recorded video sent by administrators to the school community detailing important news and announcements. Teachers would participate in virtual meetings between 8 am and 9 a.m. Teachers hosted virtual instructional support sessions through Google Meet between the hours of 9 a.m. and 11 a.m. and between 1 p.m. and 3 p.m. Students could sign up for appointments to meet with their teachers and receive instructional support. Students would have a 2-hour break from 11 am to 1 pm, which would provide teachers with a one-hour planning period and 1-hour lunch.

Attendance. The initial plan assumed that students would be participating in emergency remote learning on campus in a residential home and required teachers to take daily attendance

through Infinite Campus, the district's student information system. Students would be marked present after attending a virtual instructional period through Google Meet; however, the precipitous nature of the school closure created a situation where many students participated off-campus and were unable to participate on a consistent basis. Therefore, administrators adapted the definition of participation and developed a Google Form to collect attendance information from teachers about students who participated in synchronous learning or turned in assignments through Google Classroom.

Learning Platform. Learning platforms were used to communicate announcements, distribute materials, and collect assignments from students participating in emergency remote learning. Students in third and fourth grade would use Google Classroom to receive information, access learning materials, and upload completed assignments. Google Classroom was also used by teachers to communicate directly with individual students because students did not have email accounts.

Video Conferencing Platform. The KHS School District adopted Google Workspace for Education during the 2015-2016 school year. Most teachers were familiar with Google's suite of applications, which included the free video conferencing platform Google Meet. The KHS School District used Google Meet as its primary synchronous learning tool in March 2020. Administrator 4 said, "Google was already integrated into the classroom setting and something teachers were already comfortable with, so using Google Meets made sense."

Unfortunately, KHS elementary teachers and students experienced several challenges with the connection quality of Google Meet during the initial phases of emergency remote learning. Administrators listened to the concerns of teachers and transitioned to Zoom in April of 2020.

Learning Expectations. Learning expectations were communicated to students through residential care providers and teachers. All KHS Elementary students were expected to complete daily assignments in mathematics and language arts. Students were expected to attend virtual instructional support sessions on Google Meet to check in with their teachers and receive any instructional support. Students were expected to upload digital assignments upon completion and hand in completed paper assignments upon returning to school after the expected 10-day school closure.

Grading Expectations. Emergency remote learning occurred during the final weeks of the third marking period at KHS Elementary. Teachers were expected to continue grading assignments as they did during face-to-face instruction. Digital assignments were graded immediately, and paper assignments would be graded after students returned from the expected 10-day school closure.

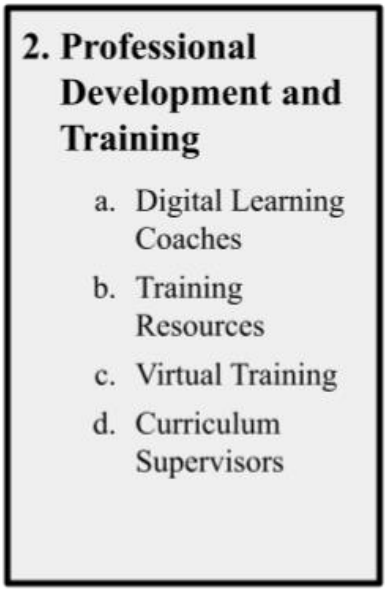
As the extended school closure continued, teachers recognized the challenges students were facing during the pandemic. School administrators and teachers worked together to establish a pass-fail grading system to reward students for their efforts to complete assignments.

Professional Development and Training

Professional development and training were an important part of the KHS Emergency Remote Learning Plan because the rapid transition from face-to-face required teachers to learn new educational technology tools, skills, and teaching methods in a virtual environment. In the following section I discuss how KHS provided professional development and support to teachers through digital learning coaches, training resources, virtual training, and curriculum supervisors. Figure 5 provides a visual overview of the KHS Emergency Remote Learning Professional Development Plan.

Figure 5

KHS Emergency Remote Learning Professional Development Plan



Digital Learning Coaches. The KHS School District employed digital learning coaches (DLCs) in each building to support students, teachers, and residential care providers with using educational technology in the classroom and residential home. Each DLC was a valuable resource to all adults and students in the KHS School District, who needed training, assistance with developing technology infused lesson plans, and technical support.

Training Resources. Digital learning coaches developed training materials for teachers and residential care providers to use. A daily email blast was sent to teachers and residential care providers with tips, tricks, and video tutorials on how to use various technologies during emergency remote learning. A collaborative Google Doc was created and shared with the school community for all adults to share tips, ideas, and troubleshooting solutions for emergency remote learning in the virtual classroom and residential home.

Virtual Training. Digital learning coaches provided teachers with synchronous and asynchronous training options. One coach held brief training sessions with teachers during lunchtime. The goal of each synchronous training session was to provide teachers with a basic overview of a tool or strategy that could be implemented immediately. DLCs also provided teachers with asynchronous learning options through video recordings and tutorials of how to use various technology tools.

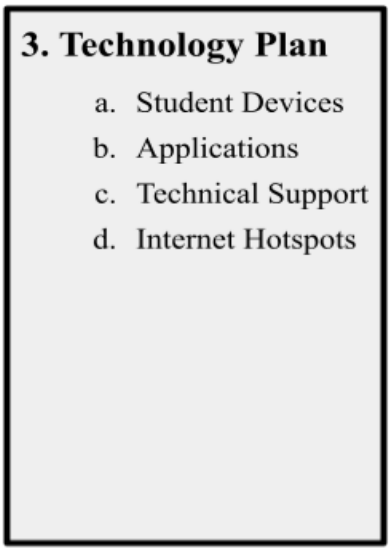
Curriculum Supervisors. The KHS School District employs curriculum supervisors who oversee the implementation of mathematics, language arts, social studies, and science within the school district. Each curriculum supervisor served as a resource to teachers adapting the curriculum to student needs during emergency remote learning. They provided additional advice, support, and even an extra set of hands during the pandemic.

Technology Plan

The foundation of the KHS School District Emergency Remote Learning Plan was based on using educational technology to facilitate instruction. As many school districts across the nation scrambled to provide students with devices, KHS had a preestablished one-to-one technology initiative and additional resources to support student learning. The following section describes the important components of the technology plan, such as student devices, applications, technical support, and internet hotspots. Figure 6 provides a visual overview of the KHS Emergency Remote Learning Technology Plan.

Figure 6

KHS Emergency Remote Learning Technology Plan



Student Devices. The KHS School District had a preestablished one-to-one technology initiative, which supplied all students with devices during the 2015–16 school year. At the beginning of each school year, all KHS Elementary students are assigned an iPad as part of the technology initiative. Residential homes were equipped with high-speed internet access, device charging stations, headphones, and other technology amenities.

Applications. The KHS School District used various educational technology tools to facilitate learning and manage student information. The single sign-on (SSO) application Clever was used to manage student passwords, created automated rosters, and assist students with signing into applications. Students used Google Workspace for Education's suite of applications to complete assignments, share resources, and communicate with teachers. Diagnostic assessment tools like iReady were utilized to provide diagnostic assessments and customized lessons for students to complete asynchronously.

Technical Support. A technical support plan was developed to provide students, teachers, residential care providers, parents, and guardians with technology support during the pandemic. A phone hotline was created to provide all members of the school community with troubleshooting and technical assistance with hardware, software applications, and student accounts.

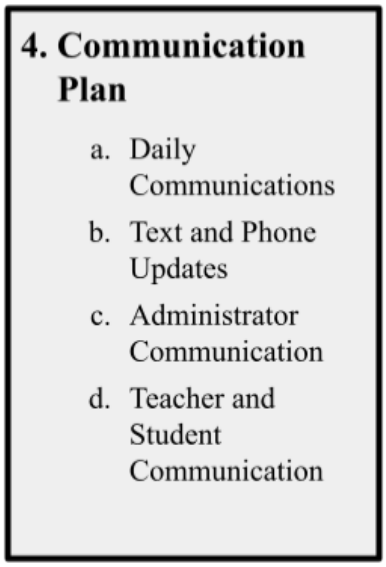
Internet Hotspots. The KHS School District found that many families did not have access to high-speed internet, which prevented students from participating in emergency remote learning. School officials secured a limited number of mobile internet hotspots, which were shared with families first-come-first-serve. High school seniors and juniors were given preference to help with graduation requirements.

Communication Plan

A communication plan was developed to ensure that all stakeholders inside and outside of the KHS community had access to the latest information and resources. The communication plan was developed to provide stakeholders with the most current information promptly and efficiently. Communication occurred through daily messages, text and phone updates, administrator communications, and teacher to student communications. The following section describes the important aspects of the communication plan, such as daily communication, text and phone updates, administrator communication, and teacher and student communication. Figure 7 provides a visual overview of the KHS Emergency Remote Learning Communication Plan.

Figure 7

KHS Emergency Remote Learning Communication Plan



Daily Communication. A mass daily email communication was sent to the entire KHS community with the latest information and announcements regarding the COVID-19 pandemic and its impact on campus. The email shared important resources with students, staff, and families to ensure their safety and welfare. Valuable information was also shared through social networking platforms such as Facebook and Twitter.

Text and Phone Updates. A text and automated phone messaging system was used to quickly alert the entire school community of school closings and other important announcements. The system was designed to quickly disseminate information to students, staff, and family mobile devices.

Administrator Communication. Each building administrator sent a daily email communication to students, staff, and families. Administrator 2 created a daily video recording to communicate important announcements and information to students, staff, and families.

Teacher and Student Communication. Teachers communicated with students through various applications and tools. All teachers used Google Meet to meet with students individually to provide support and live instruction. Secondary teachers communicated directly with students through email and learning management systems, while primary teachers used tools like Seesaw and Google Classroom. Elementary students did not have email accounts; therefore, the stream feature of Google Classroom was used to send and receive private messages.

The First 21 Days of Emergency Remote Learning

Administrator 2 was challenged to help students and staff maintain consistency and stability during the possible transition to emergency remote learning in March 2020. Administrator 2 stated, "I wanted it to be a consistent format for Pre-K to fourth grade so that everyone understood what the expectations were, whether it was a (residential care provider), parent, or a teacher."

Although all students were assigned a school-issued iPad, Administrator 2 felt hesitant to send the devices with all students to the residential home. She was concerned that students younger than second grade would lack the independence and technology skills needed to participate in remote learning. Therefore, Administrator 2 decided that students in third grade and above would complete instructional packets and use iPads to participate in synchronous instruction through Google Meet.

In less than 48 hours, teachers scrambled to prepare instructional packets, make copies for every student, and place them inside student backpacks. Each packet contained 21 days of lessons in language arts and mathematics for students to complete during a potential shift to emergency remote learning. Teacher 3 stated, "no new content was covered at this time because we thought this would be temporary, and we didn't want to confuse the kids."

Administrator 2 advised teachers to place all instructional packets, materials, and devices in student backpacks at the end of the school day on Friday as a precaution. Teacher 1 said, “We sat the students down, and we were just kind of like, we don’t know what’s happening, but we’re sticking these packets in your backpack in case something would happen.”

Teachers proactively trained students on the behavioral expectations of participating in emergency remote learning, attendance, and completing and handing in assignments. For instance, Teacher 2 stated, “We sat the kids down and told them, ‘This is what school will look like for a little bit, and we expect you to act like you were in a face-to-face classroom. This is how you will complete your assignments.’”

By Friday afternoon, Administrator 2 sent an email to teachers, residential care providers, parents, and guardians detailing the preparations for a potential shift to emergency remote learning. The message stated that

> We will be sending students home with their 21-day instructional packet and iPad. At this point, we are being proactive with this measure. When students leave at dismissal, their backpacks should only include the materials for the 21-day instructional plan and their iPad. Please clean out their backpacks and ensure nothing else is in them.

The KHS Elementary staff and students were ready for a possible transition to emergency remote learning. Students left the school building and headed to their residential homes with instructional packets and iPads secured in their backpacks. No one was certain what Monday would bring.

School leaders held discussions throughout the weekend and determined that an immediate transition to emergency remote learning was necessary to protect the safety and welfare of all school community members. All students, staff, parents, and guardians were

notified through the campus emergency notification system that remote learning would begin on that Monday and continue for approximately10 days. Learning Support Teacher 1 said, “I figured we’d all come back, and we’re going to move on. Like it was, you know, nothing really.” Unfortunately, no one was quite certain of what was in store.

The following section details how the first 21 days of emergency remote learning unfolded in third-grade language arts instruction at KHS Elementary through the lens of Moore’s (2018) transactional distance theory. First, I discuss the structure of third-grade language arts during emergency remote learning at KHS through the perspective of teachers, administrators, and residential care providers. Next, I detail how dialog or communication occurred between teachers, students, and caregivers, as all stakeholders adjusted to emergency remote learning. Finally, I discuss the impact of emergency remote learning on student autonomy in third-grade language arts and themes that emerged from the research.

Structure

Distance learning environments emphasize the importance of structure in measuring an “educational program’s responsiveness to learner’s individual needs” (Batita & Chen, 2022, p. 549). The structure of a lesson or curriculum consists of a deliberate arrangement and progression of academic standards, learning objectives, teaching methods, learning materials, assessments, and student reflection (Moore, 2018). Therefore, the unique nature of emergency remote learning forced third-grade teachers to develop a structure emphasizing routine and normalcy through a consistent schedule, routines, attendance policies, and a curricular framework.

Virtual Environment. The shift to emergency remote learning created a virtual environment, where students would participate in virtual instruction from the residential home or

home of origin. All residential homes would remain open for students to participate in virtual instruction; however, any students who left campus over the weekend would participate in virtual instruction from their home of origin to prevent the spread of COVID-19. Teachers would be required to participate in online instruction from their homes and could only access their classrooms with the building administrators' permission. Most students at KHS Elementary remained on campus during the pandemic. Administrator 2 estimated that "30% of students left campus, with the majority being middle and high school students."

Residential Home. Residential care providers were responsible for delivering care and supervision to six to eight students per residential home. Students on campus would remain in their assigned residential homes and isolated from others as they practiced social distancing protocols. The shift to emergency remote learning required residential care providers to engage in a new and unfamiliar task, supporting and managing students participating in virtual instruction.

Many families of young children made the difficult decision to leave their students on campus for their safety and welfare. Residential Care Provider 3 shared an example of one student whose parents had the tough decision to keep their son on campus:

> We talked to (parents and guardians) about what they wanted. They wanted to keep him here because they knew his safety to be here. It is a safe place for them. They had gone on the phone and said that it's not that we don't want you home; we'd just rather have you there because it's a safe environment.

Although students were used to living on campus during the school year, residential care providers observed more students feeling homesickness and difficulties with separation. Residential Care Provider 4 said the following:

> The biggest issue kids were having was homesickness, which we're faced with and navigate pretty well as staff on this campus. Because it's something that most kids deal with; however, this was a whole different level because now the school's saying you can't go home, or if you go home, you can't come back. That caused a lot of stress for the kids.

All students living on campus during the pandemic were required to participate in daily synchronous virtual instructional support meetings with teachers. Managing students during this time was challenging for residential care providers because emergency remote learning was unfamiliar to everyone involved. It was challenging to manage six to eight students participating in learning with six or more teachers. Residential Care Provider 3 mentioned how much confusion there was in the beginning stages:

> When we were just starting to hear about it, it was kind of like uncertainty, you know what I mean? Like what does this mean? What is this going to look like? You know what I mean? So, I think for everybody it was kind of like, just sort of figuring it out on the fly.

Although transitioning from learning in a classroom setting to a virtual setting within the residential home was difficult, residential care providers responded quickly and adapted to make things work. Residential Care Provider 1 mentioned, "It was a learning curve, but we do quite a bit on the fly."

Spaces typically not intended for learning were converted into learning spaces. Dining rooms were converted into makeshift classrooms, bedrooms turned into gymnasiums and music rooms, and shared areas into study spaces and libraries. Residential Care Provider 4 described some of the challenges:

> It was challenging because we didn't know where teachers were or how to contact them if iPads weren't working, and if they had gym class and had to do jumping jacks. How do you manage students being loud, but everybody else in the house has to be quiet? I think there were challenges that came up with many different things that we didn't expect. I guess there's no way to think about those things. They just popped up and you just had to kind of work them out as they came up.

Residential care providers quickly developed routines and classroom management techniques to supervise student technology use. Initially, Residential Care Providers 3 and 4 tried to allow students to complete assignments in their bedrooms; however, they noticed increased behavioral issues and off-task behavior. Students were moved to common areas within the home and spread out to practice social distancing. Apple Classroom was used to monitor students' devices within the home to reduce off-task behavior. If students needed to participate in a kinesthetic or noisy activity, they would move to an alternate location within the home.

The physical layout of the residential home restricted how students could participate. Residential Care Provider 5 said that the floorplan of the residential home did not provide students with internet access; therefore, students had to find alternative locations in the home for learning.

Although students were accustomed to studying and completing homework before emergency remote learning, many residential homes were not equipped with the amenities needed to participate in virtual instruction. Therefore, Administrator 2 and her family hand-delivered materials to each home on campus:

> I was in my car driving and my family would be with me. One of my kids was manning the trunk and another would hop out with a crate, run it to a (residential home), get back

> in, go to the next house and again. We had to get everything in their hands, whether it was keyboards, headphones, school supplies, chargers, whatever it was.

Life on campus may have looked and functioned differently; however, all adults did whatever was necessary to help students have a successful experience.

***Off-Campus*.** Some families began picking their children up from the KHS campus due to concerns about the spread of the COVID-19 virus; others engaged in routine weekend visits and planned to return their children at conclusion of the weekend. Administrators determined that any students who left KHS over the weekend would remain off-campus and participate in remote learning from their homes.

The influx of off-campus students participating in emergency remote learning created logistical issues. For instance, most off-campus students still needed their instructional packets and devices because they thought they would return to campus. Administrator 2 described how the school adapted and began mailing iPads and instructional materials home during the first few weeks of remote learning:

> We came to the quick conclusion that anytime a student left campus, they took their iPad with them. Then we needed to mail iPads to students we could get in touch with who were home, so that was a big undertaking. It was finding the iPad too. Was it at the (residential home)? Was it in the classroom? Um, so those types of things. But yeah, we spent a lot of time mailing.

Schedule. Teachers adapted the traditional elementary face-to-face schedule and replaced it with a new schedule designed to meet the needs of students participating in residential homes and off-campus. Although students were required to complete daily instructional packets lessons, teachers were available for optional virtual instructional support on Google Meet. The

synchronous virtual instructional support sessions functioned like office hours. Students could visit their teacher during a prescheduled morning session between 9 a.m. and 11 a.m. and an afternoon session between 1 p.m. and 3 p.m.

The adjusted schedule adapted to the needs of students, providing them with flexibility for completing daily assignments. Students had more autonomy or control over their learning pace; however, they were required to upload pictures of the completed assignments to Google Classroom. Students could attend synchronous virtual instructional support sessions if they needed assistance from their teacher.

The heightened student autonomy created concerns for teachers, who felt that students needed more structure to be successful. For instance, Teacher 3 stated the following:

> We got worried because they weren't required to be with us. And they just, um, signed up for appointments if they needed. Now, when they were in the (residential) home, I think that (residential care providers) signed them up at least once a day to at least meet with us so, we could go over anything or if they had any questions about anything.

Teachers quickly realized that the flexible learning schedule and increased student autonomy were helpful for some students participating off-campus. However, the increased independence became problematic for other students. In one situation, Learning Support Teacher 1 combined forces with another third-grade teacher to meet with a student before school started to get them to participate in learning. She mentioned that

> I remember there was another teacher who had contacted me, and we ended up logging in together on Meet at like seven in the morning, because it was the only time that grandma was home and could get the kid up. This third-grade teacher and I would meet with this student from 7 to 8 a.m., every single day. We're not getting paid extra for that. Like our

school day doesn't start until 8 a.m., but on certain mornings we would do that because we wanted to, again, just kind of have contact with this child.

Morning Meetings. Morning meetings were essential to KHS Elementary's existing curriculum because they helped students develop important social-emotional learning (SEL) skills; however, emergency remote learning disrupted how these meetings could occur. Teachers adjusted to the challenges and started hosting optional morning meetings for students to check in and share some of the social and emotional challenges of the pandemic.

Learning Support Teacher 2 said, "We wanted to try to maintain a daily schedule for the kids, just like you do here (face-to-face), because kids like routine. We like routine." Learning Support Teacher 2 felt it was vital for her to maintain a daily morning meeting for students to share, connect, and prepare for the school day. She used Google Meet to facilitate meetings and allow students to connect with classmates.

Teacher 2 used Google Classroom to connect with his students and invite them to check in through Google Meet during instructional support sessions. For example, one afternoon, a student posted a message on Google Classroom asking, "Is anyone out there? I really need to talk." Teacher 2 immediately responded and invited the student to talk with him through Google Meet.

Attendance. Attendance is an important indicator of student engagement; however, taking student attendance during a pandemic was challenging for teachers because learning consisted of synchronous and asynchronous learning activities. Although many students participated in optional synchronous instructional support sessions in Google Meet, many could not participate for various reasons. Teachers, who were normally accustomed to recording attendance at the beginning of class, suddenly had to make a paradigm shift and take attendance

in unusual ways. For instance, students were marked as present for responding to discussion questions, uploading completed assignments to Google Classroom, or attending meetings through Google Meet.

KHS Elementary teachers used a daily attendance Google Form, completed by 9 a.m. daily. The data from the form would populate a spreadsheet containing a record of the names of students who did not participate in learning. Students were required to check in with their teachers by 9 a.m. each day and were marked present if they participated in a meeting or completed assignments. Teacher 2 described the process:

> So, every day we had to get on (the Google Form) and we had to take attendance. Who was there, who wasn't. I think that it was due, I want to say by 9 a.m. every day, but again, half of the kids weren't even awake at that time.

Teachers 1, 2, and 3 observed that students living on-campus in residential homes had higher attendance rates than their off-campus peers. Residential homes were staffed with residential care providers, supervising students' participation in emergency remote learning. Teacher 3 mentioned that it was easier to contact a residential care provider if a student was missing:

> You could contact (residential care providers) if students were not on and they would immediately, you know, rectify the problem and make it right. So, it's always much easier when the kids are on campus than if they were to go to their home.

Students participating off-campus often had limited adult supervision and access to resources like high-speed internet. Teacher 1 explained, "Many of my kids did not have adults around, because they were essential workers and had to work."

Teacher 2 expressed frustration at the apathy and absenteeism some of his off-campus students demonstrated:

> The kids that went home didn't engage at all. So, it is like, "Hey, are you okay? Are you alive?" We're calling houses. We're sending stuff in the mail. We sent packets in the mail because some kids weren't doing anything online. Still nothing!

Learning Support Teacher 2 mentioned that one student did not participate in more than five days of remote learning. The teacher worked with Administrator 2 to contact the student's mother and get them to log into Google Meet; however, the student would regularly log out after their mother stopped supervising the student. Learning Support Teacher 2 grew frustrated and realized that "there was nothing that I could do. I had to let go."

Devices and Internet Access. All students were provided with school-issued iPads as part of the KHS Elementary one-to-one technology initiative before the pandemic. While students living on campus had access to iPads and high-speed internet, their peers living off-campus did not. If students left campus to participate from home, they were instructed to take their instructional packets and leave their iPads on campus. School officials had concerns that iPads would be lost or damaged if the devices left campus. Administrator 2 shared, "After about a week or two, it became apparent that we were not going back (to the classroom) anytime soon. We had to get iPads to students living off-campus quickly!"

After school officials decided to mail iPads home to students living off-campus, Administrator 2 gathered and mailed all off-campus student iPads:

> Then we needed to mail iPads to the students. We would contact anyone who was home to make sure we had the correct information. From then on, we decided that students

> would take their iPad with them whenever they left campus. So, that was a big undertaking. We spent a lot of time mailing.

Although off-campus students now had access to devices, many families did not have access to high-speed internet, causing some to go to great lengths to hand in assignments. Teacher 3 described the following:

> One of my student's families needed access to Wi-Fi. So, they were like trying to do their work at, I think, McDonald's whenever they could. Um, and then the school eventually sent them a hotspot, so it was a lot better for them that they could do their work.

Instructional Packets. According to Moore (1997), structure refers to the rigidity or flexibility of an online program consisting of the content, learning objectives, teaching strategies, and assessment methods used. Structure determines how much autonomy a student will need to exercise and the extent of how personalized the course is (Moore, 2007).

Instructional packets were the primary instructional tool used during the first 21 days of instruction in the spring of 2020. Students were required to complete one daily lesson in third-grade language arts and mathematics and post an image of their completed assignments to Google Classroom.

The third-grade language arts curriculum emphasizes writing, reading comprehension, fluency, grammar, and word study. Writing focuses on narratives (personal and fictional), opinions, and informational writing. Students focus on several elements of reading comprehension and fluency, such as reading words per minute for speed and accuracy, determining the central message, story plot, author's point of view, comparing/contrasting, main idea, key details, asking and answering questions about a text, sequence, text features, drawing conclusions, and making inferences. Grammar includes using conventions of standard English,

such as capitalization, punctuation, and spelling. Additionally, word study includes phonic skills, prefixes, suffixes, root words, figurative language, and distinguishing literal from nonliteral meanings of words. Teachers had the challenging task of condensing an entire curriculum into an instructional packet.

Teacher 2 mentioned, “During the first 21 days, we had a decent plan at one level; however, meeting all the kids’ needs was tough.” Packets addressed one academic standard in mathematics and language arts instruction per week. Daily lessons contained detailed instructions, objectives, a checklist of daily assignments, and instructional materials. Many lessons contained QR codes to scaffold instruction and links to helpful instructional videos, websites, and other resources. An analysis of instructional packets revealed the following weekly structure of the first 21 days of instruction that included the following:

***iReady*.** Students were required to complete daily iReady language arts lessons for fifteen minutes every Monday through Thursday. iReady is an online curriculum and instruction tool used to build student proficiency in reading and tailor individual lessons toward student needs.

***Reading Fluency*.** Students participated in daily reading fluency practice on Monday through Thursday. Instructional packets contained a timed reading passage that students would read several times to build reading fluency.

***Reading Comprehension and Grammar Practice*.** Students participated in weekly reading comprehension and grammar exercises each Friday instead of iReady and reading fluency practice. Students participated in reading comprehension activities such as making inferences, using context clues, and reflection activities. In addition, students completed grammar exercises in punctuation, capitalization, parts of speech, and sentence structure.

***Reading Passage*.** Students were assigned a weekly reading passage to read and analyze on Mondays and Tuesdays. Teacher 2 said, “We had our main stories for reading, but the kids didn’t take books home, so we made packets with different reading passages.” Students used a before-during-after (BDA) protocol to analyze the passage, build background knowledge, identify and highlight important parts, and make deeper connections with the text.

***Digital Curriculum Resources*.** The existing reading curriculum contained various digital resources, multimedia presentations, and supplemental activities. Teachers would assign a resource each Wednesday to supplement instructional packets and practice skills, such as identifying the main idea of a story, sequencing, and building vocabulary.

***Supplemental Resources*.** Although instructional packets were designed as a one-size-fits-all experience, teachers did add additional resources to scaffold and support their learning. For instance, QR Codes were linked to supplemental resources like YouTube videos, Flocabulary videos, and websites.

***Assessments*.** Each week ended with a short writing assessment based on the week’s academic standard and a reading passage. Students would compose their essays using a writing prompt. Final drafts of the essay were constructed in Google Docs and uploaded to Google Classroom.

Learning Support. The KHS School District continued to support learning support students receiving Tier 2 and 3 special education services throughout the pandemic; however, teachers had to rely on the support and help of residential care providers, parents, and guardians in the spring of 2020. Tier 2 language arts instruction is provided to students needing short-term targeted instruction to address learning gaps and difficulties quickly. Tier 3 language arts

students are behind two or more grade levels and need more time-intensive instructional support to address significant chronic learning problems.

