Coming off Mute: A Case Study of Elementary Students' Perceptions of Remote Learning During the Height of the COVID-19 Pandemic

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ABSTRACT

COMING OFF MUTE: A CASE STUDY OF ELEMENTARY STUDENTS PERCEPTIONS OF REMOTE LEARNING DURING THE HEIGHT OF THE COVID-19 PANDEMIC

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Northern Illinois University, 2022
Laura Ruth Johnson, Director

The purpose of this exploratory case study was to understand how elementary students perceived their learning and engagement in a remote learning environment during the COVID-19 pandemic. Five students elected to join the study with parental permission, ranging in grades 3rd – 5th. Interviews were conducted on Zoom with the students as well as their teachers and the students were observed during synchronous learning times.

Data analysis identified three areas of themes: the remote learning experience, control and power struggles, and preferences for or against remote learning. Within the first area, the remote learning experience, students identified ways to personalize their home learning environment and stay organized. They also found ways to build flexibility into an intense schedule. Teachers provided both asynchronous and synchronous learning opportunities that were largely based on their previous activities from in-person learning.

In the second area, control and power struggles, the school and teachers found ways to exert control over the students physical at home. The students, in turn, found ways to fight against the control and battle to oversee their behavior, actions, and learning.

The final area, preferences for or against remote learning, showcased a split in opinion on remote learning. While all but one student enjoyed remote learning, the content area impacted
their opinion. Their opinions were also swayed by the lack of social interaction they experienced as well as being isolated from others outside of the school day. Last, students wanted interactive and collaborative activities online, something they did not feel they were able to experience.

The findings suggest multiple ways to improve remote learning including building additional support for students and teachers online, evaluating the technology used for remote learning, and enhancing online instruction with authentic learning activities. A focus on pedagogy and technology for teacher professional development as well as online course design would benefit students as well.
COMING OFF MUTE: A CASE STUDY OF ELEMENTARY STUDENTS
PERCEPTIONS OF REMOTE LEARNING DURING THE
HEIGHT OF THE COVID-19 PANDEMIC

BY
KAREN LADENDORF
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Doctoral Director:
Laura Ruth Johnson
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“Never forget that life can only be nobly inspired and rightly lived if you take it bravely and gallantly, as a splendid adventure in which you are setting out into an unknown country, to meet many a joy, to find many a comrade, to win and lose many a battle.” Annie Besant

I took on this doctoral journey bravely as Besant encouraged. It was an adventure, a joy, and a challenge. It was also a larger part of my educational journey, beginning as a small-town music teacher and culminating with a doctoral degree in instructional technology. It was a journey that could not have been completed without the love and support of so many people.

First, I thank my chair, Dr. Laura Ruth Johnson. She took on my dissertation in the middle of a global pandemic when my first proposal was no longer a possibility. I am forever thankful for her guidance during this project and throughout my classes at Northern Illinois University. I also thank Dr. Ying Xie, my advisor and research partner. She provided many opportunities for research, growth, and publishing throughout my program. She encouraged me to follow my heart, ask the questions, and search for answers. I thank Dr. Jason Rhode for joining my committee. His feedback has been invaluable, both with this dissertation and throughout my coursework with him.

This journey never would have happened without the colleagues and administrators that took a chance and hired me to their schools throughout my career. I thank my principals, Galen Nord, Dr. Josh Reitz, and Dr. Mike Glover for bringing me into their buildings, providing me with the opportunities to teach music, grow in professional development, and start my journey into instructional technology.
My colleagues and team in my school district have been both supportive and inspirational. I am especially thankful to Becky Kline for letting me “borrow her brain” to brainstorm and work through my many thoughts. I also cannot thank Dr. Marie Hoffmann enough for hiring me into this team, encouraging me to grow in leadership, and continuing to be a rock in my professional life.

Finally, my family has always been my north star, guiding me, loving me, and giving me the reason to move forward each day. Thank you to my amazing sister, Beth, for your encouragement and love. You inspire me to look beyond my job, reflect on my world, and breathe through the hard and amazing moments.

My father, Larry, has been a constant rock and source of strength throughout my life. Thank you for questioning me, pushing me, and encouraging me to do everything, even if it scares me. I made it this far because I knew you were always there to catch me because you would not let me fall.

To my biggest inspiration, my mother, Kim: Thank you for always loving me. Thank you for inspiring me to work harder than I ever knew I could, find the passion inside me, and share that passion with the world. I can only dream to be half the educator, administrator, woman, and mother you so amazingly are.

I could not have made it through this journey without the love and support of my husband, Andrew. Thank you for never stopping me in my many endeavors and keeping my eye on the path in this journey. I think you will be prouder of this accomplishment than even I am.

Last, and never least, I thank my two girls: Laura and Emily. You inspire me more than you will ever know. Every piece of writing and presentation has always had you two at the front of my mind and my heart. I love you both to the moon and beyond.
DEDICATION

This dissertation is dedicated to my past, present, and future students.
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CHAPTER 1
INTRODUCTION

I begin this dissertation with two stories: one professional and one personal. These are moments that stand out to me as we embarked on the COVID-19 school closures and shift to online instruction.

My professional memory:

I am the Director of Innovation and Technology for my school district. My technology team had only a few days to ensure all students had their devices and were able to access digital resources at home. Due to the closures, our support team was downsized, leaving three people counting on me to provide all technical support and Wi-Fi access to 3600 students and 450 staff members. We were also tasked with supporting the Curriculum team on transitioning all instruction to a remote setting, with the emphasis on digital tools and access. Sleep was limited at best, and stress was high. Though I was working from home for a few months, I rarely saw my family quarantined in the same house with me.

The 2019-2020 school year ended in remote education for all Illinois schools. The summer of 2020 was hectic, especially for my school district. We began the planning for the 2020-2021 school year not knowing if it would be in-person, hybrid, or fully remote. We had at least six different return plans in place for where students would be located, which teachers would be in what sections, and how we would keep everyone safe. We continued to play defense, trying to keep up with an ever-changing situation, even as the 2020-2021 school year passed the half-way mark. Our joke was, yet also some hopeful solace, the statement, “Well when we’re back to a somewhat normal next year, maybe we can breathe and sleep then.” Little did we know the 2021-2022 school year would be just as stressful.

My personal memory:

My two children went to school on Friday, March 13, 2020, and left that afternoon with all of their supplies and weeks’ worth of work to complete at
home. The students in my district, where this study will take place, had the 13th off for professional learning. They left on March 12th with their usual supplies, and only came back to their school building parking lots to pick up necessary items that had been collected and bagged for them, as they were not allowed in their classrooms. Like many parents, I wondered when they were going back. As April blended into May, I realized going back was not an option.

Flash forward to Friday, November 13, 2020. My daughters have been in a hybrid face-to-face and online setting for a little more than a month. The rise in COVID-19 cases combined with the upcoming holiday travel fears forced their school district to close and move back to full remote. My youngest, only in 1st grade, cried. “We’re never going back. This is what happens at school. You go for a little bit, then go home and never go back.”

These stories stand out to me for two reasons: they remind me daily of the struggles educators and school systems have had in the shift to online and then hybrid instruction for students in their systems. They also keep me grounded. I know the stress I felt and remind myself of the stress all members of my team and teachers we serve felt as well. I also keep the students in my school district in mind with each decision we make, as I know the emotional impact they have after watching and supporting my own daughters through the shifts and constant changes.

K-12 Distance Learning

Distance learning was being explored as far back as the 1940’s when military organizations were looking for ways to consistently train new recruits throughout the country (Rozitis et al, 2018). Organizations and companies followed suit in the 1980’s and 1990’s, using the expansion of technology to use satellites, televisions, and video recordings to share media presentations at locations across the country (Rozitis et al., 2018). K-12 education systems were no different, also looking for ways to meet state mandates and expand course offerings in rural towns (Barker, 1992). Technology used at the time included video recordings, televisions, and
faxing completed assignments or scores back and forth across long distances. Phone calls were used for teachers and students to touch base and provide clarifications (Sanborn et al., 1999).

K-12 distance learning was growing rapidly prior to the COVID-19 school closures in the form of full-time learning options as well as supplemental placements for students (Larson & Archambault, 2019; Vasquez III & Straub, 2012), and was swiftly becoming a popular educational reform across the United States (Watson et al., 2014). As of the 2016-2017 school year, there were at least 429 full-time virtual schools throughout the United States and 296 blended schools where students spent time both online and in a physical building (Miron et al., 2018). Full-time virtual options were available in 34 states and blended options available in 29 states across the country (Miron et al., 2018). This growth in K-12 distance learning comes alongside the same growth in higher education and corporate training (Rice, 2006). Historically, distance learning options were centered on high school students and some middle school, with enrollment low but some growth in K-6 or K-8 virtual settings (Archambault & Crippen, 2009; Pourreau, 2015).

The expansion of K-12 remote learning came from an interest from students and parents for credit recovery (Vadell, 2013), access to courses not available in the school building (Cavanaugh et al., 2004), and to provide individualized instruction to meet the specific needs of students (Curtis & Werth, 2015). Rural schools in particular had been using distance learning to offer advanced courses in Mathematics, Foreign Language, and English (Hannum et al., 2009). Rural schools also benefited from the option to have highly qualified teachers available to their students without having to be physically at the building through distance learning (de la Varre et al., 2010).

It became clear that K-12 distance learning was becoming a viable option for students
and parents either through their local school district or at a state level (Miron et al., 2018).

However, it was still an option and not a mandate or requirement. Only teachers who opted to teach in a virtual setting were teaching, and only students who had opted for a virtual setting were participating.

The Onset of COVID-19

The onset of COVID-19 in March 2020 took the education system by surprise. The last quarter of the 2019-2020 school year was filled with fear and confusion. I share my own memories below, knowing they are not unique to me but shared with many other teachers and technology directors across the country.

I remember hearing about the virus spreading in China but thought nothing of it. I attended my state-wide technology conference in February. I sat in a district-wide, in-person institute day presentation at an auditorium at the beginning of March. My husband flew to Florida for a music conference, noting a few people were opting to wear a mask on the plane. He was coughing and thought nothing about traveling with a cold. I spent the first two weeks of March traveling to the schools in my district and presenting on cybersecurity and new student data privacy laws going into effect in a year. I remember mentioning, “Our changes in security are a lot like the COVID thing happening. We are going to review which resources are good that we will use with our students, just like we stop and wash our hands to get the germs off.”

I remember very clearly the last building I presented at on Thursday, March 12, 2020. Every teacher came to my presentation that day during their individual planning time. Their minds were not on my presentation but wondering if our state would follow others around the country that were beginning to close schools down. I remember saying, “No, that won’t happen here. We don’t have any cases in our state.” Later that day the NCAA basketball tournament was cancelled.

Friday, March 13th was a flex day. Administrators were together for professional development while students and teachers had the day off. As I sat in the administrative training, I received a text message from my husband that his district, where our two daughters also attended, was going on Spring Break early and would be closed for two weeks. I notified my superintendent, and
within an hour my district was following suit. The news had begun reporting positive cases in our area and the health department was urging closure. By the end of the day the Governor had closed all schools for two weeks.

I spent one week in the office still before the health department determined all administrators should be at home as well and our office building closed. Three technology team members, myself included, moved the district’s entire operation remote overnight. I spent the second week at home with my family and planning in case we were not coming back. I hoped to be back in the office soon but had a feeling it would not be happening. We never did go back in 2020.

My school district planned for the beginning the 2020-2021 school year with multiple options ready, including a fully remote option. The goal was never to have remote learning but rather to be back in-person in some fashion. District leadership held onto in-person learning until 4pm the evening before our first institute day. The health department’s mitigation requirements were too much for us to handle in-person and remote was the only option. Our teachers began the year on a remote schedule, having spent the summer believing and planning that in-person learning would be happening.

My story and the story of my district is not unique. Nearly all school districts in the state and throughout the country began the 2020 school year either fully remote, hybrid, or with multiple options for families in place (Dietrich et al., 2020). The Governor did not require schools to be remote for the fall of 2020, but highly encouraged it, leading to communities and schools developing different schedules and building setups that varied district to district (Ilhan et al., 2021). The mitigation strategies we had to implement at the time, including extended social distancing, contact tracing, and no mixing of cohorts, made remote learning the only initial option.

The immediate change to remote learning in 2020 and its extension into the 2020-2021 school year on such a large scale had not been seen in the K-12 education system before (Dietrich et al., 2020). Districts had experienced closures in the past due to emergency weather conditions, the most notable in recent years being Hurricane Katrina in New Orleans (Osofsky et al., 2007). However, in the case of Hurricane Katrina remote learning was not enforced nor even
Remote learning under these conditions was not traditional remote learning. This became what is known as Emergency Remote Instruction (ERI), where remote learning happens due to a sudden shift that was not anticipated (Hodges et al., 2020). ERI is temporary in nature, with the goal of the school districts to return to in-person, traditional learning as quickly as possible (Hodges et al., 2020). ERI had a direct impact on school districts, teachers, and students. It stretched district technology resources and brought gaps and inequities to the forefront (Code et al., 2020). ERI required teachers and students to manage a new school format while dealing with the emotional toll of COVID-19, closures, and isolation (Demaray et. al., 2021).

Immediately following the 2019-2020 and 2020-2021 school years, researchers began gathering teacher surveys. Teachers shared the emotional and educational support their provided students and parents (Anderson & Hira, 2020), their comfort levels with technology they used during ERI (Ladendorf et al., 2021), and their overall opinions of ERI and student achievement (Santos et al., 2021). They shared how they problem-solved together (Tawfik et al., 2021) and collaborated on new methods and activities (Justis et al., 2020).

Missing from the research was another impacted group: students. The student voice was shared through teachers and parents. Teachers shared their opinions on student performance and well-being while parents shared their opinions on student engagement and learning growth (Hinderliter et al., 2021). The direct student voice, however, was muted throughout the remote learning experience.

Problem Statement: COVID-19 and Learning in a Time of Crisis

The 2019-2020 school year was upended by the COVID-19 pandemic, reaching all corners of the world and saw mass closures of public spaces starting in early 2020.
Approximately 1.7 billion K-12 students around the globe were impacted educationally and socially by the pandemic, something the world had not experienced since World War II (Dietrich et al., 2020). Specifically, in the State of Illinois, USA, all schools were ordered closed and moved to remote instruction beginning March 17, 2020, by the Governor. As mirrored around the country and world, the forced move to remote instruction was implemented by school districts in their own unique ways, creating a variety of experiences that varied greatly community to community (Ilhan et al., 2021).

The start of the 2020-2021 school year was one of shifts. The district that is the focus for this study had plans to begin the school year with all students back in the classroom, then a hybrid schedule, and finally moved to a fully remote option right before the first day of school. Starting in January 2021 students were back in the school buildings on a hybrid schedule where elementary students were split between morning and afternoon groups. Families were able to choose to send their students back into the building or continue complete remote instruction. Classes were divided mostly by remote versus in person options chosen by families. A classroom teacher possibly had all in person students in the morning and remote students in the afternoon, if spacing and scheduling allowed. The district used the term “hybrid” to describe this schedule, while teachers coined it “A/B” to depict the two instructional groups. However, hybrid also referred to the instructional program being provided; one where the students experienced both face-to-face and online instruction, asynchronously and synchronously. The schedule was the driving force behind the instructional program, forcing teachers to adapt their instruction to a hybrid schedule.

The schedule shifted again in April 2021. The elementary school day was expanded, and all students participated in instruction at the same time. Teachers were teaching both remote and
in person students, coining the phrase “the concurrent schedule.”

As my district, as well as many others across the country, grappled with the shift to remote learning, to hybrid instruction, and finally to concurrent instruction teachers and administrators were left guessing how to provide both in person and remote instruction to elementary students. The lack of research on K-12 online instructional strategies that meet student needs, as well as what student needs in an online setting are, made a tough situation harder to manage. Decisions were made based on health metrics and guidance from the CDC. While parents and teachers were able to provide feedback throughout the year, we did not seek that same feedback from our students, even though they are directly impacted by our decisions.

Purpose Statement and Research Questions

The purpose of this multiple exploratory case study was to understand how elementary students perceived their learning and engagement in a remote learning environment. The study focused on elementary school students’ perspectives of the learning process, assessment practices, and their participation as described and critiqued by them across their classes.

This study was guided by the following research questions:

RQ1: How do elementary students describe their learning and participation in a remote learning model?
RQ2: How do elementary students describe learning and assessment activities across the content areas in a flexible hybrid learning model?
RQ3: What are the observed engagement behaviors online during both synchronous and asynchronous learning activities?
RQ4: What are elementary teachers views and perspectives of their students’ remote learning experiences and their experiences teaching remotely?
RQ5: What are elementary students perceived wants and needs for remote learning?

The teacher perspective was included in this study to gain another view of the students’ remote learning experience. The teacher view is also vital to understanding the district-required policies,
procedures, and curriculum, and how those requirements were implemented in the classroom.

Significance of the Study

K-12 online learning was on the rise prior to the COVID-19 pandemic (Larson & Archambault, 2019). While much research has been done on distance learning in higher education and some high school settings, there is a noted gap in literature for the K-12 level, specifically elementary school students (Arnesen et al., 2019). In addition, students who had been enrolled in fully remote settings had usually elected this for themselves or had parents elect it for them. The sudden shift to Emergency Remote Instruction (ERI) due to COVID-19 moved students who had no previous experience with remote instruction into an online setting, a challenge for students, parents, and teachers alike (Dietrich et al., 2020).

Many districts had done away with emergency weather closures and moved to a single day of remote instruction prior to COVID-19. The mere idea of teaching elementary school students online is not an imaginary concept. Furthermore, the COVID-19 pandemic continued to cause school day disruptions due to teacher absences and student quarantines. Online instruction has shown success in some grade levels and can be a successful fully virtual or hybrid option for K-12 school districts (Pourreau, 2015). It is imperative that we continue to refine online instruction to be as robust and engaging as face-to-face instruction can be.

Summary of the Study

This exploratory case study took place in a suburban school district outside of Chicago, IL. Students in grades 3-5 were recruited from one elementary school within the district. Individual interviews were conducted with each student as well as their teachers. Seidman’s
(2013) three-part interview process was utilized in a modified format. Observations were conducted three times for each student virtually in the class setting of their choice. Finally, focus groups were conducted at the start of the study to introduce students to the research process and at the end for both students and teachers to review the emergent themes. Chapter 2 of this study will review the e-learning theoretical framework (Aparicio et al., 2016) as well as the related literature to distance learning before and during COVID-19. Chapter 3 will review in detail the methodological approach outlined above. Chapter 4 provides a portrait of each of the five elementary students and their three teachers who participated in this study. Chapters 5, 6, and 7 will present the findings and themes of this study. Quotes from both students and teachers will be provided throughout the chapter. Finally, Chapter 8 will discuss the themes with conclusions, implications, and future research to be completed. Chapter 8 will also include reflections on COVID-19, Emergency Remote Instruction, and the path forward.

Definition of Terms

Asynchronous Learning

Online learning that takes place at a student’s own time and pace, without a set schedule or specific duration (Kerr, 2009)

Blended Learning

A class that combines both online and face-to-face instruction (Archambault & Crippen, 2009). Technology is used to deliver approximately 50% of the class content (Hamza-Lup & White, 2015). K-12 instruction has historically used the term “blended” to describe a blending of online and hands-on materials used in the classroom for face-to-face instruction (O’Byrne & Pytash, 2015). Other terms used interchangeably in the literature include hybrid learning, mixed-mode learning, and partially online learning (O’Byrne & Pytash, 2015).
Emergency Remote Instruction (ERI)

Fully online teaching during a time of crisis. It usually involves a sudden, unplanned shift in instructional delivery to meet the needs of the moment. The COVID-19 shift to online and later hybrid learning is an example of ERI (Hodges et al., 2020).

Face-to-Face Learning

Instruction that happens in the physical school building with teachers and students present together. Other terms used interchangeably in the literature include on-site, on-campus, live in person, and local instruction (Hamza-Lup & White, 2015).

Hybrid Learning

Instruction that happens both online and face-to-face (Archambault & Crippen, 2009). Hybrid courses blend online and face-to-face instructional strategies and elements (Lorenzetti, 2004). This is similar to blended to learning and used interchangeably in the literature with blended, mixed-mode, and partially online learning (O’Byrne & Pytash, 2015). In the United States, the term “hybrid” is most widely used to describe this combination of learning environments (O’Byrne & Pytash, 2015).

Learning Management System

The online space that holds all course materials and can be the central virtual gathering place for teachers and students (Kerr, 2009). Other terms used interchangeably include virtual classroom (Kerr, 2009).

Remote Learning

All the content is delivered online (Archambault & Crippen, 2009) and the students and teacher are not in the same physical location throughout the course (Hamza-Lup & White, 2015). A fully remote or online program does not offer any blended, hybrid or partially online courses (Hamza-Lup & White, 2015). Nearly all distance learning courses have some method of communication utilizing technology either asynchronously or synchronously (Hanover Research, 2011). Other terms used interchangeably include distance learning and online learning.
Social Emotional Learning

The learning process to gain and use the knowledge and skills to manage emotions, feel empathy, and establish positive relationships. Social Emotional Learning includes the competencies of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2022).

Student Centered Learning Environment

Student-focused instruction with students engaging in problem-solving, self-directed learning and authentic activities (Land et al., 2012). This learning environment draws on the constructivist theories of problem-based learning (Hmelo-Silver, 2004), situated cognition (Brown et al., 1989), and communities of practice (Wenger, 1998).

Synchronous Learning

Instruction that occurs live or in real time. The teacher and students must be in the same place at the same time. This could be done face-to-face or virtually via videoconferencing tools (Kerr, 2009).

Videoconferencing

Live video feed to connect students and teachers virtually face-to-face for direct instruction, collaboration, and learning activities (Peacock et al., 2012). While previously used with satellites (Anderson, 2008), videoconferencing tools have moved online and connect students via websites and online software.
CHAPTER 2
LITERATURE REVIEW

Distance learning, online learning, remote instruction, and eLearning are terms used interchangeably. For the purpose of this literature review, “distance learning,” “remote learning,” and “online learning” will be used to describe fully online or remote instruction. This chapter will provide a very brief history of distance learning, a theoretical framework for distance learning design, and a review of literature related to the framework. The educational shifts made to adapt to the COVID-19 pandemic will be reviewed as they relate to the framework as well. Finally, gaps in the literature will be presented, as well as a note on including students in research and when reviewing and reflecting on the educational process.

Distance Learning: A Brief History

Distance learning has been in existence in the United States before the current technology was imagined. As early as the 1940’s, military organizations were exploring ways of providing consistent training for new recruits across the country without having to transport everyone to one single location (Rozitis et al., 2018). The 1980’s and 1990’s saw a growth in digital media and the ability to provide multimedia presentations that could be sent across the country (Rozitis et al., 2018). Today, K-12 distance learning can help provide families options for school choice, credit recovery, educational reform, and preparation for 21st century workplace skills.
K-12 distance learning began in the late 1980’s and early 1990’s. Barker (1992) noted that schools utilized distance learning to meet state curriculum mandates, provided courses when a teacher was not able to be hired in the district, and to provide training to teachers on a variety of topics in the early 1990’s. Middle Tennessee State University developed a satellite-linked distance learning program to connect with rural districts in the area in 1998 (Sanborn et al., 1999). The program utilized video recordings, live satellite television presentations, and follow-up by phone and fax to provide drug, alcohol, and violence avoidance lessons to high school students.

As of the 2016-2017 school year, approximately 412,000 K-12 students were enrolled in either a virtual or blended school option (Miron et al., 2018). These schools tend to have lower numbers of minority or low-income students, with blended options having slightly more of these populations than virtual options (Miron et al., 2018). The growth in K-12 online learning continued due to the potential to provide access to content and instruction not necessarily available at the school building (Bakia et al., 2012). Students potentially have access to courses taught by teachers that their school districts could not afford to hire full time, such as advanced placement and specialized courses. This assists the school district in hiring and recruiting teachers without the worry of physical distance of the instructor (Bakia et al., 2012).

Historically, K-12 distance learning was not without its challenges. There was and continues to be a lack of qualified teachers, resources, and guidelines across states and districts (California State Department of Education, 1990). While resources and training continue to be an issue, as discussed later in this chapter, states and organizations such as iNACOL are taking on the challenge of developing descriptions and standards for K-12 online education (Barbour,
The standards, both emerging and revised, are focused on effective online educational practices to meet the challenge of growing K-12 distance learning (Cavanaugh et al., 2009).

Theoretical Framework

Aparicio et al. (2016) proposed their holistic e-learning theoretical framework to explain the components of distance learning and how those components interact with each other. Three main components are present in the framework: people, technologies, and services. Figure 1 shows the framework in detail.

Figure 1. E-Learning Systems Theoretical Framework, Aparicio et al. (2016) p. 302
People are the distance learning stakeholders, or the ones who are directly involved with the production of distance learning or consumers of the content. This includes students, whom the framework describes as customers consuming the content and experiencing the learning. Suppliers are teachers and content providers, those people who create the instructional activities, content, and assessments and then present the final products to the consumers or students. Additional stakeholders to consider are the leaders that run the distance learning system. In this study’s case, the district and administration would be included as the organizational unit managing the distance learning a hybrid instruction (Aparicio et al., 2016). Finally, parents are also important stakeholders to consider because students require much parental involvement for successful online instruction (Curtis & Werth, 2015).

Technologies are the distance learning digital tools used to create, provide, and obtain the content throughout the online course. Students and teachers also use the technologies to collaborate with each other and communicate across the distance (Aparicio et al., 2016).

Services are the pedagogical and instructional e-learning activities designed by the suppliers and presented to the consumers to complete. The learning activities can take on any shape or follow any instructional theory. Aparicio et al., (2016) noted instructional theories such as distributed learning, communities of practice, and knowledge building communities as possible examples from their literature reviews of adult learning. Instructional and assessment strategies could include problem solving activities, collaboration with peers, simulations, contextualized instruction, authentic project-based assessments, and scaffolding of learning through materials, resources, and instructional supports (Aparicio et al., 2016).

The e-learning theoretical framework was validated in a study of undergraduate and graduate students in Brazil (Cidral et al., 2018). Students completed a satisfaction survey aligned
to the three components and the interactions between them. After a path analysis was competed, Cidral et al. (2018) found that higher levels of student satisfaction with the online course had a positive impact on their individual performance. Their overall use of online tools and instruction did not interact with their personal satisfaction; however, both positively impacted overall performance. The overall quality of information provided to students, the quality of the online system and quality of assessment opportunities contributed positively to the overall perceived satisfaction students had with the online course (Cidral et al., 2018). The teacher’s attitude also positively impacted the level of student satisfaction. In addition, the quality of the content, instruction, and collaboration opportunities were seen as important and impacted the overall quality of the online course. Finally, how well students felt they were able to collaborate and interact with each other grew their level of satisfaction with the course (Cidral et al., 2018).

The three components are connected and all necessary for successful distance learning experiences. The “people” component interacts with the e-learning system (Aparicio et al., 2016). This can be seen in students participating in the online course, teachers developing and facilitating the instruction, administrators guiding teachers, and parents supporting their students. The e-learning technology allows people to interact and collaborate (Aparicio et al., 2016). Students collaborate with each other while teachers collaborate on instruction. Students and teachers collaborate on the learning and assessment activities, all enabled by the technological communication methods (Aparicio et al., 2016). The e-learning services utilize both the people and the technology to bring the online learning to fruition through specific pedagogy, instructional strategies and frameworks (Aparicio et al., 2016).

While Aparicio et al.’s framework is for the older and adult learner, and further was validated with a sample of university and graduate level students, the concepts can be aligned to
the K-12 system. The following sections dive into the three components as they relate to K-12
distance learning and school systems in general.

People

Aparicio et al. (2016) place all stakeholders who are directly involved with or impacted
by the distance learning environment. While multiple stakeholders are involved including district
administrators, state officials, school Boards of Education, and community organization, these
groups are not always directly impacted, though they may make organizational decisions that
have a direct impact on other stakeholders. For the purpose of this study, we will focus on three
groups of people: teachers, students, and parents. Teachers are developing the online experiences
that students are completing. Parents are involved through motivation of their students.

Teachers

Online teaching has grown over the past two decades. As stated earlier, the number of
students enrolled in a virtual or blended option was well over 400,000 K-12 students as of the
2016-2017 school year (Miron et al., 2018). While projections are not out as of yet, it will be
interesting to see if that enrollment grows again after the COVID-19 pandemic closures and
families opt for a fully remote, virtual charter, or virtual home school option. The growth in
online learning opportunities leads to a needed growth in virtual teachers. As of 2012, only 1.3%
of surveyed teacher preparation programs offered a virtual field experience option for pre-service
teachers (Kennedy & Archambault, 2012). This has led to in-service teachers having to learn and
grow in virtual learning on their own. The following sections showcase who remote teachers are,
their roles in the virtual classroom, skills they possess and challenges they encounter teaching
Teaching online was an option, not a mandate, prior to COVID-19. Archambault and Larson (2015) surveyed online teachers and found they were either full-time traditional teachers seeking supplemental income, teachers who wanted a flexible schedule with the ability to work from home to care for young children, were not able to obtain a full-time traditional teaching position, were trying to accommodate for their spouse or partner’s career or were retired. This would indicate that much of the time online teachers were not full-time employed. This is not to say these teachers were not experienced or qualified teachers. These online educators described themselves as having advanced degrees, multiple years in the educational field, and a desire to try something new and innovative in the classroom (Archambault & Crippen, 2009).

Archambault and Larson (2015) conducted a survey of fully online teachers and their perspectives on the position. Distance learning teachers felt they were able to form strong relationships with their students. They also felt more actively engaged with parents and noted communication was at a higher level than when in the classroom (Archambault and Larson, 2015). This could be due to the increased need for parental involvement with students in online learning environments. These teachers indicated they had a love for technology and saw online learning as a means to try something new, innovative, and different. They also noted that they had specific frustrations with traditional face-to-face instruction, including class behavior and district policies (Archambault and Larson, 2015). Still others were concerned about the permanence of their positions in the traditional school environment (Farmer & West, 2019). Distance instruction provided them with a means for income as well as a chance to be out of the
traditional educator career environment (Archambault & Larson, 2015).

Larkin et al. (2016) surveyed 108 virtual K-12 teachers and found similar results. The teachers surveyed stated they liked the flexibility the position offered and the ability to meet individual student needs in a more personalized manner. Teachers also indicated they were able to build a strong professional community with other virtual teachers and receive in-the-moment technical support (Larkin et al., 2016). Overall, teachers who opt to teach online have a positive view on the position and the potential virtual teaching has to meet student needs and try innovative approaches to teaching and learning.

Role of the Remote Teacher

Online instruction shifts the educator’s role, sometimes drastically depending on how much ready-to-use instructional materials and postings are provided or required for teachers to use by their districts or institutions (Barbour, 2012). When able to design all instruction themselves, teachers have found to be shifting from the giver of all information to a facilitator in the online classroom by guiding students through problems, activities, critical thinking exercises, and performance-based assessments (Dietrich et al., 2020). Online teaching requires that teachers create engaging and motivating lessons in order to keep students’ attention and drive to complete the assignments. With these activities and assessments comes a larger amount of formative and summative data for the online teacher to review and use to guide future instruction (Archambault et al., 2014). Online teachers must also provide instructional support beyond the academic content. In a survey conducted by Amro and Borup (2019), distance learning teachers reported providing technical troubleshooting and lessons on the software. The teacher role expanded to include not just instruction but also one of technology expert and help desk support.
Teacher Skills and Characteristics

The United States does not have a national certification program and allows each state to determine their requirements to become a certified teacher. Very few states have an online learning certification program and even fewer require pre-service teachers to have online teaching experience in order to gain certification (Archambault et al., 2014). This requires online teachers to develop their own skills through personal growth and professional learning they seek out themselves.

Based on their survey of online teachers, Archambault and Larson (2015) suggest that online teachers must be organized, experienced in education, and have strong communication skills in order to be successful in distance learning. There is a large amount of online lesson design and facilitation that takes place in distance learning. Online teachers should have strong communication skills to properly instruct students either live or through flexible activities, as well as involve parents and other caregivers in the expectations (Archambault & Larson, 2015).

In traditional face-to-face instruction, the teacher can gather formative, informal, and observational data immediately based on their observations and live interactions with students. In the online environment, every submission becomes a piece of assessment data. With the large amount of data coming in, teachers need to be organized in order to use the data in a timely fashion and adjust future instruction accordingly (Archambault & Larson, 2015). There can be a delay in gathering data on student understanding in the online environment when compared to face-to-face instruction. Teachers must respond quickly to students to ensure misconceptions do not grow and learning is not halted (Archambault & Larson, 2015).

Archambault et al. (2014) argued online teachers should have a strong understanding of
technological pedagogical content knowledge (TPACK) and how technology, pedagogy, and content knowledge combine in a distance learning environment (Koehler & Mishra, 2008), seen in Figure 2.

In general, a teacher possesses knowledge of pedagogy, knowledge of their content, and knowledge of technology. These three areas overlap, showcasing a teacher’s knowledge of how certain instructional designs or strategies work within a given content area, or how specific technology tools can enhance those instructional strategies (Koehler & Mishra, 2008). Specifically, a teacher’s pedagogical content knowledge (PCK) is necessary to understand which instructional strategies work with the content. Online teachers need to have a strong understanding of possible misconceptions within their content and plan for ways to ensure students do not form those misconceptions (Archambault, 2014). Further, a teacher’s technological pedagogical knowledge (TPK) is necessary to understand which technology tools will enhance those instructional strategies. Teachers can use their knowledge of technology to enhance the content and the pedagogy (Archambault, 2014). Archambault et al., (2014) suggests distance learning teachers would most benefit from focusing on the technology being used in the virtual setting and adjusting their pedagogy to meet the virtual platform. Technology integration
is a necessary skill for online teachers and continues to be a barrier to many (Koh et al., 2014).

Mishra (2019) argues the TPACK model’s frequently overlooked feature must be at the forefront for teachers. The dotted line around the model depicts contextual knowledge. This knowledge focuses on what teachers know are available to them in their given context (Mishra, 2019). For example, teachers should be aware of the technology that is available to them through their district, curriculum required to be covered, standards required to be addressed, and knowledge of the individual school, district, community, students, and state. This knowledge is essential for incorporating technology into the classroom (Mishra, 2019). Teachers can tap into that technology knowledge with targeted professional learning to ensure they are familiar with the tools (Kaur, 2020). While Archambault et al. (2014) are correct that online teachers need to have a strong sense of technology for online pedagogy, the instructors must still be aware of the students and community they are serving as well as the organization, school, and district requirements (Mishra, 2019). Incorporating any piece of technology for the sake of using it should not be the role of any instructor, in-person or remote.