Learning Support Teachers 1 and 2 did not meet with students during the first seven days of emergency remote learning. Instead, students worked with their third-grade general education teachers and completed instructional packets. Learning Support Teachers 1 and 2 started working with Tier 3 students or those with the most significant academic needs during day 8 of emergency remote learning, while Tier 2 students continued working with their general education teachers.

Virtual Instructional Support. Learning Support Teacher 2 said, "As learning support teachers, we've got the lowest kids who typically had the least attention span. It was important for us to help our kids be successful." Therefore, Learning Support Teachers 1 and 2 found it important to have daily meetings with their students, which provided them with additional support to meet their instructional and emotional needs.

Learning Support Teacher 1 found it crucial to make connections between face-to-face and virtual instruction. "So just going through and teaching them, like, yes, this is very weird to be doing this on the iPad, but it is no different than when we're sitting in a classroom." Familiar tasks were digitized to meet the needs of a virtual learning environment. For instance, Learning Support Teacher 1 grew frustrated with using a handheld dry-erase board to provide instruction. Instead, they transitioned to sharing their computer screen and using Jamboard. "It seemed like all I did was share my screen and use Jamboard, but it worked!"

Additional Assignments. Tier 3 students were required to complete additional assignments on Google Classroom and Classkick. For instance, Learning Support Teacher 2 asked students to use Classkick to create an audio recording of weekly word lists. Learning

Support Teacher 2 said, “I would give them a lot of the work, like decoding work on Classkick, because I can take pictures of it. I could put it on my screen, and we could go through a lesson together.”

Dialog

According to Moore (as cited in Batita & Chen, 2022), “the separation between teachers and learners is more pedagogical and psychological, rather than merely geographical” (p. 548). Moore (2018) referred to this as a transactional distance between teachers and learners in a distance education environment. Thus, transactional distance becomes a function of the interaction between dialogue and structure: “As dialogue increases, transactional distance decreases [and] as structure increases, transactional distance also increases” (Moore, 2007, p. 94). Dialog refers to all forms of communication between the teacher and the student and is influenced by positive and negative interactions with teachers (Falloon, 2011). The following section will discuss dialog methods teachers used to communicate with students during the spring of 2020.

Email Communication. Various email communications informed all adults on and off the campus of vital information, news, and updates. Elementary students did not have access to email, which limited the direct contact administrators and teachers had with students. Therefore, it was important to provide caregivers with the most up-to-date information to disseminate to elementary students.

***On Campus Updates*.** Administrator 2 shared a daily email update with teachers and residential care providers, highlighting important information, updates, and news. A video recording of this information was also made available in the email message.

Teachers were provided with important resources and links, such as attendance policies, links to communication logs, daily census of students on and off-campus, and information on adjustments to virtual instruction. Residential care providers were sent information and resources for troubleshooting, contacting administrators and teachers, and accessing a virtual learning website with teacher lesson plans.

***Off-Campus Updates*.** Parents and guardians of students participating in emergency remote learning off-campus received a weekly email communication from the KHS School District. The email contained important information for contacting teachers and administrators, receiving technical support, troubleshooting resources, and accessing a website with teacher lesson plans.

***Teacher Emails*.** Teachers primarily used email to communicate with residential care providers, parents, and guardians if a student was not participating or having difficulty in emergency remote learning. Email communication between teachers and caretakers was less frequent than other types of communication. In addition, residential care providers, parents, and guardians would also reach out to teachers if they had questions, technical difficulties, or needed assistance with a student.

***Daily 5 Technology Email*.** The KHS Elementary digital learning specialist sent out a daily email to teachers and residential care providers with technology ideas, troubleshooting resources, and video tutorials for managing educational technology during emergency remote learning. During their lunch break, teachers were invited to attend optional daily "Lunch and Learn" professional development sessions to learn how to use a new technology tool.

Google Site. A Virtual Learning page was created on the KHS Elementary Google site to share daily student assignments with residential care providers, parents, and guardians. The page

contained daily assignments, links to resources, troubleshooting information, contact information, and tutorials on student technology applications.

Google Classroom. Google Classroom was already familiar to third-grade students and teachers before the transition to emergency remote learning; however, the pandemic forced teachers to find new and creative ways of using the application. Google Classroom was used as a substitute for email communication, a tool for collecting and distributing assignments, and for taking attendance. Additionally, students used Google Classroom to communicate with their classmates and teachers.

***Email Substitute*.** Teachers used Google Classroom as a substitute for email because students did not have access to email accounts. The Stream tab was used primarily to send private messages to students, communicate a daily listing of assignments, share news and updates, and share links to synchronous Google Meet sessions.

Teacher 1 said, “The Stream feature was like emailing or texting students because they didn’t have access to email.” Students would receive a notification on their device once a teacher sent a message; however, many students did not respond to teacher messages. Teacher 1 shared, “It was frustrating because I would reach out to a student that wasn’t participating and nothing. I don’t know if they even paid attention to the notification.”

***Distributing and Collecting Assignments*.** The Classwork tab was used as a workflow solution for distributing and collecting assignments. Teachers 1, 2, and 3 had students take a picture of their completed instructional packet assignment for the day and upload it to Google Classroom.

Unfortunately, uploading an image of a worksheet assignment to Google Classroom was more difficult for students than anticipated. In an email communication to the KHS Elementary digital learning specialist, Teacher 1 stated:

> My biggest struggle right now is trying to find a way for my students to turn in their work. Their work is currently a packet that they need to do. I have asked them to take a picture of their work and turn it in to me on Classroom, but I think that they don't know how to do that, because I did not get any students to actually turn them in. Is there an easy way for students to take pictures of their assignments and send them to me?

Teachers found unique ways to teach students how to upload an image of their assignments. Teacher 1 collaborated with a colleague to develop a video tutorial for students and posted it to Google Classroom. Teachers 2 and 3 demonstrated how to take a picture and upload it to Google Classroom through Google Meet.

In addition, Teacher 1 used Google Classroom to attach an audio version of a reading passage or text for struggling readers. She found that many of her struggling readers living off-campus did not have access to someone who could read. Teacher 1 mentioned the following: "The audio version would be for the, um, the struggling readers. A lot of times their parents at home wouldn't have time to read a whole chapter to them. So, yeah, the struggling readers always had, um, audio."

Attendance. Teachers were required to take daily attendance of students participating in emergency remote learning; however, keeping track of who was participating on- and off-campus took time and effort. Although teachers kept track of students participating in optional synchronous virtual instructional support sessions, many students participated asynchronously and completed assignments independently.

Teachers would send a daily message on Google Classroom asking students to acknowledge the message and respond with a particular keyword or emoji to keep track of these students. For instance, Learning Support Teacher 1 posted an update to students and asked, "When you have read this, comment below with a thumbs-up emoji!" Teacher 3 asked students to respond with the word *done* after completing all assignments.

***Student Communication*.** Students used the Stream feature in Google Classroom to maintain communication with their classmates and teachers; however, each teacher in the research study had different expectations. For instance, Teachers 1 and 3 did not permit students to send personal messages to classmates in Google Classroom.

However, Teacher 2, Learning Support Teacher 1, and Learning Support Teacher 2 allowed students to send messages through Google Classroom. One student posted, "Is anyone out there? I need to talk to someone." Teacher 2 quickly replied by inviting the student to participate in a Google Meet.

Learning Support Teacher 1 said, "Everyone was dealing with so much change and isolation. I wanted to be there for my kids and their mental health."

Google Meet. Google Meet provided students with synchronous instruction during the first 21 days of instruction. Teachers hosted optional virtual instructional support sessions through Google Meet between 9 a.m. and 11 a.m. and 1 p.m. and 3 p.m. Students could sign up for appointments to meet with their teachers and receive instructional support. Teachers would share the direct link or code with students through Google Classroom.

Unfortunately, teachers and students experienced several challenges with Google Meet during virtual instruction. Many off-campus students needed access to the Google Meet application on their iPads, because they were disconnected from the school network. Instead,

they had to use the web version of Google Meet, which created connection issues for students. Administrator 4 worked with the IT department to resolve this issue and automatically distribute the application through the organization's device management system.

Google Meet experienced significant connectivity issues, which frustrated teachers, students, and caregivers. Learning Support Teacher 2 noted, "I had a lot of problems with Google Meet. The kids would say 'you're freezing.' And like all those things, that was the, that was probably one of the more frustrating parts."

Although IT professionals were working to resolve the issues, connection difficulties through Google Meet persisted through the first 21 days of emergency remote learning. Administrator 4 introduced an alternative called Zoom, which was tested on fourth-grade student iPads before being distributed to the rest of the organization. The complete transition to Zoom would only occur in April 2020.

Phone Communication. Teachers primarily used phone communication to contact residential care providers, parents, and guardians if students were not participating in remote learning. Residential Care Provider 5 stated that email communication between teachers and residential care providers was most common; however, teachers would make a phone call if they needed something quicker: "We mostly emailed teachers back and forth. But if you needed something quicker, you used the telephone, and you were right there. When a kid was off for five minutes . . . [teachers] were calling."

Discussion of Emerging Themes

Through the design of this qualitative case study, I was able to determine the perceptions of a select group of teachers, administrators, and residential care providers on how emergency remote learning affected student autonomy in third-grade language arts instruction. A thorough

analysis of transcripts, documents, and digital resources revealed several emerging themes, which helped answer the research questions posed in this study. The following section will discuss major themes that emerged from research data in the first 21 days of instruction.

Theme #1: The Effects of On-Campus Participation on Student Autonomy

The rapid transition to emergency remote learning in March 2020 displaced students across multiple locations. According to Administrator 2, most elementary students lived on campus in residential homes during the spring of 2020. Administrator 2 shared: "We had 70% of students on campus on a daily basis and we did track that. We found that the younger students (elementary) stayed, and the older students [high-school and middle-school age] went home."

Students on campus had access to a residential home staffed with residential care providers who provided care, supervision, and support. They also had access to iPads, high-speed internet, and other amenities. In addition, students living on-campus were more likely to engage in emergency remote learning than their peers living off-campus. The following theme will discuss the factors influencing student autonomy and why on-campus students were more likely to participate in emergency remote learning.

Adult Support and Supervision. KHS residential care providers oversee the care and supervision of students in residential homes. Before the pandemic, the role of the residential care provider was to support and supervise six to eight students in their residential homes while they completed their homework. Many residential care providers dedicated one to two hours of study time for students in the evenings. Teachers replaced traditional homework with independent reading time in third-grade language arts before the pandemic. According to Teacher 1, "We typically gave independent reading homework because the research shows that independent reading is just so beneficial."

The transition to emergency remote learning was a substantial shift for residential care providers, who were on the frontline helping students from the residential home while teachers observed from a distance. Many residential care providers were overwhelmed by the technology used to support students during the spring of 2020. Teacher 2 observed, “Some really good [with students during emergency remote learning.”

Emergency remote learning shifted the responsibilities of residential care providers from supervising homework completion to ensuring students ensuring students fully participated in emergency remote learning from 9 a.m. to 3 p.m. Although they were not teaching lessons, residential care providers had to ensure that students were online and engaged, completing assignments in packets, and signing up for virtual instructional support sessions. Residential Care Provider 3 noted:

> There was no way to supervise them correctly because we weren’t facilitating lessons. So, it’s different when you’re sitting in a classroom and the kids are expected to pay attention to the teacher who’s facilitating a lesson and us (residential care providers) who we were just sitting there waiting for someone who needed help or making sure they got to the next classroom. So, I think it was hard because it was almost like we weren’t, we weren’t in charge while they were in their classes, but we had to manage the behaviors and, and accountability for getting to their classes and getting their schoolwork done.

The physical layout of the residential home determined how residential care providers could supervise students completing assignments. For instance, Residential Care Providers 3 and 4 had students work on their instructional packets and participate in synchronous instructional support meetings with their teachers from their bedrooms. They found it challenging to supervise all students and manage behavioral issues simultaneously. Instead, they moved students to large

common areas and spread them throughout the home, equipping each student with headphones for watching instructional videos. Students who needed to participate in kinesthetic, noisy, or synchronous learning activities would move to another room to avoid disturbing their peers. The residential care providers found it helpful to work in pairs, as one monitored the common area, and the other supervised students in other areas of the home and prepared meals.

Residential Care Provider 5 had all students participate in emergency remote learning from a common area within the residential home; however, he tried relocating students to their bedrooms to control the noise and distractions. Unfortunately, the home's physical structure did not support a strong internet connection and students had to move to different areas in the home.

However, all teachers in the research study observed that on campus students received more support and supervision from residential care providers than students living off-campus. Teacher 1 said, "Students had more structure and a support system in the residential home because there was structure."

Teacher 3 agreed:

> I think because the kids were on campus, I felt better about it only because they were on campus and there's a lot more control that you can have as to what the kids were doing, like having their camera on things like that. I think it was easier to manage obviously when they're on campus, just because you can contact the [residential care provider] directly if a student is misbehaving.

Access to Materials. Students on-campus were well-prepared to participate in emergency remote learning because they had access to school-issued iPads, high-speed internet, supportive adults, textbooks, and instructional packets. Residential Care Provider 1 felt that KHS Elementary effectively prepared students to participate in emergency remote instruction:

> I think the school was well prepared and I think the students really took it seriously. They were able to just get right on and step up and do the right thing. So, I thought for me they were pretty resilient, you know, considering all the things that were going on around them. We provided the tools for them to be successful and they did rise to the cause.

Residential Care Provider 2 noted, “I was surprised at how well they [students] were prepared on that Monday. I thought they jumped on and did well.”

Administrator 2 had a major role in preparing students for the transition to emergency remote learning. She actively prepared teachers, students, and residential care providers on the Friday before emergency remote learning started. She explained that

> I proactively said to my teachers, "I want you to put the iPads in student backpacks for students in third and fourth grade and whatever learning supplies they would need.” Then I emailed the [residential care provider] team. And I said, “These items are coming home today. We are still coming to school on Monday, but these items are coming home today in, in the paper pencil packets and school supplies can stay in the [residential] home.”

Teacher 3 found that she expected more from students living on-campus because she knew that they had the support and resources they needed to be successful:

> If students were on-campus, then I expected more out of them, because I knew they had everything they needed. They had the support they needed, so I expected them to, you know, do their work and to, you know, submit it to me.

Theme #2: The Impact of Off-Campus Participation and Student Autonomy

According to Administrator 2, approximately 30% of students participated in emergency remote learning from off-campus in their home of origin, with relatives, or another location. Teachers observed that students living off-campus had an entirely different experience than their

on-campus classmates because they faced a barrage of challenges, which impacted their effort and participation. Teacher 1 observed, “The students living off-campus just did not have the support at home they wanted.” The following theme will discuss how living off-campus affected students’ participation and autonomy.

Adult Support and Supervision. Teachers observed that most students living off-campus received less support from parents and guardians than their on-campus classmates during emergency remote learning in the spring of 2020. According to the United Nations (2020), the COVID-19 virus had a ripple effect on society, as students faced learning loss and parents faced challenges balancing educating their children while working. In addition, parents had to exercise a significant amount of effort with younger children, who required more supervision to stay on task, complete assignments, follow directions, and access technology (Goldstein, 2020).

Students living on-campus had access to full-time residential care providers who provided consistent care, supervision, support with assignments, and accountability for students living in residential homes. Many off-campus students did not appear to have the same type of support. Teacher 1 observed that “some of the parents were just very hands-off,” while others “would sit there and help them get it done.”

Teacher 1 noticed that “about half the kids, maybe even more than half, just didn’t have someone helping them,” which affected participation and academic performance. The limited amount of adult support and supervision made it challenging to keep off-campus students engaged in learning; however, some students naturally were more independent and could handle more autonomy. Teacher 1 stated the following:

> Some of the kids were very self-motivated, but very few of them at this age. A couple of them already have gotten there, so they would just do their work and move on. However, they were few and far between. Most kids struggled to stay on task.

Teachers 1, 2, and 3 observed that most off-campus students were limited in their participation or did not participate; however, if students had an adult who supervised them while participating, they were more likely to complete assignments and stay engaged in learning. Teacher 2 shared, "Most of my students at home didn't show up at all, but some kids that were at home were very engaged 'cause the (parent) was on."

Teacher 3 grew frustrated at the lack of participation among her off-campus students and quickly learned she had to give up control: "You hope for everyone to give a 100%, but when they're home, it's just a whole different, whole different game. I think I was a little bit more like if they do it, they do it. What can I do?"

Learning Support Teacher 2 found that she needed to constantly redirect learning support students who did not have adult supervision. Although frustrated by the challenge, she understood the challenges of parents and guardians. She said, "It was constant redirection because, you know, their parents weren't sitting in the room with them, and I didn't expect that either. Parents had to work and support their other children."

Teachers observed that parental support and supervision were vital to ensuring that off-campus students fully participated in emergency remote learning. For instance, Teacher 3 shared her experience working with one student's mother to keep him engaged in emergency remote learning:

> I talked a lot with one of my students. He was home and his mom was really trying to keep on him. So, I met with him every day, but there were some points where she was

> getting frustrated. At some point grandma was watching him. I could see he was watching TV while he was on because his eyes kept going like above the iPad, you know? I'm like "turn that off, whatever it is you're watching." I would email mom and say, "Hey, he's not on." And she was pretty much like, "well I'm done. You make it work." So, I just stopped emailing her and I think eventually she reached back out, but I think it was hard because she was working too. So, it was hard for her to try and stay on him when he was with another adult.

It is tempting to assume that parents did not care about their child's education; however, teachers discovered that parents and guardians were facing many different challenges that prevented them from fully supporting their child's education. For instance, Teacher 1 found that many families were unable to supervise their children during the school day because they were frontline workers who needed to work during the pandemic:

> I think a lot of parents were working, like a lot of the parents were still working because some of them were nurses. Some of them were grocery store clerks. So, some of them were still working, which made it hard for them.

Other families felt overwhelmed by balancing the responsibilities of supporting their children's education and life responsibilities. For instance, Reimers (2022) discovered that families experienced a significant number of challenges in supporting their children during remote learning, such as students having to share devices with other family members, internet access, financial pressures, mental health concerns, job loss, and balancing their child's education from a remote setting. In addition, some families needed teachers to educate them on how they could best support their children during emergency remote learning. For example,

Learning Support Teacher 1 shared the following experience about working with a single mother:

> I remember there was one single mom and she had two girls, so that was also really challenging too, because I had one of the girls who was a learning support student. I found out the one sister was helping my student with all her work. She wasn't doing anything. I mean, it was just, it was difficult. But I remember contacting this mom, just saying, "Hey, listen, like there's a lot going on right now in your house. Like maybe we try to find, you know, this student, a quiet space. Maybe you can separate the girls because they're not doing the same thing in school." She was very understanding. She tried her best. It still wasn't great, but yes, I had to teach them like, "Hey, can you see if she has any headphones at home; just something to kind of help her focus?" Obviously, selfishly, like it was helping me too to keep everything kind of calm, but it was them, too.

Access to Resources. A Global Digital Overview (2020) study revealed that approximately 88% of households in the United States have internet access, meaning approximately 44 million people are currently not connected to the World Wide Web. Goldstein (2020) found that low-income families were most likely not to have access to high-speed laptops and tablets during emergency remote learning. Instead, many low-income families used cell phones to access online learning materials during the pandemic (Goldstein, 2020).

Teachers observed that many off-campus students struggled with accessing online resources for various reasons. As the pandemic began, some KHS parents and guardians began picking up their children from campus; however, when students left campus, they were not permitted to take their school-issued iPads during the first week of emergency remote learning.

School leaders had anticipated remote learning ending quickly and were concerned that student iPads would be lost or broken.

When it was apparent that remote learning was not going away, Administrator 2 began collecting student iPads from classrooms and mailing them to families:

> Then a couple of weeks went by, and we came to the quick conclusion that they took their iPad with them anytime a student left. Then we needed to mail iPads to students, who we could get in touch with and were home. That was a pretty big undertaking. It was finding the iPad too. Was it at the residential home? Was it in the classroom? Um, so those types of things. But yeah, we spent a lot of time mailing. And then the parents would call and say the iPad wasn't working. So, we had to troubleshoot through that. Some didn't have internet. We were sending hotspots. So, yeah, that's how we did that.

Although KHS mailed students their school-issued iPads, many still needed internet access and turned to unconventional means to participate in remote learning. Families would use the Wi-Fi at public libraries, fast-food restaurants, and other public venues. Teacher 3 shared a story of one of her students whose family did not have internet access and parked in a McDonald's parking lot to complete assignments:

> The one thing I do remember is that a family didn't have access to Wi-Fi. So, they were like trying to do their work from the McDonald's parking lot whenever they could. Um, and then the school eventually sent them a hotspot, so it was a lot better for them so that they could do their work. It took a few weeks to get the hotspot, but once they did, she did a lot better with her work. Everyone else I think had Wi-Fi access, but it was interesting that she didn't because you think everybody has Wi-Fi access, you know?

The KHS School District did work with some households to order mobile hotspots; however, this was uncommon. Administrator 4 was responsible for getting mobile hotspots to families:

> For the most part, we sent only hotspots to 11th and 12th graders. There were occasions when we did have hotspots for other students. Now understanding at that time that every school in the country was trying to get hotspots, the ones we did have, we did send them to some kids at various grade levels. But we sent the majority of them to our seniors because we're trying to make sure they graduate.

In addition, the sudden transition to emergency remote learning created a scenario in which many students lost or did not bring their instructional packets home with them when they left campus. Teacher 3 found that several of her students did not bring their instructional packets with them because they visited their families over the weekend and thought that they were coming back to campus.

Teacher 1 had several parents contact her because their children forgot instructional packets on campus. She said, "A parent reached out and said they wanted a paper copy of the packets. I'd send it via email and say, you can print it."

Teacher 2 took a different approach and uploaded instructional packets to Google Classroom for students to access on their iPads or print out at home. After several of his students living off-campus did not log in or participate in remote learning, he decided to mail instructional packets home. He said:

> So, kids that went home and, and didn't engage at all. So, it's like, "Hey, are you okay? Are you alive?" Or you're like, yeah. We're calling houses. We're you know, sending

> stuff in the mail. We sent packets in the mail because some of the kids just weren't doing anything online.

Distractions From Within the Home Environment. Reimers (2022) noted that American families encountered many challenges during remote learning in the spring of 2020, such as financial hardship, mental and physical health concerns, and sharing spaces and devices with multiple family members. Crowded and noisy home environments led to distractions during virtual learning. For instance, Teacher 2 noticed that family members would intentionally or unintentionally affect synchronous instruction:

> You would have parents talking in the background, doing whatever they do on their own time. And it's technically they're at school. So, it's like, "Hey, can you mute yourself? Cause I can hear mom talking or whatever's going on, you know?"

Teacher 1 stated, "I think it was good when the kids were in the residential home. But when they went home, that's when a lot of issues began to emerge." Students living off-campus had a different structure, supervision, and living environments than their peers living on-campus. Teachers observed that students living off-campus were faced with more distractions, such as noisy and crowded home environments, video games and television, and family members and pets.

Many students had to take care of their younger siblings during remote learning because their parents were essential workers. Teacher 1 shared, "Sometimes my students would come on and like introduce their siblings to me. I know they had younger siblings, and I know mom was gone. She was working a lot. I tried to be understanding about it."

In addition, several families differed in understanding what did and did not constitute school time. For example, Teacher 2 tutored a student during an optional synchronous meeting

when the student suddenly had to leave for the grocery store. Teacher 2 responded, “I guess you’re not getting on now . . . like I can’t do anything.”

Many of the most academically challenged third-grade language arts students needed a dedicated place for studying and participating in online instruction. For example, Learning Support Teacher 1 worked with Tier 3 learning support students who were two or more grade levels behind in language arts. In one situation, she worked with a single parent to help find ways to reduce the number of distractions in the home. Learning Support Teacher 1 shared the following:

> I talked to this mom about the concerns I had for her daughter because she had ADHD. Like maybe we try to find this student a quiet space. She needed, you know, a spot where they could sit down and focus on this screen that none of us have ever learned from before.

Television and video game systems were also common distractions for off-campus students, which many turned to during synchronous learning sessions. For example, Teacher 3 noticed a student could not keep his eyes focused on the iPad screen during remote learning because he was watching television: “At some point, I could see he was watching TV while he was on because his eyes kept going above the iPad, you know? Yeah. I’d like turn that off, whatever it is you’re watching!”

Even family pets appeared on the screen during virtual meetings with students in the spring of 2020! For instance, Learning Support Teacher 2 worked with several students with severe ADHD and found that a family pet would become a point of distraction:

> When I look at my roster and who I had at that point, honestly, they did their best. But the ones that were ADHD, like they’d be in their bedroom, bouncing up and down on the bed

> and I'd have to like redirect and please come sit in front of the screen for a moment and then I'll let you have another break. They were constantly like wanting to show you their dog, you know, stuff that they don't get to do here on-campus.

Theme #3: Changing Dynamic Between Teachers and Caretakers

Emergency remote learning created a new dynamic between caretakers during the first 21 days of instruction, as teachers were forced to rely on parents, guardians, and residential care providers to support student learning. Teachers needed to find ways to communicate and collaborate with residential care providers, parents, and guardians. The following theme will discuss the changing dynamic between teachers, residential care providers, and parents and guardians.

Residential Care Providers. Because approximately 70% of students remained on-campus during emergency remote learning, according to Administrator 2, residential care providers were responsible for supervising the majority of students. Residential care providers provided additional supervision and accountability because they had direct contact with students. If teachers needed to get ahold of an on-campus student, they would reach out directly to the residential care providers. For instance, Teacher 1 said, "If a student wasn't online, I would just have to reach out to the residential care provider, and then usually I could get the student on eventually."

Residential care providers ensured that students were active participants in emergency remote learning, as they ensured that students were completing assignments and signing up for Google Meet sessions with teachers. Teacher 3 shared the following:

> When students were in the student home, residential care providers signed them up at least once a day to at least meet with us. So, we could go over anything or, you know,

> have if they had any questions about anything. But those that went home, you know, never showed up.

Teachers traditionally communicated directly with residential care providers through face-to-face communication, phone calls, and emails before the pandemic. Most communication between teachers and residential care providers during the first 21 days of instruction occurred through email or directly to students through posts to Google Classroom. Residential care providers felt confused during the first few weeks of emergency remote learning as everyone acclimated to the new communication structures. Residential Care Provider 3 stated that

> I think communication-wise is where the struggles came in, because we're sitting here, but we're not actually actively involved in the lessons that are being headphones. So, we're not hearing what the teacher's saying. Then we're helping, but we're not really sure exactly what the lesson was or what was being taught. So, when that stuff kind of got figured out, I think teachers and residential care providers got better at communicating on the fly. You know, sending quick emails or whatever, or just hopping on virtual meetings. Like it got better that way with communication.

In addition, Residential Care Provider 1 noted instances when he was unaware that a student's teacher was unavailable, because they were sick or working with another group of students:

> It was challenging because we needed to know where the teachers were or how to contact them. We didn't know if a kid was making it up to get out of class. So, in the beginning, it was hard. But, when Administrator 2 created the daily screencasts, that helped a lot.

Administrator 2 aimed to improve communication between teachers and residential care providers by developing daily communication with everyone on campus. She developed a daily

email and screen recording to share daily news, announcements, and important information. Administrator 2 described this as follows:

> I think just communication was a key piece. Like we started every morning with our Screencast and all adults – teachers, parents, administrators, and (residential care providers). So, every morning everyone had exactly what was happening and it kind of set the tone for the day. So, I do think that helped with its success, which led us to continue that till this day.

Parents and Guardians. According to Administrator 2, the rapid nature of emergency remote learning displaced "approximately 30% of students" to participate in remote learning off-campus, with the majority being high school or middle school students. Teacher 3 said, "I called the [residential care provider] if I had a problem with a kid, but now I am contacting (parents and guardians), which was challenging."

Although most students participated in emergency remote learning on-campus, many participated off-campus, which created an entirely new communication dynamic among teachers, parents, and guardians. The relationship between KHS Elementary teachers, parents, and guardians is unique because of the residential nature of the school. Teachers communicate with residential care providers daily or weekly, while teachers typically contact parents and guardians a few times a year. Teacher 1 mentioned that she typically communicated with parents and guardians twice a year before the pandemic, usually about immediate academic needs or behavioral concerns. She said:

> I usually call them [parents/guardians] and tell them this is how their kid is doing. I do most of my talking to the [residential care providers] because they are involved in the day-to-day activities of my students.

Instead of communicating twice a school year, teachers suddenly had to increase their communication with parents and guardians during emergency remote learning. Learning Support Teacher 2, "I had to step up my 'communication game' with parents and find creative ways to talk with them."

Teachers used various communication methods and tools, such as email, phone calls, social media, Zoom meetings, and texting. Teacher 1 found email communication most effective with parents:

> I'm more of an email person. Sometimes a [parent] will call me, and then we'll talk on the phone, but it's mostly email because it's easy. I didn't feel comfortable using the phone because I was on my personal phone, and then they'd have my phone number, but I had to make a couple of phone calls, so I just had to do it.

Teacher 3 used a combination of email and social media to communicate with off-campus parents and guardians: "At the time, I had a Facebook group with a lot of [parents] on it, so I would post there. I emailed out too, so there was a lot that I tried to do to get these kids to try to keep them learning."

Learning Support Teacher 2 worked with families more than she typically would during a traditional school year, connecting with them through the best medium for them, connecting through Facebook, phone calls, emails, and text messages.

Learning Support Teacher 1 was the only teacher in the research study who felt comfortable enough texting parents. She continues to text these families to this day:

> I texted two parents. Believe it or not, I still have the best relationship even now when these girls are now going into sixth grade. There was one kid I used FaceTime with, and she would just call me whenever. Back then, none of us were doing anything, you know?

> So, I didn't mind picking up the phone. I mean, I'm not going to do that now. Like now I got things going on, but at the time I just wanted to do anything I could to keep that connection because I felt like I was going to lose it. And that was sad as a teacher. I didn't want my kids to feel that way.

The changing dynamic between teachers and caregivers created a situation where parents and guardians were asked to keep their children accountable for their behavior, completing assignments, and participating in online instruction. Teachers observed that some families did not feel comfortable doing this. For example, Teacher 1 shared that

> I'm calling them and asking them to hold their kid responsible, and I feel like there's a lot more negative communication. Like your kid is not doing it. Whereas when they were with me in the classroom, they usually did it. So, it was a lot more awkward because I was like, "your kids are not doing their work."

Although some families struggled with keeping their children accountable, other parents exceeded expectations in supporting their child's education. Teacher 2 shared the following:

> The ones that were involved, I had them email me every day. They would say things like. "Hey, are they caught up? Hey, we, sorry, we got kicked off, you know, sorry this happened or whatever. Is there anything they can do extra?" You know, I think some of the [parents] realized their kids need more support than just online learning or sitting in a classroom.

Although most families welcomed the support of teachers, some grew angry and frustrated. For instance, one parent grew angry at Learning Support Teacher 2 for reaching out to offer her daughter support because of communication barriers and challenges they were facing. She said the following:

> I had one [parent] who wouldn't even return a phone call. Her daughter wouldn't get on, and they had trouble with the internet. She tried, but she was a first-generation from an African country. So, she had that thick accent, and we struggled to understand each other. That wasn't easy. She got upset with me because one time I called, and she thought I was bothering her. So, I said, "Okay, I need [student] to get on when she can." Unfortunately, the student did not complete any assignments, and I was concerned about her.

After realizing she was not getting anywhere with the parent, Learning Support Teacher 1 decided to talk with the student's residential care provider, who would normally care for them while living on campus. She discovered that the residential care provider had a great relationship with the mother and served as an intermediary to facilitate a conversation to get the student back on track. Learning Support Teacher 1 described:

> I did contact the [residential care providers] of the one student that wasn't showing up. The [residential care providers] were amazing. They said, "let us touch base with (the parent). We have a good relationship with her. You're new to her." Even though I communicated with the parent throughout the year, it wasn't like they did. So, they saw this parent a lot and that helped tremendously.

Conclusion

The rapid transition to emergency remote learning challenged third-grade teachers to find a way to educate students through a pandemic. Displaced classrooms transformed into synchronous meetings and shared screens. Instructional packets replaced lesson plans and classroom instruction. Even as challenges continued to mount, teachers, residential care providers, and students rose to the occasion. Teacher 2 mentioned, "For the first 21 days, we had a decent plan at one level. However, meeting all the kids' needs was tough."

As the first 21 days of virtual instruction ended, teachers realized emergency remote learning was far from over. Teacher 1 said, “I thought this would last, um, like, two weeks at the most, but when day 21 came and went, I realized that we’re in this for the long haul.”

Instructional packets provided teachers with a certain amount of comfort because students could complete their assignments with paper and pencil; however, as the reservoir of instructional packet lessons dwindled, teachers scrambled to find new ways of teaching remotely. A scramble ensued as teachers were forced to generate new lessons, digitize materials, and use technology in new ways. Learning Support Teacher 1 expressed the anxiety that all teachers in the study faced: “I was freaking out! I mean, how do I take everything that I have done for the past two years? How do I take everything I have ever done on paper and pencil and now do everything virtually?”

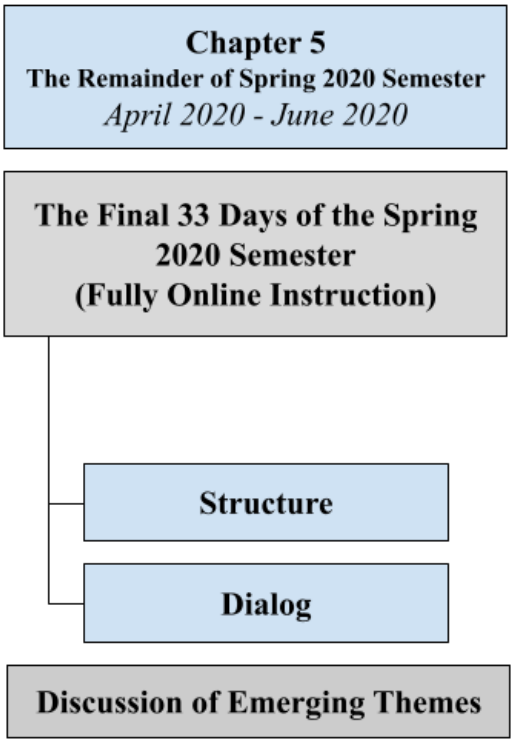
The next chapter will discuss third-grade language arts teachers’ journey as they transitioned from instructional packets to a new remote learning paradigm through the remainder of the spring of 2020.

Chapter 5: The Remainder of the Spring 2020

In Chapter 5, I discuss how third-grade language arts instruction was taught at KHS Elementary during the final 33 days of emergency remote instruction from April to June 2020. I begin by describing the adjustments made to the KHS School District Emergency Remote Learning (ERL) Plan during the remainder of the spring. Next, I will address how KHS Elementary transitioned from paper instructional packets to a fully online instructional model for the remainder of the spring. Finally, I will discuss the major themes that emerged from data analysis, which helped answer the research questions posed in this study. Figure 8 provides a graphical overview of the layout and significant sections of the chapter.

Figure 8

Overview of Chapter 5



The Final 33 Days of the Spring 2020 Semester

As the first 21 days of emergency remote learning concluded, teachers and administrators realized the remote learning experience was far from over. Modifications were made to the structure of emergency remote learning at KHS Elementary to adapt instruction, reduce screen time, and keep students engaged in learning. Dialog between all stakeholders was refined to establish better communication between teachers, students, and caregivers. In the following section I discuss how administrators and teachers adapted emergency remote instruction to meet the needs of students as the pandemic continued to shut down the school.

Structure

The KHS Elementary Emergency Remote Learning Plan's original structure continued to evolve as an experiment in progress. Teachers and administrators used the successes and challenges of the first 21 days of emergency remote learning to adjust the structure to student needs during the remainder of the spring. For instance, tracking student attendance was difficult because many off-campus students were absent. Students faced a significant amount of screen time, which caused teachers and administrators to reconsider the original emergency remote learning schedule. Teachers found it overwhelming and impossible to grade student assignments with the same rigor and expectations used before emergency remote learning. In the following section, I discuss several necessary adjustments to the structure of emergency remote learning at KHS Elementary.

Attendance. Teachers found it difficult to track attendance because of the inconsistent participation of off-campus students in the spring of 2020. According to Administrator 2, "Attendance for students living on-campus was virtually perfect" because of the structure and

accountability provided by residential care providers. In comparison, students living off-campus experienced inconsistent Wi-Fi access and a lack of adult support and supervision.

Teachers continued to complete a Google Form for attendance by 9 a.m. each day, as data from the form populated a spreadsheet Administrator 2 would monitor daily. However, as the spring semester progressed, teachers found a need to adjust and provide students with flexible attendance options. For instance, many students needed to complete assignments after school hours for assorted reasons. Teacher 2 shared the following:

> All I did was take attendance. I would take it at 9 a.m., but I would make changes if a student turned in work later. I had one student who would show up later at night to do their work because her mom worked all day, and she could help her at night.

Motivating students to participate in emergency remote learning proved extremely difficult during spring 2020, as most absentee students were off-campus. If a student failed to participate in emergency remote learning, the teacher would contact the student's residential care provider, parent, or guardian. Unfortunately, these efforts were unsuccessful for off-campus students; however, KHS Elementary increased student participation by requiring students who consistently failed to participate in emergency remote learning to attend summer school. Administrator 2 said, "So if any kid that wasn't engaged virtually during the spring of 2020, they had to come back for summer school."

Modifying the Schedule. The original emergency remote learning schedule consisted of two synchronous virtual instructional support sessions between 9 a.m. and 11 a.m. and 1 p.m. to 3 p.m., Monday through Friday. As the spring semester progressed, administrators made several adjustments based on teacher feedback to adjust the student schedule to increase participation

and reduce screen time. First, teachers observed that students were fatigued with the screen time required to participate in emergency remote learning. Teacher 1 mentioned that

> by the end of the day, they were getting tired. Some of them. Some of them were fine, but I started seeing kids lying on their beds near the end of the day. Like, are you tired? Are you taking a nap? Their eyes look glazed over, and they're just like, and, and it's a lot, it's a lot of screen time for a kid.

School administrators determined that reducing the number of school days per week was essential for lessening the burden of emergency remote learning on students. Therefore, administrators reduced the traditional school week from five to four days. Administrator 2 described it as follows: "We concluded Monday through Friday was too much because of screen time. So, we did shrink it to Monday to Thursday, and then Friday was a day off where everyone could regroup for teachers and students."

Secondly, teachers collaborated with administrators to adjust the time of synchronous learning sessions to meet the needs of off-campus students attending. Teacher 2 mentioned that he worked with Administrator 2 to make adjustments to the time students would participate in synchronous learning on Zoom to meet the needs of students. Administrator 2 concurred and the meeting times were adjusted to meet the needs of students. Teacher 2 said, "We were just looking for anything to get students to participate. We didn't want to lose them."

Pass-or-Fail Grading System. Along with attendance, teachers found it challenging to get students to complete and turn in assignments in the spring of 2020, as many completed tasks incorrectly or did nothing at all. Teachers continued utilizing a traditional grading system to provide students with points and letter grades; however, some teachers found that they had to become more lenient with their grading practices. For example, Teacher 2 shared how she

differentiated between students who were trying and those who were not trying at all: “I was a little more lenient because some kids, you know, were getting two or three wrong. Other kids were getting the entire page wrong. So, I had to focus on those kids who were not trying.”

Other students realized that teachers were limited in how they could discipline students for incomplete assignments and chose not to participate. Teacher 2 stated, “Even though there were rules, there was no accountability to hold students accountable.” Teachers observed that students struggled to consistently complete instructional packet assignments during the first 21 days of instruction. Learning Support Teacher 2 said, “I had one student who did absolutely nothing during remote learning. He showed up maybe a handful of times.”

Administrators and teachers found it necessary to replace the traditional grading system with a pass-or-fail grading system to encourage student effort and participation. The new system rewarded students for their efforts rather than for perfection. Teacher 2 admitted that a pass-or-fail grading system was an “imperfect solution” for an “unprecedented time” when the quality of instruction was much lower than during a typical school year. He shared the following:

> How do we grade kids when I don’t feel like I’m doing a great job teaching kids? So, I won’t grade a kid if I’m not doing my job to the best of my ability. Not that I wasn’t, but we couldn’t, you know? That’s what we told the administration, “Hey, can we do like a pass-fail?”

The KHS Elementary administration collaborated with teachers to adapt the grading system for the remainder of spring 2020. The pass-or-fail grading system had many benefits. For instance, it benefited off-campus students who often needed more consistent internet access or adult supervision and support. In addition, it made it easier for teachers to measure participation and keep students accountable. The traditional point-based grading system took time and effort

to adapt to emergency remote learning; however, teachers could quickly measure student participation and engagement with a pass-or-fail grading system. For instance, Teacher 3 shared that

> it took more work to stay on top of grading everything (in the first 21 days). When we changed to pass or fail, that really helped. If kids weren't participating, how could you grade their work if they weren't submitting anything or if they weren't meeting with you anyways?

Digital Lessons and Projects. As the spring of 2020 progressed, students started to run out of lessons in instructional packets; therefore, teachers had to create new digital lessons students could access from their iPads on or off-campus. Classkick was a popular application that students were already familiar with. Thus, teachers used it to upload existing worksheets into a digital format. Teacher 1 explained the following:

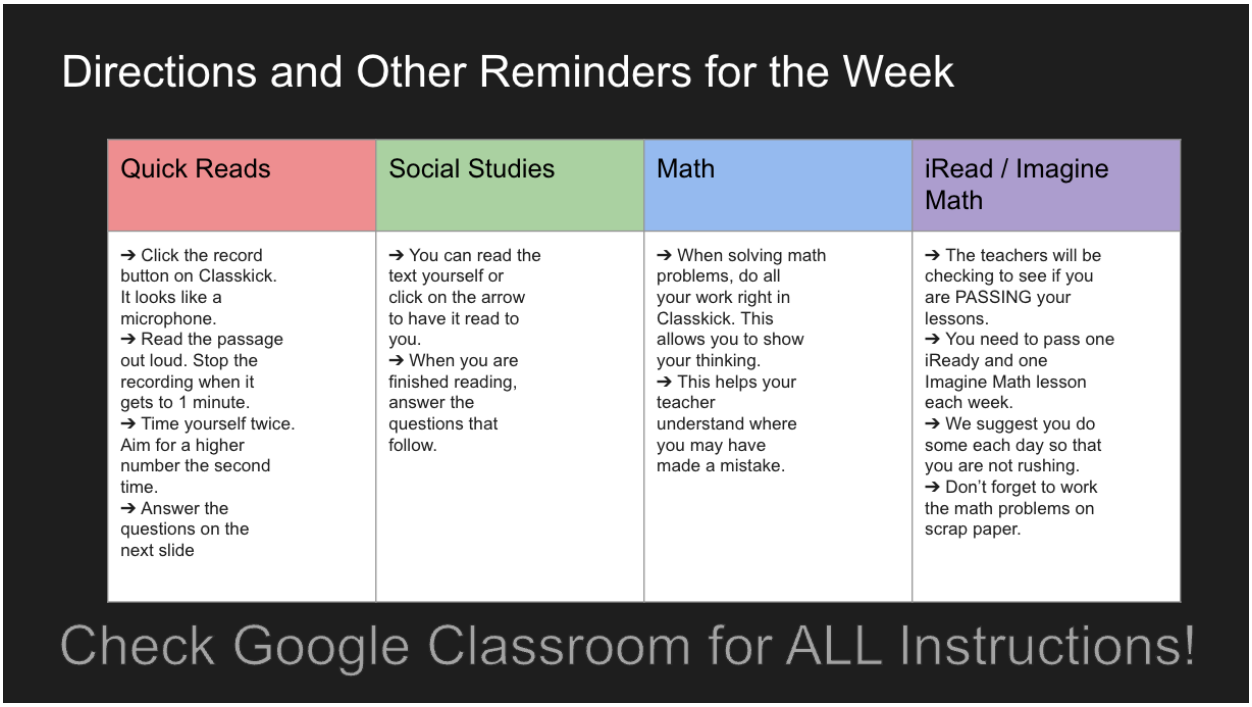
> Many of the third graders already had a background with Classkick, so we knew we would go that route because they had already been using it. Instead of making paper copies of packets and mailing them to kids, we could take a picture with our phone and load it to Classkick.

Furthermore, teachers began combing language arts and social studies lessons to keep students engaged. Teachers assigned quick reads from social studies textbooks to practice reading fluency and reading comprehension skills (see Figure 9). For example, students would open a digital copy of the reading passage in Classkick and create an audio recording of reading the passage. Afterward, students would answer multiple-choice questions to assess their reading comprehension. Teacher 1 explained it as follows:

Our virtual learning assignments focused more on fluency and social studies projects. Language arts is a lot harder to do remotely, for sure. Unless everybody has something in front of them, that's hard to do. It was easier to read social studies passages and answer questions.

Figure 9

Google Slide Instructions for Students in April 2020



Since teachers could be creative and flexible, they began incorporating more hands-on activities and research projects in third-grade language arts. Teachers 2 and 3 mentioned how they assigned students an end-of-year research project. Students had to research a topic that interested them and develop a written report or presentation based on their findings. Teacher 1 shared how her third-grade language arts students participated in a virtual field trip to learn more about the Revolutionary War:

> Students had a virtual field trip project. So, they had to pick a topic from the Revolutionary War and do some research on that and create a Google Slide. So, that kind of took the place of the Revolutionary War field trip and combined it with language arts.

Dialog

According to Moore (1997), the dialog between teachers and students influences the perceived psychological distance between teachers and students in a distance learning environment. The more communication between teachers and students, the less transactional distance is generated, and less autonomy is required of students (Moore, 1997). Continued communication between teachers, students, and caregivers remained paramount for student success during the rest of spring 2020. The following section will detail adjustments made by teachers and administrators to streamline and improve communication throughout the remaining 33 days of instruction in the spring of 2020.

Zoom. Google Meet was the primary video conferencing tool used at the beginning of the pandemic; however, KHS Elementary transitioned away from the application because teachers and students experienced many connection issues. Instead, administrators recommended that teachers use Zoom as the primary video-conferencing application. Administrator 4 described the thought process behind the switch:

> There were a few reasons why we changed to Zoom. One was security-wise. We thought it was more secure. And two, we were having a lot of issues with stability with Google Meet at the time, and we thought that Zoom was just better. It was clearer. We just thought it was more stable for our students.

Once Zoom was adopted at KHS Elementary, teachers and students noticed a significant difference in call quality and reduced connection issues. In addition, Zoom provided teachers and

administrators with important settings and security not available in Google Meet. Administrator 4 stated, “I know that we got an educational account with Zoom, which helped increase some of our security measures.” Teachers could protect students by using security features like requiring a meeting password, establishing a waiting room, and restricting users with email addresses from outside the organization.

Classkick. Classkick provided students with flexible tools for completing assignments, such as text responses, drawing tools, virtual manipulatives, fill-in-the-blank, and multiple-choice questions. In addition, teachers could use monitoring features to observe student progress, answer questions and give real-time feedback, and provide accommodations, such as audio recordings. Teacher 2 shared the following:

> The audio recording tool was great. And the kids were able to do that, too, and could say, “Hey, I do not understand number seven.” So, I could say, “Number seven says this.” That was the one thing for our Tier 3 students when they took a test. I was able to get on a read and record my voice for the questions so they can use it, you know. Every kid was able to use it, which was nice. But the Tier 3 kids benefitted from that.

Learning Support Teacher 2 found the annotation tools on Classkick incredibly helpful because she could circle, highlight, and give immediate feedback on student assignments: “Classkick was a big help because you could go on while they were doing a problem and circle. They loved that! I found it to be very engaging for them. They enjoyed the instant feedback!”

In addition, teachers experimented with different strategies for organizing content and distributing assignments in Classkick. For example, Teacher 3 organized assignments in Classkick like she organized instructional packets at the beginning of emergency remote learning. The first page consisted of a checklist of assignments for the week. Students could use

the annotation tools to check off completed assignments. Each additional page contained daily language arts and math assignments.

Teachers 1 and 2 organized Classkick assignments by posting links and communicating daily assignments through Google Classroom. Students would receive a notification on their iPads that their teacher posted an announcement on Google Classroom. When students read the posting, they tap on an attachment to open a hyperlink to the Classkick assignment.

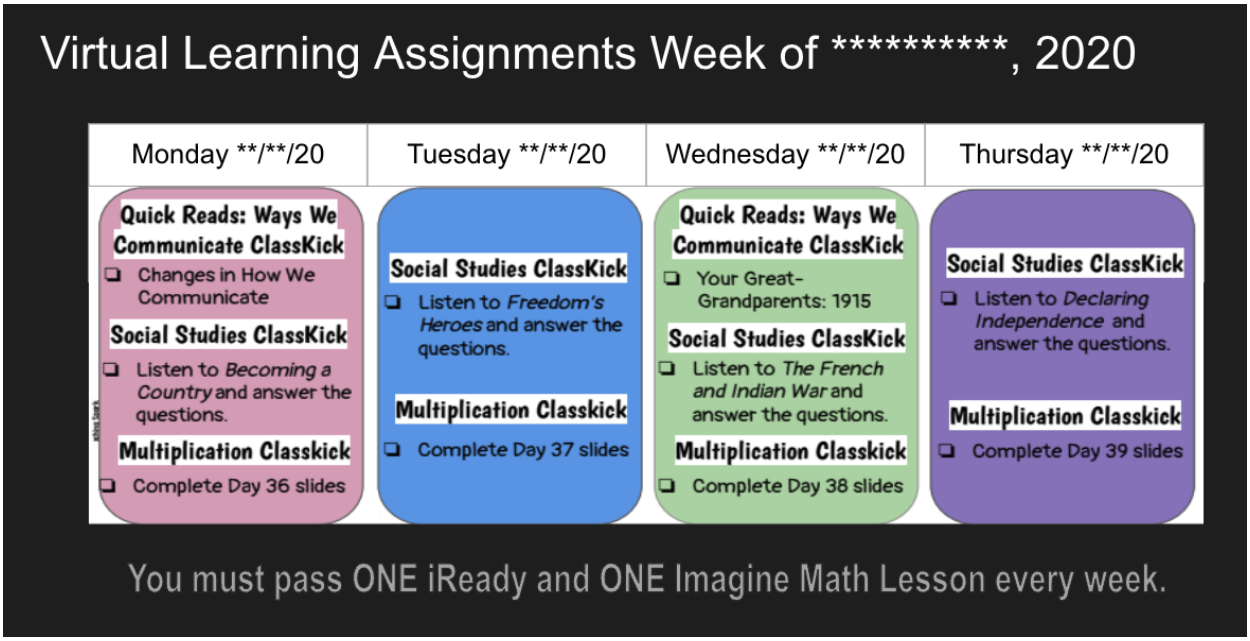
Google Slides. When emergency remote learning began in March 2020, third-grade language arts teachers organized instructional packets with a daily assignment page, lesson materials, and worksheets. The daily assignment page contained a checklist of all assignments to be completed that day. As instructional packets were being phased out after the first 21 days of instruction, teachers started using Google Slides to communicate assignments.

Teachers created a weekly slide to communicate assignments and share important links for the week. The Google Slide presentation was posted to Google Classroom, where students could access and complete assignments. Teachers 1 and 3 used one slide per week to organize weekly assignments in all subjects, such as mathematics, social studies, and language arts (see Figure 10). Teacher 1 said, “Google Slides made it easier for students to see all that was happening. They could see all their assignments on one slide and in one place.”

As digital lessons replaced instructional packets, teachers started using Google Slides to develop slides containing weekly assignments and essential links. Teachers posted their Google Slides presentations to Google Classroom, where students could access and complete assignments.

Figure 10

Google Slide Instructions for Students in May 2020



Daily Welcome Video. Although many teachers used Google Slides to communicate weekly assignments, some posted daily videos to Google Classroom as an alternative. Teacher 2, Learning Support Teacher 1, and Learning Support Teacher 2 created daily videos to share important news, announcements, and assignments. Teachers posted their videos to Google Classroom with written daily instructions and links.

Each teacher had a unique way of using daily videos to communicate and connect with students. For instance, Learning Support Teacher 1 found that posting daily videos helped her better connect with students, share her experiences, and encourage others during the pandemic. Teacher 2 experimented with different strategies to engage students to watch his daily videos and attend Zoom meetings. For example, he would create videos featuring his three-year-old daughter or dress up in a costume and pose as a "special guest" who would teach the class that day. His strategies effectively increased attendance, as curious students wanted to see who the

guest teacher would be. Teacher 2 shared, “Like I showed up the one day with a mullet wig on and said, ‘[Teacher 2’s] not here, I’m a substitute.’ I was just wearing different costumes to keep them going, you know.”

In addition to using Google Slides, several teachers developed daily welcome videos on Google Classroom to share important news, announcements, and assignments. For instance, Learning Support Teacher 1 found that posting daily videos helped her better connect with students, share her experiences, and encourage others during the pandemic. In one video, Learning Support Teacher 1 shared the following message to students:

> Hey everyone! You might have noticed, um, that I am in my classroom. I got special permission to be here because I could move into my new house! Of course, I don’t have the Internet! So, um, I am coming into the classroom for a couple of days. Uh, it’s very quiet. It does feel good to be in the classroom, but it doesn’t feel the same without you guys here. I miss you!

Morning Meetings. Morning meetings were an essential part of the daily schedule during the 2019-2020 school year to support student social-emotional learning (SEL). The daily meetings were designed to build a positive classroom community and allow students to check in emotions and learn valuable SEL skills. Teachers found it helpful to continue having meetings before language arts instruction and adapt them to emergency remote learning. For instance, Learning Support Teacher 1 posted a morning meeting discussion question in Google Classroom daily to facilitate an asynchronous discussion with students. During the first few weeks of emergency remote learning, she would have students respond through one-word answers and emojis; however, as the spring progressed, she asked students to respond in more detail. She described it as follows:

> When we first started, I had students respond in like a one-worded response, like a one-worded emoji sort of thing. Then I was able to turn (morning meetings) into more of like a morning meeting question as spring went on. So, I was able to have them do like our typical morning meeting journal prompt.

Learning Support Teacher 2 worked with students and caregivers to hold synchronous virtual morning meetings on Zoom before school started each morning. Although meetings were designed for students, she found many parents and guardians participated. She enjoyed being able to connect with families on a deeper level during the pandemic and described how important it was for students to connect during this unprecedented time:

> We always tried to have that little morning meeting and connect, but many kids came on during class. We always had like a 20-minute morning meeting. Uh, and many of those [parents] didn't have the kids come on until it was class time. So, they missed those conversations or the first 20 minutes of class. As I said, it was only one or two kids consistently every day of the week. They always asked, "Oh, I wonder where so-and-so is today."

Discussion of Emerging Themes

The transition from online learning through instructional packets to a fully online instructional model shifted how teachers taught third-grade language arts at KHS Elementary. A thorough analysis of transcripts, documents, and digital resources revealed several important themes involving the instructional methods, materials, and technologies used by teachers. In the following section I analyze the major themes that emerged from research data during the remainder of the spring of 2020.

Theme #1: The Challenge to Keep Students Engaged

Emergency remote learning challenged teachers to find new ways to engage students in a virtual environment; however, as virtual learning progressed past 21 days, teachers found it was becoming increasingly more difficult. Teachers had to find new ways to keep students engaged in learning during an unprecedented time. Teachers described students as fatigued from extended screen time, frustrated by a lack of physical and social interaction with classmates, and bored by the monotony of daily independent lessons. In addition, students became increasingly aware of the limitation's teachers had for correcting misbehavior. Teacher 2 described it as follows:

> My biggest challenge was ensuring every kid was engaged and they didn't learn the same way. So, it was a challenge trying to do it one-size-fits-all. You could do small groups within it, but again, the kids will not learn to look at a screen as much as they do with you in person, period.