Fostering relationships with students in the virtual setting is necessary for the teacher to design instruction, assess students, and promote engagement in the online class (Archambault et al., 2014). This can be done through multiple technology tools such as discussion boards, podcasting, and posting online videos. One popular method is to use live videoconferencing. This allows the teacher to view students in real-time, have authentic conversations, and allow students to see each other. However, as pointed out in later sections, the technology tool alone does not lead to success in forming relationships. The teacher must develop the instruction and facilitate the discussions to build the relationships (Rehn et al., 2018).
Challenges for Remote Teachers

Class size is an ongoing debate in K-12 education. While the average class size in the United States was approximately 16 students per teacher in 2018, virtual teachers reported having as many as 45 students in a section (Miron et al., 2018). Online teachers reported larger class sizes made it difficult for them to consistently and thoroughly review all the student data received and provide timely feedback (Miron et al., 2018). Larkin et al. (2016) found similar results in their survey where virtual K-12 teachers indicated the workload and number of online students can be cumbersome, with the level of compensation not equal to the large student caseload and workload. Online teachers can have difficulty finding a work-life balance due to the fluid schedule and increased workload. Even with set synchronous learning times, students are able to submit work on their own schedule, providing the teacher with non-stop tasks to complete (Farmer & West, 2019).

While teachers assume that teaching online will be easier to manage and provide instruction for, Itow (2020) warns that the opposite is potentially true. The independence of space and time management can be a struggle for students and teachers alike. As seen in later sections, developing online materials is not simply a “copy paste” of face-to-face activities onto a website. The online teacher must revise nearly all lessons in order to meet the needs of the students and adjust for technology and resource access (Murillo & Jones, 2020). The increased emphasis on engaging students in a virtual setting, as opposed to simply creating to-dos and a specific amount of work for a specified time, can be overwhelming and a struggle for teachers, especially those who do not have a strong sense of TPACK (Ladendorf et al., 2021). Further, motivating students and not being able to immediately interact with them can become a challenge for the virtual instructor (Larkin et al., 2016).
Teachers require training and support to incorporate technology such as videoconferencing to ensure the instruction and tools are used to engage students and not simply deliver sit-and-get instruction (Anderson, 2008). School districts and virtual program organizations have recognized the need for additional support and professional development for online teachers (Vasquez III & Serianni, 2012). However there has historically been a lack of time and resources to train teachers. Further, online programs have not included online experiences for their teacher candidates, making even younger, new teachers inadequately prepared for the online teaching role (Vasquez III & Serianni, 2012). This same lack of support was seen when schools shifted to online learning at the start of the COVID-19 pandemic. As explored later in this chapter, teachers reported having little support and training on new learning management systems, videoconferencing software, and other digital tools (Anderson & Hira, 2020). In many cases, prior budget cuts had eliminated the embedded support such as instructional or technology coaches that teachers could have relied on throughout the pandemic (Anderson & Hira, 2020).

A struggle for school districts and virtual organization leaders is a lack of research on what defines effective K-12 online learning (Barbour, 2012). Despite the research that has been conducted, there exists a gap in what online teaching for K-12 education can and should look like, as well as what will be support K-12 teachers in these new virtual settings (Barbour, 2019). This creates two challenges for professional development providers: what do we want online learning for our students to look like and how to we help our teachers bring it to life? Without a body of research to guide organizations, teachers went into the COVID-19 pandemic with little guidance and felt a lack of support, as seen in later sections.

Teachers also experience first-hand the inequalities of their students in an online learning
environment. There are large gaps in parental involvement, income, access to electronic devices, and internet access between students, many times within the same classroom (Anderson & Hira, 2020). Teachers had to support all students and provide instruction that could be obtained and completed no matter the home situation, motivation, or resources available for students.

Students

Students do not typically choose to enter an online learning environment. The decision is made for them by their parents or the school system. Despite not having input on their experiences, students are expected to complete the learning activities and successfully navigate the virtual learning environment. The following sections provide virtual students’ skills, characteristics, needs, expectations, participation, academic achievement, and challenges.

Student Skills and Characteristics

Coraso (2003) stated, “Kids are social and want to gain control of their lives and share that sense of control with each other,” (p. xi). While speaking to young children, this is true for any age. Students want to have a sense of control over their learning and experiences. However, many times students lack the skills necessary to have full control and successfully navigate their learning journeys, especially in a distance learning environment. Online high school teachers noted their students were lacking in many of the skills necessary to be successful online, including organization, motivation, and ability to create their own learning structure and environment off-site (Farmer & West, 2019). Carter Jr. et al. (2020) suggests students need to have strong skills in self-regulated learning in order to complete independent work in general. This extends into student success in distance education as well (Huh & Reigeluth, 2018).
Teachers need to provide direct instruction on self-regulated learning skills and reinforce those lessons consistently throughout distance learning, as well as in person, to help students successfully complete the course (Archambault, 2014).

Stephen et al. (2020) conducted a survey with 82 nontraditional undergraduate students who worked at least 35 hours a week alongside taking classes. Their findings suggested the students needed a high level of self-regulation and self-evaluation to complete the online course successfully. Additionally, self-efficacy was suggested to be an important skill for students to persist and complete the course. However, their findings suggested it was not the actual level of self-efficacy but the students’ own perceptions of their self-efficacy and self-regulation that made a difference in their ability to persist (Stephen et al., 2020). This study implies the need for students to have a sense of self-regulation and self-efficacy and potentially have lessons on building these skills in the online setting. Success online can potentially be determined by the students’ own use of self-regulation skills by directing and navigating their own learning (Hodges, 2005).

Another skill that students should possess is self-advocation. In an online environment, the teacher is not in the same room and cannot read body language nor sometimes hear tone of voice clearly through a computer screen. Students need high levels of communication skills to advocate for themselves and successfully complete distance learning. The younger the student, the more difficult this becomes as they learn these skills in person (Shaytura et al., 2020). Even older students struggle with these skills. Teachers again should provide direct instruction and consistently reinforce these skills no matter if online, face-to-face, or hybrid (Archambault, 2014).

Aparicio et al. (2017) suggest that a level of grit is necessary for online learning success.
Students with grit demonstrate a high level of self-control, motivation, and persistence to seek out long-term goals. In an online learning environment, students with grit are more persistent to complete the course requirements, no matter the difficulty or challenges of learning process online. While these students do not necessarily participate in online learning more than other students, they do have a high level of perceived satisfaction towards the online learning system when compared to their classmates with less grit (Aparicio et al., 2017).

**Student Needs and Expectations**

As stated earlier, students are social and want to socialize with each other (Coraso, 2003). There are two relationships to consider: the student-student relationship and the student-teacher relationship. The student-teacher relationship cultivates learning and growth cognitively, socially, and morally. The student-student relationship builds upon all other relationships and mirrors those of the student-teacher, or student-adult in general (Piaget, 1966). Both are vital in any learning setting, but especially in distance learning.

Oliver et al. (2009) conducted a study of older distance learning students. The students reported expecting their teachers to have taken a more active role in their experience by engaging them in activities, providing feedback, and collaborating with them. They were looking for the online version of the course to be similar to traditional face-to-face instruction where the teacher was activity and not simply providing online material to review. The student-teacher relationship was not cultivated through online learning that did not include live instruction or community building activities (Piaget, 1966).

Eisenbach and Greathouse (2020) interviewed two middle school students prior to the COVID-19 pandemic. These students had opted for a fully remote environment. Both indicated
that while they were able to know and form a relationship with their online teacher, they felt disconnected to their classmates. They preferred live instruction to asynchronous work because they were able to interact with their classmates and form relationships with their peers. Students in Oliver et al.’s 2009 study suggested teachers engage with their students through discussion boards, chat rooms, and messaging. They also suggested teachers would create more engaging instruction through live video conferencing and by providing interactive lesson activities such as problem solving, collaborative questions, and collaborative live activities. Students in Oliver et al.’s study (2009) also indicated they wanted less “busy work” and more authentic assignments. They were looking for fewer reading-worksheet pairs to complete and more collaborative problem solving or engaging projects to work through.

Age of the student could potentially have an impact on their expectations and preferences. Parrish (2009) studied elementary and middle school students’ and teachers’ reactions to a virtual dance class. While teachers of all grades did not feel the experience was completely successful, and elementary students were not always engaged, middle school students felt the experience was good, engaging, and preferable to a live dance class.

**Student Satisfaction in Online Learning**

While younger students may not necessarily choose to participate in remote learning, older students at the university level do make the choice. Higher education students find online learning to be flexible to their individual needs, time, place, and pace (Kristanto et al., 2020). Additionally, when given the opportunity to communicate and collaborate across distance, students prefer the communication and feel it is a positive component to online learning. This suggests that students may prefer the collaboration and communication over the flexibility and
freedom of choice an online class provides (Gillett-Swan, 2017). Communication at a distance has been a valued feature of online learning by students, especially at the graduate level. Whitworth (1999) saw these results back in the late 1900’s, with elementary teachers in a graduate school experiencing distance learning and valuing the ability to share with colleagues at different in-person sites across a long distance. Communication, collaboration, and sharing are key for students to feel satisfied with the online learning experience.

Aparicio et al. (2017) tested a hypothesized model to understand what elements determined e-learning system success with students based on components of the e-learning theoretical framework (Aparicio et al, 2016). 383 university level students participated in the study via survey. The resulting path analysis indicated student grit, quality of the information online, quality of the e-learning system, and quality of service provided to students impacted students’ level of satisfaction. Perceived success was determined by the level of student use and student satisfaction (Aparicio et al., 2017). Students felt more satisfied with the experience if the system was perceived to be of high quality, however this did not impact their overall use of the system. This would indicate students use the learning management platform if it is the required system no matter their view of the quality of the system. Additionally, if students experienced technical problems or needed to reach out to support, they perceived the system as having a lower quality and indicated a lower level of satisfaction. Diving deeper into the support, if the support provided to the students was perceived as positive and helpful, students became more satisfied with the system overall (Aparicio et al., 2017).

Remote learning also has the potential to alleviate stress in the classroom setting. Lazarevic and Bentz (2021) surveyed 139 undergraduate students enrolled in either a remote or in-person class based on their personal preference. Their results indicated students in the face-to-
face setting felt more stress than their peers in the remote setting. The remote students felt they were able to find time to study, were able to access the learning materials easily, and manage stress from social situations and family expectations (Lazarevic & Bentz, 2021). These results mirror teachers who opt to teach in the remote setting. This would imply that students and teachers who opt for remote are aware of the expectations and environment and are wanting to take on this style of teaching and learning.

**Student Participation and Completion in Online Learning**

No matter the reason for enrolling in online learning, student satisfaction can impact their levels of participation, completion of the course and their overall academic achievement online. Academic achievement will be reviewed in the following section. This section will focus on how students participate online and the factors that impact their completion of the online course.

Louwrens and Hartnett (2015) conducted a study observing middle school students participating in an online learning cohort in New Zealand. They found the students engaged online in three ways: behaviorally, cognitively, and emotionally. The students completed the assigned work and teacher expectations for behavioral engagement. They provided feedback to each other and their teacher as well as were receptive to feedback for cognitive engagement. Finally, they contributed to the learning environment and collaborated with their peers, indicating emotional engagement (Lowrens & Hartnett, 2015). This cohort of students were fully engaged with the virtual learning, indicating they potentially had a high level of motivation to complete the work at hand.

The types of student engagement Lowrens and Harnett (2015) saw in their study was directly connected to the environment and instruction the online teachers created for them. This
would suggest the online environment, structure, and instruction all can impact student participation and their motivation to complete the course. De la Varre et al. (2014) surveyed 720 high school students from 93 rural schools taking a year-long online Advanced Placement English Literature and Composition class. All of the students had dropped the online class at some point during the school year. Both the teachers and students provided reasons for the course drops, with much overlap between the groups. Scheduling and time constraints were main reasons for dropping the course. Some students felt the course required too much time and conflicted with their other engagements outside of the regular school day. Students also connected the high amount of time required for the course with the high level of academic rigor. The course was very intense, required a lot of time, and overwhelmed the students. They did not feel connected to the teacher, did not like having immediate feedback, and felt they were challenged by the use of the technology (De la Varre et al., 2014). Student motivation to participate, complete the online course, and their overall levels of satisfaction are tied to the tools used, the instruction and activities provided, and the connections they have to the instructor and each other.

Academic Achievement in Online Learning

In general, virtual schools that are part of a local school district outperform those that are charter or private operated (Miron et al, 2018). Further, Cavanaugh (2001) found no statistically significant difference in final course and exam scores between online learners and traditional face-to-face learners after completing a meta-analysis of online learning studies and found no single factor in online course development to outweigh another for student success in higher education courses (Cavanaugh et al., 2004). However, Barbour (2012) found full-time online K-
12 programs were lower performing when compared to their face-to-face counterparts. This lack of consistency in results showcases the varied program experiences, expectations, and training provided to students and teachers across the country between higher education and K-12 education. It also could potentially be due to a stigma the distance learning experience has of being lower-quality and easy to complete (Hodges et al., 2020). In a study of higher education students, Nguyen & Zhang (2001) found that while students anticipated a higher average grade in their online class to be roughly 86%, the actual average at the end of the course was 67%. Students went into the course expecting it to be easier due to the online environment, and the results did not match their expectations. Further, adult learners feel more successful if they perceive the online system is of high quality, easy to navigate, and well-structured (Cidral et al., 2018). However, the gap still exists in K-12 distance learning and academic achievement, especially at a large-scale level.

Mixing instructional designs can have a positive impact on student achievement. After completing an action research project implementing a flipped classroom instructional model (Zhang et al., 2014), Gariou-Papalexiou et al. (2017) found Greek middle school students were more involved in the lessons and engaged with the learning activities. However, situations like this involve putting lecture material online and hands-on experiences face-to-face. In this hybrid-style learning environment the students were still in the physical school building and collaborating with each other in person.

Despite the supports put into place, academic failure or incompletion of online courses does exist. Students drop or fail online learning programs sometimes in part due to the lack of support between the school, online teacher, and home (Curtis & Werth, 2015). Similar to teacher, parents have noted lack of motivation and independence as a barrier to their children’s success in
distance learning (Curtis & Werth, 2015). Upon reflection, parents of secondary students who were not able to successfully complete a distance learning program noted their students’ inability to keep to a daily plan, follow a schedule, or keep themselves on task independently as barriers to their success (Curtis & Werth, 2015). They felt too much freedom to complete assignments in a flexible manner or not attend a set live course equated to their children’s failure (Curtis & Werth, 2015).

**Challenges for Remote Students**

States do not have a unified approach to online instruction across the country, leading to a wide variety of experiences and expectations for students. Archambault et al. (2016) recommended creating a unified set of guidelines for online course expectations and attendance to better support students in these programs. However, prior to the COVID-19 pandemic, these efforts had not been underway.

Prolonged student engagement is also a challenge for online learning teachers and environments. Teachers reported in a study by Farmer and West (2019) that online high school students would begin a course with enthusiasm and excitement, to later drop their levels of engagement when the work became more difficult. Students have echoed those statements, sharing that without an adult present it was easy to become distracted, stay off task, and not complete their work (Barbour, 2015). Students have also noted difficulties with communication as a barrier to their learning. If instruction was provided fully asynchronously or live with no time for question and answers, students felt they were not involved in their own learning (Ilan et al., 2021). This led to a lack of engagement, lower completion rates, and lower scores overall.
Parents

Online learning has not always been an available option for parents. In many cases parents would need to enroll their children in a private or charter school program or provide homeschooling with the assistance of online digital curriculum they purchase themselves (Curtis & Werth, 2015). While the reasonings vary, many parents chose the online option for their students to either help them move ahead in a challenging manner, or to remove them from what they perceive to be inappropriate or counterproductive learning environments in their local public school (Curtis & Werth, 2015).

Parental Support

Parenting and supporting a student participating in an online learning program is not the same as supporting a student in a traditional program. Parents need take an active role in their child’s online education. The parent is physically with the student while the teacher is at a distance. This requires parents to know the technology and expectations. However, parents do not always have the technical skills their children possess. This can lead to an inability to support their children in the technical navigation of a course and in completion of activities (Anastasiades et al., 2008).

Parents can underestimate the influence they have over their child’s engagement and performance in a remote setting. Borup et al. (2013) conducted a multi-semester study with two online freshman-level high school English courses, surveying both the students and their parents. In the 82 paired results, there was a distinct difference in perspective between the parents and the students. While parents felt that the student-instructor relationship was the motivating factor for their children to complete their work, students indicated it was their relationship and interactions
with their parents that motivated them (Borup et al., 2013). Students also reported spending more time interacting with their parents, more than their interactions with their instructors or peers. These results suggest the importance of parental involvement in the online setting. Additionally, parents should be aware of their influence over their students and take the active role students see a need for in an online setting.

**Schools Supporting Parents**

Parents can exhibit anxiety over their children’s progress in the online school setting. This could potentially be due to the parent perspective of the level of work provided, navigating the online platform, and the level of teacher support (Hinderliter et al., 2021). Parents also need support in how to teach and support their children in an online setting, something they feel the schools should provide (Anderson & Hira, 2020). Remote schools tend to provide support to parents on the structure, times, and login information however not much in the way of providing children academic support (Daniela et al., 2021). Schools could support parents by ensuring they have an understanding of the online course or program requirements and providing support through parent meetings, webinars, and lessons geared toward their role in educating their child (Archambault et al., 2013).

**Technologies**

There is a very large field of literature on incorporating technology into instruction, including on assessment outcomes, 1:1 devices, interactive whiteboard, virtual reality, and the impact technology has in general. While this section could take up an entire chapter of its own, I have chosen to focus on general positives and barriers to technology integration. Technology is
also directly connected with instruction, therefore embedding of technology within the online classroom is discussed in the next section.

**Technology in K-12 Education**

Technology has grown exponentially over the past three decades. Instructional tools used in the past have made way to newer, collaborative and online versions to expedite learning with 1:1 technology. In the late 20th Century, Zhang (1998) noted email, telephone, and fax were the top technology choices for remote instruction. Interestingly, fax was considered more beneficial and effective over email at the time of Zhang’s 1998 study. Reflecting on technology use in our everyday lives now when compared to Zhang’s study illustrated how far technology has come and how quickly it changed.

The emergence of computing devices has led many districts to provide each student with a device, known as a 1:1 setting. Two common devices used in the K-12 setting are the Chromebook and the iPad tablet. Teacher incorporation of individual devices has been widely reviewed. Two studies will be presented as a representation of the multitude of research studies on incorporating technology devices with students.

Alfageh and Alkarzon (2020) conducted a study with four elementary school teachers consisting of an interview and three observations while their students used Chromebooks in the classroom setting. The teachers indicated the Chromebooks were efficient and helped with students producing their work. Teachers also noted the 1:1 devices allowed them to present material and switch topics easily while engaging students with the interactivity built into the device. They also felt the devices were good for students with special needs by providing accessible features. Alfageh and Alkarzon (2020) did note a learning curve for students,
observing it took approximately three weeks for students learn the devices and move past the silliness of “test-driving” a device to more serious work. Despite this, the Chromebooks provided students with a good experience and became part of the learning process (Alfageh & Alkarzon, 2020). These findings suggest the value 1:1 devices can provide to teachers and students if the necessary scaffolded support is provided throughout the initial introductory phase.

Al-Bogami and Elyas (2020) conducted a study with middle school students in a private school in Saudi Arabia. Students utilized an iPad throughout their classes and learning activities. After surveying the students, Al-Bogami and Elyas (2020) found students generally felt the iPad was helpful in developing their reading and vocabulary skills, potentially due to the increased level of engagement and participation they felt they had when they used the iPad in reading class. Students strongly noted the iPad allowed them to tap into their creativity by giving them the means to develop their own content and engaging more with the material (Al-Bogami & Elyas, 2020). It is interesting that students were felt their engagement and motivation increased due to the ability to develop material and be creative.

Alfageh and Alkarzon (2020) focused on the teacher perspective, suggesting that while teachers were able to increase their productivity and felt students were engaged, they had to focus on behavior and appropriate use of the device. Al-Bogami and Elyas (2020) took the student perspective into consideration in their study, showing how students can perceive their own motivation and engagement based on the ability to be creative with a device. Each study suggests the positive impact 1:1 devices can have on students and teachers. Devices can provide teachers with an easy means to share material, meet individual students’ needs, and create interactive actives, while students can feel a sense of empowerment, motivation, and engagement in the learning (Al-Bogami & Elyas, 2020; Alfageh & Alkarzon, 2020; Leaman & Corcoran,
Devices are only a portion of the technology available in K-12 education. Digital tools are accessed on those devices to provide students with interactive and creative activities. Crompton et al. (2021) conducted a literature review of educational technology used in K-12 schools. They found both internet-based and offline tools were used. Offline tools included the radio, telephone, and televisions. The internet-based tools list was much longer and divided into 6 categories: communication tools, free resources, learning management systems, online workspaces, social media, and specific applications (Crompton et al., 2021). Table 1 shows the breakdown of tools by category.

<table>
<thead>
<tr>
<th>Communication Tools</th>
<th>Free Online Resources</th>
<th>Learning Management Systems</th>
<th>Online Workspaces</th>
<th>Social Media</th>
<th>Specific Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom</td>
<td>YouTube</td>
<td>Canvas</td>
<td>Microsoft 365</td>
<td>Facebook</td>
<td>Nearpod</td>
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<tr>
<td>Tencent Meeting</td>
<td>Khan Academy</td>
<td>Schoology</td>
<td>Google Workplace</td>
<td>WhatsApp</td>
<td>Zaptoons</td>
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<tr>
<td>Email Services</td>
<td>MOOCs</td>
<td>PowerSchool</td>
<td>Twitter</td>
<td>Tik Tok</td>
<td>SWYG</td>
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<tr>
<td>SMS/Text</td>
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<td>Skyward</td>
<td>WeChat</td>
<td>WeChat</td>
<td>Flipgrid</td>
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<td>Skype</td>
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<td>Google Classroom</td>
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<td>Freckle Math</td>
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<td>Myon Reader</td>
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</tbody>
</table>

While all the listed resources are not necessarily used with students, Crompton et al. (2021) showcase the growth in available technology and its use throughout K-12 education. This researcher can personally add another 20 digital tools without any effort based on what both
students and teachers in my district use. Notably, the specific application section could be broken down further into production and creativity apps and content-specific apps (Lauricella & Jacobson, 2022), providing teachers with multiple options to use depending on their content, standards, or learning objectives.

The vast number of digital tools can be overwhelming to students and teachers. In a survey of 74 middle school teachers, DeCoito and Richardson (2018) found teachers reported the large number of tools available created a challenge for them: which tool to pick and implement into their classroom? The decision on which tools to use and how often to incorporate them is a common theme in the research. Baek et al. (2018) surveyed 169 K-12 physical education teachers on their technology use. The physical education teachers used technology for their own professional use but noted the limited training on too many tools combined with a lack of technology specific to their physical needs lead to them not incorporating as much technology with students. DeCoito and Richardson’s (2018) study also concluded that teachers felt more complex setup for technology was not always worth the effort, and therefore did not opt for those specific tools or incorporating as much technology with students.

Students felt a similar sense of using familiar or empowering tools. Al-Bogami and Elyas’s (2020) middle school students were most interested in using tools they felt gave them control over their learning. Tools that allowed them to pick a path, create, and play games engaged them and made them feel motivated to learn. However, too many tools can present a similar challenge to students that their teachers saw. Bardule (2021) interviewed 98 middle school students on their use of digital tools. Students preferred tools that gave them immediate feedback and were easy to navigate and use. The more complicated a tool was, the more likely students were to indicate their dislike for the tool. Further, students would indicate dislike for
tools teachers did not incorporate much or used in conjunction with too many tools infrequently (Bardule, 2021).

It is an important reminder that the technology does not automatically solve all educational problems in the classroom or online setting. Teachers need to provide support, set expectations, and follow-through when using devices and applications with students (Lauricella & Jacobson, 2022). Having set expectations, natural consequences, and teaching expected behaviors are necessary for any learning environment (Alter & Haydon, 2017), including one with embedded technology or in an online platform.

Additionally, devices and applications will not solve instructional dilemmas in person or online. Digital learning activities should be designed to allow students to interact with each other in engaging activities that promote communication and collaboration (Alhumaid, 2019). Online tools used with K-12 students should be collaborative in both synchronous and asynchronous settings (Jayathirtha et al., 2020). This will allow students to interact and collaborate with each other and engage deeper in the learning. Students should also be able to use their digital devices to the fullest potential with calendars, notifications, and space for taking notes. This will help them to expand their face-to-face and live time with their peers and teachers (Jayathirtha et al., 2020). The technology tools in students’ hands are very powerful and students should be allowed to harness that power. Using tools such as online journaling, message and discussion boards, and secure video sharing platforms such as Flipgrid could help students stay engaged in the lessons and provide additional rich data for teachers for assessment purposes (Jayathirtha et al., 2020). Keeping students engaged with digital tools, whether in an online or in-person environment, requires additional time, troubleshooting, and patience (Karakoyun & Kuzu, 2016). Despite the challenges, incorporating collaborative and creative tools into the classroom setting can help
students showcase their learning, empower them to take control over their growth, and provide opportunities for all students no matter their level or specific needs.

**Learning Management Systems**

A key need for distance learning is a learning management system, or the online platform teachers and students access for learning materials and tools. Common platforms include Canvas, Schoology, and Google Classroom, which is used in the school district participating in this study. These systems provide multiple built-in features including discussion boards, online quizzes, video embedding, and messaging which teachers can use to build out the online learning experience (Daniela et al., 2021). However, the system itself does not imply teachers will be successful with online instruction. The overall design of the system will assist, but teachers will still need support with instructional strategies, assessments, and activities (Meier, 2021).

The design, navigation, and implementation of a learning management system can have an impact on student participation, parent communication, and teacher lesson design. Having a district-wide learning management system can provide consistently for parents and students while also providing a similar online learning navigation experience (Tawfik et al., 2021). Too many options for teachers can lead to confusion with students and parents, leading to a potential “nightmare” of technical support. This can also be detrimental to communicating effectively with parents and encouraging accountability for students (Tawfik et al., 2021). Wang (2021) offered suggestions for building an online course. While written during the COVID-19 pandemic, these suggestions could potentially support online learning at any time. Wang (2021) posits content should be organized in a systematic way with the course containing multiple modules and lessons within each module. This method would allow for the instructor to design learning
activities that use multiple resources and tools within the learning management system. Providing a simplified, scaffolded environment structured in a stepwise format can assist remote students with navigation and accessing the learning material easily (Martinez, 2001).

The overall design and navigation of the learning management system can have an impact on teacher and student satisfaction. Aparicio et al. (2017) found in a study with undergraduate students in Brazil that the learning management system itself did not impact the amount of student use of the system. Instead, it was the quality of the information provided online that positively impacted the students’ usage of the system. Further, the undergraduate students used the system whether they were satisfied with the system or not. Satisfaction was impacted negatively by the amount of technical support they required or their perception of the quality of the system itself. Overall course content, how reliable the content was, and the perceived level of information quality, understandability and usefulness all positively impacted student satisfaction with the learning management system but had no impact on the actual use. Students used the system no matter potentially due to it being the required online system (Aparicio et al., 2017).

Cidral et al. (2020) expanded on Aparicio et al.’s (2017) study with 297 high education students in Brazil. They found learner satisfaction with the system did have an impact on their usage of the system. Further, they found the quality of the information and collaboration abilities within the learning management system positively impacted the students’ levels of satisfaction with the system, and ultimately the level of use (Cidral et al., 2020). Both studies imply the need for reliable and high-quality content. Further, if students are satisfied with the learning management system, they will potentially use the system more (Cidral et al., 2020) and be able to accomplish the learning tasks and activities easily with higher productivity (Aparicio et al.,
Barriers and the Digital Divide

Technology integration does not come without its challenges and critics. Distance learning requires both teachers and students have access to the physical technological resources necessary to create and complete the course. The long-existing equity gap in access creates a barrier to learning (Burns, 2020). The digital divide is exacerbated by the wealth and intergenerational inequality cycle present for many years. Wealthier families have the means to provide additional educational opportunities, devices, and access. Further, this divide is seen between White families and Black and Latinx families. The digital divide has grown greater alongside the wealth and inequality divide (Francis and Weller, 2020). This gap includes not just access to equipment but also home internet access, something many students across the country have been lacking for years (Dietrich et al., 2020; Shaytura et al., 2020). Pre-service teachers in their observation phase or student-teaching phase noted this gap as not just an access to technology gap, but an access to learning gap in a fully remote setting (Burns, 2020). The gap in technological access is a showcase of the gaps in our students’ income level, living situations, and social status (Alhumaid, 2019). While it is tempting to try to replicate the school day and all activities, educational systems and teachers need to recognize this is not always possible in a hybrid or online setting. Attempting to do so could exaggerate the inequities between students regarding technology and internet access, parental support, and cognitive abilities (Aguilera & Nightengale-Lee, 2008).
Technology Challenges or Preferences?

The debate to use technology in the classroom versus hands-on, paper-pencil learning has been a decades-long endeavor. Subrahmanyam et al. (2013) conducted two studies with university level students. The first group of 120 students were first tasked to read both an easy and difficult passage on paper, a laptop or a mobile tablet. Some students were also asked to multitask while reading by highlighting, switching applications, or opening other resources. While students who were mistaking took longer to read the passages, multitasking did not impact the level of comprehension of the reading passages. Further, the medium used to read did not have an impact on comprehension (Subrahmanyam et al., 2013). A second group of 67 students were asked to read multiple texts and synthesize the information into a one-page, evidence-based report. Students read the passages on paper, a computer without internet or printer access, or a computer with internet and printer access. Results indicated no significant difference in report quality between students who read the passes on paper or read the passages on a computer. While the participating students in both studies preferred reading on paper, the results of both studies indicated that using technology and screen time did not have a significant negative effect on comprehension (Subrahmanyam et al., 2013).

On a more global level, technology can have a dehumanizing effect, separating students from each other and creating a sense of isolation in students and teachers (Alhumaid, 2019). Articles have been shared around social media for years on limiting screen time, the dangers of online bullying, and the impact social media can have on our mental health. Hall et al. (2019) conducted a study with 130 adult participants on the impact of removing social media from their daily routine on their psychosocial outcomes. Over 3000 observations were conducted, and daily
diaries were completed by each of the participants. Participants were placed into five groups, each with a different amount of time being off social media. While Hall et al. (2019) recognize a plethora of research that suggested a weak, negative association between using social media and positive mental health, their study did not detect any causal relationship between social media and feelings of loneliness. Further, not using social media for up to a month did not impact feelings of well-being or positive outlooks on the day. Hall et al. (2019) suggests reviewing previous research on the impact of social media with greater scrutiny, while still recognizing the impact it could potentially have. This would suggest that the inclusion of technology, in this case social media, could have an impact when taking into account other stressors in daily life.

Incorporating technology into the classroom has been studied as well, with teachers indicating their own personal negative believes and attitudes towards technology as a reason to not utilize it with students (Ertmer et al., 2012). The negative view of technology in general can be a barrier to its use in general. This proves to be challenging when online learning requires technology to be used in order to connect and complete assignments as well as communicate between the teacher and student.

**Positive Aspects of Technology**

Despite the challenges and barriers, technology provides a powerful means for reaching a variety of students and connecting over large distances. Technology integration can allow for students to have additional access to material that might not happen without it. For example, auto captioning tools on videos and videoconferencing software to assist in hard-of-hearing students or students learning a new language (Smith et al., 2017). These tools can also pause, rewind, and provide students with the opportunity to review the content again. Interactive video tools can
embed formative assessments so both the teacher and the student can gauge understanding of the content in real-time (Shelton et al., 2016). Digital comics and online writing platforms can be engaging for students and provide them with an alternative means of demonstrating their learning of a specific content or topic (Ilhan et al., 2021).

Technology tools can also be used to promote engagement and collaboration such as blogging, collaborative projects, and video sharing to help students communicate with each other at a distance in the same course and with others from around the world (Alhumaid, 2019). Using digital tools such as social media can encourage students to collaborate and communicate with a global society (Greenhow & Chapman, 2020). Students can document their learning journeys and express themselves in positive manners. This allows them to take charge of their learning and empowers them to be the sharer of their knowledge and provide feedback to others in a critical thinking manner (Greenhow & Chapman, 2020).

Technology tools in the classroom have allowed teachers and students to have multiple means of representation of their content and knowledge, as well as provide additional assistance to those students who need it. Importantly, it embeds within instruction and enhances the teacher’s work as well as the student’s activity.

Services – Teaching, Learning, and Instruction

As stated earlier, there are no set standards for online learning at the K-12 level, leading to a wide variety of experiences for students depending on the state they live in or even their local community. This section reviews how technology has been infused into online learning environments, and what online learning environments could potentially look like. Specifically, the section focuses on technology and pedagogical approaches used by the school district in this
Asynchronous and synchronous online learning have both been used at all grade levels for this specific school district. In general, these two approaches are seen throughout online learning opportunities at K-12 and higher education levels.

In asynchronous learning, students and teachers are not present together, either face-to-face or remotely. This is not commonly used during face-to-face instruction and left to remote settings (Hamza-Lup & White, 2015). Asynchronous learning can potentially provide students with engaging extended learning activities that do not fit into the face-to-face classroom time (Whittle et al., 2020). Videos can be utilized in asynchronous learning and provide a powerful resource to students. Students can pause, playback, and review videos at their own pace and time (Kerr, 2009). Online tools such as EdPuzzle https://edpuzzle.com allow teachers to embed quizzes and additional information within videos, making them interactive activities versus passive learning. Videos allow for easy posting and sharing of ideas from the teacher to the students and vice versa. Students can use videos to present their understanding and knowledge, providing a voice to those students who are not comfortable sharing live with their peers (Kerr, 2009).

There are challenges to asynchronous work. It can be a challenge for students as they are required to be independent and on task. This can be difficult without an adult present to monitor their work, especially if they lack the motivation and skills to work independently (Barbour, 2015). Teachers can struggle with finding the balance between asynchronous and synchronous instruction, including videos, to meet the needs of their students (Kerr, 2009). Multiple videos to
follow and respond to can be overwhelming and hard to manage for teachers, requiring them to have a strong organizational system to engage and provide feedback in this medium. Wang (2021) suggests connecting asynchronous resources and activities to synchronous ones. This will reinforce the work done synchronously and has the potential to assist students in succeeding in online assessments and reflections.

Synchronous learning activities occur when the teacher and students are together and interacting with each other. This can be done face-to-face or remotely via videoconferencing tools (Hamza-Lup & White, 2015). Synchronous activities reduce the perceived distance between students and the instructor, removing a temporal distance while the physical still exists (Hodges & Barbour, 2021). Videoconferencing tools have been utilized for distance learning experiences since at least the 1990s and specifically with rural schools to assist in their digital learning opportunities (Anderson, 2008). Videoconferencing provides students with a virtual face-to-face option that allows them to work with each other to collaborate, share ideas, and check for understanding via live video feed on an individual computer or mobile device (Peacock et al., 2012).

Videoconferencing has been used by school districts to provide professional development and conduct meetings for at least the last fifteen years (Anderson, 2008). In these cases, educators were able to participate in meetings and learning activities without having to travel, which appealed to the rural districts in the study.

Anderson (2008) surveyed and observed school districts in Canada utilizing videoconferencing as a means to provide instruction and professional development. Results indicated that rural school districts had been using videoconferencing for some time to provide direct instruction on advanced classes and enrichment experiences to students where a certified
teacher could not be hired by the individual district.

Anderson (2008) suggested that videoconferencing did not change the instructional approach for many online teachers, and instead simply moved traditional face-to-face direct lecture to a videoconferencing format. The majority of class time in three distance learning classes observed were taken up by teacher lecture with student questioning, lab work, and feedback all combining for the remainder of the class. Videoconferencing as a whole tends to lean towards lecture-based instruction, specifically for high school courses or courses where an end-of-year exam is the ultimate goal (Rehn et al., 2018). Where videoconferencing did provide an engaging experience was during enrichment experiences. Students were able to connect with guest speakers, take virtual field trips to museums and research institutes, and classmates in different school districts across a great distance, providing a unique opportunity to meet and collaborate with people beyond their classroom walls (Anderson, 2008). In these situations, the instruction was collaborative, and inquiry based, engaging the students in a SCLE where they took control and lead their own learning through collaboration, questioning, and interests.

Videoconferencing is met with multiple challenges for both teachers and students. Creating videos, posting, and replying to them requires training, skills, and time on the part of the teacher (Lowenthal et al., 2020). Also finding the right balance between live and recorded video lectures is necessary for the teacher workload and student engagement. Too much or too little of either one leads to teacher over-load and student disengagement (Lowenthal et al., 2020). Furthermore, despite videoconferencing being a live feed and potentially a social technology, participating students and teachers have indicated even prior to the COVID-19 closures that it still creates a barrier to building relationships, creating a positive classroom culture, and collaborating. The technology alone does not provide the facilitation for these items, it simply
provides the physical means (Rehn et al., 2018).

Despite the technological challenges, videoconferencing tools can be successfully utilized in the distance learning class if they are reliable and functional with the proper training for teachers (Anderson, 2008). Teachers can be successful with videoconferencing as a tool if they have prior training and the equipment is functioning as needed (Rehn et al., 2018).

Videoconferencing provides the means for synchronous instruction. However, it is not the videoconferencing technology that develops the synchronous instruction. The instructor must design and facilitate appropriate instruction for their content and student needs. Wang (2021) suggests instructors focus on three types of facilitation for synchronous instruction: learner-to-content, learner-to-instructor, and learner-to-learner interactions. Learner-to-content facilitation focuses on how students access the material and how the instructor designs the online environment (Wang, 2021). This facilitation is covered in the following section, Online Instructional Design. Learner-to-instructor facilitation is how the learner and the instructor connect, including office hours, support, and synchronous activities. Learner-to-learner interaction refers to students collaborating, learning in groups, and building their self-awareness. Both facilitations are covered in the sections on Student Centered Learning Environments, Social Emotional Learning, and Building Community.

Online Instructional Design

While there are platforms and guides to assist teachers in building online classrooms through a designated learning management system, such as the Quality Matters Standards Rubric for K-12 education (Quality Matters K-12 Rubric, Fifth Edition), the rubric itself is not easy to follow right away. While some portions are easy to implement such as the overall look of the
online modules or course site, developing the instruction and shifting face-to-face activities to an online format takes time and training (Murillo & Jones, 2020). Ultimately, student needs and collaboration should have the most impact on the remote learning system and instructions, with teachers adapting their lessons to meet those needs in real-time (Coker, 2021). Reflecting on remote instruction, Tienken (2020) recommended remote learning lessons include examples, models and clear directions to the students. This includes not just the pre-planned and created resources, but also tips, support, and in-the-moment directions to assist students, similar to the in-person instruction. Kristanto et al. (2020) suggest learning tasks and assignments should take into consideration the availability of internet and device access to students, especially in circumstances where students were not able to opt out of remote learning.

The physical building of an online class is only part of the instructional design. Pedagogy and instructional approaches should drive the build, materials, and support teachers provide to students online. Sharer et al. (2020) conducted an exploratory study with an interpretive phenomenological analysis with eleven faculty members and seven university-level students. Their qualitative findings suggest students and faculty agree that a variety of pedagogical approaches is appropriate for the online class. No single pedagogy would work for all classes and content areas. Faculty wanted a variety of authentic real-life problems to create a deep learning experience while students wanted to be able to select a learning and assessment path to personalize their online experience (Sharer et al., 2020).

Student-Centered Learning Environments and Online Learning

The school district in this study has had a goal of creating student-centered and personalized learning environments for multiple years (CCSD93, 2018). Student-centered
learning environments (SCLE) are noted to be student-focused, with the students engaging in problem solving, self-directed learning, and authentic activities (Land et al., 2012). SCLE’s provide an authentic content and situated learning experiences that allow learners to experience a concept that applies to their real-life now and in the future (Herrington et al., 2014). The instructional emphasis is on the individual student achieving their potential through personalized and individualized activities (Land et al., 2012). SCLEs draw on the constructivist theories of problem-based learning (Hmelo-Silver, 2004), situated cognition (Brown et al., 1989), and communities of practice (Wenger, 1998). The learning activities provide students with the opportunity to share their ideas, collaborate with their peers, and demonstrate their knowledge of the content with authentic and varied assessments (Herrington et al, 2014). This specific district has been implementing problem-based learning as an instructional design for science and community engagement with students in grades 1-8 and staff has been participating in communities of practice for their own professional learning and growth since at least 2018 (CCSD93, 2018). With the shift to remote instruction and later a hybrid schedule, the school district emphasized keeping SCLEs at the forefront. However, when there is a lack of a set theory to fully describe SCLEs and what it looks like in both elementary and middle school, it becomes challenging to implement across mediums (Land et al., 2012).

SCLEs create learning spaces where the context is authentic, not decontextualized into individual skills and knowledge without connections between them and reality (Land et al., 2012). Dewey (1938) argued that learning by being a “spectator”, or a passive participant would not lead to true understanding. Learning begins with an initial impulse or drive based on a concrete, authentic experience (Dewey, 1938). Students in SCLEs learn together, set goals, research, and understand through inquiry (Land et al., 2012). It is through these authentic
experiences that learning happens (Dewey, 1938). When teachers approach their instruction from a student-centered, or person-centered mindset, there is the potential for students to have higher levels of achievement and develop positive relationships with each other (Cornelius-White, 2007). This can transfer to an online setting with guidance, support, and professional development for the teacher, however not easily as seen in past sections. Russo et al. (2021) conducted a mixed-methods survey of 82 primary teachers in Australia. Teachers indicated they felt more successful assisting students through productive struggle and problem-solving activities in-person rather than online. Teachers noted not being physically with the younger students made it difficult to control and support the students. Additionally, teachers pointed to the inability of students to communicate face-to-face with each other and the parents’ negative attitude towards online learning as barriers they encountered with remote learning and younger students (Russo et al., 2021). While the study took place during the COVID-19 shutdown, results can be looked at from a general remote learning perspective with younger students.

A potential solution would be a gamified approach with engaging characteristics such as avatars, badges, achievements, and digital medals built into the online platform (Piteira et al., 2018). Gamification involving achievements and video game features can engage students through a drive to compete against themselves, with each other, and reach each next level. However, additional research is needed in this area, specifically with the younger aged student.

SCLEs provide opportunities for students to collaborate with each other and value the role of the instructor for designing and adapting learning for the content and the medium (Kristanto et al., 2020). This requires the instructor to provide opportunities for students to explain their thinking by pressing them to dig deeper in their responses and by posing deeper, more rigorous questions to the students (Matsumura et al., 2008). This can be done both in face-
to-face classes as well as in an online format. Students gain much from each other including assistance, peer models, and verbal persuasion, which assists in their achievement online (Hodges, 2005). Instructors should provide opportunities for student collaboration and become a “guide on the side” for academic success in an SCLE.

What does an SCLE look like in online learning? Coker (2020) gave an example of how online or blended learning could provide opportunities to “Tear down the classroom walls.”

“An example shows how the new structure could be operationalized. A solitary 5th grade classroom teacher planning her class and seeing few students could be replaced with 4th through 6th grade teachers cooperating to reach all students; students could be placed higher or lower for tutoring as needed. Instead of each teacher designing instruction and only being available for a small group, the power of the collective would be unleashed. When non-teaching staff would be included, educators would be freed from individually figuring out everything and limiting availability for students who need help. Cooperation could happen within and between schools and with other districts, (pg. 82)”

This online environment is one built on teacher collaboration and student flexibility. Students can move freely between levels, not even realizing when they are beyond their current learning level. A seemingly utopia of education, online learning has the potential to build an SCLE founded on personalizing learning for students in an authentic manner and connecting teachers.

**Social Emotional Learning and Online Instruction**

Social emotional learning (SEL), as defined by CASEL (2022) is “…process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.” There are five SEL competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2022). SEL has
become a large part of K-12 education, including direct instruction in the in-person classroom. The inclusion of direct SEL lessons in the classroom has the potential to increase students social, emotional, and academic growth (CASEL, 2022). Remote classrooms should have similar structures and support in place to encourage students’ growth in SEL skills online.

Slagter van Tryon and Bishop (2009) found students make a strong effort to use their initial social information processing skills to begin to develop a group social structure online, similar to their in-person skills. They recommend for online instructors to build in time throughout the course for students to share their own personalities and learn the personalities of others frequently. Limiting this non-academic engagement to just the beginning of a course does not allow for students to develop their SEL skills successfully online (Slagter van Tryon & Bishop, 2009).

As seen above, SEL is connected directly to SCLEs the teacher approaching instruction with a student-centered mindset. Cornelius-White (2007) conducted a meta-analysis of over 1000 studies focused on SEL and student-centered instruction. Student-centered instruction was connected to large increases in student participation, motivation, and engagement in the classroom. Additionally, the meta-analysis indicated that higher levels of student self-esteem and social connections led to positive relationships between students, their peers, and their instructors. Finally, Cornelius-White (2007) recommended increasing the positive relationships between students and instructors to curtail negative behaviors in the classroom. While this meta-analysis focused on in-person learning situations, similar can be seen to online learning environments. In a survey of 31 members of iNACOL, Bryans-Bongey (2015) found members felt very strongly that K-12 students needed programs to support their SEL growth online and in-person. Interestingly, the members indicated in-person activities to build SEL skills with remote
learners including field trips, project collaboration, social work group, peer mentoring, and involvement with local organizations (Bryans-Bongey, 2015). This would suggest that a combination of in-person and online activities would benefit remote learners in their SEL growth.

Building SEL skills for online students at any age or grade is a challenge for instructors. This challenge has been ongoing since remote learning became popular. Martinez (2001) conducted a study with 71 adults who volunteered to take an online course titled Discovery the World Wide Web in 2000. Participants were surveyed and completed both pre- and post-tests to analyze their level of growth in learning tasks and skills. The results suggested the learning environment and design of activities can have an impact on remote students’ self-motivation, self-assessment, and self-directedness. Students could potentially grow in these skills with environments that are sophisticated and focused on problem-solving and discovery by providing students with opportunities to be assertive and challenge themselves (Martinez, 2001).

Additionally, online learning environments and activities that provide students with the opportunities to complete projects can be energizing, competitive in a positive way, and build SEL skills (Martinez, 2001). Though this study was completed in 2000 with older technology, the same can potentially be true for developing online learning environments now. Rovai (2002) suggested focusing on building an environment of trust by allowing students control and not making the course fully teacher-centered. The teacher-centered virtual classroom can be too formal and cold, lacking in student engagement, and sharing of ideas. Rovai (2002) connected trust with a building of the online community through friendship, bonding, and cohesive group dialogue. Aiming for an SCLE online could potentially assist in building SEL skills for students of all ages, no matter the technology.
Incorporating SEL skills in the remote classroom should be done with some level of direct instruction, especially for younger remote students. However, this direct instruction should be done with care. Stephen et al. (2020) found in their study with 82 undergraduate learners that the more they reflected on their work, becoming more self-directed and building their interpersonal skills, the more likely they felt they were not being as successful as they could be and their desire to persist through the online class fell. This would suggest that instructors need to develop self-reflection and self-evaluation tools and activities that provide for both strengths and areas of growth and guide students through these activities in a positive manner (Stephen et al., 2020). Teachers should also provide feedback to students to help them identify areas to improve on, strengths they are showing, and compare their evaluations (Stephen et al., 2020).

Contrary to the above findings, Joosten and Cusatis (2020) found in a study of 620 undergraduate and graduate students that the level of student self-directedness or their organizational skills did not influence their academic or perseverance outcomes. The survey results did not find a significant difference in outcomes between students who perceived themselves to have high levels of self-directedness or organizational skills. This would suggest that the students’ SEL skills were not necessary to complete the online course. However, Joosten and Cusatis (2020) also found the more students were able to collaborate and socialize online as well as navigate and complete their online work with their own set of skills, the more likely students were to be academically successful and complete the course. Further, if students perceived themselves to be learning, preferred the online course setting, and were satisfied with the course, the more likely they were to be successful in the course. These findings suggest that while high SEL skills are not the “golden ticket” to academic success online, they can still have an influence on students’ perceptions of success, leading to academic growth.
Building Community to Combat Isolation

Context, content, and instructional design combine to engage students in the learning process. This involves students communicating and collaborating with the content provided to them, and with each other, as described in Vygotsky’s (1978) social development theory. Collaboration is a vital part of the child developmental process because it develops skills and language. “…the most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge,” (Vygotsky, 1978, p. 24). Vygotsky pointed out the connection between action, in the form of any activity where learning can take place, and speech, which develops with each activity.

Two ideas align with this concept: language is a necessary component for learning and language comes in multiple forms. Vygotsky’s theory emphasizes the role of speech and language on learning with activities. Learning activities are not limited to the formal classroom setting but instead are found all around the child from the day they are born. The world is the classroom, and all activities are learning activities. Speech does not merely assist the child; speech is a necessary component and works with the activity as “one and the same complex psychological function,” (Vygotsky, 1978, p. 25), focused on completing the activity. Dewey (1938) describes these activities as quality experiences that are long-lasting, influence future activities or experiences, and as having an immediate positive or negative effect on the learner. More complex experiences require more dependence on speech as an integral tool to complete the activity. Denying a child their ability to speak their way through the experience could cause the child to not be as successful in completing the activity (Vygotsky, 1978). In
addition, older students, middle school and beyond, regard rules and structures not as a top-down approach, as many adults do, but as a collaborative agreement. Rules and structures are also flexible, and the older student looks for ways to change and manipulate them (Piaget, 1966). Students will need guidance and support for online learning and SCLE embedded instruction (Carter Jr et al., 2020). While strong structures are required in distance learning environment, the relationship between the student and teacher should be one of mutual respect and understanding so all agree on the structures or understand why they are in place.

The very nature of distance learning is that students and teachers are at a physical distance from each other. Initially, students may find the online format to be positive with the sense of flexibility asynchronous work brings (Hodges, 2005). However, the distance can bring about a sense of isolation for both students and teachers. Relationships and community building become essential to building SCLEs online. Online classes should operate similar to a traditional classroom with relationships, community and expectations between students and teachers. Matsumura et al. (2008) observed 34 6th and 7th grade classrooms in five high-poverty, urban, public middle schools. A total of 608 middle school students were observed. Results suggested that the amount of respect teachers showed students predicted the students’ behavior toward each other. The more respect present in the classroom culture, the more positively the students’ interacted with each other. Further, the presence of explicit expectations from the teacher for students to be respectful to each other, the more likely students were to participate in the discussions and activities (Matsumura et al., 2008).

People + Technology + Services = Successful Online Learning Environment

Students appreciate the learning environment and process that enables them to build
community with each other and the instructor through feedback, discussion, and positive interactions (Kristanto et al., 2020). The sense of community is what can potentially help students to be successful in their perseverance through the online course (Gillett-Swan, 2017). It becomes imperative that instructors have access to the technology tools and learning management systems that allow for collaboration and community building while still being productive tools to deliver their content (Gillett-Swan, 2017).

Hindsight is 2020

In September of 2019, I had a conversation with my assistant superintendent. The State of Illinois had extended the deadline for schools to submit an e-learning plan for state approval. This would allow us to host remote learning on emergency weather days, in lieu of closing schools and making up the days at the end of the school year. He asked my opinion. At that moment I did not feel there was full support from our upper administration and Board of Education. I commented how remote learning would even look for an elementary student and the frustration it would cause. We opted to not submit a plan and just continue to make up emergency weather days, usually only 3 at most in a bad weather year. I left that meeting thinking, as great as remote learning would be, it is just not worth the trouble to set up and explore for a few days of instruction. Hindsight is truly 20/20.

We can look back at distance learning over the past few decades and see the importance of growing in online learning strategies and services for students, teachers and parents. Miller and Ribble (2010) argued for the need to include online teaching into teacher preparation programs in the anticipation that remote learning options would grow and expand. Prior to COVID-19, virtual learning had the potential to provide accessibility to students who could not attend a traditional school and increase student-instructor ratios without having overcrowded classrooms (Bakia et al., 2012). Despite the potential positives to remote instruction, many K-12 school districts used distance learning opportunities for credit recovery or in cases of dire health
situations with students (Miller & Ribble, 2010). The resistance to providing online learning opportunities in the past lead to fewer opportunities for students to learn in non-traditional formats, and a lack of recognition that the world was rapidly changing in technology and connection (Miller & Ribble, 2010). The COVID-19 pandemic turned a rapidly changing world upside down and forced many changes Miller and Ribble (2010) had argued for, however also showcased many challenges they foresaw as well.

The Social and Emotional Impact of a Global Crisis

In Chapter 1, I shared a memory of the moment my school district dove into remote instruction, as well as the moment my own children realized they were not going back to school. My memories mirror those of millions of teachers, parents, and students from around the country. COVID-19 began spreading in the United States of America in early 2020. Now, in 2022, we are still managing the pandemic through mitigation strategies, masking, and vaccinations. Since the start of the pandemic, a plethora of research has emerged covering all areas of impact including remote learning, physical health, and mental wellbeing of people at all ages.

While in 2020 it was predicted that COVID-19 had the potential to impact children with a milder form of symptoms, the need to close schools and protect the entire population was still warranted (Lewandowska, 2020). The larger concern quickly became the impact the pandemic and mitigation strategies would have on students’ mental well-being including depression from being confined at home, lacking social interactions outside the family and limiting or fully cancelling social activities (Lewandowska, 2020). Students lost school-provided services such as social workers, support groups, and therapy, with that loss greater for students based on their
race, ethnicity and LGBTQ+ status (Goldberg, 2021).

This was not the first time in our country’s history that students and families have experienced large-scale closures and trauma. Hurricane Katrina hit New Orleans, flooded the city, caused multiple deaths, destroyed homes, and closed schools. Parents reported at high rates their children needed mental health services, something usually underreported by families (Osofsky et al., 2007). Children experienced post-traumatic stress disorder (PTSD) and depression (Osofsky et al., 2007), very similar to the resulting mental health needs of children during COVID-19 (Lewandowska, 2020). Similar symptoms were seen with younger children as well who exhibited new fears, clingingness, regression in social behaviors, and separation anxiety after Katrina and throughout the pandemic (Lewandowska, 2020; Osofsky et al., 2007).

Looking more into the emotional toll the COVID-19 pandemic brought about, Goldberg (2021) found a larger risk for harassment and violence against Asian American and Pacific Islander students and their families. The political and racist rhetoric could not be stopped at the school doors, exposing students to this discrimination without face-to-face school support. LGBTQ+ students also experienced a growth in harassment, anxiety, stress, and loss of access to peers and teachers who supported them on a daily basis, isolating them with potentially hostile family members (Goldberg, 2021).

It is imperative to remember the stresses all people have taken on throughout the pandemic. Like students, teachers and parents of Asian descent, other races, and the LGBTQ+ community experienced the same lack of support, stress, and confinement as their students. Ugur (2021) surveyed 626 adults in Turkey on their challenges during the initial COVID-19 lockdowns. While in Turkey, the themes are seen across the world. Ugur (2021) found participants listed their challenges of health and mental health deterioration, loss of economic
stability, and being isolated from each other. Reflecting on the trauma children experienced in the aftermath of Hurricane Katrina and throughout the pandemic, it is clear school buildings provide students with more than instruction. Schools are a source of food, warmth, clothing, security, safety and comfort for students of all ages. As we reopen, students will bring this trauma with them into the school setting. Communities and schools need to continue to provide support to students in the form of therapy and social-emotional support as children continue to navigate a pandemic that has taken nearly 900,000 lives and directly impacted millions of others in our country.

Emergency Remote Instruction

While previous literature presented has focused on distance learning in situations where the students, parents, and teachers selected the online learning environment, the 2020 emergency closings and later the 2020-2021 hybrid and remote learning schedules implemented by school districts removed that choice. Two options were provided to families: fully remote and hybrid when possible. The hybrid and remote instruction models are not typical instructional setups as described previously in this chapter. Mass remote instruction on this scale had never been seen in the American Public School System (Tienken, 2020). Educators, students, and parents found themselves in Emergency Remote Instruction (ERI) where the sudden shift was not planned for, chosen, nor always wanted (Hodges et al., 2020). ERI was happening as of this study, and with it a need to evaluate what stakeholders were experiencing. While there is a push to compare ERI to traditional distance learning, it is imperative to remind ourselves that the current situation is not traditional distance or hybrid learning (Hodges et al., 2020). ERI is a response to the moment, with the anticipation to go back to a typical educational setting for the organization at some point.
in the future. ERI is temporary, and as such planned quickly with multiple changes throughout the time, separate from pre-planned and continuous distance learning (Hodges et al., 2020).

ERI is temporary in nature, opposite of traditional remote instructional programs (Hodges et al., 2021). Despite the short-term goals of ERI, many districts and parents have compared ERI to remote instruction, citing the struggles and challenges as reasons why remote instruction is not appropriate for K-12 students. However, there is a key characteristic ERI that is missing in the narrative on remote instruction: crisis. ERI is a response to a crisis and the immediacy of a community emergency is present (Hodges et al., 2021). The following sections explore how ERI impacted the three areas of remote learning: people, technology, and services. All three components are explored within the context of ERI and the crisis of COVID-19.

**People**

As stated earlier, teachers, students, and parents have all experienced social emotional trauma, financial loss, health-related issues, and loss of loved ones to the COVID-19 pandemic. The following sections explore the impact of ERI specifically on these three groups.

**Teachers**

The COVID-19 pandemic expanded the role of the teacher to one of caregiver, constant communicator, and parental support. Teachers provided both educational and emotional support to students and parents throughout the emergency remote time (Anderson & Hira, 2020). Parents and teachers had more communication than previous in some cases due to the need for teachers to support parents in the educational process, which in some cases was able to strengthen the parent-teacher relationship (Anderson & Hira, 2020). The increased communication also helped
students navigate the sudden shift from in-person to remote instruction (Whittle et al., 2020). Teachers became caregivers to their students and focused on their emotional needs. This extended past the students to the parents and family members. While teachers were concerned about students’ academic progress, their focus was on their students’ health physically, mentally, and emotionally as well as their parents or caregivers (Anderson & Hira, 2020).

Teachers responded to ERI by constantly communicating with students through multiple technological means (Anderson & Hira, 2020). Teachers focused first on student safety, mental health, and access to their instructional materials with the initial shift to ERI (Whittle et al., 2020). Teachers put the emphasis on their students’ well-being and shifted the focus off content instruction at first. This allowed teachers to continue their relationships with students, help them feel comfortable in the new setting, and make a plan to move forward with instruction (Peterson et al., 2020). This also gave teachers better perspectives of their students’ situations and what was impacting their learning beyond understanding the content (Whittle et al, 2020). Teachers used assignments and student data to not only gather formative and summative academic achievement, but also social-emotional well-being in the means of engagement and support (Anderson & Hira, 2020).

The shift to ERI was difficult, even if a teacher felt strong in their technology integration. The quick turn-around with limited training and lack of internet access or speed for both students and teachers at home proved to be difficult (Dietrich et al., 2020). In a survey of online teachers, Lai (2017) found that teachers perceived distance instruction as very different from traditional face-to-face instruction, with 88% citing required shifts in their approaches to managing activities, using technology, and forming relationships with students. This would suggest that even though administrators and professional development providers can assure teachers they
have the skills and can base distance teaching on their overall knowledge of pedagogy and instruction (Itow, 2020), teachers may not feel comfortable instructing online, especially in a pandemic.

Teachers learned more about distance learning during ERI than in previous years, no matter the level taught or the amount of time with 1:1 technology (Dietrich et al., 2020). Their previous comfort level with technology and perceived level of TPACK knowledge did not necessarily translate to their feelings of success and satisfaction with ERI teaching (Ladendorf et al., 2021). In a study conducted by Santos et al. (2021), teacher attitude toward distance learning at the higher ed level impacted their actual success. Those that had a positive-leaning attitude towards distance learning were more successful and saw the benefits of distance learning, despite the ERI. Likewise, those with negative-leaning attitudes saw less success and reaped fewer benefits of the distance learning experience, which also impacted their students (Santos et al., 2021). Attitude towards distance learning was impacted by multiple outside issues teachers were facing including fear, health, lack of resources, and lack of training.

Teachers did feel successful transitioning content that was knowledge-based. Hands-on or physical activities were much more difficult for them to shift, especially when the content was specific to a specialized course such as career and technical education, the fine arts, or maker activities (Code et al., 2020). Jayathirtha et al. (2020) spoke to the successes and challenges teachers saw in makerspace activities in a distance learning setting. While teachers were able to give personalized feedback on coding activities and provide more expansive coding lessons to students targeted to specific levels of understanding, teachers felt the loss of live student-teacher interactions limited their ability to have in-the-moment learning experiences and grow as a full learning community. Teachers worried about the impact the closure and remote/hybrid
instruction will have on students’ long-term interest in the content areas, especially specialized content (Code et al., 2020).

Elementary teachers reported during the ERI time they spent increased hours working including early morning and late at night to make themselves available to students and parents when was most convenient for them (Anderson & Hira, 2020). They felt less satisfied with the overall ERI experience and felt their students were less successful than their secondary level colleagues (Ladendorf et al., 2021). Like all teachers, elementary level teachers felt they needed more district or coaching support, especially when those supports were cut from budgets in years prior to COVID-19 (Anderson & Hira, 2020).

Despite the challenges, teachers came together in schools, districts, and across the country to support each other and their students. Teachers responded to ERI by creating engaging assignments using new technology and materials students had on hand at home or would not need the school to provide through a pick-up or mailing process (Anderson & Hira, 2020). Teachers began collaborating more and relying on each other for support and learning. In a survey of in-service K-12 teachers during the pandemic, Tawfik et al. (2021) found teachers placed an importance on working together to problem-solve the sudden shift. Teachers reported sharing their lessons, materials, and instructional approaches with each other to help colleagues and receive feedback to help their own students. They also indicated this collaboration allowed them to find new ways to connect with students to ensure their social-emotional health was addressed during the crisis (Tawfik et al., 2021). The urgency of the moment brought about a sense of collaboration and collegiality (Justis et al., 2020). Teachers relied on themselves and each other to support through immediate changes and learn new technology tools quickly (Anderson & Hira, 2020). In some schools, administrators encouraged teachers to openly share
new ideas and instructional practices to positively impact their colleagues (Justis et al., 2020). Teachers had to quickly learn new tools to continue their lessons and assess student knowledge, changing their instructional choices and tactics on a daily basis (Trzcinska-Krol, 2020). While a difficult task, the ERI and closures helped to strengthen collaboration within some schools, with building administration support. Teachers worked together to bring SCLEs, experiential, and authentic learning online with anticipation of using it in a hybrid format (Justis et al., 2020).

Many teachers focused their efforts on student SEL and mental health in the initial ERI of the 2019-2020 school year. Miller (2021) conducted a survey of 20 teachers also attending graduate school during the COVID-19 pandemic. This specific group of teachers indicated they focused more on students’ emotional needs and saw the ERI as an opportunity to reprioritize students’ emotions over academic growth. However, teachers indicated they needed help with building SEL and strong relationships with students in an online setting because neither they nor the students were in a familiar environment (Miller, 2021).

Students

When compared to their instructors, students saw similar results in their attitude toward distance learning, at the higher ed level in this study, impacting their actual success. Those that had a positive-leaning attitude towards distance learning were more successful and saw the benefits of distance learning, despite the ERI. Likewise, those with negative-leaning attitudes saw less success and reaped fewer benefits of the distance learning experience, which also impacted their students (Santos et al., 2021). Students were compelled to become more independent and complete the activities provided remotely. Using technology was no longer a choice or option, but a requirement (Trzcinska-Krol, 2020). Students reported completing
worksheets, joining online classes asynchronously, reviewing online digital resources, and completing online activities with and without guidance as part of the provided ERI (Apiryanti, 2020).

Student attitude towards ERI was impacted by multiple outside issues they were facing including fear, health, lack of resources, and lack of training (Santos et al., 2021). Students see school as a place to learn, grow, and socialize with their friends. ERI took that socialization piece away. Now in a hybrid environment, students still cannot physically socialize or collaborate together (Sari & Maningtyas, 2020). This has caused challenges for teachers to keep students engaged in learning and for parents to keep their children accountable and completing their assigned work.

Young students were not widely seen in the K-12 online school population prior to ERI (Pourreau, 2015). The expansion of distance learning to younger elementary students in the aftermath of COVID-19 has been cause for concern. Students at this younger age do not have the self-regulation skills necessary to navigate distance learning independently (Larson & Archambault, 2015). The lack of research and instructional practices to support the younger age group in an online setting also proved to make a difficult situation harder, with teachers and schools having nothing to rely on for building an online program for their younger learners.

Many students struggled with their mental health throughout the pandemic. Demaray et al. (2021) surveyed 2,738 students in 4th–12th grade at a suburban midwestern school district using the COVID-19 Adolescent Symptom and Psychological Experience Questionnaire. While a non-significant number of elementary students reported levels of anxiety and depression symptoms, high school females reported significant levels of depression and anxiety. Students’ reported stress levels correlated with self-reported levels of depression and anxiety symptoms.
Secondary students showed stronger levels of stressors, anxiety and depression compared to elementary students. The students also indicated that schoolwork was a high stressor, naming their motivation, fear of falling behind, and the level of required concentration as specific stressors. While secondary students felt these stressors more and consequently indicated more anxiety symptoms, elementary students did indicate these stressors and a slight level of anxiety as well. Demaray et al., (2021) posited the heightened stress may have come from a history of high achievement as a community and working with parents who have high expectations.

While remote learning itself caused stress and anxiety, fear of COVID-19 also took a toll on students. Both elementary and middle school students indicated their fear of getting sick or seeing a family member get sick caused stress and anxiety. Additionally, the lockdowns of 2020 forced families to isolate. Social isolation was a second predictor for depression symptoms in both elementary and high school students (Demaray et al., 2021). Adults must remember that students are under an extreme amount of stress during a crisis. That stress adds to their cognitive load and emotional well-being and takes away energy that could be used for learning and instruction (Hodges et al., 2021).

Parents

ERI had a large impact on many parents in the country and internationally. As stated earlier, parents would usually choose to sign their child up for a remote learning program. The pandemic and resulting ERI took that choice away. Parents who had no previous experience supporting their children in an online learning environment shifted to being the main educational support for their children overnight, becoming a proxy educator for their children (Davis et al., 2021). Parents had to assist with learning technology tools, completing assignments, and
following the learning process remotely or in a flexible environment (Trzcinska-Krol, 2020). The ERI did not shift the burden of teaching away of teachers to parents so much as it increased for both. Families could no longer send their children to a building to learn while they focused on their own work. Parents had to support their children’s work on top of their own family and career obligations (Lase et al., 2020).

Parents taking on additional teaching roles with their children had multiple challenges. Daniela et al. (2021) surveyed 738 parents of school-aged students in Latvia, 675 of which had students in grades 1st-9th. Parents perceived the mother as having the larger role of supporting the students, even compared to the remote teacher (Daniela et al., 2021). Parents also indicated they received very little support from the schools. While schools provided information on how remote learning would be structured, schedules, times, and login information, there was little to no perceived support for parents to use the digital materials, help parents understand the material, and provide academic support to their children. Daniela et al. (2021) believed this could have an impact on a potential learning loss or knowledge gap for the next school year.

Hinderliter et al. (2021) saw similar results to Daniela et al. (2021). Hinderliter et al. (2021) surveyed 153 parents from 18 different States and conducted a path analysis on the impacts of their levels of satisfaction with online learning. As parents’ anxiety levels went up, their level of overall satisfaction with ER went down, as well as their perception of their child’s learning outcomes. As parents perceived their child’s level of learning to decrease, their anxiety increased and their level of satisfaction with online learning decreased (Hinderliter et al., 2021). Additionally, the more parents indicated their students could not work independently or lacked time management skills, the more likely parents were to indicate higher levels of anxiety. However, if parents perceived their students were intrinsically motivated, they were more likely
to feel their students were learning more and were more likely to be satisfied with the remote learning (Hinderliter et al., 2021). Parents would potentially benefit from instructional support, tips, and ideas provided by the school to ensure their students are having a positive experience and to lessen the stress on the parent-child relationship.

Abuhammad (2020) reviewed content posted on a Jordanian Facebook group for parents throughout the COVID-19 ERI. Parents postings revealed similar themes to Hinderliter et al. (2021) and Daniela et a. (2021). Parents felt they encountered multiple barriers to successful remote learning. They experienced personal barriers in their own lack of technical skills, training, and support as well as a lack of communication with the schools or teachers. Parents also felt they did not know how to support their children academically and needed support from the schools and teachers on how to approach learning materials, instruction, and activities online. They also noted the digital divide indicating some did not have access to quality internet speed, bandwidth, or the financial means to provide technology tools or internet access at home (Abuhammad, 2020). Through all the barriers, parents felt as though the remote learning was not beneficial to their children and cited many times in-person instruction was of higher quality (Abuhammad, 2020; Daniela et al., 2021; Hinderliter et al., 2021). These results suggest that the added burden on parents to provide increased academic and technical support potentially led to higher levels of anxiety and a perception that the instruction was not as of high quality. It should be noted, however, parents in these studies did not specifically state what made in-person instruction of higher quality, just that the in-person model was better. It leads this researcher to wonder if it was the actual instruction that was not of high quality, or it was the added stress on parents that was not wanted.