For instance, Teacher 1 observed that off-campus students tended to struggle more with staying engaged in learning:

> If students are at home, they probably thought they could get away with more because you know, mom, maybe wasn't checking up on them. I mean, what am I going to do? I'll call mom. That's all I could do and if she doesn't have the authority, then it's kind of like, uh, okay. He's just not going to do it. I found this happened in the residential home too. I think they just felt different because I wasn't like, what are you going do to me? Like I can contact somebody, but then it might take a while for that person to respond. Like it's not an immediate thing, whereas when I'm in classroom, you can take care of it right away.

The third-grade language arts team responded to the challenge by finding creative ways to keep students connected, engaged, and learning. For instance, teachers found it helpful to give students free time on iPads for good behavior, dance parties for students who completed all assignments, and social gatherings through Zoom for effort. Teacher 2 shared that

> we tried to incentivize them like, "Hey, if you're doing this, this and this, we're going to give you a dance party. We're going to give you free time on your iPad." But at the end of the day, you didn't truly know who was doing those things.

Sometimes the element of surprise or curiosity was just enough to get students to participate in a Zoom meeting. For instance, Teacher 2 would dress up in a costume and wig to disguise himself as a "guest" teacher for the day:

> Like I showed up the one day with a mullet wig on and said, you know, (Teacher 2's) not here, I'm a substitute. Just wearing different costumes. They would say "What's teacher going to do today, you know?" They loved that. I had to just to try to keep them going. So that was my biggest thing. It was to just be present and then beyond that, it was, you know, it was, it was survival, you know.

Teachers 1, 2, and 3 found it helpful to reward student participation with playing games with students. Teacher 1 shared the following:

> We would play Kahoot on Fridays as something fun, you know? I sort of realized that the kids had been staring at a screen for 40 hours this week and needed some fun. We played other games too. For math, we would do a 99 Math challenge. They loved that. Just to keep them going. That was my biggest thing.

Learning Support Teacher 1 tried increasing student engagement by finding ways to connect with the students and their families. For instance, she would Facetime off-campus

students and their families and play card games like Jeopardy or Uno on Zoom. She shared the following:

> I found my rhythm and my routine in the springtime. I was lucky to have students on for, you know, a half hour if they even had logged in. So, the kids who were on, you know, especially like longer periods of time. Yes, we would do Jeopardy. I played UNO and Solitaire on the computer with the kids a lot. I mean, just anything I could find online. It was always something like a game that we could play.

Unfortunately, a large population of students from primarily off-campus still needed to participate in emergency remote learning in the spring of 2020. Therefore, administrators worked to find ways to motivate students to participate, such as attending mandatory summer school if they failed to participate in classes. Administrator 2 explained, "So if any kid that was engaged virtually, uh, during the spring of 2020, they had to come back for summer school." According to teachers and administrators, off-campus attendance increased by requiring summer school for students who failed to participate during the spring. Teacher 1 said, "Kids at home were participating more because they didn't want to have to come back for summer school."

Teacher 2 was encouraged by the administration's support and thought that summer school was an effective consequence for students who failed to participate in virtual learning:

> The administration said, if students were not showing up, they're going to have to come to summer school. So the administration had our backs there. I think they reached out to, you know, some of the kids that weren't getting on and said, "Hey, if you're not going to be active online, Y]you will be mandatory summer school." And that helped.

Learning Support Teacher 1 found that many of her absentee off-campus students began participating in emergency remote learning with the potential repercussion of attending summer

school. She mentioned how several parents and guardians would reach out to get their children caught up: “There was suddenly a lot more communication from parents and guardians, you know. They would say, like, ‘Hey, it’s now June and my child hasn’t done anything for the past six weeks. Can we get them caught up?’”

Theme #2: On-Campus Challenges

Although many students left campus in the spring of 2020, most students participated on campus within residential homes. Residential care providers were the primary party responsible for monitoring, supporting, and supervising students during emergency remote learning in the spring of 2020. Each residential home contained four to eight children living in the same home and participating from different grades and classrooms, which created challenges for managing student participation. Although residential care providers were familiar with assisting students with homework, remote learning was a new and stressful experience. Residential Care Provider 4 explained:

> I think it was difficult at times because we had children of our own that were doing remote learning. Plus, we had kids in different grades doing remote learning, all different teachers. So, trying to manage, um, making sure that all the kids were accountable for everything they had to do and still learning and also managing your mental health.

As lessons shifted from worksheets to digital tools, residential care providers faced unfamiliar tools and were expected to be the first line of defense for technology troubleshooting. The following theme will discuss many of the challenges that emerged for residential care providers as they supported third-grade students during emergency remote learning in the spring of 2020.

Communication Challenges. Residential care providers struggled to stay current with student assignments and teacher expectations because all teachers remained off campus. Instead of directly communicating with residential care providers through email or phone calls, most teachers found it easier to communicate directly with students through Google Classroom and Zoom. Residential Care Provider 2 mentioned that she sometimes felt "out of the loop," because connecting with teachers who were teaching off-campus in their homes during the pandemic was difficult. In one instance, she was unaware that a student's teacher was unavailable for class:

> With teachers being off-campus, we only sometimes knew where they were. Sometimes people were sick. They had COVID, so we didn't know who was jumping in. Um, there were times when the kids would say, "Oh, I don't have class. My teacher's not here." Or, um, "My teacher just told me to read instead because they're doing something else."

Sometimes, students conveniently forgot to share important instructions or details from their teachers, such as class ending early, or their teacher was unavailable. Residential Care Provider 3 felt that some of his students took advantage of the lack of direct communication between teachers and residential care providers stating that some of his students would "stretch the truth" or "conveniently leave something out" of instructions:

> I told the kids, "If the teacher says you can do that. That's, that's on them" As for us, we said, "Unless they were directed, they had to be on what they're supposed to be on." But that's how I looked at first. We'd have to remind them that they're supposed to be with somebody else right now and navigating the day or on a site they shouldn't be on because they're bored with the teacher. We had to make kind of sure that they were on the right websites and apps.

Logistical Challenges. As the pandemic continued, tracking where students were participating became difficult as unexpected challenges and variables occurred. For instance, students may have moved to new residential homes, or the administration may have repurposed staff to another residential home to maintain appropriate student-to-adult ratios. Residential Care Provider 4 shared the following:

> It was challenging to keep students on task and learning, but there were also times when residential homes were closed, we got moved to a different residential home, or the kids went home. There were all sorts of shifting variables, and they changed so rapidly every day. There was always something new!

Although school administrators notified teachers of these changes, there were instances when teachers were unaware of a sudden change.

Technology Challenges. Every residential home is equipped with high-speed Wi-Fi in common areas, such as dining rooms and living rooms; however, some residential care providers reported experiencing internet connectivity issues in other areas of the home. For example, Residential Care Provider 5 initially encouraged his students to work on assignments from desks in their bedrooms to reduce noise and distractions; however, students had to move to common areas because their bedrooms had little to no Wi-Fi signal. He said that

> we had connection issues at the beginning where the kids, uh, couldn't connect or they were connected, and it would fall off, but the teachers could help to a degree. Then we had to have IT come out two or three times over the first three months to increase our connection and everything to make the internet a lot better and accessible for them. So first it was, it was frustrating, but the kids could wait it out.

It was essential for students to have access to a functioning device and high-speed internet to participate in emergency remote learning. Although residential care providers were not trained IT professionals, they were often the first responders to technology problems for students living in residential homes. Residential care providers varied in their comfort level with technology. For example, Residential Care Provider 5 found troubleshooting difficult and stressful. He said, "It was a little scary and difficult because we were unfamiliar with iPads and stuff. So, I was glad the kids were able to figure it out."

A broken or malfunctioning student's device could disrupt student participation for hours. When technical issues occurred, the KHS School District had a technical support hotline for students and adults to call or email; however, most IT staff members worked from home, which made replacing or repairing a device more time-consuming. Residential Care Provider 1 described how disruptive device issues were to student participation, sharing, "If iPads didn't work, there was nothing for the kid to do. And then we have a kid who's got a couple of hours to fill."

Residential Care Providers 3 and 4 were former educators who were familiar with and felt comfortable navigating technology issues with students; however, it took them several months to feel comfortable supporting students in a residential home setting. Residential Care Provider 2 shared the following:

> I have a teaching background. Like, I was familiar with the devices students used in our home because I taught at [school name] students could bring their own devices there. So, I had some background in technology. So, for us, it wasn't too bad, you know, I think. Well, not at the start of it, no. But then after it really started to settle in, like, we're talking months later.

Residential Care Provider 1 mentioned how she would have to figure out solutions "on the fly." In addition, she mentioned how she encouraged her students to communicate directly with teachers through Google Classroom or Zoom if they could not figure out a solution. She said:

> The teachers were very helpful! If there was an issue, the students would say like, "Hey, this isn't working." So they'd message [Google Classroom] or call the teacher[Zoom] and they'd help out or whatever. So, to us, it was just a learning curve of what we do with like, almost every day we do a stuff on the fly quite a bit as being [residential care providers].

In addition, school officials increasingly realized the importance of expanding the bandwidth for students to participate in video conferencing tools like Zoom. IT professionals worked with the school's Internet Service Provider (ISP) to increase internet bandwidth and speeds. Administrator 4 mentioned, "We were having bandwidth issues on campus, which made things difficult in the (residential) home. We worked with IT to increase bandwidth, and that helped." When the network's bandwidth increased, teachers, administrators, and residential care providers noticed a notable change in the consistency of on-campus student internet connectivity.

Theme #3: Challenges in the Off-Campus Environment

Teachers observed that students living off-campus were less likely to participate in emergency remote learning during the spring of 2020 for several reasons. Teacher 2 mentioned how distracting Zoom meetings could be for off-campus students. He shared, "when students were at home, it would create more issues and distractions than students in the (residential) home." The following theme will discuss the challenges of students participating off-campus during emergency remote learning in the spring of 2020.

Lack of Adult Supervision and Support. Teachers observed that students living off-campus varied in the adult supervision and support they received. Although many students had parents and guardians, who took an active role in their child's education during emergency remote learning, teachers observed that many off-campus students had little to no adult supervision and support for various reasons. Numerous parents were classified as essential workers and did not have the ability or flexibility to work remotely. Single working parents faced limited childcare options because of lockdowns and social distancing mandates, which forced parents to leave their children at home. In addition, children with younger siblings were often forced to balance remote learning and caring for their brothers and sisters.

Although many students had to take care of their siblings and family members, Teacher 1 noticed the deficiency of an adult presence, which created situations where other students "stopped showing up because there were no consequences." Unfortunately, teachers observed that the students who needed the most academic support tended not to participate in emergency remote learning; however, there needed to be more they could do to remedy the situation. Teacher 1 said, "I tried asking one parent for help, and they were like, 'you're the teacher,'and I'm like, 'yes, I'm the teacher, but I can't do anything.'"

Learning Support Teacher 1 expressed frustration when describing the lack of participation from one of her neediest academic students. She shared:

> I had one student that rarely logged in. I mean he didn't get more than five days at max. Um, and it wasn't just me. Like when he was supposed to be with his homeroom teacher his homeroom teacher would say, "Nope, he's not showing up for me either." And we contacted his (parent) and he'd be good for an hour and then he'd get off again and she wouldn't know it. It was so frequent and so frustrating.

Communication Struggles. As emergency remote learning extended into the spring, the patience of parents and teachers was challenged by the growing frustrations of emergency remote learning. Although many parents were supportive and concerned about their child's education, there were cases where teachers struggled to receive support from home. For example, Teacher 1 described a challenging experience of reaching out to one single mother:

> I talked a lot with one of my students. He was home, and his mom was trying to keep him on. So, I met with him every day. And there were some points where she was getting frustrated, and I don't know if it was at him or at me. I would email her, saying, "Hey, he's not on." She said, "Well, I'm done with this kind of thing." So, I just stopped emailing her, and I think she eventually reached back out, but it was hard because she was working too. So, it was hard for her to try and stay on him when he was with another adult.

After several failed attempts to encourage an off-campus student to participate, Learning Support Teacher 2 contacted the child's mother. Unfortunately, the mother grew frustrated and stopped communicating. Learning Support Teacher 2 reached enlisted the help of Administrator 2; however, the student still chose not to participate. She described, I remember talking to [Administrator 2] and she said, "You just got to let it go. We can't force anyone to get on if they don't want to." I did what I could, and that had to be ok." Administrator 2 had empathy for many of the families of students living off-campus because she understood that they were "doing the best they could" in an unprecedented situation: "There were times when I would step in and, you know, we don't know what's going on in that home. We're going to have to set the expectation, and that's all we can do. We're not going to get into a battle over this."

Distractions Within the Home. Students living off-campus often lived with family members in cramped living conditions, which sometimes made it impossible to find a quiet space for learning. Zoom meetings provided teachers a window into the home environment, where family members and sometimes pets would appear on camera. Teacher 2 shared the following:

> You would have parents talking in the background or doing whatever they do in their own time. And, technically, they're at school. So, you'd ask them to mute themselves because I can hear their mom talking or whatever's going on, you know?

Teacher 3 shared a time when she struggled to get one of her students out of bed and ready to learn:

> I had another student whose mom signed him up for a Zoom meeting, but he was still sleeping. She made him get up, but he was still lying in bed, Zooming with me. I'm like, "You're going to need to sit up at least." But you could tell like he didn't really care, you know, so, and that was hard.

Learning Support Teacher 2 embraced some of the distractions from within the homes and said, "Kids constantly wanted to show you their dog, you know. Stuff that they don't get to do here." Instead of growing frustrated by the distractions, she adapted her instruction to include show-and-tell opportunities during daily morning meetings on Zoom. Learning Support Teacher 2 found that giving her students a chance to share at the beginning of the day "got distractions out of the way" and increased their attentiveness during the rest of the day.

Learning Support Teacher 2 found that many of her off-campus students with ADHD experienced more difficulty staying focused during emergency remote learning: "One of my ADHD students was on Zoom and bouncing up and down on their bed. I'd have to redirect and

say, ‘Please come sit in front of the screen for a moment and then I’ll let you have another break.’”

Although there were challenges with distractions in the home, Learning Support Teacher 1 found that most parents were very helpful and supportive. For example, she worked with the grandmother of one of her students, who was frequently absent from Zoom meetings. Although the student was physically present during the class meeting, she observed that he was not mentally focused on learning:

> I would contact grandma about five minutes before class would start. We would make sure that he was up and ready to go. If there were distractions, I would reach out to her for her help to refocus him. She was very helpful!

Unfortunately, some parents and guardians were more distracting than their children. Administrator 2 frequently worked with small groups of language arts students during the pandemic to help support teachers. In one instance, she encountered a parent who intentionally distracted a tutoring session she was having with a student. She shared the following:

> So, like I had one dad, who was very clearly trying to embarrass his child. He was on Zoom and was like yelling things like, “Don’t forget your pink bunny slippers.” I mean, it was just, you know, how would I even respond to that in person? I just pretended I didn’t hear. I just, you know, went on with the instruction.

Theme #4: From Packets to Digital Lessons

The reservoir of instructional packet lessons had dwindled, and teachers were forced to find a new solution to accommodate students living on- and off-campus. Distributing new instructional packets would be increasingly complex and inefficient because some students lived

on-campus while others lived hundreds of miles away. Therefore, teachers needed to adapt instruction to a fully online teaching model composed of digital materials and lessons.

Converting to Digital Assignments. As lessons in instructional packets ran out, teachers scrambled to find alternative solutions by creating digital lessons that students could access on or off-campus. Digital lessons were created by using tools like Classkick, Google Slides, and Google Docs, and teachers distributed lessons through Google Classroom. Classroom materials were uploaded and converted into digital formats using Classkick, Google Classroom, Google Slides, and Google Docs. Teachers would continue providing students with direct instruction through synchronous virtual meetings and prerecorded instructional videos.

Preparing new digital lessons and materials was time-consuming and challenging, as teachers created or uploaded entirely new lessons into digital ones. Collaboration with colleagues was a vital strategy teachers used to manage pressure and stress. Teacher 2 shared, “How did you prepare for the shift? Thank God. I worked for good people. We all kind of divided and conquered.”

The third-grade language arts team worked well together and divided responsibilities to ensure no one was overwhelmed. Teachers used their phones to convert paper handouts and textbook pages into digital pictures for students to access on Google Classroom and Classkick. Teacher 1 shared the following:

> We pulled the resources we knew we would be using over the next couple of weeks and had to take pictures with my iPad of some of the textbooks. Cause we knew the kids wouldn’t have the textbooks with them. We downloaded some tests they’d be taking and everything we knew we would do. We made it into a digital copy by loading it into Classkick.

Classkick emerged as the primary tool for teachers to create digital lessons, upload existing materials, and share lessons with students. The third-grade team collaborated to upload materials and create digital language arts lessons in Classkick for the entire third grade. Teacher 1 shared the following:

> We used Classkick to develop reading slides. And we kind of divided and conquered, but we used all the same materials. I mean, we might have supplemented here and there. But we all used the same Classkick documents. One teacher made a field trip. So, we couldn't obviously go anywhere, but he made a virtual field trip on Classkick. It took them to like the website where they could go through the museum and stuff. Then the kids wrote about it on another slide. We all chipped in, and we worked really well together all the time. So, it went pretty much the same virtually.

Classkick enabled teachers to redesign assignments and personalize student learning in new ways, such as practicing decoding and reading fluency skills. In addition, students could receive feedback in multiple modalities, such as text, writing, and audio. Learning Support Teacher 2 explained it as follows:

> I would give them work on Classkick like decoding and fluency practice. I could take pictures of a worksheet or reading passage. Then students could record themselves reading it. Sometimes we did it together as a class. I could put it up on my screen on Zoom and they could still answer questions on their own.

In addition, teachers found it helpful to use Classkick to mimic the design of instructional packets. For example, instructional packets contained a daily checklist of required assignments and tasks. Teachers used Classkick to design a slide for students to see assignments and check off completed assignments using the built-in pen tool. Teacher 1 said the following:

> We included a checklist with Classkick assignments because if they had a to-do list, they would go through the to-do list. I think it was easier for them to keep track of what they were doing. Plus, we could see what they were doing from the teacher dashboard.

Instead of creating multiple Classkick files for daily assignments, teachers organized a week's worth of lessons in one Classkick file. Each Classkick page contained a daily lesson, and a checklist of daily assignments was placed on the first page to keep students organized. Classkick's dashboard allowed teachers to monitor student screens as they completed real-time assignments. As students completed assignments, they would receive immediate feedback or be able to ask questions. Teacher 1 described it as follows:

> We put a checklist of assignments on the very front page. It was like the cover page and it would say Monday, Tuesday, Wednesday, Thursday. Then it would say what score they got for that day as a whole. Then they would have to go to that day and see which questions they got wrong. I had just circled them and sometimes I would've typed in a message if I thought they needed help or like go back to this page. This is where the answer is. Look on this page.

Immediate feedback was an essential part of instruction for teachers during emergency remote learning. Learning Support Teacher 2 found that Classkick provided her with options for customizing feedback, such as providing audio or written feedback:

> I did give a lot more virtual feedback, like on, right on their Classkick document. I would like to give them their scores or I'd like mark it right on their document, so, that then they could see their score right on their screen. It's also a little more private cause then I don't have to like to say, "Hey, come here. Let's talk about this number that you got wrong."

> You know, it's kind of like, I could write to them on their screen, and they could see it from where they're at.

Teacher 1 developed a color-coded system for grading assignments in Classkick to communicate to students if they were exceeding, meeting, or not meeting expectations:

> I was driving myself crazy kind of because I would just go in and pretty much grade everything. I had so much time on my hands because a lot of the kids weren't meeting with me. So that was kind of my only way of interacting with them was grading their work. So, I would go in and I would, I would grade everything, their math and reading assignments in Classkick. I would then on the like front page, share what they got, and I would color code it. You got green, yellow, or red. Yellow and red meant you'd have to go back and make some corrections. Green meant you're doing well.

Shifting From Daily Assignments to Weekly Projects

As emergency remote learning extended into the spring, teachers began experimenting with assigning weekly class projects to students. Projects required students to complete weekly tasks to construct a final digital product using various tools and applications like Classkick, Google Docs, and Google Slides. Teacher 3 found that most projects were cross-curricular, stating that "towards the end of the spring, we focused more on reading fluency and social studies projects."

Projects were intended to provide students with an opportunity to apply knowledge and skills. One project required students to combine language arts skills with social studies content, as students participated in a virtual tour of famous Revolutionary War websites in Classkick. After completing their virtual tour, students were required to conduct research and complete a

writing assignment on a Google Slide. Teacher 1 described how her colleague developed the project for the entire third-grade language arts team:

> [Name] had an amazing virtual field trip! He loves teaching the Revolutionary War and just kind of took it upon himself to do all of this. So, students had the virtual field trip and they had a project. They had to pick a topic from the Revolutionary War and do some research and do a writing assignment on a Google Slide. We also read a book on the Revolutionary War, which goes along with it too.

In addition, students participated in a read aloud of a book on the Revolutionary War. Since students did not have access to the physical text, teachers read the book aloud on Zoom and posted audio recordings on Google Classroom.

Transitioning From Google Meet to Zoom. Google Meet generated many call connection and quality issues, forcing school officials to transition to Zoom as its preferred video-conferencing application. Administrator 4 shared the following insight:

> It's funny to think about Zoom now, because back then, it was not well-known in education, the business world, or anywhere else. Now it's like everybody knows about Zoom, everybody, you know. And so, what can we provide teachers that will be comfortable? We're already asking to teach virtually, which is a different skillset than what they use in face-to-face interaction. Plus, we needed to provide a stable environment.

The third-grade language arts teachers found that Zoom provided helpful learning tools and security features to keep students safe. For instance, teachers expressed concerns that students had unsupervised access to their virtual meetings on Google Meet. Teacher 3 explained

that “a few of my kids told me that once I left the meeting, they would get back on and chat. I realized I couldn’t shut it down.”

Although it was rare for a student to do so, anyone with a school-issued Google Meet account could access and join a teachers’ meeting. Administrator 4 stated, “I know we got an educational account with Zoom, which helped increase some of our security measures.” Zoom provided teachers with a secure virtual meeting that was free from distractions. Teachers could safeguard students by using security features like requiring a meeting password, establishing a waiting room, and restricting users with email addresses from outside the organization.

Teacher 1 mentioned that students and teachers encountered a learning curve associated with Zoom because of several new tools and features:

> We went on Zoom and taught them how to use it and its etiquette. There was a learning curve with, like, don’t make faces. I learned about the breakout rooms; putting them in there was nice. Plus, we had control over if they could get in or not. That was great cause they couldn’t do anything with each other without my permission.

Breakout rooms allowed teachers to foster collaboration or give students a quiet place for completing individual assignments. Although the use of breakout rooms was rare in the spring of 2020, Teacher 1 was the only teacher who experimented with using this feature in the spring of 2020. She mentioned, “I learned about the breakout rooms, like putting them in there was nice, because then they could work together or alone!” In addition, Teacher 1 found it helpful to work individually with students who may need additional help and tutoring:

> I could work one-on-one with a kid without any other kids hearing or even knowing I’m doing that. So, that was nicer than being in the classroom, because usually when a kid needs me, all of the other kids can hear my conversation.

Chapter Book Study. The third-grade language arts curriculum emphasized reading chapter books throughout a normal school year; however, the pandemic disrupted how students participated in language arts. Teacher 2 said, "We knew we had to keep students engaged and connected somehow, um, that's when we started doing chapter books."

Teachers worked together to organize a daily virtual book study for the entire third-grade language arts students. Since most students did not have a physical copy of the chapter book with them, teachers took turns reading a chapter from the book each day. Teacher 3 described, "We did a novel study. I think that because not all the kids would have the reading series with them. That's what we focused on. We like listened to the chapter or they listened to the chapter."

Although every third-grade student did not participate, a sizable portion of students were actively engaged in a read-aloud or book study. Teachers took turns reading a chapter per day and invited guest readers to participate, too. Although not every student could participate in the live daily readings, teachers shared session recordings with students through Google Classroom, so that students could listen at their convenience. Administrator 2 described the student experience:

> And every day [students] would log in and we would do a read aloud. We would have guest readers. The students would take turns reading and they would have book discussions . . . I mean, we didn't have a 100% attendance, but there were a lot of kids participating! Some were in their home setting, crawled up in their bed. Some were in their residential home. It just varied.

Teachers organized guest readers to keep students interested and engaged with the book study. For instance, Administrator 1 was invited to participate as a guest reader and described her experience:

> [Teacher 2] had guest readers come and read to his kids. So, there was one day where I got on and read a chapter to his students. Um, and it was fun because, you know, they were, a lot of his students were home. So, kids were really like, their cameras were on wherever they were. So, some were in the [residential] homes, some were in their home homes. And, um, you know, we did some activities with that chapter. I was able to ask some questions and we worked on some expressions. I remember we were working on character expressions at that point. So really in that situation, it was anything that anyone asked for or wanted to try, you know, I was very, very willing to support.

In order to keep students engaged and participating in the book study, teachers and administrators worked together to find creative ways to keep students motivated. For example, administrators and teachers worked together to mail a physical copy of the chapter book to every student that participated in the book study. Administrator 1 shared the following:

> We were just trying to support it any way that we could. Because the kids didn't have a copy of the book, I worked with the curriculum office to mail a copy of the book to each kid that participated. The kids were excited!

Teacher 2 reached out to the book's author and invited her to participate in a virtual read aloud with students:

> We brought in the author from [book title] and she did a Zoom with our kids and talked about how she made the book. We did that virtual, which was nice. And the school actually sent all of the kids, the [name of book], even if they were at home. That was neat. That was one thing that I thought was really, really great.

Conclusion

As the spring 2020 semester concluded, teachers and students participated in 54 days of emergency remote learning. The first 21 days of instruction consisted of students completing daily instructional packet assignments independently and participating in optional synchronous virtual instructional support meetings through Google Meet. As the first 21 days of instruction ended, the reservoir of instructional packet lessons dwindled. Teachers needed to adapt instruction to a fully online teaching model composed of digital materials and lessons. Classroom materials were uploaded and converted into digital formats using Classkick, Google Classroom, Google Slides, and Google Docs. Direct instruction shifted from Google Meet to Zoom.

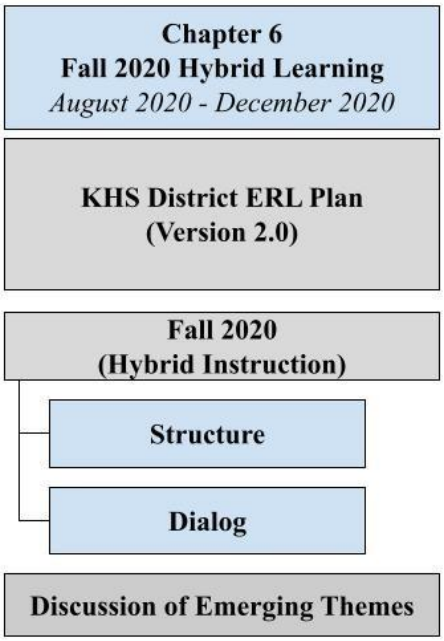
Although teachers and students were relieved that emergency remote learning had concluded, there was still uncertainty about what the fall of 2020 would bring. In the next chapter I discuss third-grade language arts teachers' journey as they prepared for a new school year.

Chapter 6: The Fall of 2020

In Chapter 6, I discuss how third-grade language arts instruction was taught at KHS Elementary School during the fall of 2020 semester from August 2020 to December 2020. I begin by describing the adjustments made to the KHS School District Emergency Remote Learning Plan for the fall of 2020. Next, I will address how KHS Elementary transitioned to a hybrid instructional model, which incorporated face-to-face and virtual instruction. Finally, I discuss the major themes that emerged from data analysis, which helped answer the research questions posed in this study. Figure 11 provides a graphical overview of the layout and significant sections of the chapter.