Parents had to take on an increased educator role throughout the ERI and hybrid learning.
This has decreased the amount of “family time” and play, making the work-life balance hard for parents and students challenged to not see home as simply an extension of traditional school and boredom (Sari & Manigtyas, 2020). In a survey by Lase et al. (2020), parents felt their children regressed in motivation and academic level throughout the ERI and later in hybrid learning. As of the survey, they were hoping for a return to expanded in-person learning so their children could be out of the house and they would not have the increase responsibility of school day support as well as homework support (Lase et al., 2020).

Loss of annual celebrations and traditions was hard on the community. Parents grieved the loss of proms, graduation, banquets, sports, and concerts, showing how involved parents were with the schools in Austin, and assumingly across the country (Peterson et al., 2020). Interestingly, Demaray et al. (2021) did not see an indication that loss of traditions and events had a significant impact on depression or anxiety symptoms amongst students.

Parents of special education students, whether academically and cognitively behind or advanced, reported difficulties in supporting their students throughout the ERI (Trzcinska-Krol, 2020). In this survey of international families, parents noted the increased pressure placed on them to be involved with actual instruction of their children. The students could not always learn from just the teacher; the parent had to be involved and provide support and guidance on navigation of the learning material and completion of the activities. Parents felt more teacher than parent and were hoping for more guidance from the teachers themselves. Where teachers provide online activities or worksheets to complete by hand, parents felt many of these activities were not engaging or were too advanced for their students (Trzcinska-Krol, 2020). Parents felt they needed as much, if not more, support as their students did during ERI and hybrid learning (Anderson & Hira, 2020).
Parental mental health was also impacted throughout the pandemic. Davis et al. (2021) analyzed data from the National Panel Study of Coronavirus Pandemic (NPSC-19), which surveyed 3,338 households between March and April of 2020. Parents with children who struggled with remote learning indicated higher levels of depression and symptoms of anxiety. Interestingly, race and parent level of education did not indicate to be mediators. Parents had multiple symptoms of mental health distress the more their child struggled to adapt to learning online at home (Davis et al., 2021). This decline in mental health could have also been due to the additional stresses the pandemic placed on families. Francis and Weller (2020) analyzed data from the U.S. Census’ Weekly Household Pulse Survey from April – July 2020. They found 55% of respondents stated they had lost income during the pandemic. Additionally, 15% did not pay at least one mortgage payment and 26% did not pay a rent payment (Francis & Weller, 2020). Couple the economic and health stresses parents had with the new role of teacher, and parental mental health declined throughout the pandemic.

**Technology**

The overnight shift to remote instruction was not done easily. The immediate school closures created a frenzy for districts to provide both hardware and software to students. The lack of immediate funding and resources was a barrier for many school districts and teachers. The immediate nature of the shift meant school districts had to rely on already existing infrastructure and equipment, if it was available (Hodges et al., 2021). Further, instructional tools were not always available. Many of the online learning tools created and marketed for K-12 learning are not necessarily engaging or collaborative. This made it difficult for teachers to connect with their students throughout the school closures and into hybrid learning for the 2020-2021 school year.
Equity and access became a challenge for students, from the teacher perspective (Code et al., 2020). As noted earlier, the technology access gap led to a gap in learning access for fully online students in the past. Francis and Weller (2020) analyzed data from the U.S. Census’ Weekly Household Pulse Survey from April – July 2020. 84% of household reported having a form of reliable internet access as well as access to internet-enabled devices. However, 24.7% of Black households and 19.1% of Latinx households indicated they did not have access to reliable internet or devices for remote learning, combined higher when compared to the 34% of White households. Black and Latinx families were more likely to use devices provided by the school district, as well as rely on the school district for internet access. That greater reliance on public resources is coupled with many schools who service majority Black and Latinx communities having fewer funds and technology resources to meet the community needs (Francis & Weller, 2020). While the school districts help to bridge the digital divide, that bridge is a shaky one with many students receiving old technology or devices not able to be updated (Francis & Weller, 2020).

The ERI has expatriated that gap. Where in the past students without internet or with extremely slow internet could frequent libraries, after school computer labs, or community centers (Barbour et al., 2013), the COVID-19 pandemic closed those options due to health and safety concerns. Schools and community organizations should assist to ensure all students and families have access to reliable and affordable internet packages for their homes (Oussama et al., 2020). Francis and Weller (2020) found in their analysis that having access to reliable internet increased the number of hours students spent working on remote learning independently or with a family member by 1-2 hours. Black students were also on average spending 2-2.5 hours more
per week than their White classmates if they had access to a device and internet at home.

Security also remains an ongoing challenge for ERI. Online collaborative spaces that could be more engaging for students are not always as secure as needed to keep student information and data private. Many times, schools block collaborative or open sites due to privacy and safety concerns for their students, especially younger ones (Jayathirtha et al., 2020). This and state laws on student data privacy can limit the digital resources teachers are allowed to use and hinder the online collaboration.

Online learning software and spaces should provide features where students can collaborate in a safe and secure environment (Cidral et al., 2018). This would potentially assist with online collaboration and break down the feelings of isolation that so many students feel in a distance learning setting (Alhumaid, 2019), which only expands when they are confined to their homes.

Additional challenges were seen throughout the immediate shift to ERI. Technology usage prior to COVID-19 was usually in a supplemental format. The need to provide everything online required teachers and students to learn the technology in a trial-and-error manner (Tawfik et al., 2021). Further, teachers had to rely on videoconferencing tools for the first time to deliver their instruction in a remote format. Zoom became the main tool of the end of the 2019-2020 and 2020-2021 school years. Both K-12 and higher education organizations moved to Zoom for online learning. Serhan (2020) surveyed 31 university level students after the shift to remote learning. The students did not indicate a high level of support or positive feelings for the Zoom platform due to technical issues, glitches, lack of internet access at their homes, and Zoom bombings interrupting the instruction. Students also indicated the struggle for them to learn mirrored the struggle teachers had to navigate the platform and teach (Serhan, 2020). When a
tool is not used fully and implemented with support, an emergency situation will create heightened stress around the tool and showcase the lack of training and preparation instructors and students had for using the tool with fidelity (Tawfik et al., 2021).

**Services – Teaching, Learning, and Instruction**

Taking an entire school district online nearly overnight is no easy task. The district in this study took two weeks to provide teachers with a plan for remote instruction including which videoconferencing tool to use, what schedule to follow, and what grading and assessment expectations were going to stay in place or change. The following sections take a deeper look at the challenges ERI presented.

**Instructional Shifts During COVID-19**

The sudden shift to ERI caused much confusion at first. Teachers were not prepared to move to the online environment and students were not prepared for online expectations and activities. Initially, in the state this study was conducted, the governor entered an executive order stating no student grades would go down through the remainder of the 2019-2020 school year. Participation in online courses could only help students, not lower their grades. Due to this policy in this state and many others, teachers relied on built-in features of the learning management systems to provide quizzes, short activities, and worksheets, with a noted lack of essays, reports, and problem-based activities during the initial remote instruction of 2020 (Daniela et al., 2021). Students did not always respond positively to the situation, citing lack of engaging instruction as a reason why they chose to not engage, turn off their web cameras, and stay on mute when it was their turn to talk (Serhan, 2020).
Videoconferencing continued to be a staple in ERI and the resulting hybrid instruction. It allowed students who were in-person to connect with their remote peers. It also allowed students who may be quarantined due to COVID-19 test results or exposure to continue their learning, when physically able to. However, the needed equipment was not readily available at the initial shift to ERI and was still lacking as the 2020-2021 school year began with remote instruction. Schools needed have a multitude do technology available including video cameras, interactive whiteboards, and high-speed internet with large bandwidth to accommodate the online activity (Oussama et al., 2020). The lack of needed equipment led to a challenge for teachers and schools with the instructional shift to ERI.

Anderson (2008) found over ten years ago that while wonderfully suited for distance learning, videoconferencing tools on their own do not automatically make online instruction engaging nor provide a revolutionary change to public education. Instead, it is the online instruction itself transitioning to a SCLE that makes or breaks the videoconferencing experience, and the distance learning experience as a whole (Anderson, 2008). Training should be provided early on in anticipation of shifting between fully remote learning and hybrid schedules and providing teachers with support on videoconferencing as well as other technology tools in the hybrid classroom (Oussama et al., 2020).

Hybrid and Remote Instruction in the 2020-2021 School Year

The start of the 2020-2021 school year came with many changes before the students even walked through the school doors. The school district in this study began the year with a fully remote model. For the 2020-2021 school year, the remote model was not an optional one and students were required to complete all work and attend daily. This shift away from the
governor’s executive order at the end of the 2019-2020 school year was difficult for many students and parents at first. The school district in this study then shifted to hybrid instruction for the second half of the 2020-2021 school year. A detailed schedule is provided in Chapter 3. In a hybrid setting, technology is used to present and facilitate at least a portion of the direct instruction, no matter if students and teachers are face-to-face or remote (Hamza-Lup & White, 2015). The student is still enrolled full-time with the school and attends a portion of the day face-to-face in the building and the rest online in a remote setting. The remote instruction can be done both synchronously and asynchronously (Archambault & Crippen, 2009). It is also known as blended learning, where part of the instruction is presented online and part is presented live by the teacher (Hamza-Lup & White, 2015).

Hybrid learning schedules can be seen as a bridge between fully face-to-face and fully only, allowing students to transition between the two settings (O’Byrne & Pytash, 2015). The school district in this study, as well as many others in the area, used a hybrid approach to bring students slowly back into the school buildings while maintaining social distance guidelines set forth by the Department of Health. Students were split into two groups, with half attending in-person for a morning session while the other half completed asynchronous work and participated in synchronous exploratory class sessions. The two groups switched for the afternoon. Despite having students attend in-person, there remained a large presence of online instruction happening within the school district, which harkens back to the gaps in K-12 distance learning research. It is important to note that while the district in this study moved to hybrid instruction, the participating students featured in Chapter 4 remained fully remote throughout the entire 2020-2021 school year.
Gaps in the Literature

K-12 distance learning has been on a steady climb since the late 1990s (Cavanaugh et al., 2004). As of the early 2000’s the field of research on K-12 distance learning was limited. There continues to be limited research on the topic, despite the growth in K-12 virtual schools (Cavanaugh et al., 2009). The field of literature has not kept pace with K-12 distance learning despite the growth in opportunities as well as now the COVID-19 closures and subsequent hybrid learning (Arnesen et al., 2019). Remote learning in higher education continues to be the main focus of the field of research, with K-12 remote learning coming in behind and focused on the high school level or for groups of students with specialized needs (Martin et al., 2017).

Much of the previous literature on K-12 distance education has focused on teacher training, certification, and administration and organization of online learning. Little has been focused on instruction, teaching, learning and assessment of the students (Arnesen et al., 2019). Past research has also focused on instructional pedagogical, operational and student concerns from the teacher perspective, with little on the student perspective, specifically at the K-12 level (Farmer & West, 2019).

Of the research that has been conducted with K-12 students, the majority have been theoretical studies with little inferential studies (Arnesen et al., 2019). The lack of empirical research has also resulted in the lack of reliable and valid assessment tools (Black et al., 2008). There does exist research on K-12 distance learning with at-risk students and students with specific disabilities. However, this research tends to focus on asynchronous learning design and work completion (Vasquez III & Straub, 2012).

There also continues to be a lack of research on identifying what characteristics and
supports are needed for K-12 students to have successful distance learning experiences (Vasquez III & Serianni, 2012). While research has been conducted on course and instructional design for online learning in higher education, there is a gap concerning their counterparts at the K-12 level (Oliver et al., 2010). With K-12 students being a wide range of ages, there is a lack specifically of the younger grade students and their experiences.

Now with the required shift to remote instruction for nearly all students in the United States, the continued hybrid learning schedules created, and the discussions on what a new “normal” will look like for K-12 education post-COVID, it is imperative that research includes the experiences of younger students with distance and hybrid learning. We now see that the likelihood of wide-scale shifts to remote instruction are not a thing of fantasy and can happen due to pandemics, wildfires, safety incidents, weather related experiences, and other extreme situations (Whittle et al., 2020). The COVID-19 closures forced an implementation of ERI and later hybrid learning with a combination of face-to-face and distance learning. It is imperative that we continue to study what impacts students’ success, growth, and satisfaction with distance learning.

A Note on Student Voice

Students are impacted the most by our decisions as educators. Every decision we make has a direct impact on the content, instruction, assessment, activities, materials, or language we use directly with students. Yet students do not typically have a say nor is their feedback consistently sought, despite the fact they are the most impacted by these decisions (Smyth, 2006). Students do not usually have a say in decisions made on their behalf, especially within education and the school system (Corsaro, 2003). While educators and educational reform strive
to include student voice in curriculum renewal and gaining insight into the student perspective on instruction and content, there are barriers to those intentions. Students are still limited on who they can speak to and what they can speak about (Fielding, 2001). Typically, feedback is in the form of assessment results, behavior tracking data, and surveys of teachers and parents.

The educational system made many shifts and changes to adapt to the COVID-19 pandemic. As of this writing, vaccines are being handed out, prioritizing educators, and the pressure is on schools to reopen. While we do not know what this full reopening will look like, what we can be sure is that the new “normal” will not be like before. Adults are making decisions and adjustments now that will impact education in the future and can benefit from understanding the culture and processes of children, no matter the age, to ensure their voices are heard in the decisions made for them (Corsaro, 2003). Fielding (2001) points out that simply hearing and actively listening to our students are two different tasks. The former acknowledges the voice while the other provides respect and action to the voice. One listens, the other involves. My hope in this study is to not simply hear the students, but actively listen to them in my district. By understanding their experiences, perspectives, and gathering their feedback, I feel we can design an educational system within my district that will integrate the students into the decision making. Doing so will encourage my students’ leadership (Corsaro, 2003), and potentially bring my district’s mission to life: “The mission of CCSD 93 is to maximize the academic, social and emotional potential of each student,” (CCSD 93, 2018).

Summary

This literature review focused on the E-Learning Systems Theoretical Framework (Aparicio et al., 2016). The framework showcases the three areas that impact online learning
environments: people, technology, and services. The review of people focused on teachers, students, and parents, the main stakeholders in this study, showing that while there is much research on teacher’s perceptions of online learning, student perceptions and academic achievement at the K-12 level is lacking. Further, a shift to ERI placed new instructional challenges on teachers, learning challenges on students, and increased parental involvement in their children’s education. The review of technology focused on gaps in access to devices and internet and how those gaps cause a learning gap as well. Last the review of services focused on instruction, learning environments, and videoconferencing as a tool to provide instruction. The review suggested that simply moving face-to-face instruction to an online setting is not effective nor easy to accomplish. The ERI due to the COVID-19 pandemic heightened that finding, revealing the difficulties teachers, students and parents had in making the shift online.

Moving forward, Oussama et al. (2020) recommend that schools focus not just on closing the technology gap and learning for students, but also focus on mental health. Students and staff alike will need additional support emotionally and mentally as COVID-19 continues and hybrid learning combines both face-to-face and online instruction. An emphasis should be placed on the social and emotional well-being of both students and staff in a time of ERI (Oussama et al., 2020). Additionally, schools must consider the emotional toll reopening to full in person learning will have on students and teachers. Having been home or in a hybrid setting for over a year, full in person learning will be a difficult transition, especially as the technology stays in the instruction and remains a constant reminder of the ERI (Oussama et al., 2020).

Early planning for extended remote and hybrid learning should be an on-going training and professional development theme for all educational organizations. Though the goal of the current hybrid schedule is to move to a traditional fully face-to-face schedule in the future,
educational systems should not rely on that certainty. Among all the lessons from COVID-19 we can take away is that ERI must be thought of, prepared for, and ready to implement on a moment’s notice (Oussama et al., 2020).

Hybrid and remote learning were in place for many districts, and specifically the district in this study, for the remainder of the 2020-2021 school year. The shift back to full face-to-face instruction included elements of the online and hybrid experience. Chapter 3 outlines the methodology to gain student insight into their current experiences to have an impact on instruction and design moving forward.
CHAPTER 3

METHODOLOGY

This study focused on the experiences of elementary students in remote learning environment. This chapter will overview the purpose of the study, research questions, data collection, and data analysis. Also discussed are the setting and participants. Finally, the role of the researcher, ethical obligations, and validity will be discussed.

A case study is a qualitative method that includes focusing in-depth on a current phenomenon in the real-world situation (Yin, 2018). The phenomenon is explored as it exists in an open-minded manner (Edwards, 1998). An exploratory case study was used for this specific study. In an exploratory study, the researcher focuses on exploring a phenomenon that is not specific, clear, or very defined (Yin, 2018). In this study, the phenomenon is not very clear. I do not know fully what students are experiencing and perceiving from their remote learning, nor how their teachers are implementing remote learning. A case study is unique in that the design can use theories as the foundation (Meyer, 2001). This specific study will use Aparicio et al.’s (2016) e-learning theoretical framework to focus the interview questions and observations. An exploratory case study is appropriate for this study due to the ambiguity and new experience of remote learning in the chosen school district. Case studies can also provide perspectives and insights that are not always seen in quantitative studies and are appropriate for current events when the experience cannot be changed (Rowley, 2002). In this study, the remote learning setup,
students participating in remote learning, and the school schedule is determined by the school district and cannot be manipulated due to COVID-19 protocols.

Additionally, this study was conducted as a multiple case study. Each student and teacher were considered an individual case throughout this study. This provided me with a depth of understanding of the remote learning experience throughout the school building. Multiple cases also provided a pluralist perspective (Meyer, 2001), giving greater understanding to the experience of remote learning across the building and grade levels.

Purpose Statement and Research Questions

The purpose of this multiple exploratory case study was to understand how elementary students perceived their learning and engagement in a remote learning environment. The study focused on elementary school students’ perspectives of the learning process, assessment practices, and their participation as described and critiqued by them across their classes.

This study was guided by the following research questions:

RQ1: How do elementary students describe their learning and participation in a remote learning model?
RQ2: How do elementary students describe learning and assessment activities across the content areas in a remote learning model?
RQ3: What are the observed engagement behaviors online during both synchronous and asynchronous learning activities?
RQ4: What are elementary teachers’ views and perspectives of their students’ remote learning experiences and their experiences teaching remotely?
RQ5: What are elementary students’ perceived wants and needs for remote learning?

The teacher perspective was included in this study to gain another view of the students’ remote learning experience. The teacher view is also vital to understanding the district-required policies, procedures, and curriculum, and how those requirements were implemented in the classroom.
Setting

The following subsections explore the school district and school this study took place in. Both the school district and school are described because the school was guided by district policies and procedures that could not be changed.

School District

This study took place in a PreK-8 school district in the suburbs of Chicago, IL. The district has approximately 3,600 students in grades PreK-8. There are six elementary buildings, two middle school buildings, and one early childhood center. The district is suburban, with little to no rural areas within the boundaries. The early childhood center serves students aged 3-5, elementary buildings serve ages 5-11, and middle schools serve ages 11-13. All schools were evaluated by the State of Illinois on growth and overall success based on state-developed metrics. Only the early childhood center was exempt from the evaluation. Seven of the remaining eight buildings were rated commendable and one elementary building was rated exemplary (Illinois Interactive Report Card, 2020).

The ethnic breakdown of the district is: 44.3% White, 6.5% Black, 25.5% Hispanic, 20.1% Asian, 0.2% American Indian, and 3.4% are two or more races. These metrics have shifted over the past five years with a decrease in the White population and an increase in the Hispanic and Asian populations. A breakdown of the student economic demographics yields 36% low income and 1% homeless, both of which have shown growth over the past five years. Within the student population, 17% have Individualized Education Plans (IEPs) and 19% are classified as English Learners (EL). Approximately 2,200 students are elementary, grades K-5.
There is a 96% positive attendance rate with only 9% of students chronically absent or truant. The mobility rate is 6%, another metric that has grown in the past five years (Illinois Interactive Report Card, 2020).

Students in the district work with teachers on an average of 15:1 student-teacher ratio. There is a 76% positive teacher attendance rate and 89% teacher retention rate in the district. 70% of the teachers have a master’s degree or higher (Illinois Interactive Report Card, 2020).

**Armstrong Trail Elementary School**

One elementary building was the focus of this study. For privacy purposes, the school’s name has been changed to Armstrong Trail Elementary School. Armstrong Trail Elementary serves students in grades Kindergarten – 5th. Armstrong Trail Elementary has a rating of commendable from the State of Illinois Interactive Report Card, 2020. This school was chosen because it reflects the average elementary student in the district’s population.

Armstrong Trail Elementary serves 306 students: 47.1% are White, 5.6% Black, 28.4% Hispanic, 16.3% Asian, 0.3% Native American, and 2.3% two or more races. Student economic demographics show 39% of the students are classified as low income and 1% are homeless. Finally, 15% of these elementary students have an IEP and 27% are considered EL. Armstrong Trail Elementary has an attendance rate of 96%, a chronic absent or truant rate of 5% and a mobility rate of 6%. The staff retention rate is 84% (Illinois Interactive Report Card, 2020).

**District Technology Integration**

The school district has been implementing a 1:1 technology program for the past eight
years. Pre-Kindergarten students share iPad devices in the classroom setting. Prior to the 2020-2021 school year, early childhood students were not given individual iPad devices and did not take the devices home. This practice changed for the 2020-2021 school year with the opening shift to remote learning by the school district. Kindergarten – 2nd grade students have individual iPad devices while 3rd – 8th grade students have MacBook Air computing devices. Students in grades 3-8 have been taking the devices home for the past eight years.

The school district has multiple digital resources available to students and teachers for instructional purposes. The district utilizes Google Suite for Education with Google Drive, Gmail, and Google Classroom for a learning management system (LMS). A district-wide license to Seesaw collaborative portfolios was also purchased to better assist PreK-2 teachers as an LMS. Teachers and students have access to the SMART Learning Suite for interactive and collaborative lessons in the classroom and online. Teachers have been applying for and obtaining interactive SMART flat panels for the past four years. Other digital curriculum resources include Discovery Education and iReady for mathematics and reading assessment.

**District and School Schedule and Model**

Due to Covid-19, the school district multiple created unique school schedules that shifted throughout the 2020-2021 school year.

**Elementary Remote Model**

The elementary remote schedule mimicked the traditional school day and was enacted when buildings must be shut down due to COVID-19 health metrics, lack of available staffing,
or weather-related closures as well as each Monday of the hybrid schedule below. The schedule followed the normal school schedule of meeting all day with the large class. Teachers were allowed to develop their own daily schedule with a maximum of 2.5 hours of live video conferencing time. The school hours were also shortened by an hour and a half, giving teachers the opportunity to work with individual remote students on any given day. The shortened time on Mondays was dedicated to teacher professional development and collaboration. Teachers coined this schedule “full remote.”

**Elementary Hybrid Model**

The elementary hybrid model split students into two groups within their classroom – Group “A” and group “B.” Both groups met daily with their teacher. The A group met from 8:45am until 11:20am each day with the classroom teacher live either in person in the school building or on Zoom. This A group then met with exploratory teachers including Physical Education, Art, and Music in the afternoon from 1:10pm until 3:45pm in a synchronous remote session. The classroom teacher also provided additional asynchronous work for the students to complete. The B group met with their exploratory teachers during the morning block and the classroom teacher in the afternoon. Neither group was onsite for lunch. Groups combined on Mondays and met for a full remote, synchronous schedule to accommodate added teacher professional development time and collaboration at the end of the school day. The schedule’s visual format is in Table 2.
Table 2. Elementary Hybrid Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday - Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Remote</td>
<td>Morning Session 8:45am – 11:20am</td>
</tr>
<tr>
<td>8:45am – 2:15pm</td>
<td>A classroom instruction (in person or remote)</td>
</tr>
<tr>
<td></td>
<td>B remote with exploratory classes</td>
</tr>
<tr>
<td>Afternoon Session</td>
<td>A remote with exploratory classes</td>
</tr>
<tr>
<td>1:10pm – 3:45pm</td>
<td>B classroom instruction (in person or remote)</td>
</tr>
</tbody>
</table>

Elementary Concurrent Model

The school district voted to extend in-person and remote synchronous learning beginning in early April 2021 in response to revised health guidelines. The students were no longer divided into “A” and “B” groups. The teacher instead provided concurrent instruction to both remote and in-person students. Mondays remained shortened for teacher professional development time. Tuesday through Friday followed an extended morning live and synchronous schedule with additional remote time for small groups, asynchronous work, and pull-out support. The schedule’s visual format is in Table 3.

Table 3. Elementary Concurrent Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday - Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live and Synchronous learning</td>
<td>Morning Session 8:45am – 12:50pm</td>
</tr>
<tr>
<td>8:45am – 12:50pm</td>
<td>Live and Synchronous learning Dismissal at 12:50pm</td>
</tr>
<tr>
<td></td>
<td>Afternoon Session 2:00pm – 3:45pm</td>
</tr>
<tr>
<td></td>
<td>Asynchronous work, small group synchronous work, pull-out support</td>
</tr>
<tr>
<td></td>
<td>Student connect time 2:35pm</td>
</tr>
</tbody>
</table>
Student Placement

Families were able to choose between the in-person or remote option for both the hybrid and concurrent models. The school administration highly encouraged specific students to return to the building if possible. Ultimately, parents made the final decision if their students were attending class in the building or remotely.

Participants

A purposeful sampling process was used for this study to ensure the participating students would match the stated research questions (Creswell, 2018). I first began by recruiting one teacher at each grade level. I then reached out to specific remote students in those classes and their families based on recommendations from the building administration and teachers. Building administrators and teachers based their recommendations off the stability of the student home life and their knowledge of the English language. Based on the recommendations, I was able to identify students across the three grade levels, academic progress, IEP status, and ethnicity. This provided a solid framework for data gathering (Miles et al., 2014). I contacted the students and their families by phone call and email to gain consent to participate in study. The recruitment script is found in Appendix A.

Students in younger grades were excluded due to their age and the number of changes they have gone through. Furthermore, younger students had not participated in traditional school for a long enough period to be able to compare their face-to-face instruction with remote instruction. Another exclusion were students in grades 3-5 with profound disabilities. These
students specifically may not have the ability to speak or may operate at a cognitive level much lower than their age. While their voices are crucial and should be validated, I wanted to sample students that were a better representation of the entire elementary student population of the district. Finally, those students who elected the in-person learning option were excluded from this study. While these students participated in remote learning, they were not been fully remote for the entire year.

I was able to recruit three teachers, one from each grade level. Pseudonyms were given to each teacher. Jennifer taught 3rd grade, Caroline taught 4th grade, and Anita taught 5th grade. The parents of five elementary students in grades 3, 4, and 5 agreed to have their students participate in the study. All five students had participated in the remote model throughout the entire 2020-2021 school year. The five participating students were all boys. Pseudonyms were given to each student. Two students were in 3rd grade: Carlos and Xavier. One student was in 4th grade, Marcus. The last two students, John and Aarav, were in 5th grade. Chapter 4 provides a portrait of each of the five elementary students and their three teachers who participated in this study.

Role of the Researcher

I was a participant observer and observed the students at a distance while also participating in the class activities when possible (Creswell & Poth, 2018). I did not lead or teach the students in their class settings and wanted to limit the disruption to the learning environment. With the COVID-19 guidelines at the time of this study, I was not allowed in the classroom if the students were in-person. I joined the classrooms via video conferencing with Zoom using the teacher’s Zoom link. Passively participating with the students allowed me to view the students’
world and navigate their experiences with them, with the goal of bringing their voice to light through the analysis (Clark, 2011).

I did not assess the students, nor did I provide interventions, mentoring, or disciplinary decisions. I was a stranger to the students and therefore had to build a strong rapport and relationship with them prior to observing them. The students could have potentially viewed me as an evaluative adult, and I needed to be ready to shift my focus to relationship and partnership building with the students in order to gain their trust (Lareau, 1997).

I gained student trust by reminded them at the start of each interview it was their choice to participate or not. I also reminded the students our conversations were confidential and would not be shared with their teachers. Last, I did not provide feedback on behavior while observing or talking with the students.

Data Collection

Multiple types of data were collected throughout this study. Data included interviews, observations, and artifact gathering.

Interviews and Focus Groups

I began the study by meeting with the five participating students in an initial focus group setting to explain the purpose of the student and the process. The focus group met near the end of the school day during student connect time, a time where all students in the district were remote and teachers met virtually to work with individual or small groups of students. During the focus group, I met all the students, had them introduce themselves to each other, and outlined what the
study entailed. Students were then asked if they would like to continue participating and providing their opinions. Appendix B contains the focus group protocol.

Multiple in-depth interviews were conducted with each student. I had intended to follow Seidman’s (2013) 3-part model by interviewing all students three times. However due to district scheduling, I had to combine the second and third interviews for all but one student. The first interview focused on the students’ past experience with remote learning during the initial COVID-19 closure of March 2020 and the start of the 2020-2021 school year. The second interview focused on students’ perspectives of their current experiences in remote learning, thoughts about remote and in person learning in the future, and their desires for future school years. Appendix C contains the first interview protocol. Appendix D contains the second interview protocol and Appendix E the third interview protocol. The modified second interview protocol is found in Appendix F.

Student interviews lasted at a minimum of 20 minutes and a maximum of 33 minutes. All interviews were conducted via the Zoom video conferencing tool. Interviews were video recorded and were transcribed for both verbal conversations between me and the students, as well as for body language and nonverbal cues from the students, to gain additional insight into the students’ answers (Danby et al., 2011).

A final focus group was conducted with four of the five participating students. Three were still at the participating elementary building and met together in a socially distance setting in the library with masks. One student was at the middle school and had an individual meeting. The final student had moved out of the district over the summer. During this final focus group and individual meeting, I shared my emergent themes and findings with the students to receive their feedback. Appendix G contains the student focus group protocol.
I also interviewed the three participating classroom teachers twice. Both interviews were modeled after the student interviews. The first interview focused on the teachers’ perspectives of the initial COVID-19 closures in March 2020, the start of the 2020-2021 school year, their thoughts on their current remote experience, and their perspectives on their remote students’ growth and participation. The second interview focused on reviewing a lesson I had observed the students in, their experiences with remote learning this year, their perspectives on the students’ growth throughout remote learning, and their hopes for the future years. Appendix H and I contain the protocols for interviews #1 and #2. Interviews were audio recorded and transcribed to ensure teacher comfortability. Last, I conducted a final focus group with the three teachers to review the emergent themes for member checking as well. Focus group questions can be found in Appendix J.

Observations

I observed the students in their synchronous classes three times. Observations allowed me to further enter the students’ world and better understand and interpret what I saw and what we discussed in the interview (Charmaz, 2004). I had intended to observe the students at least once in an asynchronous session where the students were working independently. I was able to accomplish this observation twice with John and Marcus. Both students were very uncomfortable with me observing them during independent work. I chose to not include that observation for the remaining three students. All observations were conducted in the synchronous classroom setting via Zoom video conferencing. Each of the students gave recommendations for classes they wanted me to observe if possible. John was very insistent on seeing his morning meetings. The other students said whichever class I was able to join was fine. This allowed the students to feel
that they were part of the study and helped me to build trust with them (Erickson, 1986). I also let the classroom teachers know when I was planning to observe students, to be sure it worked in their schedule. The teachers were very accommodating at letting me know when testing was occurring or other teachers who were not in the study would be working with the students. The observation protocol is found in Appendix K.

Artifacts

Data was also collected in the form of documents and artifacts. Student work was collected from Google Classroom and Seesaw. Anita and Caroline provided me access to their Google Classroom spaces as a co-teacher to see and collect the students’ work and comments. Jennifer used Seesaw as her main form of communication. I had access to Jennifer’s Seesaw class through my administrative login. I told Jennifer I would be pulling information and posting links via my administrative access, which she agreed to.

Research Journal and Reflections

Throughout this study I kept a journal of my experiences and self-reflections as well as writing memos. I kept a book with my jottings and details that stand out to me including my initial impressions, feelings, and summaries of the event, and then transferred these to digital notes in Microsoft Word (Emerson et al., 2011). While this study was not an autoethnography, it was important to know where I stood throughout this study. I am on the decision-making team that directly impacts teachers and their access to technology as well as their instruction. I am also a parent who was navigating the remote learning experience with my own two children who
attend a different school district. My self-reflection helped me to acknowledge my own bias, experiences, and better understand the experiences of the students (Charmaz, 2004). I feel that documenting my own experience and feelings helped me keep my bias in check throughout the data collection and analysis. I was able to document what happened from my perspective and reflect on the experience (Stone Sunstein & Chiseri-Strater, 2012).

**Timeline**

The timeline for data collection is listed below in Figure 3.

![Data Collection Timeline](Figure 3. Data Collection and Analysis Timeline)

**Data Management and Security**

All videos of interviews and observations were stored on a password protected external hard drive, not connected to cloud storage or the internet to ensure security of the student and staff videos and audio recordings. The password is over 24 characters long to better ensure data security. Transcriptions were stored on a password protected computer. Transcribed data was
managed in NVivo (QSR International, 2018). NVivo allowed me to organize the data, pull word queries, and matrices. This assisted with both my data organization and my breath and depth of analysis (Bonello & Meehan, 2019).

Data Analysis

All data gathered, including interviews, artifacts, memos, transcriptions of observations, and my journal were analyzed. First, I conducted a full read of all data pieces to get a fresh and full view of the data. At this point, I began the memo process by reflecting on the emergent themes (Lancy, 2001). Both open coding and simultaneous coding methods were utilized to gather a general overview of the data for first cycle coding (Saldaña, 2016). A second round of first cycle coding was completed to include descriptive and NVivo coding (Saldaña, 2016). First cycle clean-up was done through code mapping (Saldaña, 2016) and through developing a code book to define each code from the first cycle. Code landscaping was also be conducted by utilizing NVivo’s (QSR International, 2018) queries, matrix, and word cloud features (Saldaña, 2016). Finally, second cycle coding included pattern coding to find the emergent themes and patterns associated with them. Analytical memos were written after each coding cycle in order to reflect on the coding and start to build my thoughts on the emergent themes and categories. This also allowed me to elaborate on the data and begin to link together the data pieces, codes, and themes (Emerson et al., 2011). The memo process also helped to focus my analysis by determining which themes to focus on and which are not as strong as originally thought (Lancy, 2001).
Credibility and Trustworthiness

Triangulation was used to ensure both credibility and trustworthiness of the data and analysis, as case studies have triangulation built into the design and data collection (Tellis, 1997b). Data was collected from multiple sources including students, observations, teachers, and artifacts. This wide variety of data allowed for corroboration and increased the trustworthiness of the study (Tellis, 1997a). I also included all data, including discrepant data, to ensure reliability (Miles and Huberman, 1994). Final analysis and write-up also included direct links and quotes from the data gathered, increasing credibility of the analysis (Miles and Huberman, 1994).

I also used member checking to share findings and emergent themes with the students (Koelsch, 2013). I included immediate follow-ups throughout the interviews with students in the manner of repeating back what they said. The final student focus group also provided an opportunity for member checking with both the students and the teachers.

Ethical Considerations

Honoring Student Autonomy, Time, and Relationships

Due to the young age of the students in this study, I took great strides to keep their identity and words confidential. The students were given pseudonyms throughout transcripts and writings and were interviewed in a private Zoom meeting without teacher participation. This ensured the students felt comfortable sharing their thoughts and perspectives on the learning process.

The students were interviewed outside of the synchronous instructional day, when
possible, to ensure they did not miss live instruction with their teachers. This also limited the
distractions to the students’ remote learning routines established by the teachers and schools.
However, due to schedule limitations with state testing and student absences, I had to interview
three of the students during their class time with teacher permission.

Finally, I strove to build a positive and trustworthy relationship with the students. I had
not worked directly with any students for multiple years in my district, and never with these five
students. This required me to establish a relationship with them right away. I partnered with the
students and invited them to help me learn about remote learning from their perspectives by
reminding them they had the ability to say yes or no to participating at each interview, had the
option to skip a question, and thanking them for sharing their opinions each time (Erickson,
1986).

Honoring Teacher Relationships and Professional Practice

I was in my ninth year of working in this specific district at the time of this study. I had
established professional relationships with teachers throughout the district and have worked with
them in confidential settings in the past. I had shown them my trustworthiness by keeping our
past coaching sessions and instructional conversations private unless they chose for me to share
with others. I had also worked with the three teachers in this study personally through
professional development sessions, coaching, and technical support sessions. I built off my
established professional relationships for this study.

I interviewed the teachers’ students about the instruction and activities they developed
and presented. I did not share the content of the interviews or the criticisms the students may had
on their instruction. Moreover, I refrained from providing judgement or evaluation of the
teachers and their instruction. I did not share my opinions or evaluations of their instruction and reminded them each time we interviewed of the purpose of the study, that we may need to discuss topics they assume I know, and that anything they tell me would not be shared with administration (Fleming, 2018). By placing an emphasis on the student perspective, I was able to keep my relationship with the teachers positive.

Further, the goal of this study was to explore the student experience of ERI. My intent was not to call out nor judge teacher practice, lessons, or achievement. Teachers were also experiencing a life-changing event at the time of this study. They had never taught remotely, let-alone ERI during a global pandemic. Their views and perspectives were gathered to better understand the student perspective and understand why the experience was the way it was.

Biases and Conflict of Interest

As stated earlier, I am on the decision-making team at the district level helping to dictate school schedules, access to digital resources, and the general framework of remote learning for all grade levels and content areas. While I did not teach the content directly, I provided the resources and professional development on what remote learning could potentially look like in our district. Ultimately, the teachers bring the curriculum and resources to life for the students through their instruction and lesson planning. I must acknowledge my own bias in their interpretation of the curriculum and use of digital tools (Fleming, 2018). To assist, I reflected on my own bias throughout the study in my research journal. I also reflected on my view of the interviews and the answers from the students and how they either confirmed or challenged my opinions. I believe that the student voice is vital to our reflections as educators. While much research is done in the K-12 schools throughout the country, much of it is lacking the student
perspective (Seidman, 2013). I kept this in mind throughout the study and in my reflections and memos.

Permissions

Written permission was obtained from the building principal, found in Appendix L. Verbal permission was also obtained from the Assistant Superintendent of Teaching, Learning and Innovation as well as the Superintendent of Schools. Classroom teachers also gave written permission (Appendix M) and access to online classes. Approval was granted from Northern Illinois University’s Institutional Review Board (IRB) (Appendix N). Written permission was also gathered from all participating students’ parents (Appendix O). Parental permission was necessary as the participants were under the age of 18. Finally, assent was sought from each participating student. Students were asked to give assent at the start of each interview to ensure they were comfortable and willing to participate, which was developmentally appropriate for this age group (Clark, 2011). This further established trust and autonomy for the study (Erickson, 1986). While parents are required to provide written permission for their children to participate in the research, students should also be active members and consent, moving them from decisions being made for them to having a voice in those decisions within the research (Clark, 2011).

Summary

This chapter reviewed the case study proposed for this study. An exploratory case study was utilized to gather the perspectives of students in grades 3rd – 5th on their experiences in a
flexible hybrid learning environment. Five elementary students and three teachers participated in this study. Data collected included interviews with the students and their teachers, observations of the students in synchronous lessons, and artifacts from the online class spaces. I also kept a separate research journal for my own notes and reflections as I navigated remote learning as a district administrator and parent. All data was analyzed for emergent themes and patterns.
CHAPTER 4
PARTICIPANT PORTRAITS

This chapter profiles each of the five student participants and three teacher participants in this study. I have provided a narrative on each participant with reflections of our interviews and observations. The scene is also set to provide the reader with a glimpse into remote learning in this school district up to the start of the study in May 2021.

Setting the Scene

My role in remote learning was a supportive one for teachers, students, and parents during the 2020-2021 school year. As the Director of Innovation and Technology, I assisted my team in keeping devices running, managing Zoom meetings, providing online access to digital resources, and providing internet access to families in need. My days were spent ensuring everything was running, leaving the actual instruction to the curriculum team. This study allowed me to get back into the classrooms virtually and see students and teachers in action.

All of the interviews were completed at the middle and end of May 2021. The school district would not allow me to extend my interviews into the summer, so I had to get everything done before the last day of school. My three-part interviews with students were shorted to two for timing. I was still able to interview the teachers twice and observe each student at least three times. I had hoped to observe students in both synchronous and asynchronous work. However,
the students were not very comfortable with me watching them do asynchronous work and preferred to talk about it during our interviews.

The school district had gone through multiple schedules by May. The district began the 2020-2021 school year completely remote; a decision made the day before teacher institute. Students began coming back on a half-day basis in October 2020. However, the district went back to remote in November 2020 due to higher COVID-19 cases. Students began coming back into the building on a half-day basis again in January 2021. By the beginning of February, all students who had opted to return to in-person learning were spending half-days in the buildings. The final schedule change came in April 2021, when students were in school for an extended day and teachers began concurrent teaching. By the time this study began, students and teachers had gone through at least four schedule changes. Teachers were managing their full remote students at the same time as their in-person students.

Remote learning during the 2020-2021 school year tried to replicate the typical school day. There were set class times and lengths for all subject areas. Direct instruction was provided daily via Zoom. The district continued with district-wide common assessments in language arts and mathematics. While schedules were changing, students were coming in and out of the building on and off quarantine, and remote learners were navigating new daily attendance, the district kept the curriculum moving and the assessments on time.

The interviews began at the point in May when the school year was beginning to wrap up. Typically, the district would have completed all high-stakes testing and the last two-and-a-half weeks of school would be dedicated to celebrations and community time. However, the multiple schedule changes forced the district to move state testing to the last full week of school. I happened to be observing students amid testing. Only one of the remote students I worked with
was going into the building for testing. The rest were staying home.

The Students

Aarav

I met Aarav individually for the first time on Zoom. He was at our initial focus group meeting reviewing the study; however, he was not at my initial observation of his class. Aarav was a 5th grade student on the brink of completing elementary school in the next few weeks. Aarav was 10 years old when he participated in this study. He was of Indian descent. While his family speaks Gujarati at home, he spoke clear and fluent English at school. He did not receive any English-Language services or Special Education IEP services. He is the younger of two children in his family, with his older sister in high school. He had been in this school district his entire educational career.

I could not tell how tall Aarav was. He was always sitting on the floor or at a desk for our interviews. He looked fairly thin and, from my point of view, average height for a 5th grader. His dark hair laid slightly over his eyes, and he wore glasses each time we met. His glasses would reflect the computer screen every now and then. When the reflection was very bright, I would see him get darker, as though he was turning down the brightness of the screen.

Aarav almost blended in with his surroundings. He liked to sit on the floor quite a bit throughout the day. The space on the floor looked as though it was in between the side of his desk and a wall, with his bed behind him. A lamp lit up the room from a back corner behind the bed, making Aarav’s corner of the floor bright. When he would sit at his desk, he stood out more, however it was still fairly dark in the room.

Aarav was a very quiet child. He stayed on mute as much as possible and had to be
prompted to come off mute each time we met. Our conversations were short, and the transcripts showcased his brief responses. He preferred to nod when asked how he was doing, or if his day was going well. He took the brief route when answering questions, not wanting to expand on his thoughts, even with prompting.

My first interview with Aarav took place on Zoom after I had observed him once in the classroom. He was in the same classroom as John, so I had the unique opportunity to see him more than two times. Our first interview focused on his experience remote learning in 4th grade and starting to reflect on his experience this year. He remembered feeling nervous about the pandemic and not coming back to school. He mentioned multiple times the nervous feeling from dealing with COVID-19 and the emergency stay in place. For this year, he felt that he had gotten used to remote learning and was not as nervous as before. He preferred to answer any many of the questions with short “yeah,” or by simply nodding. Even though Aarav wanted to participate, he did not seem very comfortable sharing with me.

My second interview with Aarav was the day before the last day of school. Despite the end of the school year being in sight, he still stayed very quiet and reserved. It took until six minutes into his second interview to open more and suggest he show me something on his computer screen. This second interview focused on his experience this year in 5th grade and thoughts about transitioning back to in person. Many times, Aarav stated he wanted everything back to normal and to be back in person. He did not seem to really want to be remote. When questioned, he simply stated he wanted to be back in person. Interestingly, he had similar behavior in the classroom settings. Aarav would opt to pass rather than share answers or feelings with his classmates during morning circle sharing routines. When placed in a partner situation, he worked on his own and did not come off mute much with his two partners.
What stood out to me most about Aarav was that he never smiled. He was not sad nor angry. He did not share any emotions. His face stayed blank throughout our interviews, and he carried that blank emotionless face to his classes. Aarav’s eyes would stare at the screen, watching the teacher and the class. However, he never reacted to the class conversations, did not participate in words, and would never change his facial expression. Many times, during the class observations Aarav would prop his head up with his elbow on the desk or floor and his hand holding his head. He never looked upset or uneasy. Aarav seemed to simply come to class, sit, listen, and complete work.

Carlos

I was looking forward to my interview with Carlos for two reasons. First, as one of two 3rd graders he was younger, and the younger brain and experience really intrigues me. Second, he missed our first scheduled interview and did not show up to class when I was observing. I ended up asking his teacher, Jennifer, for a class time to drop in and to be placed in a breakout room with Carlos. I never knew if I would see him or not on a scheduled day.

Carlos was a 9-year-old boy in 3rd grade at the time of this study. His ethnicity was both Hispanic and Caucasian. His primary language was English, and English was the main language spoken at home, however he told me they also speak Spanish a little. Carlos did not receive any English-Language services or Special Education Individual Education Plan (IEP) services.

I learned something about Carlos right before the interview. His mother is a teacher in the district. I am not interviewing parents, nor did I make the connection until his mother sent me the consent form via her school email address. I liked going into the interview not fully connecting that Carlos is a teacher’s child. Growing up the child of a teacher turned administrator, I know it
comes with a bias for some people. I liked that I did not connect that I knew Carlos’ mother personally and had worked with her in the past on professional development and coaching ideas.

Carlos seemed very short when compared to the two 5th graders in the study. It was hard to fully gauge his height since he liked to either lay on the ground or move away from the computer screen often. He had short black hair and a round, young face. Carlos also always had a mischievous smile on his face. It felt as though he was sizing me up with that smile, seeing where the boundary was and how close he could get to it. That mischievous grin stayed on his face always, even in class.

Carlos was in his bedroom on the floor during our first interview. He had a similar setup during the focus group. His computer seemed to be on the floor – I could see carpet right at the bottom of the screen. He had background nature sounds playing from an air purifier machine. His lights were not on full blast, making part of the room dark.

Carlos also loved to move around. He would twist his chair around, lay on the floor and roll to the side, stand and walk away from the computer, and lean as close to the camera as he could. I rarely saw Carlos sit still, moments that were usually right at the beginning of the day when he seemed very tired. Every time he moved, he would glance at me, almost as though he was trying to make eye contact. I did not say anything when he moved. After the first time he glanced at me, moved and stared right at me the whole time as though to say, “What are you going to say to that?” It felt as though he was trying to figure out what my reaction was. Like he was testing the waters to see what I would do or say to him. Moving the computer from the floor to the desk was almost an ultimate, “Let’s see what she does with this.” I never mentioned the movement, and he eventually settled down on his own during both interviews. I also switched topics quickly to keep his attention span up.
Our first interview focused on his remote learning experience in 2nd grade and beginning to reflect on his remote learning in 3rd grade. Overall, Carlos seemed very bored with school. A common theme was “boring”: “Last year was boring. This year is boring.” He likes subjects but does not like the work. He said last year, “I was getting bored with like the Seesaw and everything because it was like, it’s kind of hard to like figure it out because it was like online.” For this year he said, “I don’t like the tests at all, like, a lot of them are hard., and like whenever they have to like write something like, I think it depends if it’s long or it’s short.” If the work was long or hard to figure out what to do, Carlos did not seem to like it. Carlos also spoke of hating masks and not wanting to be in school because he would have to wear one all day.

Our second interview saw a scene change for Carlos. He was in a spare room at his house with a desk, surrounded by cream-colored walls and using an old-style green desk lamp and a high-back black chair. He looked even smaller on the screen with the large furniture surrounding him. Despite the desk, his constant movement never stopped. He instead found additional ways to move around, including leaving the screen completely or leaning over the desk so his feet were hanging in the air. The desk created a side view from his camera.

Carlos was a student who just did not like school. He mentioned multiple times in his interview that his mother had him do extra Spanish worksheets for her when she got home. Carlos wanted control and seemed to fight daily for it.

John’s smile greeted me each time we met, whether it be for an interview or an observation. He took the lead during our focus group, introducing himself and speaking up. He also greeted me by name each time he saw me, sometimes over the chat on Zoom. I looked
forward to all my interviews, but especially John’s.

John was in 5th grade and about to turn 11 years old at the time of this study. He was in the same class as Aarav with Anita. His racial makeup was both Black and White. He qualified for low income and fee waiver and did not receive any services for English-Language or Special Education. John was the oldest of two children, with a younger brother in his school he shared about. John had asked that I use his middle name for his pseudonym, which I followed through on.

John seemed average height for a 5th grader, with a slightly round face and dark, short black hair. I mistook him for being of Latin descent originally from the way the light from the window in his bedroom and the glow of the computer hit him. He was not overweight by any means, but fuller than his peers in this study.

John used his bedroom as his remote learning space. He sat at a desk with his back to a window. Under the window was his bed. I could see baseball bats, jerseys, and mitts hanging by his closet door. I could also see soccer jerseys and sometimes a soccer ball on his bed. He did not have anything up on the walls of his room, making it seem fairly blank. The walls were off-white and the carpet a dark cream.

John had moved to the district in 5th grade and was moving out again at the end of the school year. The family was renting the house and planning to move again at the end of the school year. John wasn’t sure where they were moving to, but he knew he would be starting middle school somewhere else. He said during our first interview he had never once gone inside the school building. He had only driven past it with his parents. His parents had picked up his supplies and he spent his time at home.

John loved his teacher, Anita. He always smiled when he talked about her. He loved her
stories about her life, her family, and felt he got to know her more than any other teacher. John said many times that Anita took the time to help him learn a new computer and new websites and how grateful he was for her help. John said he really did not know other students in his class. He saw someone walking by his house one time and waved, but that was the extent of his interaction outside of class time with other students.

John always smiled. He was always in a positive mood, smiling, and waving. He made comments in the chat to let people know he was listening, and always willing to share and talk. He insisted I come to the talking topic, or morning meeting, with Anita. He wanted me to see everyone share their feelings or answer the daily question and share the greeting from another language. During the talking topic, John shared each time what his thoughts on the question were or how he was feeling. He had no fear sharing, and did so with a loud, confident voice. Where many students opted to pass and not sure during the morning meeting, John found it good for him to share and was excited that I did as well. John was also one of the only students to chat and share his emotions with the class on Zoom. Anita hosted each morning a joke of the day, to which John would reply, “Hahahaha,” or “Good one!” in the chat for Anita.

John was the only student I was able to do three interviews with. He was the only one who came to all interviews and observations without prompting. John was a student with a good heart, a desire to participate, and a want for relationships. He always said my name, and not simply an abbreviated Mrs. L. He asked me many times how to say my name and used Ladendorf as often as he could. He spoke highly of the adults around him and how they helped him get through the year.
My interviews with Marcus were always entertaining. He had a sense of humor that made me laugh throughout our conversations. He enjoyed sharing stories and making me laugh, and I enjoyed a wonderful break in my day to talk and laugh along with him.

Marcus was a 10-year-old 4th grade boy. He was in Caroline’s class for the year. He was the only 4th grade student to volunteer for this study. Marcus’ race was Black. He qualified for both low income and a fee waiver and did not receive any services for English-Language or Special Education. Marcus was the youngest of three children. His two older sisters kept him busy, according to him. One was in high school and the other in middle school.

Marcus seemed taller than the average 4th grader. He stood up a couple times during our interviews and observations. He was tall, thin, and had very short, black hair. Marcus wore glasses always. He told me they were blue light glasses, and he only used them to keep him from getting headaches from staring at the computer screen all day.

Marcus was in a spare bedroom and office space for remote learning at his home. He sat a larger desk that allowed him to have his MacBook to his right side and use an external monitor as an extended screen. He took great joy in showing me his setup during an observation. He liked having two screens so he could spread his work out. Marcus also used a headset with a microphone so he could hear better. It did make it difficult to hear him sometimes. I do not think his microphone level was turned up all the way. However, the setup worked well for him, and he liked the extra space he had at the large desk. Marcus looked very “official” sitting at the desk with his large headphones, high-back office chair, and multiple screens.

Valuing relationships came through in our interviews. Marcus talked about getting to know Caroline and his classmates during remote learning. Caroline provided many opportunities
for everyone to Zoom together to talk and hang out. He said sometimes the girls were “loud” and “annoying,” however he seemed to enjoy being part of the group when I was able to observe him during one of these hang out times. He laughed and joked with the other students in the class. Marcus said that he definitely had friends and had “gotten all the fame” in the class. He said the girls loved joking with him, though he was not sure why. He said that with quite the big smile on his face.

Marcus also wanted a connection with his teachers. He felt he knew Caroline very well and enjoyed his class time with her. Marcus also mentioned multiple times in both interviews that he liked remote learning because he did not feel he got in trouble as much. He told me about getting in trouble in 2nd and 3rd grade for working too far ahead in math, or going ahead of the class in reading, or not following along with an activity because he had finished it already. Marcus seemed very bored with the pace of school, as evident by his frustration in a math class observation where his partner moved very slow through a set of problems that he finished quickly. I noted his use of the word “trouble;” specifically how he did not get in as much trouble this year. He credited it to remote learning. However, Caroline said once she got him on pace with turning in work, communicating, and taking his time to add details and not just get the work done as fast as possible, he was very good to work with.

I saw a bit of Marcus’ boundary pushing at the start of our first interview. He was eating a bowl of ramen when he came into the Zoom room. Marcus stopped and looked at me for a moment as though to ask if it was ok. I asked him what he was eating with a smile. He told me ramen, and we went on with our interview. It felt as though he was “feeling me out” at the start of the interview – can I get away with eating? Will she care? I didn’t bring anything else up, so he continued eating and participated fully in our interview. I felt as though I was giving Marcus a
Marcus was a very funny boy. He was well-spoken, gave great thought-out answers, and added humor to the conversation. He sat up straight, did not take his eyes off the computer and did not seem to click around on the computer or play with items at his desk. He rotated in his chair a little, but nothing extreme. Overall, Marcus made me laugh along with his jokes, seemed to enjoy sharing with me, and emphasized his value of relationships.

Xavier

Xavier was the first person to join my Zoom meeting for our initial focus group. He came early, quickly saw it was just me on the screen, and left the meeting. I sat for a second, confused as to what just happened. After a few other students came into the Zoom, Xavier tried again. That time he stayed, sitting and waiting.

Xavier was a 9-year-old 3rd grade boy when he participated in this study. He was in the same class as Carlos with their teacher, Jennifer. Xavier’s racial makeup was both Black and White. He was the oldest of three children, having two younger sisters. His primary language was English, and he did not receive EL services. He did receive 504 services for basic accommodations. Xavier was also low income, on a fee waiver, and homeless. He described moving in the middle of the school year and not being sure where he was going to school next year.

I do not know if Jennifer knew Xavier was homeless. It is standard information available to teachers through the district’s student information system. Also, school buildings will typically review information with teachers throughout the school year to keep them aware of what is happening at students’ homes. During a class observation, Jennifer seemed surprised
when Xavier mentioned they had moved around 45 minutes away

Xavier was short and seemed shorter with the tall back chairs he sat in often. He also sat very close to the computer so his chin and sometimes bottom of his mouth were hidden on the screen, giving the appearance that he was even smaller than he was. Xavier seemed to wear hoodie sweatshirts and thinner shirts with hoods a lot. He usually had a hood up over his head so only his eyes were showing. The few times he did not have a hood on showed his curly black hair bouncing with his movements. Sometimes Xavier brought a large blanket to the chair. Between the blanket and the hood, Xavier would nearly disappear into the back of the chair.

Xavier’s learning space changed throughout our interviews and observations. Each day was a new place. Once, he was in a small office at a desk with a large black office chair. Another time he was at a table with a large, wooden kitchen chair. His usual place was in a large, high-back armchair. However, the chair moved around the room, sometimes near the window, sometimes near the kitchen, and other times close to a blank, white wall. Xavier described finding different spaces depending on what was happening around him and where he was. He also described staying home by himself some days if a sitter was not available. He said it made him feel more grown up and independent.

Xavier loved spending time with his family. His younger sisters would come into the background of his Zoom many times during our observations and interviews. He ignored them, but I could see his eyes glance towards them on the screen and a smile would cross his face. He was very excited to tell me about his summer plans of going to Michigan and picking blueberries with his cousins. He said he typically spent most of the summer with cousins in Michigan and loved seeing them. While he liked smashing the blueberries, he told his class he could not wait to see his cousins again and missed them very much.
Xavier was very quiet in class. He worked on his own when given the chance to join with a partner, something Jennifer confirmed. He would not talk or wave or use the chat with other people in the class. Xavier also advocated for himself with me. I had mentioned I would post links to our interview Zooms in Google Classroom. He stayed on at the end of our initial focus group and asked me to use Seesaw instead. He felt more comfortable with Seesaw, knew how it worked, and did not want to miss the interview. Xavier was always present when I was observing or had scheduled an interview. Jennifer mentioned in one interview that he was absent quite a bit, but I was not able to confirm that.

During our first interview, Xavier described moving to nearly an hour away from the school building. He told me how his stuff was still boxed up and he did not have access to all his toys or things he liked. He was hopeful to be able to stay in one place next year but kept thinking he would have to move schools. Whenever he mentioned moving schools, Xavier’s face would look a little sad.

I enjoyed my conversations with Xavier. He was quiet but loved to share about his family and life changes. He was not afraid to advocate for himself, despite not participating in many discussions. He seemed to go with the flow in school, and with his home life.

The Teachers

Anita

I interviewed Anita in person in her classroom both times. She chose her asynchronous time which also doubled as a planning period.

Going to Anita’s classroom was an interesting experience for me. I had been to her classroom multiple times throughout my career in the district. On those occasions she had either
invited me to join, asked me to come see a lesson, or I had stopped by on my own. This time was very different for me. I had not been in a school building more than five times this school year, if that much. I had to follow the district’s COVID-19 mitigation strategies, which meant not mixing of people from other buildings as much as possible. I conducted all of my meetings on Zoom and relied heavily on virtual meetups, office hours, phone calls, and email. However, with the end of the year upon us, district office staff were allowed to begin visiting schools again. Additionally, the students were gone for the day and my leadership felt it was safe for me to visit the building. Anita had asked me to come to the building and meet face-to-face. Her preference was to not be on Zoom any more than she had to on any given day.

I walked into the school and was hit with the familiar sensation of being in an elementary school. Coat racks lined the older school hallways of yellow-tinged cinder blocks and older fluorescent lights. The large wooden doors with tall, thin windows were closed for each classroom, meaning I had to purposely glance into each one to get a glimpse of the learning environment. Walking through the 1st and 2nd grade portion of the building to get to Anita’s classroom, I was immediately hit by the lack of tables. Our youngest students were sitting at desks or small, individual tables. The flexible seating this specific elementary building had piloted and championed for the district was replaced with standard metal chairs. I then noticed the addition of hand sanitizer stations throughout the hallway at both lower and taller heights. I was back in a familiar building with many twists. The twists reminded me that the pandemic was still raging, and the building was adapting.

Anita’s classroom was in the 5th grade hall. This elementary school is a smaller one, set-up in a square-like shape. Entering the building, you follow the path down 1st and 2nd grade classrooms, turn left for the 3rd and 4th grade classrooms, and make a final left to see the three 5th
grade rooms. It’s only in the 5th grade hall that you finally see windows that show the courtyard in the center of the building. This courtyard, or the secret garden as the school calls it, is green and bright with pops of colorful flowers. However, no one is out in it. In years past teachers would take their classes outside to the courtyard for reading or spend their plan time outside for inspiration.

Outside of Anita’s classroom sits her very old wooden Victorian-era school desk, wrought iron and all. She has had that desk outside her classroom for as long as I have been in the district. It was nice to see some things stayed the same this year.

I met Anita in her room right on time. She was coming off lunch and greeted me with a smile and excitement. We both acknowledged we were vaccinated and opted to take masks off. We did sit 6 feet apart, and a mask break was a welcome moment. It was also wonderful to see Anita. I had talked with her multiple times and seen her on Zoom. However, there was something different about being in the same room as her, without a mask, talking and seeing live reactions.

Anita’s classroom was a clash of styles: old and new, messy and organized, tech and paper. She set-up desks in rows with 6 feet of spacing between students. A few students sat at small mini tables while the majority sat at traditional metal desks. Each desk had its own small, colorful bin at the side and a label with a name. The bins held the student’s supplies. The back of Anita’s classroom was filled with books, shelves, boxes or supplies, and posters. The wall with her windows facing the local neighborhood was balancing piles of books. Two rolling bookshelves were opposite the windows with books piled on top of each other. Bins of construction paper, crayons, folders, and lined paper sat on the floor and shelves attached to the wall. A large floor-to-ceiling cabinet had a lock on it, presumably for her personal items. In
many ways Anita’s classroom reminded me of my own 4th and 5th grade experience. The teachers had piles of supplies, books and activities all around us. The front of Anita’s classroom brings me back to 2021. She has two MacBook Air computers set-up – one on her standing desk and one on a table she is working at. She has two iPads – one in her hand and the other on a tall tripod facing an interactive SMART panel.

I’ve known Anita for 8 years. I worked with her in a professional development role, provided coaching and support to her, and encouraged her to share her knowledge with her colleagues. Anita is known in the district for trying new tech tools. When my department has a new software, tool, or piece of equipment to try, her name is always one of the first to be added to a list of pilot teachers, which she usually says yes to. To say Anita likes to try new things is an understatement. Anita is older and possibly close to retirement, though how close I am not sure. Despite being one of our older teachers, she is young at heart with energy, excitement, and an openness to try new things. Anita’s energy came through in her humor. She seemed to need to laugh so she could get through her day. She chose the name Anita for her pseudonym because that is the name she gave her class iPad, with the last name “Vacay.” She chose Anita as a way to say, “I need a vacation.” Her students would get involved in the joke and would change Anita the iPads last name to “Anita Nap,” or “Anita Snack.”

Anita was open and willing to share. She loved sharing and was excited when I initially reached out to her about this project. Our interview felt more like a conversation at many points. Had she not had a class to get to we probably would have gone longer. We both kept an eye on the clock to ensure she would not miss her time with students.

Anita’s dedication to her students showed throughout our interviews. In the middle of our discussion a student appeared on her Zoom notifications in the waiting room. She went from an
exasperated face to a smiling one when she pulled them into the main Zoom room and told them to come back in 20 minutes. She went right from talking with me to pausing, taking care of this student, then back to our discussion. Anita did not miss a beat with the student or with me.

Caroline

I met with Caroline for both interviews after her student connect time in her classroom. Walking through the building to her class was a surreal event for me. I was not allowed in the building while students were present unless it was a true technology-related emergency. COVID had stopped me from making my trips to see students and teachers in action. The walk to Caroline’s room was familiar yet awkward. I felt as though I did not belong in the building. I got many surprised looks behind masks on my way to her room.

I had made this walk to Caroline’s room many times over the course of eight years. She had moved from a room across the hall to her current one a few years ago. She and her teammate had traded rooms back and forth when her teammate was moved to a different grade level. I see Caroline’s room and am reminded of her teammate and her old room. In the past, Caroline had tables setup around the room with alternative forms of seating available for students to choose from. The flexibly was gone this year with COVID. Her desks and tables were in rows and the flexible seating options had been replaced with easy-to-clean chairs. Despite the space and change of seating, Caroline’s room felt familiar. A SMART Panel was at the front of the room with her extra MacBook plugged in. She had a tall table and stool for a desk and no other teacher’s desk in sight. Her shelves were not filled with baskets like years past. However, the baskets were placed at each desk and table for individual students to have books, fidgets, and extra supplies. Aside from these small changes, Caroline’s room looked very similar to how it
had in the past. Where Anita’s room was filled to the extreme with a huge tech setup in the front and Jennifer’s room involved a tech setup and small table at the front, Caroline seemed to be operating as she had for years.

My past work with Caroline had always been positive. She had me visit multiple times when I was a Curriculum Integration Specialist. Caroline and her teammate were always looking to incorporate the latest technology or try the newest instructional strategy. One year they went 100% paperless. I visited their classrooms multiple times that year to see how it was going, how they had been troubleshooting parent access to materials, and what changes they made. At the time, Caroline and her teammate wanted to use the digital tools the district had provided to the fullest. It was met with skepticism and pushback from other members of the Curriculum Department. Personally, I was very interested to see how the paperless classroom looked in actual practice. In this same year, Caroline dabbled with the flipped classroom model. While that model did not become a consistent one used for the year, Caroline kept much of her class paperless for the following years.

Caroline and her teammate have always been the types of teachers that I go to with a new idea or tool to try. I know Caroline will try something, tell me no if she truly cannot fit it in, and give me her honest feedback if she is able to try it.

Something that stood out to me in both interviews was that Caroline was not seemingly stressed about remote instruction in general. Many times, she referred to the fact she was just doing what she had always done. She felt very confident in her technology skills, so the remote instruction was not scary to her. Caroline had even volunteered to be a fully remote teacher when the district was originally not planning to be fully remote and only offer it to those families who opted for remote instruction. Caroline mentioned this early in our interview, and it stayed with
me throughout our conversation and into my reflections. Where Anita and Jennifer wanted to be 
back in person with the students, Caroline did not mind one way or another. “I just want them all 
the same.” She wanted the students either all remote or all in person for ease of instruction.

Jennifer

Jennifer and I held our interviews at the end of the school day both times. It was again 
wonderful to be in a building with teachers. While I did not get to see students live, I was able to 
see the teachers and be in a room with them.

Jennifer was a middle-aged, short, white woman with long blonde hair. She had been 
teaching for nearly 20 years and had spent most of her career in grades 4th and younger. Jennifer 
had her own two children who were elementary and middle school aged that she worked with at 
home. She had been in this school for as long as I personally had known her and worked with her 
teammate for multiple years.

I had worked with Jennifer in the past through my professional development role. I had 
not always been directly with Jennifer’s group because she had previously taught 2nd grade and I 
worked with grades 3-8. By the time I was working with all grades K-8 I was not placed directly 
at Jennifer’s building. Our relationship had always been good and professional, but not as close 
as I was previously with Anita and Caroline. Both Anita and Caroline had invited me to their 
classes in the past, reached out for support with technology, and had been on planning 
committees with me where we were able to form strong relationships. I saw this as a great 
opportunity to get to know Jennifer more and form a stronger relationship with her.

Jennifer was in a new classroom for me. I had seen her in a 2nd grade room. Her current 
classroom was a former third grade teacher’s room who was moved to 5th grade. It was a bit
strange for me personally. I had always pictured Jennifer in her other classroom. To see her in a
different room, and to see that room in a different setup gave me a slight start for a moment. I
knew teachers had changed positions and moved rooms. However not being in the buildings
made those moves only appear to me on paper. It never registered in my head that Jennifer had
moved and was teaching 3rd grade students until I walked into her new 3rd grade room.

Jennifer and I were able to meet without masks at the time. We sat at her half-moon table
that she had setup in the front of the room. Jennifer’s room was wide, but not very deep. Her
desks were setup in long rows spaced 6 feet apart. She had a series of bookshelves across the
back underneath large windows. On one short wall was a whiteboard with make-shift shelving
underneath storing some of her supplies such as pens, paper, notebooks, and construction paper.
The front of her room was not messy but felt very crowded. She had her SMART panel up and
running with a sitting area in front. She put her MacBook on a pile of books by her half-moon
table. She had a second MacBook setup for Zoom pointing at her SMART Panel on a second pile
of books. Her personal MacBook was plugged into the panel, but not showing. She seemed to
have created her own work area where she was sitting nearly all day behind the computer in front
of her panel. It almost felt like a fort of books and tables.

Before we started Jennifer warned me, she had never been interviewed like this. She
seemed a little nervous. She said she wanted to help me with my project and was excited but
nervous that she wouldn’t answer the questions “right.” I reminded her there are no right or
wrong answers, just her own opinions. I reviewed that nothing would go back to my curriculum
team or her administration. That seemed to help her relax.

Jennifer discussed the challenges of balancing her personal life with her work life. She
said that the initial shut down in 2020 was challenge. She had two young children at home plus
her husband working from home to manage. She then discussed how the work was never ending. Jennifer looked very tired when she talked about the increased amount of work. Interestingly it was not the actual work that she mentioned but the constant communication with teammates. She felt that she was constantly working with her team, something it seems she had not done in the evening as much in the past. It was a big shift for her and a challenge.

A common theme I heard from Jennifer through both interviews was balance and workload. As stated earlier she felt the workload with her teammates had increased greatly. She also described workload in her work-life balance “So I think just yes, surviving and getting through it, as both the teacher and the mom like just everyone’s joking those COVID Facebook pages and here’s things to do.” While it was a positive for her to get ideas, Jennifer also seemed overwhelmed when discussing them. Her words were positive, but her tone was not. She took deep breaths and sighs when she discussed Facebook groups and text messages. That balance also connected to the theme of fear. She was fearful about the initial shutdown and fearful of starting the school year fully remote.