Figure 11

Overview of Chapter 6



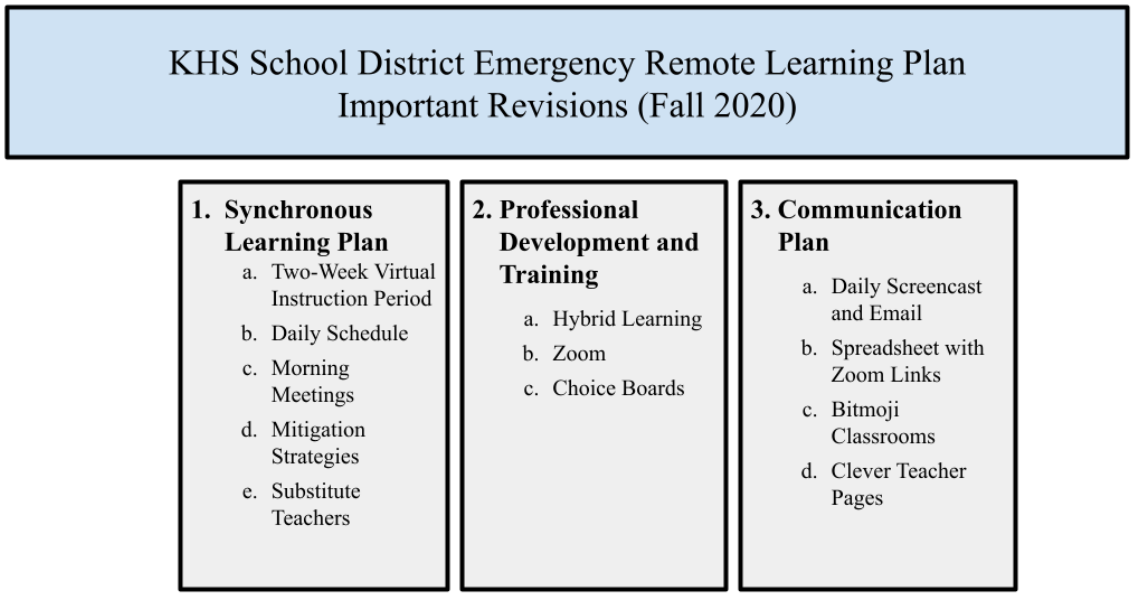
Revisions to the KHS District Emergency Remote Learning Plan

The KHS School District prepared an initial emergency remote learning plan in response to the growing public concern about the COVID-19 virus in February 2020. School leaders

revised the plan in the Summer of 2020 to correspond to adjustments from the Center for Disease Control (CDC) and state guidelines, advice from medical professionals, conversations with officials from other schools, and leveraging existing resources within the district. The following section will detail important revisions to this learning plan in the fall of 2020 (see Figure 12).

Figure 12

Emergency Remote Learning Plan Important Revisions (Fall 2020)

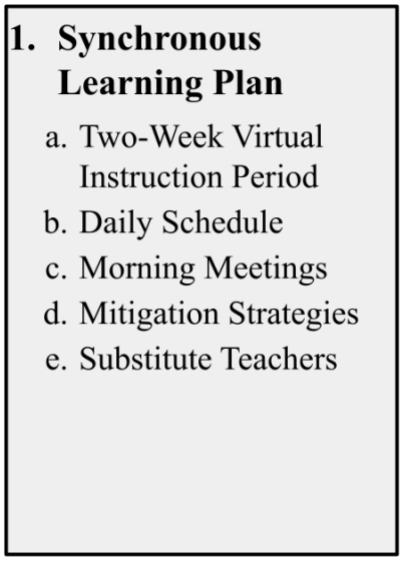


Synchronous Learning Plan

KHS School District officials determined that students would participate in face-to-face instruction during fall 2020. Students had to quarantine and participate in virtual instruction from the residential home during the first two weeks of the school year. Figure 13 provides a visual of the important changes to the Synchronous Learning Plan in the fall of 2020.

Figure 13

Important Changes to the Synchronous Learning Plan (Fall 2020)



Two-Week Virtual Instruction Period. As students returned to campus in the fall of 2020, they were required to quarantine in their residential homes and participate in virtual learning for two weeks. Instead of a typical first day of school, students followed their traditional daily schedule through Zoom.

Daily Schedule. School officials designed the fall 2020 daily schedule to balance mitigation strategies with a sense of normalcy, as students participated in the traditional face-to-face schedule they were accustomed to before the pandemic. The schedule structure provided students with flexibility regardless of whether students were participating virtually or face-to-face. Learning Support Teacher 1 shared how the schedule remained the same:

> In the fall, it was more of a structured schedule. I just feel like the day literally ran how it would in the classroom if kids weren't on Zoom. During that, um, first two weeks, we would login to each class through Zoom. In the fall, you should have all your students logging in at the same time. You should have your whole roster. We were doing

> attendance now. So, it mimicked your typical school day. Just on Zoom. You know, maybe they are with me, for ELA, maybe someone with different from math, they're logging off for lunch and recess. They're going to their specialist teacher. Then we came back to school and continued with the schedule. The schedule was nice, because if a kid had to go into quarantine, they could just click on the Zoom link and participate in class.

Morning Meetings. Morning meetings continued to be an essential component of the curriculum in the fall of 2020. Whether students participated face-to-face or virtually, morning meetings provided students with an opportunity to connect with classmates, develop social-emotional learning (SEL) skills, and process emotions. Learning Support Teacher 1 noticed that the quality of sharing at morning meetings grew from an asynchronous discussion post on Google Classroom to a rich synchronous discussion in the physical classroom or on Zoom:

> We continued doing morning meetings. Like during the first two weeks of school, when things were virtual, it was your typical morning meeting that you would see in the classroom. I would just be running it on Zoom. So that was more structured, and it allowed us more sharing time. Again, it was more structured, like me asking a question and then they would be able to respond. It was more so like us using our words. We were all communicating on Zoom versus just like a discussion post. When kids came back into the classroom, we continued this format, but there would be a few kids in quarantine or virtual. We would run our meeting with the virtual kids on my Smartboard and the other kids in their seats.

Mitigation Strategies. When students returned to the face-to-face classroom environment, there were additional routines and mitigation strategies to prevent germs from spreading. Teachers shared that they were relieved to be back in school with students; however,

mitigation strategies prevented everyone from experiencing normalcy before emergency remote learning. For instance, students always had to remain six feet apart, which limited the amount of group work that could occur. Students could remain closer than six feet for less than 15 minutes. Teacher 2 explained it:

> It felt better when we returned to school, but it still was like, hey, we're all separated. So, it was like, you can't read with a partner because you must be six feet apart. You can't be close for 15 minutes. You have whatever the scientific data was at the time. So, we were here, but it still could have been better, you know?

Administrator 2 noted that it took substantial time to prepare students for the "new normal" in the fall of 2020. Administrator 2 shared, "We reduced the size of general education classrooms to seven or eight kids in a classroom. You couldn't touch anything and had to remain six feet apart. Masks were required. Even using the cafeteria was different!"

Substitute Teachers. As a boarding school, the KHS School District determined it would not use an outside substitute teacher service during the 2020-2021 school year to reduce the potential spread of COVID-19. Instead, administrators had to find creative ways to provide substitute teachers, such as using nonteaching staff members within the school community and allowing teachers to Zoom in from home. Administrator 2 shared the following:

> That there was no combining of classes if a teacher was absent. No sitting in the [common areas] together. So, sub finding was really difficult. Obviously, we weren't using any (substitute service) subs at that point. Um, so we were down to [KHS] staff. When a teacher was out for quarantine, they would be out for 10 school days. And that's, that's a long time. So, one of the things we did, was ask them: "Would you be interested in teaching from home? We will have an adult in the room, but would you like to Zoom

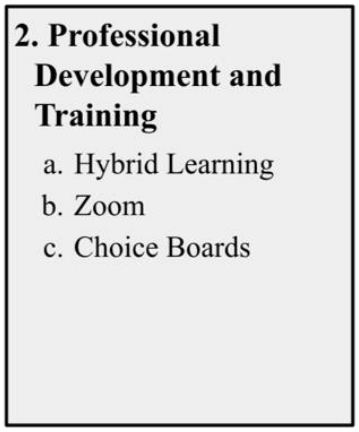
in and have some control over what's going on in the classroom?" You couldn't force a teacher to do this, but we would always ask if most of them always said, "Yes." And every single person was, unless they were like super sick, they were like, "Yes, please let me be a part of the classroom."

Professional Development and Training

The emphasis on technology generated a need for increased professional development for teachers using educational technology in virtual and hybrid learning environments. Administrator 2 worked with the building's digital learning coach to coordinate a variety of training sessions on using hardware, software, and instructional strategies. In the following section I discuss important revisions to professional development offerings made available to teachers in the fall of 2020 (see Figure 14).

Figure 14

Important Changes to Professional Development and Training (Fall 2020)



Hybrid Learning. Administrator 2 allocated time for monthly professional development during the fall of 2020. She shared, "A lot of our building time before and during the school year was solely focused on ensuring that our teachers felt prepared to do hybrid teaching." Teachers

could choose from a variety of professional development options designed to help them learn specific tools and strategies on applying hybrid learning. Sessions were designed to provide teachers with options for participating, such as attending in person or synchronously, collaborating with another teacher, or watching an on-demand video recording.

Zoom. Although teachers already had experience using Zoom during emergency remote learning, they needed additional advanced training in a hybrid learning environment. Teachers had to shift how they used Zoom, because they had primarily used the desktop version from their MacBooks; however, they had to learn how to use the iPad version to broadcast classroom instruction for students participating virtually. There were several minor nuances teachers had to grow accustomed to, such as using a tripod. Administrator 2 shared, "Teachers had to use a tripod and iPad for Zoom, so it was important to ensure everyone's tripod was set up and knew how it worked."

Document cameras were traditionally an important staple in third-grade language arts instruction because teachers could project paper handouts on a Smart Board for instruction and demonstrations. Many teachers found teaching challenging without their document cameras in the spring of 2020; however, Zoom enabled connecting an external device and broadcasting it possible through the application. Teacher 1 mentioned that

> I learned that I could hook up my document camera to Zoom and that really changed everything for me! It made it a lot more like how I would do it in the normal classroom, because they could see what I'm doing. I would just hook in the document camera; I'd do my modeling and then we'd do our construction together. Then they'd do their independent work. So, it was more of the structure of the actual classroom once I could have kind of adapted to the technology.

Choice Boards. Teachers received training on how to incorporate choice boards into instruction to give students autonomy and choice during independent work. Choice boards give students two or more options for completing assignments or meeting a learning goal. Many teachers used choice boards to give students options for completing assignments such as vocabulary development. Administrator 2 shared how she observed third-grade teachers using choice boards for vocabulary development: "You would see the students participating and reading and doing vocabulary activities, doing choice boards, where the teacher was monitoring them and meeting with individual kids. You really saw it evolve as the time went on."

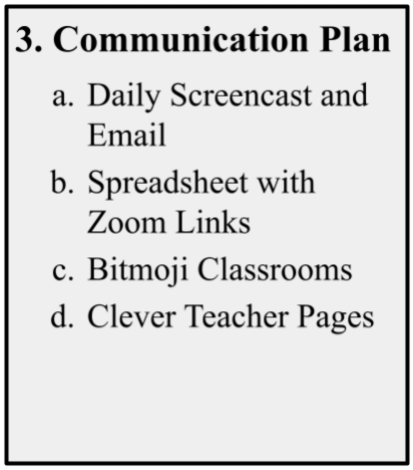
Learning Support Teacher 2 used choice boards to provide her language arts students with options for completing reading assignments. She shared, "I created a reading choice board, where students could pick a book in the virtual library to read."

Communication Plan

Although most students were participating in face-to-face instruction, the rapidly changing nature of the COVID-19 virus created an environment where communication was essential to the success of hybrid learning. Administrator 2 built upon the existing communication system to provide students and residential care providers with detailed information and resources. For instance, it was extremely important to coordinate Zoom links and learning schedules for students participating virtually. In the following section I discuss important communication strategies used during the fall of 2020 (see Figure 15).

Figure 15

Important Changes to the Communication Plan (Fall 2020)



Daily Screencast and Email. Communicating important daily announcements to the entire school community was difficult during hybrid learning, as some students participated virtually and others face-to-face. It was important for school leaders to share information and important announcements quickly with the entire school community. Administrator 2 streamlined communication by creating a daily video recording called a screencast with important announcements and information.

Administrator 2 emailed announcements to teachers, residential care providers, parents, and guardians at the beginning of the school day. Teachers and residential care providers played the video for students at the beginning of the school day. A text version of the announcements was also available on a Google Document for everyone in the school community. Administrator 2 shared the following:

> I think just communication was a key piece. Like we started every morning with our Screencast. So, every morning everyone had exactly what was happening and that kind of

> set the tone for the day. I do think that helped with, um, the success of it, which led us to continue that today.

Spreadsheet With Zoom Links. Administrator 2 worked with teachers to post class schedules and Zoom links to a master Google spreadsheet that all students and residential care providers could access. The spreadsheet contained a listing of every teacher's schedule and Zoom link. Teachers posted a link to the spreadsheet on their Google Classroom and Clever teacher pages, making it easier for students to access if they participated virtually.

Bitmoji Classrooms. Keeping students organized while entering numerous Zoom sessions throughout the day was a challenge. Administrator 2 and the KHS Elementary digital learning coach provided teachers with professional development on creating Bitmoji Classrooms. Each Bitmoji Classroom was designed in Google Slides to depict a fictional classroom scene greeted by a cartoon image of the teacher with important links and information.

According to Administrator 2, "Most teachers at [KHS Elementary]" created these virtual hubs for students filled with hyperlinks to helpful classroom resources, such as Zoom links, schedules, teacher contact information, homework assignments, and virtual libraries. Learning Support Teacher 2 explained this as follows:

> My Bitmoji Classroom was like a schedule and had the Zoom link. A lot of the teachers got creative and added a virtual library of audio and digital books. There was a virtual calming corner. There was a virtual recess link. It was virtual everything. I would post my Bitmoji Classroom on my Clever teacher page. And then [students] could just click on the links.

Clever Teacher Pages. Teachers used an application called Clever as a single sign-on (SSO) solution to manage student accounts and passwords for educational technology

applications. Clever also had a built-in feature to create teacher webpages pages containing hyperlinks to standard software applications and external resources. Teachers began using the Teacher Page feature to share hyperlinks to the master schedule spreadsheet and their Bitmoji Classrooms.

Hybrid Learning in Fall of 2020

The KHS School District determined that students would participate in face-to-face instruction in the fall of 2020; however, administrators made certain adjustments to ensure the safety of students and staff. Leaders determined the structure of the school day based on mitigation strategies developed in concordance with information and guidance from the CDC. For instance, students were quarantined in their residential homes during the first two weeks of the school year and required to participate in virtual learning. Teachers taught students virtually from their classrooms.

When students returned to face-to-face instruction after the mandatory quarantine period, mitigation strategies were in place to limit the number of students in a classroom, reduce hallway traffic, and prevent the spread of COVID-19. If students tested positive or were exposed to someone with COVID-19, they were required to quarantine for 14 calendar days within the residential home or campus infirmary. It was standard practice for entire residential homes to be placed in quarantine if one adult or student was exposed to COVID-19. A new hybrid instructional model emerged as teachers simultaneously taught students face-to-face while broadcasting virtually to students in quarantine.

The following section explains how hybrid learning was implemented in third-grade language arts instruction at KHS Elementary through the lens of Moore's (2018) transactional distance theory. First, I discuss how the structure of third-grade language arts occurred during

hybrid instruction in the fall of 2020. The structure of a lesson or curriculum consists of a deliberate arrangement and progression of academic standards, learning objectives, content, learning activities, assessment, and reflection (Moore, 2018). Next, I detail how dialog or communication occurred between teachers, students, and caregivers. Finally, I discuss the impact of hybrid learning on student autonomy in third-grade language arts and the themes that emerged from the research.

Structure

The KHS School District determined that students would participate in face-to-face instruction in the fall of 2020; however, certain adjustments were made to ensure the safety of students and staff. Mitigation strategies were developed in concordance with information and guidance from the CDC. In the following section I discuss the organization of the schedule, two-week virtual learning period, mitigation strategies and virtual learning, and supporting learning support students.

Schedule. Administrators developed a schedule with alternating times for students to enter and exit the school building, limiting the amount of traffic in the hallways. The school day began with a first wave of students entering the building at 7:50 a.m., a second wave at 8:00 a.m., and classes starting at 8:10 a.m. The school day ended with the first wave of students exiting the building at 2:45 p.m. and a second wave at 2:55 p.m.

Lunch schedules were staggered in 10-minute increments to reduce hallway traffic and allow students to quickly enter the cafeteria, pick up their lunch, and return to their classrooms to eat. Administrator 2 shared, “Teachers got creative because students couldn’t all eat in the cafeteria. A lot of them ate outside, in their classrooms, and even hallway pod areas.”

Two-Week Virtual Learning Period. When students arrived at school in the fall of 2020, they were required to quarantine and participate in virtual learning for two weeks in their residential homes. Instead of a regular first day of school, the fall semester began with virtual instruction. Administrator 2 instructed teachers to establish routines with students during the first two weeks of virtual instruction. She described it as follows: "That two-week period was meant to prevent the spread of COVID; however, it was also helpful for teachers to focus entirely on routines, expectations, and get ready if a shift to remote instruction was needed."

Teacher 3 found the first two weeks of school helpful for establishing routines and getting to know her new students; however, students were required to participate from an iPad for an entire school day: "The two weeks honestly were kind of nice because it was a lot more relaxing. Like [instruction] was here[on the KHS campus]. So, I'd get more done, but it was also hard for them and for me to be on Zoom that long."

Teacher 2 found adjusting to a new group of students challenging because they began the school year in a virtual environment and needed to learn their students better. Teachers had to teach new classroom routines from a virtual setting during the first two weeks of the school year. Teacher 2 described this in this way:

> That year was brutal, because at least the first time it happened, I knew my kids. I can say, "Stay on task with me." I didn't know these kids. Now some of them were in the honeymoon phase. They were trying to do their work. But it's like, I didn't know who was on task and who wasn't. So, as the year went on, of course, once they came to class, it was easier. But the first part of it was a challenge. And even training them on how to get online. Here's where you'll sign in to meet me on Zoom. Here's my link to Google Classroom.

The mandatory two-week quarantine period forced third-grade teachers to prepare language arts lessons differently. Teachers had to use a blend of instructional packets and digital lessons during this time, as administrators delivered handouts to residential homes. Teacher 3 described how she designed lessons during the first two weeks of the school year:

> So we were, we were still trucking along with our curriculum. We tried to pick topics that didn't need as much face-to-face time. We couldn't really have a lot of hands-on things, because then otherwise you had to make sure that everybody gets what they need at their residential home.

Preparing and delivering instructional packets limited the amount of spontaneity teachers could exercise during lessons. For example, Teacher 3 mentioned that "it takes away a lot of the spontaneity, like teaching moments, because I might have an idea for that day, but then I would need more time to get the materials over to them. So, that was hard."

Teachers adjusted the third-grade language arts curriculum to consist of instructional videos, small group instruction, writing exercises, and instructional packets. Each activity was designed to incorporate a blend of technology and nontechnology activities. Teacher 3 described this as follows:

> We did videos. We did our BDAs (before, during, and after writing exercises) and skills packets. We did the breakout rooms for small group reading. It was a lot harder though sometimes though. Like bringing kids back from Epic [a reading application]! It was difficult because if they were in, they wouldn't always see me calling them back. It took a lot of work to get their attention.

The virtual learning schedule replicated a traditional face-to-face schedule, which increased the screen time required of students in the fall of 2020 compared to the spring of 2020.

Instead of participating in four hours of optional Zoom meetings, students were required to participate for an entire school day for two weeks. Therefore, teachers adjusted instruction to accommodate their needs. For example, Teacher 3 described it as follows:

> I tried to give them a lot of breaks and offline activities. I also tried to break instruction up, so it wasn't just me talking all the time. I tried to pull in like videos from YouTube, Brain Pop, or Flocabulary. I did Ed puzzles, you know, those things, so it's not all me just talking to them all the time. So, I tried to do it that way.

Learning Support Teacher 2 tried to incorporate more breaks to give students an opportunity to step away from their iPad screens, which helped her third grade language arts students focus better:

> Breaks. I mean, that's all I can do at that point, you know. Try to give them something that's not always staring at the screen. We would take a five-minute break to do brain breaks or exercises. Then we'd get back to work. It was also nice having instructional packets, because it was a little bit of a break from, you know, just staring at me on the screen.

Face-to-Face Instruction. When the mandatory two-week virtual instructional period concluded, teachers and students were relieved to return to classrooms for face-to-face instruction in the fall of 2020; however, there were a significant number of routines, social distancing efforts, and mitigation strategies in place to prevent the spread of COVID-19. For instance, students could not be nearer than six feet apart for more than 15 minutes, limiting the amount of group work. School officials adjusted the school calendar to decrease the number of extended breaks, encouraging students to stay on campus; nevertheless, there were circumstances when students would be permitted to leave and visit their families.

Special protocols were in place when a student returned to reduce the spread of the COVID-19 virus. For instance, if a student left the school campus to visit family members, they were required to return to the campus infirmary during a specific time window on Sunday afternoon for a COVID-19 screening. Students who did not return to campus on time had to stay off-campus and participate virtually until the following Sunday afternoon. If a student tested positive for COVID-19, they would quarantine in the campus infirmary for 14 calendar days; however, if they tested negative, students would be required to quarantine in a particular residential home for 14 calendar days and would participate in virtual instruction.

Unfortunately, a limited number of students could quarantine in the residential home, which prevented many students from returning to campus until additional space opened. Administrator 2 explained this as follows:

> If a kid went home for the weekend, they were required to be back by Sunday afternoon. There was a limited number of beds available, so if there weren't enough, they had to wait another week and participate from home. If they didn't make it there on Sunday, they would have to wait another week until we opened another home. We had kids out of school for weeks, like without being in our actual face-to-face school setting.

Students who were symptomatic of COVID-19 were quarantined in the school infirmary, where they would receive medical treatment. Students would quarantine in the infirmary for the recommended number of days set by the CDC, which continued to change throughout the fall. Students were required to participate in virtual instruction from the infirmary if they were well enough. Learning Support Teacher 1 described the following scene from her third grade learning support language arts classroom:

> At one point I had more kids on Zoom than I did in my classroom. And that was because one was home, one was in the [infirmary], and one was a behavior concern. So that student was, I don't remember where they were at. Um, another in a [residential] home was quarantined. So, that was extremely challenging to the point where I think I had two kids in the classroom and six on Zoom.

Mitigation strategies created a unique hybrid learning environment, combining virtual and face-to-face instruction. Students could participate synchronously through face-to-face instruction in a classroom or virtual instruction from a residential home, the school infirmary, or off-campus. Every teacher was equipped with an iPad and tripod to broadcast instruction in the face-to-face classroom through Zoom for students participating virtually.

Although teachers had experience teaching virtually since the spring of 2020, the hybrid model was a new concept to teachers, as many felt like they had to learn all over again. For instance, Learning Support Teacher 1 shared the following:

> It seems like a blur. I didn't know what I was doing. Like it was one thing that was like all well, back in the spring, I had no idea what I was doing because everything was virtual. Then it's like, I educated myself for this summer on how to teach virtually not knowing too what the fall was going to look like. And then it was this hybrid thing that you just, and it changed daily. We would wake up that morning and have no idea who was on hybrid and who was going to be in, in our classroom or vice versa.

Administrator 2 was responsible for overseeing a contact tracing system at KHS Elementary. A student or staff member who had been in contact with anyone who had tested positive for COVID-19 was contacted immediately and quarantined for 14 calendar days. Entire

residential homes were quarantined if one student had tested positive or came in close contact with someone who had COVID-19.

Residential Care Provider 4 described how his entire residential home (of eight students) was quarantined, because one student was exposed to someone who tested positive for COVID-19:

> I got a phone call when I was at training. My boss called me and told us that we had to leave the training because one of my students was positive [for COVID-19]. So, I had to go back to the [residential] home, and all the students came back. They're like, "Why do we have to quarantine?" They were upset about having to come home and do remote learning, because they had just been into the classroom again.

Many teachers described being on edge because of the unpredictable nature of COVID-19 and contact tracing. Learning Support Teacher 1 described how teachers would receive phone calls and emails during the school day if a student or staff member needed to be quarantined immediately:

> We would get phone calls or emails saying, "So and so needs to report to the office immediately because they're going to quarantine." That was also a time where people weren't vaccinated. The unknown was still so large. We're looking at ourselves as okay. Like it's nice coming back to work. It's nice being in a routine, but we knew darn well that everyone else at public school was still in this severe lockdown. I had a ton of anxiety, and I couldn't show that because of these, my 8-, 9-, 10-year-olds. They were not with their parents and had to stay in a [residential] home. I'm grateful that I got to leave campus and like do my like own thing. They couldn't. I had to show up every single day for them, no matter what.

Teachers found it was an impossible task to have all students in the classroom at the same time. Teacher 2 shared, “I think by November, I had maybe one day total that I had all of my students were in my classroom at the same time.”

Some students were not able to participate in face-to-face instruction for several weeks because of quarantine. Teacher 3 shared the following:

> That was really hard, because I would have some kids back for like a few days and then they would end up back in quarantine. That was hard because some kids missed the first four weeks of school. Or they were here for a little bit and then they were back in quarantine. They were there for like three or four days in September. The rest they were doing virtually because of whatever, you know. Maybe they were in a car with a parent that didn’t have a mask on. So, I remember being really upset about that. It was usually the kid that you, that needed to be like right in front of you, because they just needed more attention than anyone else.

Most students who participated virtually were quarantined to a residential home under the supervision of residential care providers for two weeks; however, students participated in other locations. If a student was sick, they were sent to the school infirmary, where they would still participate virtually under the supervision of nurses and medical staff. Teacher 3 shared the following:

> I think there were more distractions in the [infirmary]. I think it’s harder to keep [students] on track just because, I mean, they have a roommate. I know that in the [residential] home they can spread them out a little bit more. I know there were times when I was teaching a student and they would look over the iPad. And I can see them laughing or talking so that would be hard. And I know they’re short-staffed over there.

> So, there might like if a student doesn't show up, it was more like, you know, oh, well you can't really do anything. They're really busy, you know? So, that would be hard to not being able to hold them accountable for their schoolwork.

Although mitigation strategies created uncertainty and a unique hybrid learning environment, officials in the KHS School District felt the school's efforts were very effective at containing the spread of the COVID-19 virus among students and staff. Administrator 2 shared the following:

> We never once had a teacher caught in contact tracing or a student caught in contact tracing because of something in the school setting. Never once, which was a positive thing. Our teachers who got COVID or went through the testing process, it was because of something at home, in their home, home setting. The students who got COVID, it was because they left for the weekend. The returning [residential] home helped contain that. Or it was the [residential care providers] because they would go off duty and then another set would come in. That's where it was difficult to contain.

Learning Support Students. Unfortunately, mitigation strategies limited how KHS Elementary could support learning support at all levels of learning support students. KHS Elementary officials determined that the general education elementary classroom would have 12 students seated at least 6 feet apart. Learning support classrooms were physically smaller; therefore, they limited the number of learning support students to six per classroom. Administrator 2 worked with teachers to identify Tier 3 learning support students or those with the most significant academic needs in language arts and mathematics. Tier 3 students are behind two or more grade levels and need more time-intensive instructional support to address significant chronic learning problems.

Administrator 2 described the process for selecting students for learning support classrooms:

> We went off the data from the previous school year prior to Covid. We looked at those students and made sure that the ones we knew for certain were Tier 3. Once the kids got settled, we got them tested through iReady diagnostic assessments. We got together and looked at the data. Then we decided if there is anyone else that needed to go in that Tier 3 classroom or anyone that should come out. But you could only have six kids in a Tier 3 classroom because of the spacing. They were in smaller classrooms, so the services were very limited. We had two Tier 3 classrooms in second grade, two in third grade, and two in fourth grade. You really had to be very careful about how you chose. Unfortunately, every kid that needed services didn't get it that year.