Reflecting on the end of the year, Jennifer said she felt “relieved” getting to the end of the year. “I don’t feel it was what was best for all students (extended in-person) …so I feel relieved in that aspect. But I’m also feeling, I feel proud that we did it. I mean, we made it.” Survival was a theme that emerged from Jennifer. She survived despite the pandemic and workload. She survived despite the extra work and lack of balance from her teammates. Her students survived and did not cry through state testing.

Summary

The five boys interviewed were from a varied background. Their families each had
different reasons for choosing remote instruction, and it showed throughout the interviews. Their relationships with teachers and views on school and remote in general had common themes. Those themes were both supported by and contrasted with the teachers’ views. Chapter 5 will discuss these themes in depth.
CHAPTER 5
THE REMOTE LEARNING EXPERIENCE

The 2020-2021 school year began with full remote learning for all students. By the time of this study the five participating boys had opted to remain in remote learning through the end of the school year. Some of their peers were in person while others were also attending remotely. The boys reflected on their entire school year throughout our interviews, not just the hybrid experience at the end. The following sections explore the students’ remote learning experience and as compared to their teachers’ reflections.

School at Home

The five students in this study all spent the entire year on remote learning. John’s family opted for remote learning due to moving into the district and knowing they were only staying for one year. Marcus and Aarav’s families were worried about COVID-19 and did not want to risk their family members getting sick. Carlos wanted to stay home because he did not want to wear a mask the entire day. Xavier was homeless and moved locations depending on the day, making it difficult for his family to physically get him to school. Despite their multiple reasons, the five boys found ways to make remote learning work for them and complete the school year at a distance.
Personalizing the Home Environment

The students found ways to personalize their home environment to meet their needs. Some moved spaces while others added items to help them feel comfortable in their spaces. All the students found a desk space to work with and an organization system that worked for them. However, they all came about having a desk in different ways.

Carlos and Marcus used a personal office space in their homes, separate from their bedrooms. Carlos described his space to me in our second interview:

Karen: Alright, so for your remote learning, are, it looks like you’re in, are you in your bedroom for it?
Carlos: I’m just like, no I’m in like, like I’m not in my bedroom.
Karen: Okay. Is it, like, an office space or like an extra room?
Carlos: Yeah, an extra room that we use quite frequently but like, where I can use it to like focus on learning.
Karen: Cool. Do you have a desk, what’s your setup look like?
Carlos: Yeah, I have a desk I have books on top. My, my folder, a lamp, and, just like my folders, and like, art books. And then silly stuff like crayons.

Carlos also described his organization system as being a large pile of papers. He pulled the stack of papers out for me in our interview to showcase how large the pile had become throughout the year. This was the same pile I saw him pull out during a class observation with his teacher, Jennifer. In a follow-up focus group, Carlos said his organization did not change much when he went back to in-person learning. He still used piles of paper and only cleaned them out when his teacher said it was time to clean out his bag and desk space.

Carlos added an item to make his learning space a calming one. During one of our interviews, I heard birds in the background and thought he might have a window open.

Karen: I hear birds.
Carlos: Oh, it’s a little purifier thing.
Karen: Oh, cool!
Carlos: Like it makes deep noises and blocks noises from my brother.
Karen: Oh, really nice. That’s really calming. I like that.
Carlos: Yeah.

Carlos smiled when he pointed at the air purifier. I could see then a slight smoke coming from it, looking almost like a diffuser. Carlos liked the nature sounds and the fact they blocked additional sounds from his younger brother. It created a calm feeling in his learning space and gave him the opportunity to personalize the space to meet his needs.

Marcus shared in his interview that his space was an office space his dad used when he was home. Marcus had two screens – his MacBook screen and a secondary external monitor. He went between the two screen very seamlessly and enjoyed the setup. He was the only student with this setup. The others used just their MacBook screens. Marcus liked to look at his larger screen and not directly at his MacBook. This changed my view, making it look like Marcus was not looking directly at me but instead off to the side. I noticed this setup changed for our second observation and interview. He changed the camera, so he was looking straight into the screen. It helped me personally feel a connection with him, allowing me to see his eyes and feel as though we were talking directly to each other.

I asked Marcus about his organization skills and wondering if he felt they improved throughout the school year. Marcus felt strong in his organization skills and did not see any change.

Karen: So, do you think you got really better at that, like being organized and sticking to a schedule? Or were you good at that before?
Marcus: I was fine before.

I asked Marcus if he felt he was good at organization and scheduling before remote learning because he was talking specifically about following a schedule and keeping his materials nearby. For Marcus, remote learning organization was the same as his past organization system in the physical school building. Marcus did follow this same organization in his desk, confirming in a
follow-up focus group that his desk was organized just like before.

John and Aarav both attended their synchronous learning sessions in their bedrooms.

John described getting a desk halfway through the school year:

Karen: What’s your setup like for remote learning at home? Do you have your own desk, do you…?
John: Oh yeah, probably like in the middle of the school year, my mom and dad bought me a desk. I think it was from Amazon. I just put some of my stuff on the top of my desk. I just put my computer on my desk.
Karen: Oh cool, so you got like your computer, you’ve got like a little, you’ve got your own space to kind of spread out?
John: I have like a drawer on the desk that can open and then I also have space. I’ve like two shelves one on the bottom and one on the top right, that’s where I put my stuff I need for school.
Karen: Oh cool. So do you feel like you’ve got a really good organization system now?
John: Yeah, I like it. It’s way better than just being on my bed.
Karen: Oh, so that’s where you started?
John: Yeah. And then I have my chair. Oh, my brother also got a desk and a chair.
Karen: Oh, cool!
John: I like my desk and my chair a lot.
Karen: Very cool. So, the beginning of the year, you were just kind of like hanging out on your bed for class?
John: Yeah, it kind of hurt my back.
Karen: That would hurt after a while. And you like, so you like that setup now?
John nods yes

John began the school year without a desk and attended class from his bed. John was new to the district this year, having moved into his home over the summer of 2020. John knew earlier in the year he would be moving again during the summer of 2021. His family did not have a desk for him or his brother at first. As remote learning continued throughout the year, his family purchased the desk like many others did. I had this personal experience as a parent. I rushed to purchase desks for both of my daughters at the start of the 2020-2021 school year and nearly missed out with the lack of inventory. John had a huge smile on his face when he described getting a desk. He truly seemed to like having that personal learning space. John also used his
desk to keep his area neat. I never saw a mess behind John in his room, nor did I see large piles of paper nearby like Carlos used. John had a very clean and organized space, using his new desk to its fullest potential.

John was also excited to share with me how he kept calm. He had a stress ball on his desk that he would use to keep calm and fidget with throughout the school day. He picked it up and showed it to me during our second interview. I also had a chance to share with him my own stress ball I have on my desk in my office. John smiled with that connection. He enjoyed having the tools around him to make him feel successful. He personalized the space with a desk organization and calming objects to meet his own personal needs.

Aarav had a desk the entire school year in his bedroom but did not opt to use it right away. He started the school year sitting on the floor away from his desk. I observed this as well. There were observations and our first interview where Aarav was sitting on the floor of his bedroom with a desk next to his head. For our second interview and later observations, Aarav chose to sit at his desk, in a very tall chair that made him tower over his desk. I asked Aarav about his home setup, and he provided clarity on his choices:

Karen: All right, so when you’re remote learning, what, what’s your setup like at home? Do you have a desk? Where do you sit? Do you use the same space every day?
Aarav: I started off on the floor, and then I moved to my desk.
Karen: Okay. Why, so did you think the floor would be a little more comfortable at first?
Aarav: No, because like my sister and I, like, share a wall, because our rooms are next to each other.
Karen: Okay.
Aarav: But for now, I use headphones.
Karen: Oh, so you could hear your sister through the wall?
Aarav: Yeah.
Karen: Okay. So, the floor was like to get away from her?
Aarav: Yeah.
Karen: Got it, got it, is the desk a little more comfortable then?
Aarav: Yeah.

Aarav had access to his desk but chose to not use it. His sister was learning on the other side of the wall and her sound distracted him. I did notice he tended to sit on the floor right by his desk, so I am not sure how much it helped. He also would move to find more comfortable positions on the floor, something he did not do while he was sitting at his desk. I did observe him with headphones at his desk once, but during an interview at his desk he did not wear them. Aarav also had a very simplified organization system:

Karen: So, how do you keep yourself organized? Like, do you have it, do you kind of organize your space?
Aarav: Like, yeah, it was a mess, but I cleaned it up yesterday.
Karen: Oh okay. So, you kind of like have a space for your folders a space for your pencil that kind of stuff?
Aarav: Yeah.

Aarav used the desk space to his advantage and kept it clean. He was not excited to share about the space with me. Where John took great pride in sharing about his desk and where everything went, Aarav seemed to describe it with a feeling of, “Why would you need to ask this question?”

Xavier’s family struggled to find space for him to use for synchronous learning. Like John, his family was able to get a desk later into the school year. He was very excited to share about his new desk with me.

Xavier: And then, and then like after maybe four or three months after being on Zoom I, we found a desk.
Karen Ladendorf: So, you got to be on your own desk in your own space?
Xavier: Mmmmm
Karen: Is that better?
Xavier: Yeah. And now since moved I have a much bigger desk.
Karen: Oh nice! So, you got space to kind of spread out and enjoy?
Xavier: Yeah.

Just like John, Xavier told me about his desk with a big smile. He was very proud to have a space...
to call his own. Even when he was at the sitter, he had a desk setup to use, completely with a high-back chair.

All five students found ways to personalize their space and organize it for them. John and Xavier stood out to me. Their pride and excitement in their desk and home setup showcased the lack of resources they began with and how they did not take that setup for granted. Marcus liked his setup and used it to his advantage to have multiple screens and allow him to multitask. However, I do not feel that Marcus took the setup for granted. He used all the resources to their fullest potential, including a wide setup, headphones, and a big desk space. He never changed this setup and used it consistently with each interview and observation. Carlos and Aarav stood out to me in their disregard for their resources and setup. Both boys had access to a desk and learning space but chose to not use it fully. Aarav chose to not sit at his desk and Carlos chose to create large piles and disregard the desk’s organization. Where John and Xavier were very grateful to finally have a desk space, Carlos and Aarav did not seem to recognize a desk as a luxury. This showcased the differences in the five boys and the resources available. It also showcased how the physical school building does provide equal resources and learning spaces for students.

Logistical Challenges of Learning at Home

Learning at home was not without its physical challenges. All five students experienced some challenge of being at home. Carlos and Aarav described earlier having to block out the sound from their siblings so they could hear and complete their synchronous work. John described not having a desk to work at for part of the school year. Marcus described balancing his schedule against wanting to be with his sister:
Karen: What was the hardest thing last year (2019-2020 school year), when we first went remote, and we found out, okay, we're staying home and now we're staying home for the rest of the year and it was all crazy, like, what was the hardest part of that?

Marcus: I feel like the hardest part...Because I have a sister, not a younger one like an older one. We love deep sometimes. We don’t get, get, get what is it called like? We don’t like, well, like, like, sometimes we don’t like quiet like, you know, spend as much time or are close you know?

Karen: Yeah.

Marcus: Most of the time we have a good relationship and we you know we usually play games. We play outside in the backyard. I think she ended school, much more earlier than me, and she would start earlier than me. And then she would ask like, oh, like, do you want to play outside, and I would have to say no because I would be in school still.

Karen: Got it. So, being on different schedules in the house was a little hard?

Marcus: Yup.

Karen: Yeah. And what was that like when you’re like, I’m still working here and your sister’s like, but I’m done, how did you feel about that?

Marcus: I felt bad because, because it, because sometimes when I say no to something else. When I say no to something, and then I ask her like a few minutes later...I asked her, like, oh, do you want to do this thing she asked [me] to do, she’s like, and then she said no to whatever we wanted to do. So, if I say no, then that basically just gives the cool chance it won’t happen.

Marcus had the challenge of balancing his schedule against his sister’s schedule. He wanted to spend time with her, but it did not always work out. He was very sad when he talked about this challenge. While the other boys spoke of the physical challenge to setup up their learning space, Marcus brought to light the physical challenge of balancing multiple schedules within one family.

Xavier’s learning environment, however, stood out the most. Xavier spoke about his experience learning remotely at the end of 2nd grade and the start of 3rd grade. His apartment did not have much space, and he had to find space while his dad was also working from home:

Xavier: Um... [I was] thinking about where I should do Zoom. Because for a long time I didn’t have, like, a desk in my room in the old house. So, I would go like to the couch or to, like, to the dining, go to like the table I mean. And that’s where, like, everybody would be working. And my dad would always, like, my dad would be on the computer like 24-7 because he works, he works
at a university.
Karen: Oh okay, got it.
Xavier: And he’s like the person that like manages like the Zoom calls and stuff. So, he has to be on there like [until] like, like, 5pm or 7pm
Karen: Oh, he did that? That’s what I do. I manage all the technology and the Zoom and all that for our district. So, I feel for your dad. I know what he was doing,
Xavier: I mean, and it was like he had like the whole, like, what do you call them? Like, where like you have like that, like, like a separate like table in the kitchen?
Karen: Oh, like a workstation, kind of thing?
Xavier: Yeah.
Karen: Yeah.
Xavier: Yeah, like one of those.
Karen: Okay.
Xavier: He had one of those in the kitchen. Because like during dinner he was, like, when my mom was making dinner, he would probably be on Zoom still managing it. So, we would just eat dinner there [by him].

Xavier’s family did not have the physical space to spread out in their apartment for working.
Xavier shared a room with his two younger siblings and did not have a personal desk at the time.
His father was working from home as well at the end of the 2019-2020 school year. Where the other four boys had their own space, Xavier did not. Xavier had to share a learning space with his father, while his mother was cooking, and his siblings were in their shared room. It was a lot to manage for an 8-year-old boy and his family.

Xavier moved in the middle of the school year to a different city, adding additional physical challenges to him attending synchronous learning sessions. He was officially homeless, and his parents struggled to find a learning space for him as well as childcare. His father went back to the office and his mother worked as a substitute teacher. She never knew which days she would be in a school or which school she would be at. Xavier spent more days at the sitter with his younger siblings. The sitter’s house had quite a few younger children. I saw at least three young children walk behind Xavier during his online classes. One even began dancing to something in the background. Xavier did not pay any attention to the distractions.
I do not know if Xavier knew his official homeless status. He spoke of moving to a bigger place with a friend and needing to be with a sitter.

Karen: So, when you are learning at home, do you have, do you have like your own desk? So, you have like a nice big comfy chair today. Do you kind of move around your spaces?
Xavier: So, at home I have like my room. And here I’m at the sitter’s
Karen: Oh, okay so you go…
Xavier: Yeah, and it’s like an office area.
Karen: Yeah. Got it. Which one do you prefer being at home or at the sitters?
Xavier: At home
Karen: Home? It’s a little more comfortable, quieter, or just
Xavier: Yeah quieter.

Xavier went between his home and the sitters. His setup was different depending on the day and his mother’s work situation. He had a different setup each time we talked for an interview, or I observed him in synchronous class. I could tell when he was at the sitters only because he usually sat in a very large, tall-back chair I would see in a living room. When he was at home, he would sit in a rolling desk chair with a mesh back. I only saw him at home twice: once for the focus group and for our second interview. Otherwise, Xavier was at the sitters. His workspace at the sitters changed based on the day as well:

So, on some days I will go to the sitters, and I, and I, I have memorized like were to go online. So, so if, so we call her grandma, which is like basically the sitter’s mom, and she comes every day except for Tuesday so on Tuesdays when I’m there. I’ll most likely be in like the kitchen there. Or if she’s there I’ll go to like the office space. When we have to charge my, my computer, I go by, I go by like one of the outlets by the couch.

Xavier’s days were in a constant state of flux. He even had a day where he was at home by himself with his siblings: “I’m home alone. Shh…don’t tell my teacher.” It broke my heart to know Xavier was only 8 years old and having to not only manage himself but know his two younger siblings were there as well. His mother was coming home soon he said. Xavier did not seem nervous, and I picked up on the idea he had been alone with his siblings before.
Xavier’s situation showcased the physical and economic challenges many students and families faced with remote learning. His family lost their home in the middle of the school year, moved an hour away, and Xavier was expected to keep learning and attending synchronous sessions. He did not have the physical setup the other boys had. He did not even have a desk to consistently use after their move. While he had a desk available at his new home, he spent many days at the sitter’s house, taking him away from a consistent learning space. He also had inconsistent access to the Internet. The sitter’s home had internet for him to use, however he had to borrow a hotspot from the school district to use at the apartment he was living at.

The Schedule

The end of the 2019-2020 school year was not structured. The school district followed state guidelines and did not require students to complete work. Scores on assignments and assessments could only help students’ final grades, not lower them. Due to this, students were not required to attend synchronous learning sessions. The school district only required teachers to provide at least one live Zoom time a day for students, with the option to offer additional Zoom meetings if the teacher wanted.

The 2020-2021 school year brought a big shift in the daily schedule. Upon deciding the school day would be fully remote, the school district required a minimum of five hours of instructional time online for all teachers and students. Elementary schools developed schedules where the students moved between their classroom teacher and exploratory teachers. Synchronous learning sessions were longer, and attendance was required. The five remote students in this study attended live, synchronous learning sessions from 8:45am through 12:50pm with small breaks built in for bathroom or switching to an exploratory teacher. Table #3
in Chapter 2 showcased the daily schedule. Whereas the 2019-2020 school year ended with flexibility and choice for the students, the 2020—2021 school year added multiple requirements and held students online for hours. All work was expected to be completed, with the district’s standards-based grading system in full effect. The impact of this shift is described throughout this section.

**A Daily Schedule for Everyone**

All three teachers provided a daily schedule to their students. Each one approached the daily schedule and provided information in a different manner. This allowed the teachers to organize how they felt best and work with their individual students to meet their needs.

Caroline’s schedule was very simple. She used Google Classroom as her learning management system and pinned a post to the top of the assignments. The post contained her daily Zoom link and the daily schedule, seen in Figure 4.

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**Figure 4. Caroline’s Daily Schedule**

<table>
<thead>
<tr>
<th><strong>MONDAY-FRIDAY</strong></th>
<th><strong>TUESDAY-FRIDAY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Learning Hours 8:45-2:15</td>
<td>Office Hours 2:30-3:45</td>
</tr>
<tr>
<td><strong>8:45-8:55 ATTENDANCE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>8:55-9:35 CATS (SEE BELOW)</strong></td>
<td></td>
</tr>
<tr>
<td>Student groups are posted in Google Classroom</td>
<td></td>
</tr>
<tr>
<td><strong>9:45-9:55 COMMUNITY TIME</strong></td>
<td></td>
</tr>
<tr>
<td><strong>9:55-10:50 ELA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>10:50-11:30 SCIENCE/SS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>11:30-12:40 MATH</strong></td>
<td></td>
</tr>
<tr>
<td><strong>12:40-1:20 LUNCH BREAK</strong></td>
<td></td>
</tr>
</tbody>
</table>
Caroline could change the Zoom link easily by editing the post, which she did weekly. Marcus did not even notice when the Zoom link was different. He went to the same post daily to click on the link. I used this same system when I was sending him my own link for our interviews. I created a post, assigned it directly to him so it was hidden from his classmates, and edited the post to update the Zoom link as needed. Caroline did not send out a detailed schedule each day to her students. Instead, she sent reminders through Google Classroom and reached out to individual students as needed.

Jennifer’s schedule was more detailed than Caroline’s. Jennifer created a daily schedule and sent it out the day before each learning day. For example, her schedule for Wednesday, May 12th, seen below in Figure 5, was sent to students at the end of school hours on Tuesday, May 11th.

![Figure 5. Jennifer’s Daily Schedule](image)

Jennifer claimed to use Google Classroom for her LMS, however I was never invited to the
Google Classroom space. I saw all of her assignments and scheduled posted in Seesaw, the official LMS for younger grades. Jennifer gushed multiple times about how Google Classroom was very helpful to her, without ever showing me her work in the space. Jennifer’s daily schedule included the daily Zoom link and passcode at the top of the schedule and pictures of needed materials. Similar to Caroline, Jennifer reached out to individual students as needed through Seesaw and Google Classroom.

Anita’s schedule was the most detailed of the three teachers. She took great pride in telling me all about her daily schedule:

Anita: So, what I’ll do, let me see if I can pull something up. goes to MacBook to pull up daily schedule So... you can...you can...I’ll show you as many schedules as you want. So, I will push out something like, let’s go to a Wednesday middle of the week...So this was May 5th. shows May 5th schedule for day So I let them know what we’re doing in math, what they need, bathroom break, here’s what you must do for your math. And I always tell them if they have somebody that they have to go to first special, and all the links are up there so that they can just click on the name, and it’ll take them right to somebody’s Zoom. Um, so, here’s what I’m going to check in for writing. Here’s people who have to go somewhere. This is what we’re going to be doing. This is our end of the day, talking…And then here’s the afternoon, so like, from 2:00 to 2:30 this is what they’re supposed to do, here’s our community meeting. And then here is who I’m working with, and then here are people who owe me work. And then here’s late work so this is your homework. And then after I do my read aloud if you aren’t one of the blue people then you’re free to go.
Karen: Okay. That makes sense.
Anita: So, if...goes back to finding schedules...I want to go here. So, like, if we go back at the beginning of the year...missing work...
Karen: So, you make one for every single day then?
Anita: I copy paste. Yeah, so. And I got streamlined…So like I would do this where they wanted to know, what do we need, and then we had small groups, like this these kids you’re working on iReady be back for your next zoom at 9:50. So, at the beginning of the year I wouldn’t let them leave the zoom, and then it got...they got very good at coming back. And so, I would tell them blow by blow what we were doing but that’s really way too much information. They were like we don’t need that much Mrs. Anita. And we’re handling coming back so and we’re handling our late assignments.
Karen: Very cool that they said that to you!
Anita: That they felt really good about it. Yeah. So, wow. You know I put out there, they got really tech savvy.

Despite Anita pulling back some details, her schedule was much more specific than Jennifer and Caroline’s schedules, as seen in Figure 6.

Figure 6. Anita’s Daily Schedule

Anita sent her schedule out the evening before through Google Classroom, similar to Jennifer.

Anita used the schedule to hold all Zoom links and requirements for all students. It became a one-stop-shop for her class. Her students appreciated the schedule as well. John described how the schedule helped him with his own organization:

Karen: So [the daily schedule] kind of like you use, what Anita gives you to stay organized? Between that and your desk you feel really good with staying organized?

John: Yeah, without the schedule, that would be harder.

Karen: Oh yeah?

John: I don’t know how I would get our link. She would probably just post it.

Karen: Yeah, and then probably would be a little confusing, like wait, this post, that post? 

John: The schedule is easy, I like it.

John relied on Anita’s schedule to stay on time and find his work. Aarav agreed with John,
though not as enthusiastically:

    Aarav: Yeah, you just keep it up to keep track.
    Karen: Okay, so you use it a schedule like every day.
    Aarav: Yeah.

Where Jennifer and Caroline provided some information, Anita placed the information in the students’ hands and required them to use the schedule daily. The daily schedule kept both Anita planned, and her students organized.

**Multiple Schedule Changes**

The students and teachers also experienced multiple schedule changes throughout the school year. The year began fully remote, with all students attending synchronous instruction all day on Zoom. In mid-October 2020, the district began bringing students back into the building on a hybrid schedule, as was seen in Table 2 in Chapter 3. Students were split into two groups: A and B. Group A would attend in-person in the morning while Group B would attend in-person in the afternoon. The students in this study were placed in a group with other fully remote students, helping the teacher to avoid concurrent teaching when possible. The three teachers in this study had their remote students in Group B and were able to teach just remotely in the afternoons.

The hybrid model was slowly incorporated into the school setting. Armstrong Trail School brought in all kindergarten students for one week first. Then first grade students were added a week later, followed by second a week later, and third one more week after. Carlos and Xavier’s classes had moved to the hybrid schedule by the beginning of November. However, COVID-19 cases in the community began to climb and all students were moved back to full remote learning from mid-November until January. Elementary students moved back to a full remote schedule at this time. The hybrid schedule was redeployed in January. Marcus, Aarav,
and John’s classes were able to come back into the building in mid-January.

The schedule changed again in April. The concurrent schedule with extended in-person or synchronous learning was implemented, as was seen in Table 3 in Chapter 3. This is the schedule that was in place at the time of this study. By this point the students had experienced five schedule changes during the school year.

All three teachers acknowledged the work and challenges the multiple schedules changes placed on them and the students. Anita noted the schedule changes created “…a lot of moving parts” for her and her students to manage. Caroline expanded on this:

So, every time there was a schedule change, it took about two weeks to three weeks to get them [students] all right, like, all on the same schedule. And then we were good. And then it was like, we’re doing this for like a couple of weeks, and then we’re gonna switch again.

Caroline also noted the emotional toll the schedules changes had on students:

And it’s, like, a lot of prep upfront. Like “Don’t forget this change in a couple weeks, dot, dot, dot.” Like we don’t like to make these changes. And I think the fear from them [the students] was like, you don’t know what it’s gonna look like in a couple weeks. And we just kept saying to them, “We’re gonna make it through the first two week by just figuring it out.”

The teachers acknowledged they struggled with the changes and moving pieces as well as the students. Jennifer shared her dislike of the multiple schedule changes and the impact she felt as well as her students and their families:

I don’t know who it was good for. Yeah, I really don’t know…I don’t think it was good for anybody, because I think it upset some people. Some parents who have working schedules. And then teachers too. Just once we got in the swing of things, I felt like it was changing again and that we were having to start all over again…but I felt like right before Thanksgiving, here we go again. Now we have to worry about it over Thanksgiving break, all of us. Students, teachers, and the parents.

The schedule changes were not isolated to this school district, which all three teachers
acknowledged. The students never mentioned the changing schedules as a challenge they experienced. However, the teachers not only saw the challenges the students faced but also had to guide them through the multiple changes, making it a challenge for everyone whether acknowledged or not.

**The Intensity of the Schedule**

The daily schedule was modeled after the traditional school day. Students attended synchronous instruction for long periods of time. The long days online took a toll on the students. Marcus described his daily schedule and time online as being very long:

Marcus: This year we have like a whole entire schedule. We have to go back at like specific times. We have like a, we, you know, we only have like two breaks with this, we only have, oh yeah, we only have two breaks within the span of like four hours.
Karen: Oh wow.
Marcus: Yeah.
Karen: So, do you feel like you’re on Zoom a lot now?
Marcus: Yeah. Because it is I feel like whenever you’re on like a laptop or like computer or whatever. It just feels so long. It’s actually hours but it feels like centuries.
Karen: Got it. No, I totally get it. So, the schedule this year, do you think it made it easier or harder this year having a set schedule?
Marcus: I think it was the same. I think it was both because it was easy, it was harder at the same time because we only have like two breaks within the span of like four hours which kind of sucks.

Marcus points out the long time on Zoom made his day feel much like long centuries of time versus hours. The extended time on Zoom for synchronous learning took a toll on Marcus, making him tired and feeling like the school day dragged on. Carlos agreed with this sentiment:

Karen: Oh, so you want to kind of like put your head down and sleep?
Carlos: Yeah, well I wake up like so early. But then I still be tired at like 12
Karen: Do you go to bed, early to or?
Carlos: um, yeah, yeah.
Karen: Oh, but what time,
Carlos: Like seven.
Karen: Oh wow. Wow, so you do a lot of sleeping then huh.
Carlos: Yeah

Carlos got plenty of sleep, yet still was tired in class. I observed this during his morning circle meetings and classes. He sat with his head down, looking tired, and yawning. One time he did not turn on his video and signed off quickly, first thing in the morning. My observation of Carlos, and his statements during our interview, indicated the length of day on Zoom was tiring and taking a toll on the students.

Students were scheduled to the minute. Due to the COVID-19 safety mitigations, everything from bathroom breaks to which classes were walking in the hallway had to be scheduled to the exact minute. Classes that were meeting in-person could not mix or walk near each other to make contact tracing easier on administration. The remote students had to follow the same schedule as their in-person peers. I observed teachers across the buildings in my district struggle with this daily schedule. I had multiple meetings with teachers rescheduled due to their schedule changing to add additional mitigations in the buildings.

Remote students also had to keep track of multiple Zoom links for each of their teachers. There were separate Zoom links for their classroom, music, art, PE, and library media teachers. Additionally, if students were receiving specialized services, they had their resource teachers’ links to look for as well. Aarav expressed his frustration with the multiple Zoom links. He was not happy throughout our interviews and did not speak highly of his remote learning experience:

Karen: So, for you, has this year been kind of hard on remote?
Aarav: Yeah.
Karen: Yeah? What’s been like the thing that’s made it like the hardest part about it?
Aarav: *deep sigh* Just joining the Zooms.
Karen: It’s a lot to keep track of?
Aarav: Yeah, cuz like it was scheduled zooms and times to go on certain ones.

Aarav looked very sad during this. I felt sad for him. His face was long, his voice low, and he gave a deep, frustrated sigh when discussing the Zoom meetings. He did not want to be on Zoom in his house, and the multiple links to join at exactly the right moment was intense for him.

The teachers felt the intensity of the schedule as well. When describing the daily schedule, Anita said: “I don’t like it because you are constrained. You don’t have that freedom to go over a little bit more. You know? And it’s shorter than normal.” She felt stuck in the schedule because there were very specific times for students to be at the bathroom or in the hallway. She could not deviate from that strict schedule due to the COVID cleaning and mitigation strategies.

There was a positive to the intense schedule. While the students were attending synchronously throughout the entire morning, their afternoons were slightly lighter. Students had asynchronous work to complete after their lunch break. Students and teachers came back together for an hour at the end of the day to wrap up, connect with each other, and prepare for the next day. Marcus described this time:

Marcus: The good thing is that we only, we used to end school at 345 Now, so on Mondays we would end at school I like 2:15 and then Tuesday through Friday, we went like, 345 sometimes even later. But now we will now on Mondays we have school at like, 1245, and then Tuesdays and Fridays we have school like, like to, like, three o’clock or 325.
Karen: You like that?
Marcus: Yeah.
Karen: Yeah, ending earlier?
Marcus: Oh yeah!

Marcus pointed out the day was shortened. He had a shorter amount of time in the afternoon to be online and was done with school earlier than in previous years. This shortened time gave students a breather or relief from the long class length during the mornings.
John did not seem to struggle with the daily schedule as much, despite the intensity felt by other students.

Karen: So, like during the, the other weeks where testing wasn’t happening, you met, pretty much all morning, right?
John: Yeah.
Karen: What’s that like? Is it good is it like…do you like it? Do you not like it? Kind of in between?
John: It’s good because we get pretty good bathroom breaks and stuff. Plus, we’re only on for like 30 minutes before our first bathroom break and then we go to, we go back and do our math or whatever we’re doing for like 50 minutes. And then we go to like CATS and then we stay on for 20 minutes and go to a bathroom break. And we just talk for an hour, so we get like breaks and stuff. So, we don’t stay on as long or doesn’t feel as long.
Karen: Okay, so if the brakes weren’t there, would it be really hard?
John: Yeah, I like that time just to like, to take a break from all the work you’re doing.
Karen: Okay. So is the break, do you like the breaks because you get to get away from your screen or do you like the breaks because you get to stop working for a little bit and relax?
John: Stop working and getting to like to relax a little bit.
Karen: Okay, so it’s not the computer and doing it on the screen it’s the "we’re doing so much stuff"?
John: We’re not doing like so much stuff, but I just like kind of relaxing after doing work.

John saw the scheduled breaks as a moment to relax. He did not see the need to jump on multiple Zooms after small breaks as intense or a hard task. He used his break time to do just that: take a break. He showed me his bed he would lay on and his soccer ball he would kick back and forth during his breaks. The breaks were necessary for him to not feel as though the daily schedule was too intense.

Building Independence with the Schedule

The built-in breaks and asynchronous work time required the remote students to be independent. All three teachers provided a framework and guide for the students to follow to
make sure they stayed on time. However, it still felt as though the teachers were letting the
students loose on the day during asynchronous learning. For example, I observe the beginning of
Anita’s class. It was a testing day, so all in-person learners would be taking the state assessment.
Remote learners would be working on a choice board for their day. My fieldnotes from that day were:

Anita told them to come back at 2:30pm and she would see them then. She waved goodbye, and all the students including John waved back. All the remote students signed off and I thanked Anita and said good luck with testing.

I saw the same with Jennifer on a state testing day. She completed her morning routines with the students then said, “I’ll see my remote friends at 2:30pm. Do your choice board ok?” It felt very loose and strange to let a group of 5th and 3rd grade students log off the class and go about their day. However, the students were also building their independence and ability to complete their work on their own. Anita would be checking on it and posting who had make-up work to complete on the daily schedule.

Xavier described the independence he built throughout the remote learning experience:

Karen: You already said you like to remote because you get to kind of relax and find your own space and when you’re done you get to go lay on your bed. Anything else you really like about remote learning?
Xavier: It’s easier.
Karen: Really, what do you think makes it easier?
Xavier: It’s just like, I’ve memorized what to do so.
Karen: You know like the routine, and you know I click here then I do this, then I do this, that helps?
Xavier: Mmhmm.
Karen: Cool. So, when you like have to get on with zooms and all that, do you do that yourself or does an adult, kind of help you out too?
Xavier: I do it myself.
Karen: You do. Do you feel really good about that?
Xavier: Yeah,
Karen: Staying on time yourself?
Xavier: Mmm...yeah, I’m pretty good about it.
Despite being in multiple homes, and not having a consistent learning space on a day-to-day basis, Xavier had memorized which links to find and what time to be in synchronous sessions. The routine helped him develop independence, which he was able to use across all his learning environments. Xavier’s description of memorizing the day showcased how the daily schedule, though intense for some students, provided the means for others to flourish and become self-reliant for their learning.

**Finding Flexibility Amidst the Intensity**

All the students found ways to build flexibility into their remote learning days, especially during the breaks built into the day. Marcus noted he preferred the end of the 2019-2020 school year where there was not a very set, intense schedule:

> I liked that we didn’t have the schedule, because, because everyone works at different paces. Like, for me, I go pretty fast. I know probably some other people they probably go, like, middle fast or slow. And some people are slow like it’s their pace.

Marcus enjoyed the flexibility he gained from remote learning. He found ways to build in his own downtime throughout the scheduled day. Completing his work quickly allowed him the freedom to relax, which he personally loved. He liked going at his own pace in his own time, having control over his day. He also pointed out:

> Well, what I was kind of actually happy about was that you don’t get in trouble as often. Because, because, because in person, obviously the teachers are, I feel, like a Hawks. They watch you. But like, well like remote you can like turn off the video. Like, the only time I turn off my videos is either when I’m like, getting ready in, like, either when I’m getting ready in the morning.

Marcus felt he was able to be flexible with his day and did not have a teacher staring over his shoulder every moment of the day. He liked the freedom remote learning provided him, even
with an intense schedule.

John and Xavier were most vocal about their desire for flexibility in their days. Xavier described using his breaks to relax:

Xavier: When I’m on breaks I can just either turn on the computer that you find that day or I could just go on my bed and use my iPad.
Karen: Nice, so you feel like you’ve got like some flexibility, you’re not stuck at a desk all day?
Xavier: Yeah.

Break times were an opportunity for Xavier to relax and unwind. He liked the flexibility of being able to use his iPad or lay on a bed if he could. John had a similar thought:

Karen: Do you like to get outside and just kind of get away from being inside all day during breaks?
John: Yeah, I like trying my skateboard
Karen: Cool!
John: And I like going on my trampoline or playing with, like, playing sports.
Karen: Oh, what’s your favorite sport
John: I like soccer, that’s my favorite sport and then it’s football and basketball are tied.

John used his break time to go outside and move. He liked to play soccer on his breaks. He also sometimes, as mentioned earlier, laid on his bed or kicked his ball in his room. Either way, the breaks allowed him the flexibility to leave the room and get outside when he would not have that opportunity in a traditional in-person classroom setting.

John also described the flexibility to structure his day, so he had more relaxation time. He stated, “So after we finish the [asynchronous] work we could just be done basically for the day.” He liked that flexibility. I saw this also in our discussion about his choice board work during state testing. John strived to complete all of the work quickly in the morning so he would have the entire late morning and early afternoon to himself. He did all of his work well, according to Anita. He used the asynchronous time to maximize the amount of time he had to himself each
day.

I would be remiss if I did not mention Xavier’s biggest love of remote learning: flexibility to use the bathroom.

Xavier: Actually, what I want to still be [happening next year] is being able to just like to tell that you’re going to go to like the bathroom.
Karen: Oh, not having to raise your hand to just be like hey I have to do this?
Xavier: Yeah,
Karen: I get that. You like that huh?
Xavier: big smile Yeah.
Karen: Do you like that ability be like “I gotta go,” and go?
Xavier: Yeah.
Karen: Yeah, a little more freedom?
Xavier: Oh yeah!

Xavier would message Jennifer in a private chat to tell her he was going to the bathroom. He had privacy and the flexibility to go whenever he wanted. It allowed him to not have to wait for the designated bathroom time like his in-person peers. He then could use the bathroom break time to relax and do something else. Xavier and John both found ways to use the schedule to meet their individual needs.

Despite the rigorous daily schedule and requirement to be online, the students found ways to build in relaxation and flexibility. A bathroom break could be used to go for a short walk outside in the yard or play on the iPad. A movement break between the classroom and exploratory teachers could be a walk around the house and checking in with siblings. Lunch time could be done out or inside and could include YouTube and video games. Yes, the students had many hours to be online, and they were able to make the most of the breaks in customizable ways that were not possible in the physical school building.
Asynchronous Learning

Asynchronous learning was built into the daily schedule in the afternoon. All students were at home at this point, participating in asynchronous learning from a distance. Teachers were able to use the dedicated time from 1:40pm-2:30pm to build in small group time and provide additional independent assignments. All three teachers used asynchronous learning as dedicated time on iReady pathways. The iReady system created personalized pathways for the students based on their diagnostic assessments. The school district mandated students to work through their pathways for 15-20 minutes daily. All three teachers built dedicated iReady work time into their schedules, as seen in Caroline’s schedule in Figure #4, Jennifer’s in Figure #5, and Anita’s in Figure #6.

Anita also described using the time for students to catch-up on their work as well:

Anita: I don’t give them work that they have to do that, catch up time that’s let’s finish things that’s I may conference with you as a writer, that’s maybe we tried to do small group, but, you know?
Karen: So that asynchronous you kind of use it as like, this is your chance to do what you need to do and when you’re done, you’re done?
Anita: Right.

She was able to pull students into small groups while allowing other students to work independently. She built in dedicated catch-up time and reminded students of what their priorities were for asynchronous learning time through her daily schedule. In this sense, asynchronous learning allowed Anita to personalize learning for all of her students, provide additional support in a synchronous moment, and not waste other student’s time in the classroom.

Another structure the teachers used for asynchronous learning was providing choice boards for students to complete. Both Anita and Caroline used choice boards for their daily
asynchronous time. Anita’s choice board was dedicated to Fridays. She named the board “Friday Fun Extras” and provided a variety of resources for students to explore if they were caught up on work from the week. An example of her choice board is below in Figure 7.

![Figure 7. Anita’s Choice Board](image)

Anita gave her students these optional opportunities to continue their learning and ensure the asynchronous time was still being used. However, she did not require the students to formally report out on what work they completed, opting for the “honor system” instead.

Caroline provided a choice board that was used daily for asynchronous learning. Her choice board is below in Figure 8.

![Figure 8. Caroline’s Choice Board](image)

Caroline’s choice board included items students had to complete at least once a week. She would ask them to report out on their choices each day and keep track through her digital resources which choice they had made, how much time they had spent, and which choice they were missing.
During state testing, remote students who were not participating in the assessment were given choice boards with work to complete. The instructional coaches for the district put together a required choice board for all students in 3rd – 8th grades to use throughout the day, as seen in Figure 9.

![Figure 9. State Testing Choice Board](image)

The choice board was used by every teacher with remote students in the district. All remote students had to complete the activities throughout the week. Remote students had very limited synchronous learning time during state testing, requiring them to participate in asynchronous learning exercises only. Anita, Jennifer, and Caroline all followed up on the remote students’ completion of iReady minutes. They did not ask for reporting out on the other activities throughout the week.

The students had mixed reviews of asynchronous work. John personally liked the choice boards and independent time:

> But I actually like this week more better than the synchronous like, I don’t know why. It’s just a little hard to meet so long. And plus, we get to do a choice board.

He liked having choices in his day, a checklist to complete, and independent time to himself at the end. John preferred to complete the work as quickly as he could so he could have relaxation time, something he described with a big smile during one of our observations. During our
interview, John described his plans for the asynchronous day:

John: Like the first one is complete 30 minutes of iReady Math and Reading. I did that.
Karen: Woo hoo!
John: Yeah, and then go outside and play. Spend some time exploring the choice and posting to do. And also read for at least 30 minutes.

He liked having the “rest of the day” to himself and time he could dedicate to being outside or doing what he wanted that was not school related.

John’s classmate, Aarav, was indifferent towards asynchronous work and choice boards:

Karen: When you are doing your independent work, anytime you’re on your own, did you just want to get it done as fast as possible or did you like spread it out and take breaks in there?
Aarav: I just like did it. I don’t know.
Karen: You just wanted to get it done?
Aarav: Yeah, but not really.
Karen: Do you just go like, it’s what I got to do it, so I’ll just do it?
Aarav: Yeah.

Aarav saw the asynchronous work as additional school items to complete. He did not go into the work with a plan to complete it to build in independent time like John. He simply saw assignments and worked to complete them because it was school, and that is what he did for school. Carlos had a similar take on asynchronous work:

Karen: So when you had that weird schedule where you had independent time, how did you...like how did you keep track of what you were, what you had to do?
Carlos: I mean, I guess like, check the agenda after I finish an assignment and then checked it, and look at the passcode, and then went to the other pages sheet and then just like checked if I had to do any work, which was done.
Karen: So, you basically just like checked off on this sheet what you had to do?
Carlos: Yeah.

Both Carlos and Aarav saw asynchronous work as simply additional schoolwork. Where John planned and wanted to complete the work well but quickly, Aarav and Carlos saw checklists and
complied. Xavier was like Carlos and Aarav, only mentioning his checklists as something to complete in the afternoon.

Marcus had an openly negative view of the choice board and asynchronous work. During my observation of him walking me through his choice board, he mentioned liking the virtual field trips and learning how Tesla cars were made. He, like John, wanted to get the work done as quickly as possible so he would have additional time in day for himself. However, Marcus said all the choices were stressful. The long list of options and requirements stressed him out because he wanted that additional time to himself. He perceived the choices as being too much and cumbersome.

One item all five students agreed on: there was no homework. Most of their work was completed during the synchronous learning time as a whole class. Asynchronous, or independent time, was used to catch-up and ensure they completed anything they did not during the synchronous lessons. Marcus described the positive and negative sides to this setup:

Karen: Have you had a lot of math homework or kind of or…
Marcus: I don’t think we have such thing as homework, like after schoolwork.
Karen: Got it.
Marcus: There’s no such thing like, well like usually in class we do sometimes, like, like a lot of students are like not really good at math, they just want to do everything at once because, like, they, they don’t want to go fast, they want to do it in class. So, the students are constantly asking the teacher, can we do one more together?
Karen: Got it so you don’t feel that you really have homework this year. Were you able to get like anything that you had to get done…Were you able to get it done like during school time?
Marcus: Oh yes.
Karen: Yeah? Did you ever have to do anything after school time?
Marcus: No.
Karen: Did you like that?
Marcus: No.
Karen: No, really? What didn’t you like about it?
Marcus: Because it just wasted my time doing all the stuff so slowly.
Karen: Oh, so during school time you would you’re like, why am I doing this,
if I, because you just wanted to like be done with it?
Marcus: Yeah.
Karen: Yeah? Got it. But did you like not having homework like after school hours?
Marcus: Yeah, I loved that.
Karen: That was nice?
Marcus: I mean yeah, I loved not having anything to do.

Marcus loved not having homework, as his peers concurred. However, he felt the synchronous time was not used well and slowed him down. He felt he could get the work done faster had he been provided additional asynchronous time to work at his own faster pace. Carlos concurred:

Karen: So do you have a lot of homework or anything like that outside of school time?
Carlos: Oh no, no. Yeah, I do have one sheet because my mom and my dad, they give me one sheet of um a spelling test in Spanish worksheet I can work on and then I work on that.
Karen: So that’s from your mom and dad, huh?
Carlos: Yeah
Karen: Got it. And none from Miss Jennifer?
Carlos: No.
Karen: No. Do you kind of like not having the homework or do you want the homework?
Carlos: I mean, like, I just want to like get through school and get off from school, so like, I wouldn’t like it.
Karen: So, you kind of like not having that?
Carlos: Yeah.

Homework was not necessary during remote learning as most of the work was completed during school time. Despite students completing the work physically at home, they did not view their work as homework and simply work to complete during school time. As Carlos said, “I just want to, like, get through school and get off from school.” Homework became obsolete during the remote learning situation, a welcome change to all the students.
Synchronous Learning

The five students attended synchronous learning daily. I was able to observe synchronous learning session with all three teachers. I observed morning community and circle time with both Anita and Jennifer. I then observed a math lesson with all three teachers as well as a writing lesson with both Anita and Jennifer. This section breaks down the lessons I observed and connections between synchronous remote learning and traditional in-person learning.

Teacher Survival: Traditional Learning Moved Online

A common theme I saw between Anita, Caroline, and Jennifer was their approach to remote instruction. They all took lessons they had previously taught and simply moved it to Zoom. The instruction was very teacher-centered, where the three educators guided the students through activities down to the minute.

Jennifer’s language arts class was focused on poetry writing when I observed her, Xavier, and Carlos. Jennifer had provided all students with a poetry packet that she had used in previous school years. Each page focused on a different style of poetry with an example on one side and space for an original poem on the back. Jennifer was guiding students through a biography poem during my observation. She had all of the students write out her example biography poem about her on the front of the page. After the example, the students had time to work individually on their own biography poems. This was a past assignment Jennifer had used for multiple years. The only change was that students were participating at home so she also provided a Google Doc for students to type their poems if they would prefer. Xavier and Carlos could type their poems or write their poems by hand and take pictures of the final copies to send to Jennifer.

Jennifer also used previously created material for a math lesson I observed. The school
district utilized a popular math curriculum, Eureka Math. Jennifer had provided copies of the fluency practice pages for her remote students during a material pick-up day. The fluency practice was a double-sided page of math facts. Students had one minute to get as far as they could on the first side of the page. Jennifer read the correct answers aloud after the minute had elapsed and students marked how many answers they had correct. Then the students flipped the sheet over to see the same questions listed. They again had one minute to write as many answers as they could. Jennifer again read the correct answers aloud. The students then celebrated if they had more questions correct the second time than the first time through the sheet. Both Xavier and Carlos improved the second time but did not share their physical sheet with the screen. Both Jennifer and I had to take them on their word.

Anita had a similar setup to Jennifer with a twist. I observed a math class with a lesson she had used in previous years. Students had to work in groups to create their own math word problems and subsequently solve those problems. The only change Anita made was moving the lesson from being on paper to being on a digital platform. In the past she would have students meet and simply write down their word problems in a notebook. For this lesson she provided guidance and workspace in the digital platform SMART Lumio. SMART Lumio allowed Anita to assign students to groups automatically and work on the same shared digital page without seeing other groups’ work, collaborating via Zoom. It also allowed her to move from digital space to digital space without having to open multiple tabs on her computer. Last, her remote and in-person students could collaborate on the same page, bridging the physical distance between her students. Anita shared her struggles to add new technology into her remote lessons:

You know, some of it is I forget what I used to do, you know what I mean? This year it’s just been like survival mode, so you don’t necessarily [try something new]. I know when we first shut down like I was using ThingLinks
and things like that. But I also know certain things that I’ve used the district is starting to clamp down and maybe we aren’t going to be using it anymore, so I just let those things go so it’s just like, okay, just got to let those things go.

Anita did not want to try something new in her classroom if she would not be able to use it again in the future. With the district “clamping down” on which tools could or could not be used in the classroom, Anita found it easier for her to “survive” by falling back on her tried-and-true lessons.

Caroline had similarities in her instruction as well. Like Jennifer, Caroline had her students complete a series of word problems from the Eureka Math curriculum. She also had the students use Zoom and collaborate on the assignment, like Anita. Caroline used her past instructional materials and shifted to Zoom. Caroline had also previously used multiple technologies and had gone paperless in the past, making remote learning with Google Classroom and Zoom not a foreign idea for her.

Despite the lessons being very similar to instruction in the past, the teachers felt they were planning more for their remote students. Jennifer described planning for her remote students:

No, we plan more for our remote. And I don’t know if it’s because we sent a lot of stuff home. Any pickup we [the school] had, third grade, we probably sent the most all year round because we were firm believers that they need to be holding books like the reading books and worksheets and templates and stuff. So anytime there was a pickup, we had thought ahead of things that we would be using.

Jennifer and her teammate were not planning for specific remote learning activities but instead for pacing to ensure they had the correct materials sent home for their remote learners. The lessons, activities, and assessments were still based on past practice, with the only change being the addition of Zoom and possibly the digital delivery method. Jennifer even admitted to finally using Google Docs and Google Classroom alongside the physical copies for students near the end of the year simply to help push additional assignments or guides out to her remote learners.
However, all three teachers kept their lessons, activities, and assessments aligned with their past in-person learning, pushing aside innovative student-centered learning opportunities.

The students, however, wanted something different for their lessons. They were looking for something new and innovative. Carlos was very vocal about his dislike of the assignments he was given:

Karen: Okay, um, has there been something this year that you’ve had to use on the computer where you’re just like, I did not like that, hated anytime, she’d say we have to go to that website I hate it?
Carlos: Some of the time it would be Google Classroom because some of the assignments she put up.
Karen: Okay, so it wasn’t that you didn’t like Google Classroom you just didn’t like the assignments?
Carlos: Yeah, and I didn’t mostly like, like, how Google Classroom was.
Karen: Okay. Did you like Seesaw better?
Carlos: Yeah.
Karen: Okay. Alright, so you didn’t like how Google classroom looked, and you didn’t like the assignments?
Carlos: Nope

The Seesaw app built in interactive tools for students to use. Carlos was able to draw, use his voice, take pictures and videos all with an iPad in 2nd grade. He was not able to complete assignments in the same manner on the MacBook. Google Classroom provided traditional worksheets for Carlos to type the answers to. He wanted interactivity and options for completing his work, which Google Classroom and the assignments Jennifer provided did not allow for.

Marcus had similar feelings towards assignments. He wanted more hands-on, writing with paper and pencil options, especially for reading.

Marcus: I wish, I wish they would do reading on paper is because, because I remember in like third grade, we would have to like read this book and we have to like answer these questions. Like, obviously I would get some wrong, but it was, it was pretty entertaining, it is, is because when I was like younger, I would like, like see these like figures and like, like these like cringy like people, those like animation. So, yeah. laughs
Karen: I get it, I get it.
Marcus: So, I feel like the teachers are like now noticing like, okay, these kids are older, they’re more mature, they don’t like silly stuff like that.
Karen: Got it. So, probably more reading stuff with paper hmm?
Marcus: Yeah.

Marcus wanted to read with paper and write out his answers. He did not like being online and seeing animation and figures geared towards primary students. He also wanted a break from being on the computer and to physically hold the paper in his hands. He liked remote learning, but wanted hands-on opportunities built into the instruction.

Karen: Um, so which one did you like better, your classes with Anita or your PE art or music classes.
Aarav: PE, Art and Music
Karen: You like those better?
Aarav: Yeah.
Karen: What was the like the one thing that you love more about those classes?
Aarav: Better organization.
Karen: Really?
Aarav: Yes.
Karen: Oh, what was cool about the organization?
Aarav: It was different, but I liked it better.
Karen: Okay. Like how did those teachers organize it?
Aarav: They did use a lot of tech as well but, like not as much.
Karen: Do you feel like you were more watching and not having to use the tech with those classes?
Aarav: Yeah.
Karen: Okay. So, you felt like you could do things a little more hands on?
Aarav: Yeah.

Aarav was looking for hands-on experiences in his lessons. Art, music, and physical education gave Aarav the opportunity to move and create with his hands. He was able to draw, make music, and workout. The physical aspect of the lessons made them more engaging.

There was a disconnect between the teachers’ lessons and the students’ desires. Where the teachers relied on their past lessons and teacher-guided experiences to survive the school year, the students wanted more innovative, hands-on experiences. The teachers struggled to plan for teaching on Zoom and instead pulled out older lessons that they could easily and quickly
adapt. The students, however, wanted more. While they did participate and complete the work, they did so out of compliance and not necessarily out of engagement.

**Group Work**

Small groups and partner work had been a priority for the school district throughout my years as a staff member. I spent countless professional development sessions showcasing ways to incorporate rotations, small groups, and flexible grouping into all content areas and grade levels. It was no surprise to me to have observed both Anita and Caroline include small groups and partner work into their synchronous learning activities. Observing both Aarav and Marcus, I saw two students working in groups with similar behaviors that I would see if they were in-person. The only difference was the physical distance between them and their partners.

I focused my observation on Aarav during Anita’s math word problem lesson. Anita used Zoom to connect her remote and in-person learners. Aarav was placed in a group with two in-person classmates. All three students were in a Zoom breakout room together, where they could talk to each other and work through the math assignment. I could see Anita walking around the classroom in the backgrounds from Aarav’s partners’ cameras. Anita did take time to join each individual Zoom breakout room to talk to the entire group. Anita used this as her opportunity to check their work, confirm their progress and either redirect or encourage them to continue working on the next assignment.

I had to constantly remind myself that Aarav was remote throughout my observation of him and his partners. What I saw were three fifth grade students working in a small group with typical behaviors that I would have observed had they all been in-person together. Aarav was a naturally quiet student, so he did not talk very much with his two partners. He relied on typing
his answers and clarification to them or holding up a whiteboard with his writing on it. At one point Aarav typed out a potential problem for the group. His partners looked at it and went with it, stating simply, “Thanks Aarav.” They then started talking to each other on how to solve the problem. Aarav solved the problem and typed the answer. His partners asked him how he did the work, and he showed his whiteboard. I couldn’t really see what he wrote – the screen was dark. His partners leaned very close to the screen and asked questions to make sure they knew what he did. They weren’t sure if he was correct, so they pulled the teacher over at Aarav’s suggestion. Anita confirmed they were correct and said to keep going. Aarav’s partners talked to each other by leaning over and off the screens towards each other. Aarav went back on mute and stayed very quiet. He almost looked lost on his own. Aarav’s partners wrote out a math problem and then had to figure out again how to solve it. Aarav picked up his whiteboard and seemed to be doing the math problem the partners had written. He typed in the answer without coming off mute, seeming to ignore his partners. He went back and fixed a few more of his partners mistakes, which they said thank you for.

Aarav did the work, as did his partners. However, Aarav did not seem to want to be overly communicative with them. He behaved similarly with me during our interviews, having very short answers and a quiet voice. I asked him about working with partners during remote learning:

Karen: Did you like working with partners during the math lesson?
Aarav: Yeah, it was good.
Karen: Do you prefer working by yourself or with partners?
Aarav: With partners.
Karen: Why?
Aarav: I just do.
Karen: Did Anita get you guys doing a lot of that this year? Or…
Aarav: Yeah, like a few times.
Karen: Okay. But anytime you did it you really liked working with partners?
Aarav: Yeah.

While I could not tell if Aarav liked working with partners from my observation, he did confirm it was his preference and wanted to be with partners rather than working independently. I used to see similar behavior during my own teaching experiences. Some students who do not interact a lot with others like the group setting. I would suspect if I saw Aarav in group work in the future, he would have similar behaviors.

Caroline’s math lesson also involved partner work. I observed Marcus working with an in-person classmate while completing a series of word problems from their Eureka Math workbook. Just like Anita, Caroline had all her students join Zoom so in-person and remote students could be partnered up. Caroline created breakout rooms and had Zoom randomly assign students to a room to create partners. Marcus was partnered with a classmate who was in-person. I followed them into their breakout room and allowed Marcus to introduce me. “She’s here to watch and hangout with me,” he said with a smile. Marcus took the lead on the partner work. He immediately reminded his partner what page they were on (page 51, problems a b and c). He read the first question out loud very quickly and started answering the problem himself. His partner sat and waited, seeming confused. Marcus had to ask his partner if they even knew what they were doing because they did not respond to anything he was saying. It took a moment for Marcus to realize his partner was having audio issues and needed Caroline’s assistance. After fixing the audio issue, Caroline asked if they knew what to do. Marcus responded, “I was doing most of the work. I don’t know what [partner] was doing.”

Marcus was very frustrated with his partner. He wanted to move much faster and complete all three problems while his partner wanted to do each problem together confirming each step. At one point his partner said to slow down on question A, but Marcus responded, “I
did it. You do it and then we’ll check our answers,” forcing his partner to complete the work on their own. After his partner completed the work and their answers were the same, Marcus said, “Ok, that checked out. Let’s start B.” He then immediately read question B aloud and began writing down his answer. Marcus finished the question very quickly while his partner was struggling to keep up with him. Marcus asked multiple times, “Are you done yet?” His partner kept begging him to wait. Marcus got impatient and started rotating in his chair. I did not see any eye rolling or annoyance in his face, but his overall body language was bored and impatient. He leaned back in his chair, rotated, looked at the ceiling, and took a deep breath. Marcus kept asking, “Ready? You done? Can we move on now?” When his partner finished, he perked back up, sat up straight and immediately wanted to compare answers.

Observing both Marcus and Aarav at a distance felt no different to me than had I been observing them in the classroom. They worked with their partners and each one brought their own personality to the small group. Where Aarav was quiet and worked in the background, Marcus took control and pushed his partner to move faster. I saw similar in their personalities during our interviews with Aarav quiet and Marcus open and wanting to share. Anita and Caroline had created collaborative opportunities, based on past lessons they had designed, that brought group work to a remote synchronous setup. While accessible with the use of Zoom and SMART Lumio, the lessons were still small group, teacher designed lessons from the in-person classroom. I felt and observed as though I was in the classroom, even though I sat in my office on Zoom.

Gaming for Learning and Engagement

I am the approver of all digital resources and licenses used in my school district. The
most requested category year after year is the online gaming category. Teachers are always looking for interactive games to incorporate into their lessons. The three teachers in this study were no exception. They all used games to engage their students and to gather formative data on them.

Quizizz was a game I observed both Caroline and Jennifer use with their students. Quizizz is a competition quizzing game. Students compete against each other to get all the answers correct in the shortest amount of time. However, if they get something wrong, the game will give the students a notice and have them start the game over. Quizizz can be done both individually and in a team versus team setting. I observed both Caroline and Jennifer use the game for individual competition.

The students were very excited to play the game. The focus was on who would be the first to complete the quiz, despite both teachers saying it was correct answers not time that was most important. In Caroline’s class, Marcus came in second. He was very proud of himself and smiled. In Jennifer’s class, Xavier worked his way quietly while Carlos was focused on getting done as quickly as possible.

Quizizz was one example of a gaming program used by the teachers this year. They also used SMART Lumio games, Blooket, and Kahoot at different points in the school year. All of these tools provided formative data to the teachers and an engaging activity for the students. Jennifer commented on how her students wanted games in the classroom:

They love anytime you can make learning into some kind of competition or game. And I take those for scores. Like I, there’s a printout at the end [of Quizizz] and I can use that as an informal assessment to gauge who’s getting it and who’s not.

Carlos backed this statement up: “I would just like [to keep], like the games.” Most notably, all
these digital games were used pre-pandemic. The teachers incorporated them into their lessons for remote learning and continued to use them upon the return to in-person learning. Remote learning did not bring about the digital games nor did it make a shift to more gaming in the classroom. Similar to group work, the setting changed to being on Zoom, but the actual activities stayed consistent from previous years.

Structure Supporting and Ensuring Participation

The three teachers had a set daily schedule and structure they followed throughout the synchronous time. Whether it was a set time for sharing during morning meeting, group work or gaming, the students knew they had a specific time to be online and activities to complete. The use of digital tools such as Zoom assigning breakout rooms and SMART Lumio creating small groups provided an additional way to ensure participation.

When Anita was about to have SMART Lumio create her small groups for the collaborative math lesson, she noticed not all her students were logged into Lumio. She could see how many were logged in and take note on who had yet to join the site. She said out loud, “We can’t move forward without everyone ready. We need you online so we can all start.” She used SMART Lumio to not only deliver her lesson but also structure her groups. The students knew she could see them all online and she held them responsible for participating on the site.

Caroline specifically mentioned the need for structure and a set schedule in her day, especially as the end of the year drew closer:

Karen: Yeah, but they were still on it for the last week I was really like wow they’re really with it and moving and…
Caroline: Yeah.
Karen: …Participating, which is awesome.
Caroline: Yeah, that’s why I keep trying to keep it like super structured because I’m like, otherwise we’re gonna be chaos in here.

The structure of her daily schedule as well as using the digital tools allowed Caroline to keep the students engaged and ensured they were completing their work. Both Caroline and Anita were able to monitor student participation from a distance and encourage participation between students despite not being physically near each other.

“Instantly I’m Crushing”: Emotional Toll of Assessments Online

Assessments were still present in the remote classroom. Just as in previous years, the three teachers had multiple district-required assessments to administer throughout the school year. The district made a policy that all assessments needed to be completed during synchronous learning time. This ensured the students were present and not receiving additional help from other family members while learning at home. The benchmark assessment for reading and math, iReady Diagnostic, was administered three times. These assessments were long and took multiple days to complete. The online system would use the data from the diagnostic to create a personalized learning path for the students to complete between diagnostics. John described the iReady assessment:

Something I didn’t like this year was, like, doing the math diagnostic and the reading diagnostic. It was kind of boring. You had to read all these different types of paragraphs and every time they would switch, like the diagnostic I did, it was either, yeah, I think was math, like five times in a row they changed it. The passage. It took me a little bit longer, but I still finished it.

John focused on the length of the assessment, not the outcomes. Not only did he receive a personalized path, but the teachers and school used the data to determine next steps for instruction. While the teachers share that information with the students, John’s statement showcased the disconnect between the students’ completion and the teachers’ use of the data.
Marcus agreed with John on his dislike for iReady:

Karen: What do you think of the iReady test?
Marcus: That’s pretty long.
Karen: Yeah?
Marcus: I don’t enjoy them because you just don’t know what to expect. You could get like a one or two score. I usually get stressed about it when I always finish mine.

Marcus expanded on his hatred for another math assessment site:

Karen: How about, is there anything that you’re just like, I cannot stand that site when we have to use it for class?
Marcus: Great Minds.
Karen: Really, what do you not like about it?
Marcus: That’s a testing website.
Karen: Oh, okay. So, you like you see then you’re like man I have to take a test?
Marcus: As soon as the teacher says, Great Minds, I instantly in my brain am crushing.

Marcus went on to say he never wanted to complete another test again, whether in-person or remote:

Marcus: I never want to do...ever.
Karen: You never want to do what?

Marcus had a common theme throughout his discussion on assessments: stress. The constant tests stressed him out and made him feel nervous. It became clear he felt the pressure to do well, and that pressure had a negative impact on his emotional state. He was “instantly crushing” when he had to take a math test or stressed when he completed the iReady diagnostic because his score could not be as good as he felt he should be.

Carlos summarized both Marcus and John’s statements:

Carlos: I don’t like the tests at all, like, a lot of them are hard. And I just like, like whenever they have to like write something like, I think it depends if it’s long or it’s short.
Karen: Okay.
Carlos: If it’s long then I don’t like it.
Karen: Got it. So, and is it that you don’t like taking the test or you don’t like taking it on the computer or both?
Carlos: I sort of...Yes, it both cuz I just don’t like all the tests.

Like many elementary students, Carlos and his peers did not like taking tests in general. It did not matter if the assessment was in-person or remote. The physical act of taking a test was not well-liked. What stood out to me was the focus on the length of the test and the stress it brought to the students. All the district’s assessments were completed on the computer pre-COVID, and that practice continued throughout remote learning. The tests were long, with additional screentime, and caused students to feel additional pressure and stress that they did not have a desire to experience again.

Marcus did prefer taking his assessments at home versus being in the school setting. Remote learning provided a less stressful environment for assessments. He felt he had fewer technical issues at home and had more privacy:

Karen: Do you think being at school or I mean being a home helps you. I know it helps you with the tech does it help you any other ways? With the test?
Marcus: I think it helps, because I feel like when you’re the first one, there’s someone that was like the first person to be done. And like, and like a lot of, and then I’m like a lot more students are done, and you just feel that body on your right and like, I’m so slow. And they are so much faster Like when we’re all in just breakout rooms. We never know it for first or last so it just
Karen: Got it. You don’t have that pressure from everybody else?
Marcus: Yup.

The quiet of remote and privacy allowed Marcus to calm himself down and feel confident with his assessments. He did not have multiple eyes staring at him, nor did he have to worry about being the first or last person in the classroom done. Remote learning gave him a sense of privacy that he could not achieve in the classroom.
Supporting Students Online

The teachers had mixed reactions to supporting their students during remote instruction. All three immediately gravitated towards technical support for the students. Anita commented: “The hardest thing at the beginning of the year was not having them [the students] in here and not knowing what it [technology] looks like on their side of it… That part was really hard. Because if I knew what the student view was, then I could deal with it.” She felt the need to see what the students did so she could know how to help them navigate the different sites they were using. Anita felt additional pressure with two students who were new to the district and the MacBook devices at the beginning of the year. She spent additional time with these students helping them to become comfortable with the device:

I had two kiddos, one of them is one that you’re interviewing, who weren’t familiar with MacBooks. And you’re trying to teach them academics and teach them how to navigate a MacBook remotely. Which was hard, it was a steep learning curve. It was a very, very steep learning curve.

Despite Anita’s concerns, John felt she did a wonderful job introducing him to the MacBook and supporting him with technology at the start of the school year:

John: Something that was kind of easy was that since I was a newer, that our teacher, like if you’re new your teachers will help you out more. So, she would help us out with stuff. Another person in my class was new. So, it was way easier.
Karen: Oh, that’s nice.
John: She would Talk to us and show us how to do it. So that was a, made it, that made it easier.
Karen: So, you had some time, like, by yourself or with one other person and your teacher? A lot of the beginning of the year?
John: Not that much just like if we’re doing something new and we didn’t understand.

Anita was able to help John navigate the device, complete his assignments, and feel comfortable with the technology all at a distance. Where Anita was still concerned near the end of the year
that John was not always feeling confident with the computer, John openly shared his confidence and like for the device.

Jennifer and Anita also felt they struggled with providing timely feedback to the students. They noted that it would take a while to provide feedback to the students because of the physical distance. Jennifer noted it was hard to manage her students physically in front of her while remembering her remote students:

Um, but I do see differences from my in-person to my remote and second trimester with my report cards. Like my remotes I saw, yeah, lower grades on things. And it was harder to catch things because we always didn’t have a paper copy test and if we were doing a boom card or Google Sheets for like a formative quiz sometimes it was done too late because I wasn’t going back to reteach it. I was going to do it in my small groups and it just, I just feel like in person, you get to see so much more rather than trying to make sure your kids are on Zoom and then you’re trying to get to the Google Form to check. I mean you could just walk around the room and see it right there. I just felt like, making sure everyone was accounted for was harder in this case because you’re trying to manage so much.

Jennifer struggled to keep track of her formative data for small groups and reteaching with her remote students. Not physically seeing student work in real-time made it difficult for her to determine how her students were doing. Anita concurred:

So, I would write my lesson plans, but then I had to see what they turn into me. And the kids who turned it in late, I’m like, okay, you’re in the group that I’m gonna assume doesn’t get it just by default. I’m gonna say you don’t get it because you didn’t turn it in, in time for me to check it.

Anita and Jennifer noted the physical distance and not seeing student work in real-time caused issues with their planning. The students who did not turn in the work got left behind or it was assumed they did not understand the material.

Caroline had a different take on supporting students. She felt her students were able to navigate their computers and find resources independently. She also had years of experience
using the digital platforms in the classroom and went into remote learning confident in her technical abilities:

    Well, I’m like, we had so much stuff already, digitally. I feel like if I didn’t, it would be awful. And I feel like if I was little like primary, the kids aren’t as independent. They can’t get on by themselves, so it’s more like tech support for the parents to get them on. Yeah, that would be a little harder. But this [remote learning] was, I don’t know, I think it was fine.

Caroline, Anita, and John all had different takes on the amount of support needed online as well as the success of that technical support. Where Anita was still unsure of her help at the end of the year, Caroline had confidence in the students and John showcased how the students were able to figure the technology out independently.

    Despite the struggles showcased by their teachers, the students felt they did well and learned much. This theme is explored in-depth in a later chapter.