Tier 2 learning support students did not receive academic support services in the fall of 2020 because there were insufficient classrooms or learning support staff available to work with these students. Tier 2 language arts students usually need short-term targeted instruction to address learning gaps and difficulties quickly. Instead, many general education teachers worked with students to differentiate instruction and increase the support they provided. Administrator 2 shared the following:

> In the regular classrooms, there were only 10 to 12 kids per class. I mean, most of them were 10, so they could differentiate more. So, even though not every kid was getting the services by a specialized, trained specialist for reading or math, they were still getting significant interventions in the classroom. They were smaller class sizes.

For instance, Teacher 1 shared how she used differentiated instruction to provide additional academic support in language arts and mathematics for her students who struggled academically:

> Honestly, I focused a lot more on my learning support kids. My higher kids just kind of had to fend for themselves. I couldn't do as much differentiating for them because I just really needed to help the low kids. I guess that's just like instinct, like, I want to help the ones who are struggling. The kids who are higher . . . they need to be pushed, but if they're not, it's not going to be detrimental to them next year. Whereas if the struggling readers are reading at a first-grade level, and then I don't help them enough, they could still be reading at a first-grade level next year. At least the higher kids will still be reading at third- or fourth-grade level. I felt they'd be fine.

Learning Support Teacher 1 emphasized individual instruction with her students during the mandatory two-week virtual learning period in August 2020. She described creating one Breakout Room per student and sending them to individual breakout rooms for individual work. If a student needed additional help, she shared how she would reteach and provide direct instruction to the student:

> Back then the two-week quarantine, I would just pull work with that kid in a Breakout Room for individual instruction, while my other kids worked. Or I would pull them for a small group instruction and just reteach the skill.

In addition, teachers could offer after-school tutoring for students who needed more time and instruction to learn content. Learning Support Teacher 2 shared the following:

> I did a lot of tutoring that year. I probably tutored more that year than any year I've ever had. I started early. Like the second week of school, I was tutoring. I usually wait three or

> four weeks most years, but that was the year I started super early because the kids were so incredibly low reading-wise, but math, especially. The good thing was, we saw some decent progress pretty quickly. You know, even by December, all the kids that should have been back on grade level. I mean, I got to give kudos to the third-grade team. They were making huge progress, but even my students were making substantial progress.

Learning Support Teacher 1 discovered that the stand-alone Tier 3 learning support classrooms in the fall of 2020 had unintended benefits. For example, she shared how she enjoyed getting to know her students and families at a deeper level:

> As time went on, I grew to like being a homeroom teacher. Especially for me to have those students all day, when I wasn't typically used to pre-COVID. That ended up being my favorite year because I got to know [my students] so much more than I would've any other year. Just because I'm typically a push-in support or pull-out.

Dialog

According to Moore (as cited in Batita & Chen, 2022), "the separation between teachers and learners is more pedagogical and psychological, rather than merely geographical" (p. 548). Therefore, dialog and communication are essential for building purposeful, practical, and esteemed interactions between learners and teachers (Moore, 1973). In the following section I discuss the strategies used to increase dialogue between all stakeholders at KHS Elementary during hybrid learning in the fall of 2020.

Daily Screencast and Email Communication. Administrator 2 continued recording a daily screencast with important announcements, news, and a list of students participating virtually. The screencast was provided to adults throughout the KHS community through email. Administrator 2 described this as follows:

> Communication was a key piece to our success. Like we started every morning with our screencast [video recording] and sent it out to teachers, residential care providers, parents, and guardians. Teachers would play it during homeroom so that students knew what was happening. So, everyone had exactly what was happening every morning, which set the tone for the day. I think that helped with the success of [hybrid learning], which led us to continue that [practice] today.

Adult Communication. Teachers and residential care providers were on the front lines of hybrid learning, requiring clear and consistent communication to ensure student success. If a student had behavioral challenges or difficulties interfering with virtual participation, teachers, residential care providers, and even students would communicate via phone. Residential Care Provider 5 shared how he encouraged his students to call their teachers directly for technical assistance:

> If there was an issue connecting to Zoom, I would have the students call the teacher directly. It gave them a sense of responsibility. So to us, [hybrid learning] was just a learning curve almost every day. We do stuff on the fly quite a bit as being [residential care provider]. So, it really wasn't much of a difference really.

According to teachers and administrators, communication between residential care providers, students, and teachers occurred effectively and efficiently because everyone was on-campus. Teachers worked from their classrooms and residential care providers from their assigned residences, making phone and email more effortless and effective with students living in residential homes on-campus. Teacher 3 shared, "It was so much easier when students were on-campus because they had a [residential care provider] keeping tabs of them if they were participating virtually."

Zoom. As teachers became more experienced with Zoom, they began using it in various ways to encourage dialog and student participation, such as using the chat feature to share individual and group messages through text, hyperlinks, and additional resources. Teachers used Zoom's screenshare feature to present information to students virtually; however, they found it especially helpful in hybrid learning situations where some students were participating virtually, and others were in the classroom. Teacher 2 found it helpful to share his screen so that all students (virtually or face-to-face) could see what was on his Smart Board screen:

> Screen share was definitely key. Like, if I had a video, instead of having every kid watch the video individually, I could share it all at once. Then we could watch, pause and talk about it, you know? Discourse about it versus having them go watch it. Maybe they would and maybe they wouldn't.

In addition, teachers gave students access to share their screens to share work, make presentations, and even help with troubleshooting.

As teachers and students became more comfortable with technology, they started to use advanced features to make learning easier. For instance, Teacher 3 mentioned how using the iOS split screen feature made it easier for students to participate on iPads:

> The split screen feature was a great feature for my students because they could participate in Zoom and another application at the same time. It made it a lot easier to demonstrate something and have students follow along on their iPads.

Teachers 1 and 3 discovered how to connect their document camera to Zoom to display reading texts and handouts for students participating virtually. Teacher 1 said the following:

> Connecting my document camera was a game-changer! Students could see what I was doing in the classroom, um, if they were in the [residential] home. Like, if a student was

> quarantined, they could see what was going on in the classroom. During virtual, it was good too because everyone could see how to complete assignments.

Teachers found Zoom's Breakout Room feature helpful during fully virtual instruction to break students into groups or in individual rooms during fully virtual instruction. Teacher 1 found the Breakout Room feature in Zoom very helpful for working with students one-on-one and providing verbal feedback to students:

> I had [students] all in breakout rooms and I could go in and say, "Hey, let's work on this problem together." Whereas in the spring, many of them weren't on Zoom. I like that I could help them in private so that no one else would hear what we were talking about.

breakout rooms required teachers to trust students to exercise autonomy and responsibility as they completed their assignments. In addition, if a student was in quarantine and participating virtually, teachers could use breakout rooms to participate in group work with classmates who were physically present in the classroom. Administrator 2 observed that

> it became natural to walk into a room and have a kid on an iPad with another classmate participating virtually. It was funny because you'd see them walk around the hallway and transport their partner on the iPad to their specials [class]. It was a little weird, but our staff and students did everything to keep everyone integrated and feeling involved so that they didn't feel isolated. It was such a long time for those students or staff to be away from each other. Um, so it was just a different kind of environment. Like, you'd see kids in the hallway, like sitting at a desk with another kid on the iPad working together!

Feedback. Teachers started to use technology to provide students with written, audio, and video feedback in face-to-face or virtual instruction. For instance, the feedback features in Classkick to provide students with personalized and private feedback during face-to-face or

virtual instruction. Teacher 1 mentioned how she grew more comfortable using the feedback tools in Classkick during the fall of 2020:

> I did give a lot more virtual feedback, like on, right on their Classkick document. I would give them their scores, or I'd like mark it right on their document, so that then they could see it right on their screen. It's also a little more private cause then I didn't have to say, "Hey, come here. Let's talk about this number that you got wrong." I could write to them on their screen, and they could see it from where they're at, even in the classroom. I mean, I still did a lot of verbal [feedback] as well, but I think I did more in private through virtual stuff [on Zoom] than I'd had before COVID.

Learning Support Teacher 2 found that Classkick helped provide instant feedback to her third grade Tier 3 language arts and mathematics students:

> Classkick was a big help because you could go in while they were doing a problem and circle it. They loved that. So, I found that to be very engaging for them. More so than telling kids to go off and come back when they are done. It was better to say, "I've modeled it, you've done some with me, now go do them on Classkick." And that was true for even the, the reading part, too. They enjoyed that instant feedback and it was kind of hard because you're still scrolling through it.

Most teachers found student feedback had become more synchronous than asynchronous in the fall of 2020. Participation was optional in the spring of 2020; therefore, teachers used tools like Classkick to provide asynchronous feedback. The fall of 2020 provided teachers with more opportunities to work with students either face-to-face or synchronously through Zoom. Therefore, the feedback was more verbal and synchronous. Teachers found it helpful to provide

students with a variety of different types of feedback, such as using emojis and stickers. Teacher 3 shared the following:

> I think a lot of our things were based in Classkick. So, I think I try to use, you know, Classkick a lot to provide feedback either through little stickers that you can add on or just by writing something on their work. In the fall of 2020, it was more. I don't know that I used Classkick so much as just being able to talk to them more and give verbal feedback.

Discussion of Emerging Themes

A thorough analysis of transcripts, documents, and digital resources revealed several emerging themes, which helped answer the research questions posed in this study. In the following section I discuss major themes that emerged from research data during hybrid learning in the fall of 2020.

Theme #1: Adapting Language Arts To a Hybrid Learning Environment

Although technology had been an important part of emergency remote learning in the spring of 2020, the shift to a hybrid learning model inspired many third-grade teachers to use technology in innovative and creative ways to connect students participating face-to-face and virtually. In the following section I discuss how teachers adapted language arts instruction to a hybrid learning environment in the fall of 2020.

Creating Digital Worksheets. Although worksheets continued to be used and distributed to students quarantined in residential, some students participating from the infirmary or off-campus did not have access to physical copies. Teachers used tools like Classkick and Jamboard to upload and convert digital copies of worksheets. For example, Learning Support Teacher 1 shared how she began using more iPad applications with her students:

> I started using more iPad apps. Jamboard was a fun one because I was taking the exact same worksheet that we did and posted it on Jamboard. That allowed for interactive partner work that I would normally do. Google slides was just more of an interactive one that they could use to make virtual manipulatives. I used a lot more YouTube videos, Book Creator, and those types of apps. I loved using Slides and Classkick to make interactive notebooks, where they could take those home. The graphic organizer that they would normally see in the classroom they now had in their notebooks.

Learning Support Teacher 2 found it helpful to use Classkick for students to record themselves reading passages for reading fluency practice to monitor and assess student progress. She shared, "I would have them record themselves with Classkick reading their fluency so I could hear it then. They'd love that. We did that with their sight words, too."

Establishing Routines and Procedures. The emergency remote learning experience in the spring of 2020 made teachers aware of the importance of establishing routines and preparing students starting the first day of school. Language arts teachers emphasized using applications like Google Classroom, Zoom, and Classkick. Learning Support Teacher 1 shared the following:

> Like the first day of school, my kids were in Google Classroom. I used to wait weeks because I didn't really use it much at all. Now it's like right off the bat, we're getting them into Google Classroom. We're using the technology right away. Because, well, you never know.

Although students would return to face-to-face instruction after a mandatory two-week virtual instructional period, there was still uncertainty if students would need to continue virtual instruction. For example, a student living in a residential home exposed to COVID-19 would need to participate virtually while in quarantine. Uncertainty loomed if the entire campus would

need to return to emergency remote learning if there was a significant outbreak of the COVID-19 virus on campus.

Teachers began implementing routines and infusing technology into assignments during the first two weeks of mandatory virtual instruction in the fall of 2020. When students returned to face-to-face instruction, teachers continued building student technology skills, such as using important Zoom features like sharing their screens, chatting, and accessing links. Learning Support Teacher 1 explained it:

> There was a lot of Zoom etiquette. It was logging in, how to mute your mic, how to go to the gallery view versus the speaker view. Then it was the chat, the background, and all those little things. They had to figure out Zoom 101. From there, it was the Clever app and figuring out how they could find the schedule, how they could find their specials, what (cycle) day it was for, things like that.

Fostering Collaboration. Although mitigation strategies reduced the amount of time and distance students could be near one another, technology provided an avenue for teaching students how to collaborate. Administrator 2 shared how difficult it was for teachers to find ways for students to work in small groups and collaborate:

> We couldn’t put kids in small groups with kids for more than a few minutes, so we lost out on that discussion and, and those types of things. Instruction looked completely different, and I think we lost a lot of ground that year, but our kids were in school every day. They had constant exposure, and once we were able to get back after that into other things, we were able to make up that ground.

Collaborative work is an important aspect of third-grade language arts because it teaches students how to communicate and work with others; however, mitigation strategies changed the

dynamics of groupwork in the classroom. Teacher 2 shared the following: “All our projects involve collaborative groups. Students work together and they rate each other on how they worked within the group. Like there was none of that that year.”

In one group project, students had a chance to work with other classmates for short periods of time; however, teachers had to regularly sanitize teaching surfaces to protect students from spreading germs. Teacher 2 described this as follows: “We did one project where we had students rotate from station to station. However, we had to sanitize everything in between. So, we’re running around, spraying everything down in between. It was, it was just chaos.”

Instead, teachers had to find alternative ways for students to engage in learning. Some resorted to instructional videos and independent reading activities. For example, Administrator 2 observed that

> it was literally like, uh, it was at first teachers resorted to them being in front of the classroom and kind of going back to that traditional model of sit and get, and that’s not how our students learn. They can’t demonstrate mastery through sit and get. So, then they got very creative and that’s where I think we went a little too far with the use of iPads in instruction, because they were afraid to put them in small groups.

Other teachers relied on collaborative tools like Google Docs and Slides for students to complete assignments in small groups. Teacher 3 shared, “I would have students use Google Slides to work together and complete assignments. It was great, because they could do it across the room and we didn’t have to worry about exposure.”

Administrator 2 recalled a humorous incident, where she walked down the hallway and saw one student working near a tripod and iPad with a virtual classmate in quarantine on the other end:

> It became natural to walk into a room and have a kid on an iPad with another classmate participating virtually. It was funny because you'd see them walk around the hallway and transport their partner on the iPad to their specials [class]. It was a little weird, but our staff and students did everything to keep everyone integrated and feeling involved so that they didn't feel isolated. It was such a long time for those students or staff to be away from each other. So it was just a different kind of environment. Like, you'd see kids in the hallway, sitting at a desk with another kid on the iPad working together!

Small Group Instruction With Breakout Rooms. As teachers became more experienced using Zoom's Breakout Room feature, they began using it in various ways during mandatory virtual and hybrid instruction. Teachers used breakout rooms during the first two weeks of the fall of 2020 during virtual instruction to break students into groups for small group or individual instruction. breakout rooms required teachers to trust that students would exercise autonomy and responsibility as they completed their assignments.

Teacher 1 was apprehensive at first, but learned to trust students as they completed their work in small groups in breakout rooms in a virtual learning environment:

> I would use breakout rooms sometimes for guided reading, group assignments, and like a paired read. I'd just tell them that they're going into breakout rooms and I'd kind of surprise them with who they were going to show up with. I was a little nervous because I can't hear them all at the same time. But I would just jump into the different rooms at different times and kind of see where they were at. Like "what number are you on? Or what page are you on?" And it seemed to work out well. I had to be a lot more trusting, which is probably good. They need something. They need to learn responsibility.

Learning Support Teacher 2 found it helpful to use breakout rooms to help her learning support students practice reading fluency skills during virtual and hybrid instruction. Students would join a Breakout Room with a partner and read for six minutes, while Learning Support Teacher 2 would monitor each Breakout Room:

> They would read to each other in the Breakout Room, just like we would do six-minute solution in here. They'd have a partner so they could read to each other. And then what was kind of fun is then occasionally, like at the end of the week, a lot of times I would have them record themselves [with Classkick] reading their fluency so I could hear it then. They'd love that. We did that with their sight words too.

Teacher 3 was initially cautious about using breakout rooms because she wanted to ensure that all students were supervised and monitored. The first two weeks of virtual instruction in the fall of 2020 created challenges for how she would facilitate guided reading groups. Instead of assigning multiple students to breakout rooms, she assigned them to their own rooms during guided reading groups. While students worked individually in their Breakout Room, she would work with a small group for guided reading practice in the central Zoom meeting. If a student had a question, they would use the chat feature in Zoom to message Teacher 3. She described this as follows:

> For guided reading, I kept all of the kids in the assigned group in the main room [in Zoom]. Then everybody else was assigned an individual Breakout Room. Because I think I was worried about what they would be doing if they were together and I wasn'twatching them. So, I guess it's a little bit of a control issue and trusting them to make the right decisions. You know, especially when they're eight years old.

As the mandatory two-week virtual learning period ended, teachers continued to use breakout rooms to connect students in physical and virtual settings. Administrator 2 shared, "It wasn't uncommon to see students working together with a peer in a virtual setting." Teachers used the Breakout Room feature to connect the physical and virtual classroom.

Learning Support Teacher 1 felt that breakout rooms with her Tier 3 students were a "blessing" because everything she did was small-group oriented. Mitigation strategies prevented students from sitting close to each other for extended periods of time; instead, Learning Support Teacher 1 used breakout rooms in Zoom for students to collaborate:

> Um, that was like the biggest blessing with Zoom. It worked out so nicely. In my classroom I pretty much do everything in small groups. In my ELA block, I would show my whole group lesson to all my students [virtually and in the classroom]. And then it was a Breakout Room. I think it would end up being three. One was with me, just like you would come up to the teacher at a small group table in the classroom. Instead, we worked together virtually. While another Breakout Room is reading on their iPads. Another could be doing a Classkick assignment together. I felt like for me, that was the best way to make it feel like that [class] period was broken up. That way we're all not just sitting there. It's hard enough to teach in person in a whole group and have them all be paying attention to you, let alone on an iPad. So, I utilized breakout rooms for just about everything that I taught.

Theme #2: Using Technology in New Ways To Increase Student Engagement

Although third-grade language arts teachers emphasized using technology throughout the pandemic to connect with students, they began using technology in new ways to increase student engagement. Several teachers noted a shift in how they used technology. For instance, Learning

Support Teacher 1 stated, “I began using technology in a more student-centered way. What I mean is, I wasn’t the person on the stage. Kids were using it to learn in new ways.” In the following section I describe how teachers used technology to increase student engagement and foster student-centered learning.

Google Slides. Teachers had used Google Slides to develop presentations for lessons before the pandemic; however, they began to see how Google Slides could be used to foster student-centered activities. For instance, Learning Support Teacher 1 developed Google Slides presentations that would provide students with interactive lessons. Students could learn content by clicking on hyperlinks, watching videos, and completing self-paced activities. She built in reflection opportunities and flexible options for demonstrating understanding:

> It’s very interesting to look back on how I have grown when it comes to the technology stuff. It changed [how I was] utilizing Google Slides in connection with like Google Classroom more. So, like before with more so just like comment on here, you know? Cause I didn’t know how to really connect Google classroom to do those slides at the time. Now I know how to use Google slides more like an interactive lesson now. Whereas before I didn’t know, I didn’t do anything technology-wise back then, so anything that I do now is more than what I did before.

Learning Support Teacher 1 used Google Slides to create virtual manipulatives for her students to make connections with vocabulary terms and concepts. In one activity, students were able to drag and drop the corresponding answer into the appropriate spot on the slide. She shared the following:

> Google Slides was just more of an interactive tool, that [students] could kind of move around manipulatives. We did this vocabulary exercise, where students had to drag and

> drop the correct term with the definition. It was so engaging! It was better than what I normally did with paper and pencil.

Teachers developed choice boards using Google Docs and Slides to give students multiple options for completing assignments. Choice boards were designed to provide students with two or more choices, which gave them autonomy over how they learned and expressed their knowledge. Administrator 2 shared, "We emphasized using technology in different ways in the fall of 2020. One way we did that was offering professional development on choice boards." Administrator 2 and the elementary digital learning coach provided teachers with dedicated professional development on infusing choice boards into learning.

Teacher 3 used choice boards to provide students with options for working in learning centers and completing guided reading activities. Instead of physically rotating around a room, digital choice boards were used to provide students with options for learning, while helping students practice social distancing. Teacher 3 mentioned the following:

> For ELA, I know that for guided reading, there are centers that I have done. So even though I, and they rotate through, you know, they have choice in what they, for independent reading, they're able to choose what book they would like to read. But they couldn't do that as much in the fall, so we had to use choice boards to provide them with options. We put together a Google Slide with options and they chose which option they wanted to do.

Learning Support Teacher 1 shared, "I used choice boards a lot with my learning support students in language arts! It was super helpful and engaging!" Learning Support Teacher 1 described how choice boards changed her perspective:

> Before virtual and hybrid learning, I didn't want to use too much technology. I could sense how great iPads are, but I'm scared of them. I didn't see the point of them. I was old school paper and pencil. Seeing how they really do go hand-in-hand, seeing how my lessons have improved, you know, I was forced into this virtual learning as well that seeing how much more engaged these kids are. When I started to see how you could give students options for creating stuff, it totally changed my perspective. I could teach them to create books online, websites, and make videos on their own. You can't do things like that with paper and pencil. You really could see how much more they can get out of one lesson.

Teachers who were not comfortable with designing choice boards often collaborated with colleagues to provide students with options and choice. For example, Learning Support Teacher 2 shared these comments:

> In many ways you just give them assignments. This is where the choice kind of came in a little bit. I tried to do a choice board type of thing with them, and that was difficult for me because I was still learning that. I had [learning support] teammates who are good at creating choice boards and they would share them with me for fluency passages and decoding.

Teachers published Google Slides presentations to develop Bitmoji Classrooms as a one-stop shop of resources and information for students. For instance, students could access class schedules and Zoom links, virtual libraries of educational books, social emotional learning resources, and much more. The Bitmoji Classroom was posted in the teacher's Google Classroom and Clever Teacher Page for easy access. Teacher 2 described how Bitmoji Classrooms worked:

> My Bitmoji classroom had a schedule and the Zoom link if students were virtual. A lot of the teachers got creative. One had a virtual calming corner. There was a virtual recess that, I mean, it was virtual everything. I would post those on Clever under my page and Google Classroom. And then [students] could just click on that and then they could read in the virtual library, lots of choice boards.

Learning Support Teacher 1 used Google Slides as a communication tool for keeping her students organized and engaged in learning. She developed a daily morning slide with important announcements, information, and assignments:

> One of my favorite ways of communicating with my students was with my Google morning slide that I would have. If students were virtual or face-to-face, they got the same information! It connected everyone. And so, I would just share screening my computer and went through it. I told them where their specials were for the day, their homework for the day, and things like that. I had kids who took a screenshot of it, and they would save it.

Jamboard. Interviews revealed that learning support teachers were most likely to use Google's free whiteboard application called Jamboard in the fall of 2020 during face-to-face and virtual learning. Teachers 1, 2, and 3 did not use the application during language arts instruction in the fall of 2020.

Learning Support Teachers 1 and 2 found that Jamboard was extremely helpful for working with their third-grade language arts students. Jamboard was used to facilitate collaboration among learning support students during hybrid learning. For example, Learning Support Teacher 2 described how she utilized Jamboard for modeling in the fall of 2020 with her Tier 3 learning support students:

> I loved using Jamboard. I could share my screen and work a problem out in front of them when they were in the classroom. That was like a breakthrough moment for my students because Tier 3 kids need that modeling, modeling, modeling, and then, then the guided part, they could quickly show me theirs.

Learning Support Teacher 1 would create a collaborative Jamboard presentation and assign groups of students to work on individual slides, while providing students with an accessible digital version of a worksheet:

> Jamboard was a fun one. I was taking the exact same worksheet that we would normally do in class and posting on Jamboard, but that allowed the interactive partner group that I would normally do. Plus, students could use the assistive technology tools to help them read their screen and increase the font size.

Clever. Clever was introduced to teachers as a single sign-on application to manage student accounts and passwords before the pandemic. Students logged into Clever with their Google credentials and accessed applications, accounts, and shared passwords. Teacher 1 shared, "Clever was extremely helpful for managing all their passwords! I can't imagine life without it!"

Teacher 2 shared, "Clever made it so much easier for my students to access Zoom links. When I put it on Clever, they tapped on the link, and it directly opened the application."

Teacher 3 shared, "[Clever] simplified my life. It created accounts automatically and students didn't have to remember their passwords!"

Teachers started using the Teacher Page feature in Clever in the fall of 2020. Teachers had the ability to create a customized page for students to access specific applications and hyperlinks. Teachers placed links to Zoom meetings and their Bitmoji Classrooms in Clever, so

that students could easily access information. Learning Support Teacher 1 shared her experience using Clever:

> That was really my first time using Clever that much, because I think before COVID, I was not very tech-savvy. After COVID, I became much more savvy . . . Clever became my best friend. I put everything on Clever. Every app and everything that they needed. It was so easy for them just to tap it and then be done.

Apple Classroom. Apple Classroom is a free application available on MacBooks and iPads, which uses Bluetooth to monitor student iPads in a physical classroom. Although teachers had been using Apple Classroom for several years, residential care providers began using it as a tool for monitoring student devices within the residential home during virtual learning in the fall of 2020. Teachers could not use Apple Classroom to monitor student devices during virtual learning; however, they could monitor students once they were in the classroom.

Although both teachers and residential care providers used Apple Classroom in the fall of 2020, residential care providers found it extremely helpful for monitoring between six and eight students simultaneously participating in different classes during virtual learning from the residential home. Most tasks required students to use their iPad to access digital resources; thus, Apple Classroom helped residential care providers monitor and keep students accountable.

Residential Care Providers 1 and 2 found Apple Classroom extremely helpful in their residential home during virtual learning in the fall of 2020. According to Residential Care Provider 1,

> Apple Classroom was so helpful for us in keeping students accountable. We kept everybody in the dining room while they were working. And then if they had to get up to go to their gym class, we just sent up back to like a different part of the house where they

> could go, you know? It would be louder or disruptive, but once they had the headphones in, it eliminated all the feedback you would get. Apple Classroom helped us monitor everybody in the home, especially when the other [residential care provider] was making lunches, helping kids, whatever, one kid, so our kids. So, Apple Classroom worked for us, being able to have everybody in the same place for the most part. That's what we found to be most effective.

Residential Care Provider 3 found Apple Classroom's dashboard of tools and features helpful for monitoring student technology use in the residential home without disrupting the learning process during virtual learning:

> I think, for the most part, we were able to manage them because we had them sit so we could kind of keep an eye on their screens, you know. We kind of made it so they were always visible to us. I mean, our boys were pretty good integrity-wise. The ones that had trouble, we just had them move closer to us, you know, where you could rely on what they were doing. It was nice if the teacher was calling, because we could share exactly what was happening on the student's screen. It worked out. And we said that we gave them expectations like, you know, you're supposed to be on those sites; you know you are supposed to be.

The application was helpful in monitoring and keeping students accountable because many teachers and residential care providers found that some students struggled more than usual to stay attentive and focused in the fall of 2020. Teachers felt that students did not have the same autonomy and independence that they typically had in years past. Teacher 2 mentioned that it often depended on the student:

> The amount of independence kids have is going to depend on the kid. Like I have a student that I had last year. She's still here again this year, unless I'm standing right with her, she's off task. I have other students that I can give them a list of things they need to accomplish by Friday, and they'd have it done. I think it's my job as teacher to build that over the year. To build the independence to be able to do X, Y, and Z by the end of the year independently. A lot of kids struggle again with reading with that, because they're so low and they can't focus that long. So historically, when we came in from recess, they had to read for 10 minutes.

Conclusion

Although teachers and residential care providers were excited to have students back at school and in a classroom setting, it was challenging to establish routines and a sense of normalcy. Instead, teachers, students, and residential care providers adapted to a new "normal," influenced by mitigation strategies and a new hybrid learning model. Teachers and residential care providers used technology to adapt students to hybrid learning and build a sense of community.

Old instructional strategies and assignments were redesigned to incorporate technology in meaningful and engaging ways. Because students could only sit next to one another for 15 minutes at a time, partner work was replaced by Zoom's breakout rooms. Worksheets were transformed into Classkick assignments, where teachers could give students instant feedback. Apple Classroom allowed adults to monitor student device use and keep students accountable.

Although the hybrid learning experience was different, there are many different instructional practices and tools that teachers, residential care providers, and administrators use today. Learning Support Teacher 1 said it best:

I just realized how great iPads were after this COVID-19 experience. I was scared of them. I didn't see the point of them. I was old school. Now I see how they do go hand-in-hand, seeing how my lessons have improved. I was forced into this virtual learning, but I see how much more engaged these kids are. Because the reality is these are kids living in 2022, where their career has been virtual. They love to use the iPads in a fun and creative way, so being able to kind of teach them how to create books online and create websites and make videos on their own. You can't do things with a paper pencil, you know? You could really see how much more they can get out of one lesson, which is why I am a big fan of technology today. I use it for everything, and I am glad I do! It's changed everything for me!

Chapter 7: Discussion, Conclusions, and Recommendations

This qualitative case study aimed to determine how third-grade language arts instruction at KHS Elementary was affected by the shift to emergency remote instruction during the COVID-19 pandemic in the spring and fall of 2020. The study investigated emergency remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers through the lens of Moore's (1997) transactional distance theory. Data gathered from participant interviews, focus groups, and document analysis revealed important strategies, methods, materials, and technologies that affected how third-grade language arts instruction occurred.

Discussion

The COVID-19 pandemic was an unprecedented global occurrence in the spring of 2020, affecting over 1.37 billion students and approximately 60.2 million teachers in 200 countries worldwide (Daniela & Visvizi, 2022; UNESCO, 2020). The unpredictable nature of the virus, coupled with mandatory lockdowns, displaced the familiarities of traditional face-to-face instruction with an unfamiliar, emergency remote teaching model, forcing educators to redesign their curriculum within days (Fauzi & Khusuma, 2020; Wang et al., 2021).

Perhaps the best analogy to describe many teachers' experiences is "building the plane while trying to fly" (Sayman & Cornell, 2021, p. 197). Teachers were forced to relinquish the routines and control they were normally accustomed to and adapt to meet the challenges of an emergency remote learning distance learning model (Alston et al., 2017; Asanov et al., 2021; Baran & Alzoubi, 2020; Borup et al., 2020; Russo et al., 2021). Inexperienced with online teaching, teachers scrambled to find new ways to establish a dialog with students over large physical distances to communicate assignments, provide feedback, and share expectations (Batita

& Chen, 2022; Moore, 1997; Steed & Leech, 2021). A blend of synchronous and asynchronous technologies and video conferencing tools became the primary methods of classroom instruction and communication (Coker, 2020; Wang et al., 2021).

Schools across the globe scaled down the structure of lessons and curriculum to meet the needs of students, often reducing content and the time spent on assignments (Coker, 2020). Classroom materials were quickly digitized, and face-to-face instructional strategies were converted into synchronous and asynchronous activities (Asanov et al., 2021; Borup et al., 2020; Kaden, 2020; Mutch, 2021). According to UNESCO et al. (2020), the three most popular modes of remote learning during COVID-19 were online learning, instructional packets, and television. For instance, 95% of U.S. K–12 students participated in online learning, and 89% received take-home instructional packets (UNESCO et al., 2021).

Keeping students engaged during the pandemic was a difficult task, as emergency remote learning required increased learner autonomy; more responsibility and control were placed on students and their families during the pandemic (Batita & Chen, 2022; Goldstein, 2020; Gutierrez-Braojos et al., 2022; Reimers, 2022; Steed & Leech, 2021; von Ravensberg, 2020). In addition, research revealed a variety of factors impacting learner autonomy during the pandemic, such as chronic absenteeism, lack of adult supervision and support, financial inequities, lack of resources, and failure to support students with learning disabilities adequately (Alvarez, 2020; Asanov et al., 2020; Becker et al., 2020; Bureau of Labor and Statistics, 2019; Coker, 2020; Grandits & Wagle, 2021; Gould & Shierholz, 2020; Malkus, 2020; Russo et al., 2021). As more responsibility was placed on students to complete assignments and participate in remote learning, many students were prepared for the challenge, while others were not (von Ravensberg, 2020).

Moore's theory posits that the physical separation between students and teachers in distance learning environments creates a transactional distance, which can "lead to communication gaps, a psychological space of potential misunderstandings between the behaviors of instructors and those of the learners" (Moore & Kearsley, 2005, p. 189). The transactional distance of a distance learning course is a "function of the interplay of structure and dialog" (Delgaty, 2018, p. 2). Thus, when used effectively, technology can be a powerful tool for connecting across physical and "psychological" distances, "meeting the needs of teachers and students outside of the traditional classroom" (Reyes, 2013, p. 44).

Conclusions

After careful consideration and analysis, I have drawn the following conclusions based upon my research questions, investigation, participant data, and emerging themes.

RQ1: How did the transition from face-to-face to remote learning affect third-grade language arts instruction at a private boarding school during the initial stages of the COVID-19 pandemic in the spring of 2020 from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

The transition to emergency remote learning was a continual trial, error, and refinement process. One size-fits-all instructional packets were designed to give students a temporary set of lessons; however, as the pandemic and emergency remote learning extended, teachers scrambled to digitize teaching methods and materials. For instance, teachers had to learn how to engage young learners through video conferencing tools designed for adults with little to no experience working with these platforms (Coker, 2020; Wang et al., 2021).

As the number of emergency remote learning days extended past 21 days, content from instructional packets started to run out, and teachers scrambled to devise creative alternatives.

Teachers quickly uploaded and converted handouts and textbook pages into digital lessons and projects. Furthermore, teachers created cross-curricular projects in language arts and social studies to increase student engagement. Projects were intended to allow students to apply knowledge and skills. For instance, one project required students to combine language arts skills with social studies content, as students participated in a virtual tour of famous Revolutionary War sites in Classkick.

Teachers observed that the language arts experience of students was directly impacted by the location from where they were participating. Most students at KHS Elementary remained on-campus during the pandemic: Administrator 2 estimated that "30% of students left campus, with the majority being middle- and high-school students." Although KHS students were given school-issued iPads, many families did not have high-speed internet access, which mirrored previous research findings (Becker et al., 2020; Vogels et al., 2020). According to Becker et al. (2020), remote learning placed financial pressure on parents to support their child's learning, as approximately 22% of parents incurred financial burdens, because they needed to purchase new devices and upgrade internet access. Many KHS families turned to unconventional means to participate in remote learning, such as using public Wi-Fi at public libraries, fast-food restaurants, and other public venues.

Teachers observed that adult supervision and support was paramount to the successful participation of elementary language arts students. According to Administrator 2, "Attendance for students living on-campus was virtually perfect" and was attributed to the structure and accountability provided by residential care providers in a residential home environment. However, teachers observed that the story was much different for students participating off-campus.

Unfortunately, chronic absenteeism was a complicated dilemma all schools and communities faced during emergency remote learning (Asanov et al., 2020; Coker, 2020; Malkus, 2020). Estimates in the United States suggest that between 18% to 25% of U.S. students were truant or absent for the remainder of the 2019-2020 school year (Malkus, 2020). Although many off-campus students had parents and guardians who took an active role in their child's education during emergency remote learning, teachers observed that students with consistent adult supervision and support were more likely to attend school, participate and engage in learning, and complete assignments. For instance, Teacher 1 noticed the lack of an adult presence created situations where students "stopped showing up" because "they felt there were no consequences" for not participating.

Teachers observed that students had to exercise more autonomy during emergency remote learning because they were responsible for completing daily assignments in packets and attending virtual meetings. In addition, teachers observed that students with solid adult support and supervision were more likely to stay on task, participate, and engage in learning. Unfortunately, many off-campus students needed dependable adult supervision and support. Thus, many off-campus students did not participate in emergency remote learning. Teachers and administrators responded by implementing a pass-fail grading system, which would reward students for their efforts at completing assignments.

RQ2: How have certain instructional methods, materials, and technologies been successful or unsuccessful during remote learning through the lens of transactional distance theory and from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers?

Teachers found that providing students with structured lessons increased student participation and autonomy. For instance, instructional packets provided students with structured daily lessons that could be completed on- or off-campus without technology. Although teachers embedded QR codes as additional resources to scaffold and support student learning, many students needed help to complete assignments for various reasons. As emergency remote learning stretched past 21 days, students ran out of daily lessons to complete, and teachers scrambled for an additional solution. Teachers collaborated to develop new lessons and convert existing materials into digital format through Classkick, Google Slides, Google Classroom, and Google Docs. Classkick was the primary tool third-grade language arts teachers used for several reasons. Teachers could upload worksheets and PDFs into slides in Classkick, which students could annotate, write, or draw on. Classkick's audio feature allowed students to record responses, practice reading fluency, or listen to an audio recording of instructions.

Dialog between teachers and students was imperative; therefore, teachers used various communication methods to provide students with assignment information, feedback, and support. For instance, instructional packets contained a daily checklist of assignments that needed to be completed; however, teachers used Google Classroom as an additional tool to post instructions, news, and encouraging messages. In addition, teachers invited students to participate in synchronous instructional support meetings on Google Meet and Zoom in the morning and afternoon sessions. Teachers continued to communicate assignments with students through Google Classroom and used Classkick and Google Slides to keep students on task. In addition, teachers continued offering virtual morning meetings for students to connect and have an outlet for processing their feelings.

Motivating students to participate in emergency remote learning proved extremely difficult during spring 2020, as most absentee students were off-campus. Therefore, teachers and administrators continued to look for creative ways to motivate and encourage students to participate and engage in learning. For example, teachers invited all third-grade students to participate in a daily virtual book study. Teachers infused new tools, games, and choice boards into learning to encourage student engagement and autonomy.

Teachers received additional training on implementing new strategies and tools in the fall of 2020. For instance, teachers were encouraged to develop Choice Boards to foster student autonomy and choice. In addition, teachers learned how to use more advanced features of Zoom to foster collaboration and deeper learning. For instance, teachers learned different strategies for using breakout rooms and how to share their document cameras through Zoom.

I further discovered that many teachers were able to develop stronger relationships with parents and guardians throughout the pandemic. Teachers used various communication methods to connect with parents; however, several teachers used texting, FaceTime, and social media to connect with parents. The connections established with parents and guardians helped increase student participation during the pandemic. One teacher in particular still maintains daily communication with her former student's parents years later.

Morning meetings continued to be an essential component of the curriculum in the fall of 2020. Whether students participated face-to-face or virtually, morning meetings provided students with an opportunity to connect with classmates, develop social-emotional learning (SEL) skills, and process emotions. Teachers noticed that the sharing quality at morning meetings evolved from asynchronous discussion posts on Google Classroom to a rich synchronous discussion in the physical classroom or on Zoom.

Unfortunately, mitigation strategies limited how KHS Elementary could support learning support at all levels of learning support students. KHS Elementary School officials determined that the general education elementary classroom would have 12 students seated at least six feet apart. Learning support classrooms were physically smaller; therefore, they limited the number of learning support students to six per classroom. Therefore, students who received Tier 3 learning support services in language arts and mathematics were assigned to learning support classrooms.

Tier 2 learning support students did not receive academic support services in the fall of 2020 because insufficient classrooms or learning support staff were available to work with these students. Tier 2 language arts students usually need short-term targeted instruction to quickly address learning gaps and difficulties. Instead, many general education teachers worked with students to differentiate instruction and increase the support they provided.

Recommendations for Practice

Based on this study's findings, conclusions, and recommendations, I recommend several items for further practice.

First, teachers experienced new demands and stressors that they were unprepared for during emergency remote learning, causing a need for additional resources, training, and professional development (Reimers, 2022). The increased demand for technology as a catalyst for providing flexible instruction and virtual learning has influenced leaders to reconsider how to equip elementary teachers in today's climate. Therefore, school leaders must consider how to provide teachers with a skillset and foundational understanding of online instruction and virtual learning (Trust & Whalen, 2020). Failure to address the needs of teachers could impact the quality of instruction students receive, limit the flexibility of how schools respond to weather and

emergency closings, exacerbate student learning loss, and intensify and isolate vulnerable student populations (Coker, 2020; Mutch, 2021; Wang et al., 2021). Therefore, I recommend that school leaders aim to improve professional development offerings in blended learning and online teaching pedagogy.

Second, I recommend that schools consider utilizing a learning management system (LMS) to streamline communication and provide a consistent location to access assignments. The pandemic changed what we call *learning time* and made education more accessible 24/7 (Zhao, 2021); therefore, an LMS would provide students with digital copies of assignments, which could always be readily available to students, including during emergency and weather closings. Although many school districts already incorporate eLearning days for weather delays and school closures, remote learning has demonstrated that students are able to attend school virtually, access materials and complete assignments online (Milman, 2014).

Third, teachers and administrators should consider utilizing the Universal Design for Learning (UDL) framework to design instruction that all students can access and engage in. Remote learning has reshaped pedagogy and revealed a need to strategically prepare elementary teachers in online instruction to adjust to weather or natural disaster closings, respond to emergencies, and adapt to the changing learning needs of students (Christensen & Alexander, 2020). As teachers learned during the pandemic, one-size-fits-all instruction and resources are not best-practice for equitable and inclusive instruction, and learning needs to become more accessible, flexible, and inclusive to meet the needs of students (Novak & Tucker, 2021; United Nations, 2020). UDL provides students with accessible options for how information is presented, ways students engage in learning, and flexible assessment pathways (Novak & Tucker, 2021).

Finally, I recommend that schools explore options for further engaging and using technology to connect with families. Connecting with families was imperative to the academic success of students during the pandemic (Braojos et al., 2022; Craig, 2020; Hill, 2020; Steed & Leech, 2021). As students participated in emergency remote learning, teachers had to find ways to collaborate with parents to find solutions during the spring of 2020 (Braojos et al., 2022). In addition, parents who normally relied on teachers to provide special education services and instruction were suddenly asked to participate in and manage their child's education, and even co-teach during remote learning (Hill, 2020). Establishing connections with families can increase the academic success of students and provide valuable partnerships between teachers and parents in future remote learning situations.

Recommendations for Further Research

Based on this study's findings, conclusions, and recommendations, I recommend several items for further research.

My research study investigated third-grade language arts instruction at a private boarding school and did not consider how language arts instruction was affected by remote learning in other grade levels. I chose to investigate third-grade language arts instruction because most standardized testing begins in third-grade language arts and mathematics; however, further research should investigate other tested grade levels and subject areas.

Consideration should be given to exploring other subject areas in elementary education, such as mathematics, social studies, science, and elective areas, such as art and physical education. The remote learning experiences of teachers in different subject areas may contain commonalities and differences, which should be further explored.

In addition, my research study investigates language arts instruction in a private boarding school, where students had access to residential care providers, high-speed internet access, and school issues devices. Although there are many similarities, boarding schools are governed and function differently than public schools. Consideration should be given to exploring how emergency remote learning impacted public-school students.

Summary

I investigated the perspective of third-grade elementary teachers at a private boarding school in the Eastern United States to understand how the COVID-19 pandemic has influenced how teachers provide language arts instruction to students in virtual, hybrid, and face-to-face learning environments. I conducted semistructured interviews and gathered data from five school administrators, three general education teachers, and two learning support teachers. In addition, I conducted a focus group interview with five residential care providers.

I examined why specific instructional strategies and tools have been successful or unsuccessful in remote instruction and considered how teachers' experiences during remote instruction could shape future professional learning offerings and how the school could prepare for potential remote learning situations.

My research revealed the importance of providing students with structured options for learning, clear communication, and opportunities to exercise autonomy and choice to engage in emergency remote learning. In addition, my research emphasized the importance of adults in providing students with supervision and support during their remote learning experiences. Teachers observed that students with supportive and dependable adults were likelier to engage and participate in emergency remote learning.

As a digital learning coach and educational consultant, I personally identified with many of the experiences participants faced in the research study. The COVID-19 pandemic and emergency remote learning ventures were unlike any other time in history; however, I believe we can learn from the collective experiences of others to design learning environments that work for all students!

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Appendix A: Semistructured Interview Protocol: General Education and Special Education Teachers

First Interview

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Interviewee	
Other	

I. Introductions: *I will introduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions, but will ask additional questions for clarification and continuation of the discussion.

II. Study Purpose: *I will share the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** To understand how third-grade language arts instruction was affected during remote learning in the spring and fall of 2020 and which strategies (methods, materials, and technologies) have been successful or unsuccessful in remote learning from the

perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

III. Consent Forms and Approvals: *I will provide participants with a consent form, review the confidentiality agreement, and secure written and verbal consent (5 min).*

- I will distribute an informed consent form to the participant and review the privacy and confidentiality agreement.
- I will ensure that data will remain confidential and anonymous.
- I will note the interview will be recorded and obtain permission to record the interview.
- I will answer any questions and secure signature and verbal consent.

IV. Treatment of Data: *I will share how data will be managed, secured, and disposed of after a specific amount of time (5 min).*

- Data will be collected and stored in a secure locked filing cabinet.
- Digital files and recordings will be stored in a password-protected external hard drive, and recordings will be transcribed by an outside agency, then destroyed.

V. Other Questions and Concerns? *Participants will have the opportunity to ask additional questions or concerns.*

VI. Opening Interview Session (15 - 20 min)

Goal: The objective of the first interview was to collect general information about your background and experiences with emergency remote learning before and during the spring and fall of 2020.

Q1. Introductory Question

- ***Tell me about your background in education***.
    - *How long have you been in education?*
    - *What experiences have you had before your current teaching assignment?*
    - *How long have you been in your current role?*

Q2. Pre-Remote Learning

You might remember on March 10, 2020, administrators began notifying teachers to prepare learning materials and packets for students at KHS elementary school.

- ***Can you describe what that was like for you and your colleagues to prepare for a potential shift to remote learning?***
    - *What thoughts and feelings did you have?*
- ***How did you prepare students for a potential shift to virtual learning?***
    - *What materials and tools were in place for students to participate in remote learning?*

Q3. Transition to Remote Learning

On March 12, 2020, the governor announced a statewide mandate closing all public schools across the state for two weeks. Shortly afterward, the school decided to transition to remote learning.

- ***Can you tell me what this was like for you?***
    - *Have you had any prior experiences with teaching online before March 2020?*
- ***How did you prepare yourself for teaching online through remote learning?***
    - *What support, resources, professional development, or training did you receive for remote learning? What was helpful? What was not very helpful?*

Q4. Student Transition to Remote Learning

- ***Can you describe what the transition was like for students to remote learning in March 2020? fall 2020?***
    - *What positive behaviors did you observe in your students? What negative behaviors did you observe in remote learning? How did you address these challenges?*
- ***Can you describe if there were any differences in how students participated in remote learning from home in comparison to a residential home in March 2020?***
    - *Did you experience any difficulties or distractions with students, residential care providers, parents, and sponsors in these environments? If so, what were they?*

Q5. Student Transition to Remote Learning

- ***What were your go-to applications and websites for third-grade language arts during emergency remote learning in March 2020? How did this compare to face-to-face instruction?***

VII. Structure, Dialog, and Autonomy (20 - 30 min)

The following portion of the interview will consist of questions directly related to how face-to-face classroom instruction and emergency remote learning were structured through the lens of Transactional Distance Theory (Moore, 1997).

Q6. Instructional Day (Structure)

I will read a description written by a third-grade teacher of a typical day in third-grade language arts. After I am done reading, I would like your input.

Description*: A typical day in my third-grade language arts classroom begins with a spelling or grammar lesson. Next, we have a brief daily language review, such as proofreading for grammar errors. Then, students have 15 minutes of silent reading. Next, we have whole group reading instruction (40-60 minutes), which may include PSSA practice and writing prompts. Then, we have whole group writing instruction followed by independent writing time (30-40 min.). Finally, we have flexible guided reading groups (45 minutes). Students not working in guided reading groups work independently on various tasks and use specific apps for more practice.*

- ***Are there any additions or modifications you would make to this description?***
- ***How did the structure of the third-grade language arts instructional period change during remote learning in the spring of 2020? fall 2020?***

Q7. Language Arts Curriculum (Structure)

I will read a general description of the traditional **face-to-face third-grade language arts curriculum** at KHS Elementary through the words of a third-grade teacher. When I am finished reading, I would like your input.

Description*: third-grade language arts instruction typically consists of writing, reading comprehension, fluency, grammar, and word study. Writing focuses on narratives (personal and fictional), opinions, and informational writing. Students also focus on ACE prompt writing to specifically prepare for PSSA reading prompts. Students focus on several elements of reading comprehension and fluency, such as reading words per minute for speed and accuracy, determining the central message, story plot, author's point of view, compare/contrast, main idea, key details, asking and answering questions about a text, sequence, text features, drawing conclusions, and making inferences. Grammar includes*

using conventions of standard English, such as capitalization, punctuation, and spelling. Additionally, word study includes phonic skills, prefixes, suffixes, root words, figurative language, and distinguishing literal from nonliteral meanings of words.

- ***Are there any additions or modifications you would make to this description?***
- ***How did the structure of the third-grade language arts curriculum change during remote learning in the spring of 2020? fall 2020?***

Q8. Supporting Students with Learning Disabilities (Structure)

- ***How are Tier 2 and 3 learning support students in third grade language arts typically supported during face-to-face instruction?***
- ***How did remote learning impact the way that you supported students with learning disabilities during the spring of 2020? fall of 2020?***
    - *Can you describe some of the most common strategies, adaptations, modifications, and accommodations you used with third-grade language arts students with learning disabilities during face-to-face instruction?*

Q9. Expectations (Structure and Dialog)

- ***Can you describe your expectations for students during remote learning in the spring of 2020? How were these expectations communicated to students, residential care providers, parents, and sponsors?***
    - *How did these expectations compare to your expectations during face-to-face instruction?*
    - *Did your expectations change during the fall of 2020?*

Q10. Communication with Stakeholders (Dialog)

- ***Can you describe how you communicated assignments and homework with students prior to remote learning? During remote learning in spring 2020? fall 2020?***
- ***Describe what your communication was like with residential care providers, parents, and sponsors prior to remote learning. During remote learning in spring 2020? fall 2020?***

Q11. Student Autonomy and Choice Before Remote Learning (Autonomy)

Autonomy refers to the perceived control and choice they have over what they learn, how they learn it, and when they learn it (Reyes, 2013). Examples may include student-centered strategies like providing students with choices in learning materials and assignments, working alone or choosing cooperative learning, choosing which tools or apps to complete an assignment, setting learning goals, or choosing when to complete tasks.

- ***What opportunities for autonomy and choice did you typically provide third-grade students with during face-to-face instruction?***
    - *Were there any strategies, tools, or methods that were effective in providing autonomy and choice?*
- ***What did student autonomy and choice look like during remote learning in spring 2020? fall 2020?***
    - *Were there any strategies, tools, or methods that were effective in providing autonomy and choice?*

VIII. Remote Learning Experience (5 - 10 min)

The following portion of the interview will consist of the teacher's experience during remote learning in the spring of 2020.

Q12. Remote Learning Instruction

- ***How would you describe your overall experience teaching language arts remotely in the spring of 2020?***
    - *What went well? What were your biggest challenges and frustrations?*
    - *What were the biggest lessons you learned? What do you wish you would have done differently?*

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in this interview. Before our next interview, I will ask you to send me some artifacts of your ELA instruction during the spring of 2020.

1. **Pedagogical Artifact -** an artifact representing teaching practice during remote learning in the spring of 2020 *(e.g., assignment, lesson plan, or classroom material where students may have had some choice in what they learned, how they learned, or when they learned).*
2. **Structure Artifact** - an artifact depicting ELA curriculum expectations, routines, or schedules used in the spring of 2020 *(e.g., classroom expectations, schedule, list of routines, etc.)*
3. **Dialog Artifact -** an artifact detailing an example of communication of classroom news, events, or assignments between the educator and students and/or caregivers (e.g., a screenshot of a Google Classroom post, classroom expectations, email communication, etc.).

Please send these artifacts to me by _____ (date), and feel free to mail me with any questions ahead of time.

Appendix B: Semistructured Interview Protocol: School Administrators

First Interview

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Interviewee	
Other	

I. Introductions: *I will introduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions but will ask additional questions for clarification and continuation of the discussion.

II. Study Purpose: *I will share the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** The objective of the first interview is to collect general information about your background experiences and how you supported and supervised third-grade language arts and learning support teachers during the spring of 2020. Additionally, I ask about your role in coordinating an emergency remote learning plan for teachers and students, supporting device deployment, providing professional development, and communicating with all stakeholders during the pandemic.

III. Consent Forms and Approvals: *I will provide participants with a consent form, review the confidentiality agreement, and secure written and verbal consent (5 min).*

- I will distribute an informed consent form to the participant and review the privacy and confidentiality agreement.
- I will ensure that data will remain confidential and anonymous.
- I will note the interview will be recorded and obtain permission to record the interview.
- I will answer any questions and secure signature and verbal consent.

IV. Treatment of Data: *I will share how data will be managed, secured, and disposed of after a specific amount of time (5 min).*

- Data will be collected and stored in a secure locked filing cabinet.
- Digital files and recordings will be stored in a password-protected external hard drive, and recordings will be transcribed by an outside agency, then destroyed.

V. Other Questions and Concerns? *Participants will have the opportunity to ask additional questions or concerns.*

VI. Opening Interview Session (10 - 15 min)

Goal: The objective of the first interview is to collect general information about your background in education and general experiences with emergency remote learning before and after the spring of 2020.

Q1. Introductory Question

- **Tell me about your background in education**.
    - *What roles have you had before your current position? How long have you been in your current position?*

- *What has been your experience in supervising or teaching in an online setting?*

Q2. Remote Learning

In March 2020, the world became aware of the COVID-19 virus and the possibility of closing down schools and non-essential businesses.

- **What was the timeline of events leading up to the transition to remote learning in March 2020?**
  - *What was the thought process behind the decision to provide students with packets?*
- **What were the timeline events for the remainder of spring 2020?**

Q3. Training Teachers

Remote learning requires a different approach and set of skills.

- **Can you describe (in general terms) how you prepared and trained elementary teachers for emergency remote learning?**
  - *What training and professional development opportunities existed?*
- **How did you support teachers as they learned this new pedagogical approach?**

VII. Structure, Dialog, and Communication (30 - 40 min)

The following portion of the interview will consist of questions directly related to how administrators supervised and supported teachers with online instruction before and during emergency remote learning in March 2020 through the lens of Transactional Distance Theory (Moore, 1997).

Q4. Supporting Teachers (Structure)

- **The current research focuses on third-grade language arts instruction.**
    - *Can you describe how your role typically supports (directly or indirectly) third-grade language arts teachers and students during face-to-face instruction?*
    - *How did emergency remote learning in March 2020 affect how you supported teachers and students?*

Q5. Instruction (Structure)

- **What was the vision or expectation for how third-grade language arts instruction would be structured during emergency remote learning?**
    - *How was it decided what was taught and how it was taught? What was your role in deciding or supporting this?*
- **What was the vision or expectation for how it would be structured in the fall of 2020?**

Q6. Students with Learning Disabilities (Structure)

- **What supports and protocols are typically in place for third-grade language arts students with learning disabilities in face-to-face instruction?**
- **How were these supports and protocols impacted by emergency remote learning in the spring of 2020?**
- **How were these supports and protocols impacted by the fall of 2020?**

Q7. Structure and Expectations (Structure)

Structure and expectations are an essential part of face-to-face learning; however, remote learning caused teachers to translate these practices into a digital format.

- **How did you observe third-grade teachers structuring their online classrooms during the spring of 2020?**

    - What went well? What did not go well? How did you support the teachers?
- **How did you observe third-grade teachers structuring their online classrooms during the fall of 2020?**
    - What went well? What did not go well? How did you support the teachers?

Q8. Communication Before Remote Learning (Dialog)

- **Can you describe how you observed communication between teachers, students, residential care providers, and parent/sponsors typically occurred before and after emergency remote learning?**
- **How did you observe how teachers communicated with stakeholders during remote learning in the spring of 2020? fall 2020?**
    - How did you support teachers in their communication with others?
    - *What was successful? Not successful?*

Q9. Student Engagement (Autonomy)

- **How would you describe third-grade student engagement in language arts during remote learning in March 2020? fall 2020?**
    - *Did you notice any differences in the residential home compared to the home of origin?*
- **How did you observe teachers keeping students engaged during remote learning in March 2020? fall 2020?**
    - *What went well? What didn't?*

Q10. Behaviors (Autonomy)

- **Can you describe some of the positive and negative third-grade student behaviors you observed or were told about during emergency remote learning in the spring of**

2020? Was there any difference in the behaviors at the residential home and home of origin?

Q11. Supporting Families

- **Describe the experience of supporting students and families during remote learning.**
    - *What were some of the common challenges you saw? How did you solve them? What were the most significant challenges and successes?*
    - *What strategies, tools, and resources did you use to support students and families? What do you wish you would have done differently?*

VIII. Remote Learning Experience (5 - 10 min)

The following portion of the interview will consist of the administrator's experience during remote learning in the spring of 2020.

Q12. Remote Learning Instruction

- ***How would you describe your overall experience supporting remote learning in the spring of 2020?***
    - *What went well? What were your biggest challenges and frustrations?*
    - *What were the biggest lessons you learned? What do you wish you would have done differently?*

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in this interview. Before our next interview, I will ask you to send me any documents that you used to communicate with teachers, students, and residential care providers.

- Documents can include weekly school-wide email communications, daily news and updates, and weekly reports to upper administration.
- Documents can be in any format, such as Google Docs, Emails, Word Documents, PDF, printed documents, etc.

Please send these artifacts to me by _____(date), and feel free to mail me with any questions ahead of time.

Appendix C: Focus Group Interview Guide: Residential Care Providers

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Focus Group Members	
Other	

I. Welcome: *I will introduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions but will ask additional questions for clarification and continuation of the discussion.

II. Our Topic: *I will share the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** To understand how third-grade language arts instruction was affected during remote learning in the spring and fall of 2020 and which strategies (methods, materials, and technologies) have been successful or unsuccessful in remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

III. Consent Forms and Approvals: *I will provide participants with a consent form, review the confidentiality agreement, and secure written and verbal consent (5 min).*

- I will distribute an informed consent form to the participant and review the privacy and confidentiality agreement.
- I will ensure that data will remain confidential and anonymous.
- I will note the interview will be recorded and obtain permission to record the interview.
- I will answer any questions and secure signature and verbal consent.

IV. Treatment of Data: *I will share how data will be managed, secured, and disposed of after a specific amount of time (5 min).*

- Data will be collected and stored in a secure locked filing cabinet.
- Digital files and recordings will be stored in a password-protected external hard drive, and recordings will be transcribed by an outside agency, then destroyed.

V. Guidelines: *I will share guidelines for participating in the focus group (5 min)*

- The following focus group will consist of a conversation between us all. My role is to moderate the conversation and ask questions. Although there are several scripted questions, I may ask additional questions for clarification purposes.
- Remember there are no right or wrong answers. You might disagree with another's response; however, I ask that you listen respectfully as others share their views.
- I ask that you can please put your cell phone and other devices away so that we can focus on the conversation. Remember that we're recording, so please remember one person speaks at a time.
- In conclusion, please keep the name of the participants and anything said here confidential.

Participants will have the opportunity to ask additional questions or concerns.

VI. Opening Interview Session (10 - 15 min)

Goal: The objective of the focus group interview is to expand upon themes and observations discussed in semi-structured interviews with teachers and administrators about remote learning in the spring and fall of 2020.

Q1. Introductory Question

- **Thank you for participating in this study!** *Can you tell me how long you have been in your role as a residential care provider? What led you to a career in residential care?*

VII. Residential Home and Remote Learning (20 - 30 min)

The following portion of the interview will consist of questions directly related to how residential care providers supported student learning in the residential home during remote learning in March 2020 through the lens of Transactional Distance Theory (Moore, 1997).

Q2. Preparing for Remote Learning

- **The world started to hear about this new virus called COVID-19 in March 2020. MHS began preparing for it during the Week of March 9, 2020, as teachers put together instructional packets and resources for students.**
    - *Can you describe what that was like for you? What were your fears and concerns? How did you prepare yourself and your students for a potential shift to remote learning?*

Q3. Remote Learning (Structure)

- **Monday, March 16, 2020, the school transitions to emergency remote learning, and students are now required to participate in synchronous or "live" instruction through Google Meets and Zoom. Residential care providers had to assist teachers with facilitating learning.**
    - *How did you balance supporting teachers and students during a difficult time? What went well? What did not go well?*
    - *How did you support students who struggled with assignments or had learning disabilities? Where did you go for help if you didn't understand an assignment?*

Q4. Structure in the Residential Home (Structure)

- **All residential care providers were essential workers during the pandemic, working directly with students in the student home.**
    - *What structure, expectations, and routines did you have for students during March 2020? How did you manage student technology use in the home?*
    - *How did life in the residential home adapt to the challenges of the pandemic? How did it remain the same?*

Q5. Communication with Stakeholders (Communication)

- **Communication with various stakeholders is an important part of residential care. Residential care providers provide a gateway between students, teachers, and families.**
    - *How did communication between teachers, students, and families change and/or remain the same during emergency remote learning in March 2020? How did the methods and tools used to communicate change and/or remain the same?*
    - *What were some of the successes and challenges?*

Q6. Student Engagement (Autonomy)

- **Student engagement refers to how motivated and connected to learning students are. Autonomy is one component of engagement, which refers to how much control a student has over their learning. For example, students may choose what to learn, when to complete assignments, or how they will complete assignments.**
    - *How much autonomy did students have over their learning?*
    - *How engaged were students in the learning process?*
    - *How much did you have to intervene and redirect students during remote learning?*

Q7. Fall 2020

- **The school decided to transition to a hybrid model of learning in the fall of 2020, where students participated in a mandatory 2-week virtual learning experience at the beginning of the school year and during breaks.**
    - *How was the overall experience during the fall of 2020 compared to the spring of 2020? What went well? What didn't go well?*

VIII. The Transition to Remote Learning (15 - 20 min)

The following portion of the interview will consist of additional follow-up questions based on administrator and teacher interviews and document analysis.

Q8 - Q10. Follow-Up Questions That Emerged From Themes.

- *The following section will consist of questions on themes emerging from administrator and teacher interviews.*

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in this interview. I am genuinely thankful for your insights and contributions during a confusing and unprecedented time. As a reminder, please keep the name of participants and any information shared at this focus group confidential.

Appendix D: Semistructured Interview Protocol: General Education and Special Education Teachers

Second Interview

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Interviewee	
Other	

I. Introductions: *I will reintroduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions but will ask additional questions for clarification and continuation of the discussion.

II. Study Purpose: *I will remind participants of the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** To understand how third-grade language arts instruction was affected during remote learning in the spring and fall of 2020 and which strategies (methods, materials, and technologies) have been successful or unsuccessful in remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

III. Reminders: *I will remind participants of their rights as participants in the research study (5 min).*

- I will remind participants of their rights by reviewing the privacy and confidentiality agreement and sharing that data will remain confidential and anonymous.
- I will remind participants that the interview will be recorded and obtain permission to record the interview.
- Participants will have the opportunity to ask additional questions or express concerns.
- I will seek verbal consent to proceed.

IV. Opening Interview Session (10 - 15 min)

Goal: The objective of the second interview was to ask additional follow-up questions from the previous interview and document analysis, as well as examine your experiences with third-grade language arts instruction in the fall of 2020.

Q1. Hybrid Model - Fall 2020

- **One of the most significant differences between the spring of 2020 and the fall of 2020 was the introduction of a hybrid model of remote learning. Teachers were asked to teach classes of students in face-to-face and virtual environments.**
    - *What was hybrid learning like for you in the fall of 2020?*
    - *What were the most significant challenges? Biggest advantages?*

Q2. Hybrid Model - Fall 2020

- **Many participants have stated that there were many unpredictable elements to the Hybrid model of fall 2020.**
    - *How did you adapt your materials and lessons to meet the unique needs of the hybrid model?*

- *Did you notice any differences between students participating virtually in the student home, home of origin, and health center?*

V. Dialog (10 - 15 min)

The following portion of the interview will focus on the Dialog element from Moore's (1997) Transactional Distance Theory.

Q3. Communication Style During March 2020 and Fall 2020 (Dialog)

- **Teachers give students feedback in many different ways, such as verbal feedback, written feedback, grades, comments, etc.**
  - *How did remote learning impact how you communicated and provided feedback to third-grade language arts students in virtual environments in spring 2020 and fall 2020?*
    - *What methods and strategies did you find successful? Not successful?*
    - *How did the students respond?*

Q4. Student Dialog (Dialog)

- **Student dialog refers to communication between students, peers, and/or teachers. It can occur in many ways, such as cooperative learning, discussion, online discussion, group discussion, small group discussion, etc.**
  - *What **synchronous** strategies and methods did you use to encourage student interaction and dialog in your ELA instruction during remote instruction?*
  - *What **asynchronous** strategies and methods did you use to encourage student interaction and dialog in your ELA instruction during remote instruction?*

- *In what ways did you encourage students to develop communication and critical thinking skills?*

Q4. Grading Practices (Dialog)

- **The third marking period of the spring of 2020 required teachers to continue their grading practices. The 4th marking period required teachers to use a pass / fail grading system.**
  - *How did remote learning impact your grading practices in the spring of 2020?*
  - *Were you more or less lenient with students? Did your expectations change?*
  - *Did you notice any changes in your grading practices and expectations in fall 2020?*

VI. Artifacts (10 - 15 min)

The following portion of the interview will focus on digging deeper into the artifacts provided by participants in the research study.

- *Structure Artifact - an artifact depicting ELA curriculum expectations, routines, or schedules used in the spring of 2020 (e.g., classroom expectations, schedule, list of routines, etc.)*
- *Dialog Artifact - an artifact detailing an example of communication of classroom news, events, or assignments between the educator and students and/or caregivers (e.g., a screenshot of a Google Classroom post, classroom expectations, email communication, etc.).*
- *Pedagogical Artifact - an artifact representing teaching practice during remote learning in the spring of 2020 (e.g., assignment, lesson plan, or classroom material where students*

may have had some choice in what they learned, how they learned, or when they learned).

Q5. Question About Artifact (Structure)

- _____*?*

Q6. Question About Artifact (Dialog)

- _____*?*

Q7. Question About Artifact (Pedagogical)

- _____*?*

VII. Autonomy (15 - 20 min)

The following portion of the interview will focus on the element of Autonomy from Moore's Transactional Distance Theory.

Q8. Student Engagement (Autonomy)

- **Think back to working with students in virtual environments in spring 2020 and the hybrid environment in fall 2020.**
    - *Describe the behaviors, body language, and actions of a third-grade language arts student engaged in learning in a virtual learning environment.*
    - ***Spring 2020***
        - *What kept students engaged? What factors contributed to disengagement?*
    - ***Fall 2020***
        - *What was it like engaging students in a* ***hybrid learning environment*** *in spring 2020? What were the challenges and opportunities?*
        - *What kept students engaged? What factors contributed to disengagement?*

Q9. Student Engagement and Technology (Autonomy)

- *How did you use technology in the **spring of 2020** to impact student engagement?*
    - *What was effective? What was ineffective?*
- *How did the way that you use technology in the **Hybrid Model in the fall of 2020** impact student engagement?*
    - *What was effective? What was ineffective?*

Q10. Student Autonomy (Autonomy)

- *In your professional opinion, how much independence can typical third-grade language art handle in a regular face-to-face environment?*
- *Several participants mentioned that students were forced to be more independent during remote learning. Do you feel that most of your third-grade language arts students were equipped to handle the responsibilities of virtual learning in **spring 2020?** Why or why not?*
- *Did you notice any differences in the **fall of 2020**?*

VII. Final Reflection (5 - 10 min)

The following portion of the interview will include personal experiences during remote learning in the spring of 2020.

Q11. Final Reflection

- ***Tell me about some of the challenges you experienced during remote learning personally and professionally.** How did you get through these challenges?*

Q12. Final Reflection

- ***What lessons have you taken away from remote learning in the spring and fall of 2020 and applied to your current teaching practice?***

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in my research study. It has been a pleasure learning about your experiences during remote learning. I want to assure you that your identity will be kept confidential. Transcripts will be created from audio recordings and coded for themes.

Do you have any additional questions? If you have any questions after you leave, please feel free to contact me via email or phone.

Appendix E: Semistructured Interview Protocol: Administrators

Second Interview

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Interviewee	
Other	

I. Introductions: *I will reintroduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions but will ask additional questions for clarification and continuation of the discussion.

II. Study Purpose: *I will remind participants of the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** To understand how third-grade language arts instruction was affected during remote learning in the spring and fall of 2020 and which strategies (methods, materials, and technologies) have been successful or unsuccessful in remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

III. Reminders: *I will remind participants of their rights as participants in the research study (5 min).*

- I will remind participants of their rights by reviewing the privacy and confidentiality agreement and sharing that data will remain confidential and anonymous.
- I will remind participants that the interview will be recorded and obtain permission to record the interview.
- Participants will have the opportunity to ask additional questions or express concerns.
- I will seek verbal consent to proceed.

IV. Opening Interview Session (10 - 15 min)

Goal: The objective of the second interview is to ask additional follow-up questions from the previous interview and document analysis, as well as examine your experiences supervising and supporting third-grade language arts instruction in the fall of 2020.

Q1. Transition to fall 2020

- ***I'm sure there were quite a few changes that were made to emergency remote learning from March 2020 to June 2020.***
    - *Can you please speak about some of the improvements and adjustments made to improve instruction and communication in the fall of 2020?*
    - *Technology improvements?*
    - ***Attendance policies?***

V. Structure (30 - 40 min)

The following portion of the interview will focus on Structure from Moore's (1997) Transactional Distance Theory.

Q2. New Schedule (Structure)

- **One of the most significant differences between the spring of 2020 and the fall of 2020 was the introduction of a mandatory two-week quarantine period and the adjustment of the school calendar.**
    - What was the thought process behind a two-week quarantine period and adjusting the school calendar in 2020-21?
    - Why did the quarantine schedule replicate a traditional face-to-face schedule and not the schedule from the spring of 2020?

Q3. Schedule (Structure)

- **Replicating a face-to-face schedule through video conferencing had some advantages and challenges for teachers and students.**
    - Can you describe some of the challenges teachers and students faced with this particular schedule?
        - How did you address screen time?
        - How did you address student engagement?
        - Were there any other challenges associated with this model?
    - What were the advantages of this model?

Q4. Hybrid Learning (Structure)

- **Once students returned to the classroom in fall 2020, a new hybrid learning model emerged. Some students were in a face-to-face classroom, and others were in the residential home, health center, or home of origin during the fall of 2020.**
    - *Can you explain more about this new model?*
        - *What were the expectations for teachers?*

        - *How was it determined where students would participate in each type of learning?*
    - *What were the advantages of this model? What challenges did this model create?*
    - *How were learning materials distributed to students at this time?*

Q5. Mitigation Strategies

- **Face-to-face learning required mitigation strategies to be implemented to protect students and staff.**
    - *Can you describe some mitigation strategies implemented to protect students and staff? Why?*
    - *How did these strategies change during the course of the school year?*

Q6. Learning Support Students (Structure)

- **Mitigation strategies impacted the services that learning support students received.**
    - *Can you describe how learning support students were supported during the fall of 2020? How was this similar or different compared to the spring of 2020?*

Q7. Preparing Teachers (Structure)

- **Teachers had to adjust to a new teaching model several times during the spring and fall of 2020. Teaching in a hybrid environment, where face-to-face and virtual teaching occurred simultaneously was another unique aspect of remote learning.**
    - *Can you speak about how teachers were trained and supported to teach in this new teaching model?*
    - *How would you assess the general performance of teachers during this period? What were their strengths and challenges?*

- *Were there any unique challenges compared to remote teaching in the spring of 2020?*

VII. Additional Questions from Document Analysis (15 - 20 min)

The following portion will provide the interviewer with an opportunity to ask questions from the document analysis.

Q8. Question About Artifact

_____*?*

Q9. Question About Artifact

- _____*?*

Q10. Question About Artifact

- _____*?*

VII. Reflection (5 - 10 min)

The following portion of the interview will include personal experiences during remote learning in the spring and fall of 2020.

Q11. Final Reflection

- ***Reflect upon your experiences in the spring and fall of 2020.***
    - *How do the remote and hybrid learning experiences of 2020 impact how instruction is delivered today? How do you lead teachers?*
    - *What is something you wish you had done differently during remote learning? Why?*

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in my research study. It has been a pleasure learning about your experiences during remote learning. I want to assure you that your identity will be kept confidential. Transcripts will be created from audio recordings and coded for themes.

Do you have any additional questions? If you have any questions after you leave, please feel free to contact me via email or phone.

Appendix F: Semistructured Interview Protocol: Direct of Learning Technologies

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Date	
Time and Place	
Interviewer	
Interviewee	
Other	

I. Introductions: *I will reintroduce myself, the process for the session, how long the interview will last, and the general format of questions (5 min).*

- Matt Bergman, Digital Learning Specialist and Doctoral Candidate
- Interview 60 - 90 minutes
- Open-ended questions but will ask additional questions for clarification and continuation of the discussion.

II. Study Purpose: *I will remind participants of the study's purpose, uses, and how the findings will be reported and shared (5 min).*

- **Purpose:** To understand how third-grade language arts instruction was affected during remote learning in the spring and fall of 2020 and which strategies (methods, materials, and technologies) have been successful or unsuccessful in remote learning from the perspective of general education teachers, learning support teachers, school administrators, and residential care providers.

III. Reminders: *I will remind participants of their rights as participants in the research study (5 min).*

- I will remind participants of their rights by reviewing the privacy and confidentiality agreement and sharing that data will remain confidential and anonymous.
- I will remind participants that the interview will be recorded and obtain permission to record the interview.
- Participants will have the opportunity to ask additional questions or express concerns.
- I will seek verbal consent to proceed.

IV. Opening Interview Session (10 - 15 min)

Goal: The objective of the interview is to understand how teachers, students, and residential care providers were supported through technology in the spring of 2020.

Q1. Introductory Question

- **Tell me about your background in education**.
    - *What roles have you had before your current position? How long have you been in your current position?*
    - *What has been your experience in supervising or teaching in an online setting?*

Q2. Remote Learning

In March 2020, the world became aware of the COVID-19 virus and the possibility of closing down schools and non-essential businesses.

- ***Can you describe the timeline of events leading up to the transition to remote learning in March 2020 from your perspective?***
    - *What were some of the concerns you had?*
    - *What were the timeline events for the remainder of spring 2020?*

V. Supporting Stakeholders in March 2020 (15 - 20 min)

The following portion of the interview will focus on how the school administration supported students, teachers, families, and residential care providers during remote learning in the spring of 2020.

Q3. Supporting Elementary Students

In March 2020, elementary students were suddenly required to participate in remote learning throughout the remainder of the spring of 2020.

- ***Can you describe some of the key tools and applications used by elementary students during remote learning in the spring of 2020?***
    - ***Dialog?***
    - ***Structure?***
    - ***Engagement?***
- ***What challenges and concerns emerged with student use of technology during this period? How did you address these concerns and challenges?***
- ***What structures and supports were in place to support student learning?***

Q4. Supporting Elementary Teachers

In March 2020, elementary teachers were suddenly required to teach remotely throughout the remainder of the spring of 2020.

- ***Do you feel that elementary teachers were prepared to teach in this new model? Why? Why not?***
    - *What training and professional development opportunities were provided to teachers?*
    - *How did you support teachers as they learned this new pedagogical approach?*

- ***From your perspective, what were some of the technological challenges that teachers experienced during this time? How did you address these challenges?***
- ***What structures and supports were in place to support teachers?***

Q5. Supporting Caregivers

Residential caregivers, parents, and guardians were suddenly required to help support students and their learning at this time.

- ***Can you describe how Learning Technologies and the IT department supported caregivers during this time?***
- ***What challenges emerged? How were these challenges addressed?***

Q6. Personal Experience

- ***What were the biggest challenges of remote learning in the spring of 2020 from your perspective? What did you learn from this experience?***

VI. Supporting Stakeholders in the fall 2020

Q7. New Schedule (Structure)

One of the most significant differences between the spring of 2020 and the fall of 2020 was the introduction of a mandatory two-week quarantine period and the adjustment of the school calendar.

- ***How did you prepare teachers, students, and caregivers for the mandatory quarantine period in the fall of 2020?***
- ***What adjustments were made to support teachers, students, and caregivers during the fall of 2020?***

Q8. Hybrid Learning (Structure)

Once students returned to the classroom in fall 2020, a new hybrid learning model emerged. Some students were in a face-to-face classroom, and others were in the residential home, health center, or home of origin during the fall of 2020.

- ***How did you prepare teachers, students, and caregivers for the hybrid learning model in the fall of 2020?***
- ***What additional technology tools were in place to support student learning in the fall of 2020?***

VII. Reflection (5 - 10 min)

The following portion of the interview will include personal experiences during remote learning in the spring and fall of 2020.

Q9. Final Reflection

- ***Reflect upon your experiences in the spring and fall of 2020.***
    - *How do the remote and hybrid learning experiences of 2020 impact how instruction is delivered today? How do you lead teachers?*
    - *What is something you wish you had done differently during remote learning? Why?*

Optional: *Is there anything else you would like to share today?*

IX. Conclusion (5 - 10 min)

Thank you for participating in my research study. It has been a pleasure learning about your experiences during remote learning. I want to assure you that your identity will be kept confidential. Transcripts will be created from audio recordings and coded for themes.

Do you have any additional questions? If you have any questions after you leave, please feel free to contact me via email or phone.

Appendix G: Codebook of A Priori Codes

Abilene Christian University

School of Educational Leadership

Codebook of the Following Research Study:

A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic

Matthew B. Bergman

July 2022

Coding for Semistructured Interviews

Semistructured interviews will be conducted with teachers and administrators. Interviews will be recorded and transcribed using www.rev.com. The interview transcripts will be coded using the following coding methods:

- Values Coding
- In-Vivo Coding
- Deductive Coding

Values Coding

For this research study, values coding will be used to analyze the experiences and attitudes of teachers, administrators, and residential care providers during remote learning in the spring of 2020.

According to Saldaña (2009), values coding will consist of the following elements:

1. **Values** - the participant's judgment about what is important about a particular topic or issue
2. **Attitudes** - how a participant thinks or feels about a topic or issue
3. **Beliefs** - a participant's acceptance that something is true or untrue based on values, beliefs, experiences, opinions, and morals

For this research study, values coding will be inductive or constructed from the data from within the interview transcription (Saldaña, 2009). The data will be grounded in an emic perspective or the participant's perspective (Saldaña, 2009).

I will pay attention to participant's responses and look for phrases such as:

- I think
- I feel
- I believe
- I want
- I need
- It is important to

The following codes were generated from participant data:

Code	Code Meaning	Description
V	Values	The participant's judgment about what is important about a particular topic or issue (Saldaña, 2009).

A	Attitude	How a participant thinks or feels about a topic or issue. Codes will be generated as one-word descriptions or abbreviations illustrating the attitude and emotion. The following contains examples of attitude codes that will be used to define participant attitudes and emotions: • POS - Positive attitude • NEG - Negative attitude • Frustration • Stressed • Awkward
B	Belief	A participant's acceptance that something is true or untrue based on values, beliefs, experiences, opinions, and morals. • A synopsis of the belief will be recorded in quotes

Codes will be transferred from a paper copy of the transcript into a spreadsheet, where they can be further analyzed. A separate tab in the spreadsheet will be used for each element (i.e. value, belief, attitude).

In-Vivo Coding

In-vivo coding will use the actual words of the participant to generate the code itself (Saldaña & Omasta, 2018). This type of coding is used to gain the perspective of participants actually living the experience.

- Data from the transcript will be read verbatim and highlighted in yellow
- A code will be generated verbatim from the participant's own words
- The code will be placed in a numbered list in chronological order at the end of the document for further analysis
- The codes will be transferred to a spreadsheet, where they will be further analyzed.

Deductive Coding

Deductive coding will be used to analyze transcripts using a priori codes or predefined codes (Saldaña & Omasta, 2018). A Codebook of A Priori codes will be used based on the three major components and terms of Transactional Distance Theory (Moore, 1997).

Code	Code Meaning	Description
Green Highlighted Text	Dialog	• All forms of interaction and communication between teachers, learners, residential care providers, and parent/guardians in a distance learning environment (Falloon, 2011; Moore, 1997). • Examples may include: o *Printed text and digital text* o *Video conferencing tools* o *Learning management systems, email, telephone, and discussion boards*
Blue Highlighted Text	Structure	• How much flexibility or rigidity a distance learning course provides learners (Moore, 1997). • Course structure typically contains objectives, teaching strategies and methods, and assessments • Examples may include: o *Prescribed goals and objectives, the pedagogical teaching model (e.g., teacher- vs. student-centered), course assessments, and learning accommodations (fallos, 2001)*
Orange Highlighted Text	Autonomy	• Perceived amount of control that a learner has throughout learning outcomes, experiences, assessments, and evaluations (Reyes, 2013) o *How much choice learners are given in what they learn, how they learn, and when they learn content.*

- The codes will be transferred to a spreadsheet, where they will be further analyzed.

Appendix H: IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World

Office of Research and Sponsored Programs
328 Hardin Administration Building, ACU Box 29145, Abilene, Texas 79699-9145
325-674-2885

July 5, 2022

Matt Bergman
Department of Educational Leadership
Abilene Christian University

Dear Matt,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled
"A Qualitative Case Study on How the Transition to Remote Learning Affected Elementary Language Arts Instruction During the COVID-19 Pandemic",

(IRB # 22-082) was approved by expedited review (Category6&7) on 7/5/2022 . Upon completion of this study, please submit the Inactivation Request Form within 30 days of study completion.

If you wish to make any changes to this study, including but not limited to changes in study personnel, number of participants recruited, changes to the consent form or process, and/or changes in overall methodology, please complete the Study Amendment Request Form

If any problems develop with the study, including any unanticipated events that may change the risk profile of your study or if there were any unapproved changes in your protocol, please inform the Office of Research and Sponsored Programs and the IRB promptly using the Unanticipated Events/Noncompliance Form.

I wish you well with your work!

Sincerely,

Russell P. Kruzelock

Vice President for Research

Additional Approvals/Instructions:

The following are all responsibilities of the Primary Investigator (PI). Violation of these responsibilities may result in suspension or termination of research by the Institutional Review Board. If the Primary Investigator is a student and fails to fulfil any of these responsibilities, the Faculty Advisor then becomes responsible for completing or upholding any and all of the following:

- If there are any changes in the research (including but not limited to change in location, members of the research team, research procedures, number of participants, target population of participants, compensation, or risk), these changes must be approved by the IRB prior to implementation.
- Report any protocol deviations or unanticipated problems to the IRB promptly according to IRB policy.
- Should the research continue past the expiration date, submit a Continuing Review Form, along with a copy of the current consent form and a new Signature Assurance Form approximately 30 days before the expiration date.
- When the research is completed, inform the Office of Research and Sponsored Programs. If your study is Expedited or Full Board, submit an Inactivation Request Form and a new Signature Assurance Form. If your study is Exempt, Non-Research, or Non-Human Research, email orsp@acu.edu to indicate that the research has finished.
- According to ACU policy, research data must be stored on ACU campus (or electronically) for 3 years from inactivation of the study, in a manner that is secure but accessible should the IRB request access.
- It is the Investigator's responsibility to maintain a general environment of safety for all research participants and all members of the research team. All risks to physical, mental, and emotional well-being as well as any risks to confidentiality should be minimized.

For additional information on the policies and procedures above, please visit the IRB website
https://cdn01.acu.edu/community/offices/academic/orsp/human-research/overview.html
or email orsp@acu.edu with your questions.