Summary

    Remote learning was mixed with both positive and negative experiences. The school district recreated the school day schedule with extended synchronous time and short breaks built into the day. The daily schedule was long and intense for some of the students. The long time during synchronous learning through Zoom strained eyes and made some students tired. Multiple Zoom links were confusing and sometimes overwhelming to the students. However, it also provided opportunities for the students to build independence and responsibility by following the scheduled times and using the correct Zoom links. It also provided opportunities for flexibility, relaxation, and enjoyment during scheduled breaks and extended lunches. Asynchronous learning especially gave students the time to quickly finish their work, not worry about homework, and use the extra time for their own entertainment.
The students found ways to personalize their learning spaces at home. They each had a work area, either a desk or table, to spread out and organize. They added touches such as stress balls, relaxing nature sounds, and soft lighting. They were also able to move between the desk, standing, sitting on the floor, or sitting on their beds.

Learning at home was not without its physical challenges. Internet connections could be weak, materials could be missing, and Zoom links could lock them out. Individual student’s family economic situations also proved to be both a physical and economic challenge. The lack of internet and a stable home environment brought about additional change on top of the remote learning. Movement due to homelessness or being at home by themselves was challenging emotionally.

Synchronous learning reflected the traditional in-person learning the teachers were familiar with. Teachers used many of the digital tools they had incorporated in prior years. They also kept the majority of their lessons, moving paper-pencil activities to Google Docs or photocopying materials to be sent home. Innovative instruction was not present, with the teacher guiding most of the instruction and any discussions that did occur.

Teachers did build in group work time, providing remote students with opportunities to talk to their in-person peers. The students liked the opportunity to learn from their peers and work in small groups in Zoom breakout rooms. They also enjoyed group games for math review. Using both the breakout rooms and online games allowed the teachers to create a structure that not only supported participation, but it also encouraged it.

Not surprisingly, the students did not like the number of tests and assessments they had to complete during the school year. They felt the tests were too long and too constant. The teachers, however, did not feel they were able to use all the assessment data in a timely manner, making
the assessment taking a vicious cycle of hatred for both teachers and students.

Finally, the teachers felt they struggled to provide timely feedback and support to their students. They did not feel they were able to use the assessment data as it was intended, nor did they feel they were able to fully support their remote students with technology. The students, however, felt their teachers did a wonderful job teaching and supporting them online, especially during concurrent teaching moments. The students praised the work their teachers did and were grateful for their help and support in the remote environment.
CONTROL AND POWER STRUGGLES IN THE REMOTE CLASSROOM

The power struggles and battle for control between teachers and students was seen throughout my interviews and observations. While the teachers openly expressed their need to control student behavior, the students did not use the word “control” in their interview. Instead, the students exerted their control through their behaviors and described moments of flexibility and freedom.

Multiple themes emerged throughout the battle for control. This section explores the school exerting control over students at a distance, the students’ descriptions and observations of their need and attempts at gaining control, and the impact this remote battle had on the return to in-person learning.

The School and Teachers Exert Control Over Students at Home

Despite being in a remote setting, I observed and discussed with the teachers the desire to recreate the school day nearly verbatim online as it would run in person. This virtual control was seen as a need from the teachers. As Jennifer said, “School is school.” Therefore, remote school was scheduled and designed to be a replica of the physical school day, just at a student’s home.

The replication of the school day to control students at a distance was seen in multiple formats. Discussed in this section includes the requirement of attendance for synchronous instruction, following classroom routines and physical school rules at home, and the
consequences for not adhering to the online learning environment structure.

**Attendance for Synchronous Instruction**

The school and teachers exerted control over the students’ day by requiring multiple hours of synchronous instruction each day. Attendance was required for all synchronous instruction time. Teachers had a set amount of time they had to be online per district guidance. During these observations, students and teachers had to be online the entire morning from 8:45am until 12:45pm. The four hours of synchronous instruction was required attendance with the remote students participating alongside their in-person peers. Tardies and absences were counted and noted in the online attendance portal. Remote students who struggled with joining the class Zoom link on time were called and at times encouraged to come back into the physical school.

Jennifer described multiple attendance issues with Carol. Carol had been tardy and absent multiple times from her class. I had observed her class the day of our first interview. Xavier was present but Carlos was not. Jennifer described the morning with Carlos:

Jennifer: Oh yes, he didn’t come until 10:05am today. *Accusatory tone*
Karen: Ah, okay, I was like, where is he?
Jennifer: Yeah, he wasn’t here when you were there, but he was there later.
*Rolls eyes and shakes her head*
Karen: It’s like oh I’ll just come when I want?
Jennifer: Yeah. *Exasperated sigh*
Karen: Okay…
Jennifer: So, he said he lost track of time. It wasn’t until the school called them to find out where he was.

Jennifer was openly exasperated with Carlos and his attendance. She described multiple times he missed the class morning meeting, lessons, and activities. Carlos was known to miss the opening morning meeting most often. It began right at 8:45am. The times he did attend, Jennifer
indicated he did not participate. Jennifer referred to “the school” calling Carlos to attend, meaning the main office secretaries or administration called the family to ensure Carlos would get online. As Jennifer had said, “School is school,” and the 8:45am start time was non-negotiable.

I had also experienced Carlos’ attendance “issues” as Jennifer had described it. Carlos had been absent for observations and our first scheduled interview. I was persistent in my observations and worked with Jennifer to interview him whenever he was present. Each time we were able to meet I did not mention the absence to Carlos, nor did he bring it up. We simply went on with the interview.

Carlos was aware that he was not always online at the assigned time. In our second interview, I asked him about his parents assisting him with remote learning and staying organized. Our conversation included:

Karen: Okay, so your parents kind of helped you out at the beginning of the year. Did they do they check in with you and make sure you're on your zooms at your right time?
Carlos: Yeah, they do.
Karen: They do. Okay. Did they...do they still do that or have they kind of let you do it on your own now?
Carlos: ...Sometimes I sleep in, but we don't talk about that.
Karen: Ok we won't talk about that.
Carlos: But yeah, they…sometimes the alarms like this don't work like they just break. Like, they just mess up and then we miss it
Karen: Oh, like the alarms broke mess up or your parents mess up.
Carlos: The alarms
Karen: Oh, okay and they just don't go off and you miss it.
Carlos: Nods head yes

At this point in our interview, I knew that he had had attendance and tardy issues with Jennifer throughout the year. Not only had Jennifer expressed this I had personally experienced it when he missed our scheduled observations and interviews. Carlos knew he was sleeping in. As
he said his alarm would not always work, he had a slight smirk on his face. He included, “Sometimes I sleep in, but we don’t talk about that.” He made this statement after a long pause to answer the question I had posed. Carlos was battling for control over his learning time.

While synchronous lessons are live online at specific times, Carlos’ behavior showcases the blurry line that is drawn with learning online. Carlos felt that he should be able to attend at different times of the day and skip lessons he did not want to attend. Carlos missing morning meetings often and not participating when he did attend was his way of regaining control over his day. He was at home. Why should he get up early for a part of the class he did not plan to participate in and did not count towards a final grade?

Carlos was the only student of the five interviewed in this study who had chronic attendance issues. The other four boys did not indicate they were absent very often, and neither did their teachers. Jennifer mentioned once that Xavier was not always online when he should be. However, this was not seen in any of my observations. Further, Xavier was always online the soonest of any of the five boys when it was time for an interview with me.

Anita described attendance issues with other students, not the two I interviewed. She mentioned multiple students in her class had large numbers of absent days. She stated, “They have chosen not to come.” In this instance, Anita implied the fifth-grade students in her class had control over their learning situation and made the choice to not attend synchronous instruction. The solution was to get the students back in-person and away from remote learning. The school collaborated with the families to convince them to have the students attend in-person learning to alleviate the attendance issues. From the school’s perspective, the students had decided to take control and not attend lessons, which in-turn required the school to take that control away and convince families to return to in-person, taking away the choice from the student and changing
the choice of the parents.

**Enforcing Physical School Rules at Home**

Jennifer’s statement, “School is school,” rang in my ears as I observed the students. All five students were observed following classroom routines while at their homes. Each time I joined John and Aarav for their morning meeting with Anita, or as John described it the “talking topic,” I saw them following each routine along with their classmates. All the students were on Zoom together so remote and in-person students could see each other. John and Aarav stood during the Pledge of Allegiance, placed their hands over their hearts, and recited the Pledge from their homes. I did not see a flag in their rooms. They sat when the school announcements said to take a seat, though they were at their homes, and I would guess struggled to hear the principal as he talked over the intercom. I had to increase my computer volume and strain to hear him myself. I found myself standing up to say the Pledge as well, out of pure habit upon seeing all the students standing and reciting.

The daily routine and motions played out on Zoom as it did in person. This school specifically had made students stand and recite the Pledge as well as the building’s personalized Pledge daily.

I will be a Cheetah Champion by showing respectful, responsible, and team player behavior at Armstrong Trail Elementary School. I will do my best to make Armstrong Trail Elementary School a safe place to learn and grow.

Interestingly, the students willingly participated. John and Aarav stood and recited, or at least seem to speak due to their microphones being on mute. Despite being at home, the school had exerted control over the students and enforced the daily motions and rituals of opening the school day, which John and Aarav did not argue about.
Xavier also followed the school routines and traditions while he was participating at a distance. Xavier stood for the Pledge and placed his right hand over his heart. I could not see if he said the words aloud due to his camera angle. He stood so close the computer that his camera became pointed directly at his chest, cutting off view to his face. Xavier stood for the school pledge as well and sat when his in-person classmates sat as well. I never was able to observe Carlos during the morning routines as he was not present. I also was never able to make a meeting with Marcus work in my schedule during the morning routines.

Despite not being able to see all five students, I was able to observe both a fifth-grade class and a third-grade class during the morning announcements. There was no wavering in student participation in the physical routines and motions. School was school and the students followed the physical routines despite being in their bedrooms or a sitter’s living room.

Another school ritual I observed with all five students was not talking during class and waiting your turn. Zoom’s mute button feature made this ritual easy to enforce with students. Zoom allows the teacher, or host, to mute all participants at once. While participants can unmute themselves at any time, the host can continue to mute students or remove them from the meeting and place them in the waiting room. I personally utilized the Zoom mute feature multiple times during professional development sessions with large numbers of teachers. The mass-mute feature allowed me to quickly begin a meeting without having to shout over the group.

The three teachers used this feature as well. They went an extra step by enforcing students to stay on mute when it was not their turn to speak. I observed from our first focus group that the students followed this routine without thought. I welcomed everyone as they entered the Zoom room:
Karen: Hi Aarav! Hi John! Both go on mute immediately. Aarav slightly waves; John waves and smiles
Karen: Hi Carlos! Carlos clicks the mute button and stays close to the screen, slight wave
Karen: Hi Marcus! Marcus waves stays on mute
Karen: And here's Xavier. Xavier waves and stays on mute Hi everyone. You can, you can go off mute it's perfectly fine.
John: Okay. comes off mute; everyone else stays on mute
Karen: Yeah, this is not gonna be a lot like class. This is a little different. So, first, it's great to see everyone...John goes back on mute

All five boys immediately went on mute and stayed on mute. I asked each one to introduce themselves. I called each name and only then would the individual student come off mute. They would nod their heads and give thumbs up throughout our short time together to indicate they understood the study. John went as far as to chat “Yes” in the Zoom chat feature to indicate her understood the study.

Each time I started an interview, the students immediately went on mute. I went as far as to set my Zoom links to not have mute on as a default. The minute they joined the Zoom room each of the five boys would turn their microphones off and sit on mute. They had been trained to do this from the first day of school and it showed.

I did observe during Jennifer’s class her remote students, including Carlos, coming off mute to talk with each other during activities. I explore this situation in a later section but note it now as well. Jennifer never redirected Carlos to stay on mute, however Xavier never went off mute unless called upon. Anita’s students stayed on mute and only came off when they were directed to. John and Aarav opted to use the Zoom chat versus coming off mute.

Caroline’s class presented a different mix of routines. Caroline provided informal time for students to “hang out,” as well as partnered students between in-person and remote settings throughout the day. They were off mute as much as they were on. Caroline’s class is explored more in the building community and remote learning experience sections.
A final physical control exerted by the school on the students surrounded the presence of food during school time. Eating during synchronous instruction was seen as a battle for control between students and teachers. I was able to pick up on the concern and potential power struggle from the first few seconds in my interview with Marcus.

Marcus and I met on a Friday afternoon over Zoom for our first interview. He was eating a bowl of Ramen, stopped and looked at me for a moment as though to ask if it was ok. After saying hello and asking how he was feeling, I asked Marcus, “Eating lunch or a snack?” Marcus responded, “Yeah, Ramen.” He gave me a slight side eye, as though he was waiting for a response from me. It felt as though he was “feeling me out” at the start of the interview – can I get away with eating? Will she care? I did not say anything else about eating and instead asked if he was ready for our interview. He said yes, continued eating and participated fully in our interview. And thus, the “great food struggle” was met without consequence.

In my own personal experience as a classroom teacher, I followed any school rules with students. If the school stated no food in the classroom setting, then I held both my students and me to that expectation. However, as an administrator I have sat in multiple meetings, specifically over Zoom, where I have had both something to drink and eat. I have also seen many other educators eat and drink in meetings that I have facilitated. I saw no issue with it if we were able to accomplish our goals and agenda. Marcus having food during our interview was a non-issue for me.

However, eating during school time was a point of contention between students and teachers. Anita described the struggle to force students to not eat during class and the steps the school administration took to enforce the physical rule while students learned from their homes.

Anita: [Eating during class] is hard to control a lot and like, they’re eating on the Zoom. all day, feeding their faces, all day long. And it’s really hard to tell the parents “No, they can’t.” And the parents are like, “It’s my house, yes they can.” Yeah, it’s like, no, this is school. It’s not lunchtime. You know? And it is…that’s a fight, and I need to fight it. At one point I didn’t fight the fight, but then when admin said, “We don’t eat on the Zoom.” Then I had leverage to
Karen: He did? Oh, out of curiosity, why did that come about?
Anita: I don’t know, but I was thankful because parents are serving...serving meals as the kids are on the Zoom and the kids are *mimics loud eating sounds* It’s just like I really don’t want to watch you eat.
Karen: And then other kids jump in when they see that too?
Anita: Right! And it’s just like no we don’t, you know, you’re doing work right now.
Karen: Yeah?
Anita: So, it’s a minor thing, you know it’s, it’s really minor. But it’s also that whole mindset, like I was saying before, when you’re doing school, you’re not sitting there just eating your potato chips, all day long. This isn’t a movie, this is school. Yes, you get your snack. And then we move on, and we do, we do school.

Anita did not know why the administration had reached out to the families to say eating was not allowed during school. I did not see this guidance given from a district level. However, I could have been excluded from that conversation between district and building administration.

Anita’s dislike for eating during class stemmed from the traditional school rule of no food aside from a dedicated snack time and her desire to not see students physically eating during her class. I note that I never saw her two students, John and Aarav, eat during synchronous learning or during our interviews. Both boys seemed to take the rule to heart and did not bring food to our time together. Interestingly, I remember frequent professional development sessions where Anita would eat a breakfast while I presented. Anita wanted the control to not allow students to eat on her time, however had no problem eating and drinking throughout time that was not hers. It echoed the old saying, “Do as I say, not as I do.” In this battle for control, Anita had won. Her students did not eat during her class, and she was able to decide for herself when she would and would not eat.

Jennifer and Caroline never mentioned eating during class as an issue. However, their students did mention the desire to have control over when they eat. Carlos was very specific
about wanting to eat on his own time and schedule. When I asked him to describe one thing about school he did not like, he stated very firmly, “Not eating. Not eating.” He wanted to eat when he was hungry at his own time and pace. He did not like having a set snack time and lunch time. Remote learning allowed him the control to expand his access to food and eat when he felt it was necessary.

Marcus echoed Carlos’ statements. He brought up the freedom to eat whenever he wanted as something he would miss about remote learning.

Karen: And what’s the one thing you’re like, man I’m going to miss this. I’m going to miss remote because…
Marcus: I’m gonna miss… miss it because, because you could eat whenever you want. Like, like I remember like, like during morning meeting, I would just grab like a whole plate full of pizza bowls and just keep getting them. And the teacher wouldn’t get mad. She wouldn’t do anything. So, I was like, so I was like, I will be eating snacks, I will be drinking Capri Sun. So…
Karen Ladendorf: You like that free…you have freedom to do what you needed to do. Marcus nods and smiles Nice! True!
Marcus: Yeah, but I feel like, but I feel like the first day when I get in person. I’m going to be pretty hungry because I’m so used to like eating like 1 billion snacks in like an hour or so.

Like John and Aarav, I never saw Carolos or Xavier eat during synchronous learning or our interviews. Marcus was the only student who openly ate during our time together. I connected the lack of eating from the other students to the time of the school year our observations and interviews took place. We met in May all the way until the second-to-last day of school. By May the routines were in place, the rules had been set, and consequences had been communicated. Four of the students were not challenging the control the school had over their eating habits due to the length of time the requirement had been in place.
The teachers looked for ways to impose consequences on the students when they did not adhere to the physical school rules or complete their work. The first obstacle to overcome was missing or late work. The consequence used by all three teachers was a requirement to spend additional time online, supervised, to finish the missing work. Caroline, Jennifer, and Anita would monitor student usage time through the district’s monitoring software. If students had not completed their required work or turned in assignments, they would be required to spend additional time on Zoom with the teacher before or after the scheduled Student Connect Time at the end of the day. John described it as, “We have to do iReady before [Student Connect Time], or else we have to stay on our Zoom and do it.” John specifically called out iReady, the district’s reading and mathematics personalized supplemental resource. All three teachers required the students to spend at least 15 minutes in both the mathematics and reading section daily, 30 minutes in iReady total. However, all three teachers would pull students for missing work aside from iReady. Caroline and Jennifer would ask students to stay on Zoom at the end of their connect time and meet with them either individually or in a small group setting. Anita built into her daily schedule links and lists of students who were missing assignments and needed to join her. She would list all students missing work or iReady time at the bottom of her schedule. These students would then have to stay on after Student Connect Time to complete the work in front of her. Figure 10 shows an example from her April 28th schedule. All student names are redacted aside from the first initial.
Anita’s students knew if they needed to meet with her and complete an assignment or iReady at the end of the day because their names were posted publicly. Anita did not seem to do this as a means of public shaming but rather for ease of communication and scheduling. Everyone looked at the same schedule and followed the same links as needed. She used it to keep everyone on time, but also control their work habits. While it was not intended to be a punishment, the public listing and added required time online were consequences to the students’ actions.

Where Caroline and Jennifer kept missing student work private or semi-private with students in similar situations, Anita would openly list all students. Everyone in the class knew who was missing work, making public students’ private academic needs. Interestingly, John and Aarav did not mention the listing of names during our interviews. Anita made sure to explain it to me in our interview and showcased it in her daily schedules. While never stated, this practice itself felt like an additional consequence. Not only would the students have to stay after, but they would also be called out in front of the entire class. The lack of academic privacy was on display.

This was an easier way for Anita to manage missing work and meet with students; however, it also took away students’ privacy and broadcasted to their classmates their current academic status.
A second obstacle to overcome was students arriving late or tardy to synchronous class. All three teachers would allow students to enter the Zoom class late but did little to catch them up. Caroline described this practice:

I feel like [remote learning] made them (the students) more, most of them more responsible about time, time management. When to come on to things and, like, you need to be on time. And sometimes if you're 10 minutes late [to the Zoom meeting], Caroline isn't gonna let you in right away. If you're not in class and you join zoom late, you're not getting on. Like kind of being aware of like, you know, just those kinds of things…It became that, like, if you’re not going to join right away, I’m not going to reteach you in the middle of my lesson. You’re going to wait. You’re going to stay on [the Zoom meeting], you know, so they kind of learned a little bit from that too.

If the students arrived late to the class, no matter the reason, they were forced to wait for additional instruction or review from the teacher. Caroline used this not only to manage her instructional flow, but as a behavior deterrent. She felt the students picked up on the requirement to be on time or they would be behind. It was similar to a student who arrived at the physical school building late. They would be caught up when the teacher had time.

A final obstacle to overcome was students not attending synchronous meetings at all. The absences from synchronous class were a concern all three teachers brought up. All three teachers felt students needed a strong consequence or school would not be taken seriously. They all reflected on the initial remote instruction during the end of the 2020 school year where assignments and attendance could not be counted against a student’s final grade and only help to improve the grade. Caroline described that time as, “Yeah, consequence, like if I don’t show up, what’s gonna happen? Nothing. So, I’m just gonna sleep all day or play, you know, do whatever.”

The common theme for managing chronic absences, tardies, and even chronic missing work was to influence the families to send the students back to the physical school and leave
remote learning. Jennifer described her desire to have students back in the classroom:

When we went back in person, I think it should have been encouraged from the district that school is going back to, we're going back to school in an email. I think it should have been [shared as] the best choice for your child to be, unless you have a medical reason, is to be back in school. And I think some of [the parents] took it for granted that oh, what we chose [at the trimester] we had to stick with and didn't want to fight it or question it. But I think, I think it should have been “School’s back in session. This is what's best. You have to do what's right for you, but this is what we are encouraging.”

The school echoed this sentiment. Families were encouraged to return to the building if students were not attending synchronous classes consistently, had a long list of missing work, or were not behaving properly online. My own district-level meetings focused on how to get more of our students back in the classroom and off remote learning. Anita described a situation with another student that she and the building administration had determined needed to come back into the building because of his home behavior:

So, I have a kid who was on the [school support system], you know? And it was like, oh my gosh, we need to get this kid in person, cuz he's like this at home (Anita acts out laying back in chair, rotating around, lounging, not looking at me). And he, you know, he's slouching and he's doing his artwork and he's not able to focus. Like he would legitimately roll out of bed, sit in his chair and log on to the Zoom. I mean, didn't brush his teeth, didn't comb his hair, didn't change out of his jammies. And it's like, you need to tell your brain that you need to be at school.

Anita looked exasperated while she described this student. She could not control his behavior at home, so the consequence was to come back into the school building. Anita noted later he did pay attention better at the school and completed work. She attributed this to being physically in the building.

And it's like, and when he's in the classroom. He pays attention, and he’s, you know, active. But the classroom, there is something to be said in…in…this classroom, the mentality. This is where I do work.

I would agree – the student was physically with Anita and had a harder time fighting for control
while in the classroom. Anita was able to win the battle and the student could not escape. Anita attributed being physically in the building to the mentality of “this is where I do work.” It can also be argued that being physically in the building is where the teacher and administration has more control over the students.

Tardies were also dealt with by the teachers and school in a traditional way. If a student had returned to the building, they were not allowed to attend remotely anymore unless they were quarantined due to COVID-19. Anita shared another story about her same student that did not pay attention during remote instruction and was strongly encouraged to attend in person. After this student had returned to the classroom, he had one day where he was running late.

And, like one day he slept in. And so, he was on Zoom [in the morning]. And I was like, “Why are you on the Zoom?” And he goes, “I don't want to tell you.” And I said, “You have to tell me. It's not an option.” And so, he typed to me in the chat, “I woke up late.” I said, “Nope, Zoom is only for people who are quarantining. You are not allowed to Zoom.” And so, I call the office and the office called his mom and said he is not allowed to Zoom. And lo and behold 20 minutes later, he was in the classroom.

I clarified later with Anita that she responded to this student out loud over Zoom, which she did. She also removed the student from the Zoom meeting link and would not let him back into the synchronous class. Anita had taken control away from not only the student, but the family. A 10-year-old student does not make the decision for themselves to sleep in and not attend school. Further, the student and parent had problem solved the situation by having the student log into the synchronous meeting. They took control over their situation, but that control was quickly taken away from them by Anita and the school.

Both Anita and Jennifer expressed a desire to fully control what the students were doing during remote learning. Anita’s experience with the student who did not participate well and later wanted to attend remotely when they were running late showcased her need to control him.
Jennifer echoed Anita’s need through a general statement:

I just feel like kids belong in school. And, yes, home is school [this year] but I don't know. I think they need to be in a social place with other children with no distractions. So that way I can be there. Maybe it's me not being digitally tech savvy. And I share, I mean you see my setup. I think it would be considered old fashioned by sharing the screen or by having them watch [my screen]. Instead, I constantly unshared my screen but I just need to see them. Like, and I feel that when I'm sharing my screen, I just can't see everybody. Or when we use the PowerPoint or whatever I'm teaching off of and then everyone's focusing on everybody else ['s faces] versus what I'm actually showing and saying. So just, especially in this case the five I have at home, two of them are being really successful. Actually one, one and a half is being really successful. The others, I wish I could just see them, and be able to help them because they're just getting lost at home, distractions, forgetting to come on, forgetting to come.

Jennifer looked sad during this statement. She truly wanted to help her students but felt she could not when they were at home. She could not control their environment, behavior, and focus.

Having students back in the classroom allowed her to control those elements and made her feel more successful.

Caroline was the only teacher to not mention needing students physically in the building. Her student, Marcus, was also the only student to not mention needing to stay on longer to complete work or due to his behavior with her. Where Jennifer mentioned she was not tech savvy, Caroline was. She had used multiple digital tools prior to remote learning and simply brought those tools back out for remote instruction.

**Teachers’ Explicit Attitude as a Barrier to their Control**

Anita and Jennifer were very strong in their opinions that students should not be taught remotely and should be in the physical school building. Jennifer stated multiple times during our interviews, “Students belong in school.” Anita echoed this statement verbatim. Both felt that
students belonged in the building and not at home learning from a distance. They saw the
distance as a barrier to their control. How can they control what students are doing if they are not
physically with them? Caroline echoed this, but not with as harsh of a tone:

Caroline: I mean we have no control, but not that I want to control them, but
we have no control about like what they do at home and like what they’re
really like what, what information they’re really getting. Yeah, I guess it’s the
same here but like you know…like I don’t know if they’re like watching a
movie and on like Netflix in the background, you know, I don’t necessarily
100% know that all the time. So, I know in here like I’m checking your work I
can see what you’re doing, we’re moving along, you know?
Karen: You can control the environmental a little more?
Caroline: Mmhmm.

Caroline’s first statement got to the heart of her barrier: “….not that I want to control
them, but we have no control about like what they do at home and like…what information
they’re really getting.” Her concern was grounded in if her remote students were absorbing the
same information at the same level as her in-person students. She saw controlling the
environment to ensure they gained the knowledge and information she wanted them to. Jennifer
and Anita, while having the same concern, showcased an attitude of needing to control behavior
for the sake of controlling behavior.

Jennifer struggled with her need to control the working environment and not wanting to
overstep the control. She was cognizant that her two remote students would need to transition
back into the physical classroom at some point. Her struggle was showcased in this statement
from our interview:

Behavior wise. Again, it’s more of my remote that I that I struggle with just,
there’s too much around them to be distracted, yeah. Not good working
environments, out of their control some of them, not all of them, some of them
could be in their control. And then just, I don’t like to have them muted all the
time, because in the real world. In a traditional school year, there is no mute
button. So, when we’re independently working. I’ll tell them to stay muted, but
I don’t really say anything when they unmute and start talking because I think
about in a normal classroom there’d be that little whispering around and the small talk and as long as they’re working. I’ve always been one that was okay with that. But I do find in this setting, it’s more frustrating because I see it’s my remote that do it more. And I think it’s because they there, they want that interaction they, they, haven’t had it in a while.

Jennifer wanted to exert control but would back off multiple times. I saw this same struggle in her interactions with Carlos, featured in a later section. She would pick and choose her battles, which Carlos took as him gaining control over the virtual classroom.

Anita took a harsher tone than Jennifer and Caroline. She wanted what was best for the students but did not want to diminish the amount of control she had. She questioned the students’ motives for not attending or completing work.

When do you say you’re playing me and you know you’re playing this whole pandemic, to the hilt? And you have to draw a line. And when do you say no? It’s, it’s hard. You’re doing a dance for every kid about how they should be, you know, holding them accountable. Am I, am I pushing too hard? Am I not pushing hard enough?

Anita questioned her own push for control. Was she asking too much of the students or not enough? However, her desire for control won out and her explicit attitude towards students learning on remote came through:

Um, they’re kids. They’ve learned how to game the system, you know, some of them have learned, like the second I put them in a breakout room, they’re doing something else. you know, they’re not stupid…They know they can go somewhere and, and then they, then they also know, “Oh I’m so tired of looking at the computer I gave myself a five-minute break.” Okay, well you’ve been in a breakout room working for half an hour, and you’ve got one sentence that’s longer than a five-minute break. And I’m not sure what you were doing, but you just lost a breakout room privilege, and you don’t get to go to breakout rooms anymore. And the student that I did that to, she goes, “Well, I don’t want, I don’t want to have to hear what you say to everybody and have everybody looking at me.” And I said “If you were in the classroom, you would hear what I say and you would have everybody looking at you, so it’s no different than if you were in the classroom. You’re not in a breakout room.” And she goes, “Okay.”
Anita battled a student for control over being in a breakout room. The student shared she did not want everyone hearing what Anita said to her or everyone looking at her. Anita took that privacy away from her due to her behavior. Anita exerted control over not only the student’s learning situation, being a breakout room or not, but also control over her privacy. The student would no longer have privacy in the classroom and Anita made sure to remind the student that she would not have that control if she were back in the physical building as well.

In all these instances, all three teachers fought for control over the students’ behaviors and engagement. They saw it as keeping remote learning as similar to “regular” school as possible. However, the students did not hand over all control without a fight.

Students Fighting for Control

The control exerted by the teachers and school was met with a fight from most of the students. Carlos, Xavier, Marcus, and Aarav all showcased their desire to control their environment through differing actions. Where Carlos acted out explicitly, Xavier and Aarav were passive in their actions. Marcus openly questioned authority and decisions. John was the only student to both give control over to the teacher and retain a small amount for himself through a passive means. The following sections showcase each of the boys’ reactions to the control desired by their teachers.

Acting Out

As a seasoned educator, I can spot behaviors that are attention seeking and purposeful. I had many students act out, shout out, move in their seats, and openly ignore my instructions throughout my years in the classroom. I saw moments of specific acting out throughout my time
with the students. While much of the acting out came from students not participating in this study, Carlos was one of my students who openly acted out. My observations of Carlos and Jennifer brought me back to those moments from my own teaching. Carlos openly acted out throughout Jennifer’s lessons to gain attention and control over the class.

My first observation of Carlos was during a math lesson. Jennifer had the students practicing their fact fluency through sprints and online games. Sprints came from the district’s required math curriculum resource, Eureka Math. The Sprint was a 2-sided timed math quiz. Students answered as many problems as possible in one minute. After one minute Jennifer provided the answers and the students tallied up how many questions they had correct. The students then turned the paper over and repeated the process, with the goal to have more correct answers on the second side.

Jennifer had provided copies of the Sprints to her remote students during a materials pick-up date earlier in the trimester. She asked the remote students to hold up their pages to the camera so she could confirm they were prepared for class. Carlos held the page up as close to the camera as he could. It made the screen blurry, but I could make out it was his Sprint. Carlos put his paper down, and then proceeded to lean in as close to the camera as possible, leaving just one of his eyes and part of his nose on the screen. After about 30 seconds, Jennifer asked Carlos to fix his camera so she could see his entire face. Carlos moved the camera back slightly and backed up, but the screen was still filled with his face. Jennifer let out a defeated sigh and thanked Carlos, who made no noise or gesture in return.

Carlos had battled Jennifer for control. I would also suspect Carlos was looking for attention from the other remote students. He could not see the in-person learners but could see and communicate with his remote peers. His actions were attention-seeking, and he got what he
wanted: Jennifer’s attention. Jennifer attempted to pull the control back by having Carlos move his camera. While he did comply in theory, he did not comply fully. Jennifer did not fight Carlos on this matter and visibly showed she was done with the battle.

Carlos continued to battle for control and attention by yawning, stretching, and leaning as close to the computer screen as possible. He leaned in so close at one point I could see his individual eye lashes. He twisted in his chair, turned his mute button on and off, and continued to lean in and out of the camera as fast as he possibly could. Jennifer did not say anything during this time. Each time Jennifer read the answers to the Sprints Carlos was moving around his entire bedroom, leaving the screen, dancing, and jumping.

While I had thought Carlos was seeking attention, I also began to see Carlos had a need to move. He was constantly twisting in his chair and moving around. In our interviews he would pick up random items on his desk, move in his seat, and sway back and forth. Carlos seemed to have a strong need to move. Jennifer confirmed during our final focus group that she felt his actions were to get attention from other students in the class. She felt her ignoring was not giving into that battle.

Jennifer had the students move from the paper-pencil Sprint to an online quiz game, Quizizz. Carlos made the point to pull out a huge stack of papers and slam it down in front of the camera, so hard the stack shook, and a few pages flew off the top. He looked directly at the camera as he slammed the Sprint on the top of the pile and then pushed the pile over with force, causing papers to fall to the floor. Jennifer made no mention of this action and did not remember it when we met as a focus group.

As the class prepared to start the quiz game, Carlos moved close to the screen again. Jennifer reminded Carlos to move back so she could see his face. Carlos gave in, and Jennifer
seemingly won the battle. However, Carlos placed his fists on his cheeks with only his middle finger raised. Jennifer made no mention, and Carlos smirked. It seemed that Carlos won a different battle.

Carlos escalated his behaviors to include shouting out. Jennifer reminded the students she wanted them to be accurate, not fast in their answers on the quiz game. “It’s not about the first team done. It’s about the percent. I want accurate not quick.” Carlos had been playing with the mute button, making his microphone go on and off. He left it on and responded loudly, “I can be both.” This encouraged two other remote students came off mute and started making comments along with Carlos. Jennifer jumped in and muted everyone before she started the game. Jennifer used the Zoom features to take control back from the remote students. I could not hear any of her in-person students talking.

Despite Jennifer muting the remote class, students came off mute and talked throughout the game. Carlos indicated he was working through the game faster than his teammates when he came off mute and yelled “I’m good! Why are you all not good?” This encouraged one more remote student to come off mute and make comments along with him. Carlos continued to make comments directed at his classmates, angry they were not getting the answers correct. “Guys what do you keep missing!?!?” He encouraged a banter between other remote students and the talking grew louder and louder. Jennifer did not say anything, nor did she mute the students again. She walked away from the computer screen and left the remote students together. Xavier, who had stayed quiet and on mute the entire time, eventually came off mute and said very sternly “I’m trying to concentrate!” Carlos and the other remote student went back on mute but not without Carlos rolling his eyes.

Carlos used multiple methods to take control of the learning environment and attention.
While some of his actions were not inappropriate, such as moving around in his chair and standing to learn, other actions were disruptive. He encouraged other students to go off mute by shouting out comments during the quiz game. He leaned close to the screen to play with the camera and distract the other remote learners. Jennifer battled valiantly for control and won in small senses. However, Carlos seemed to have brought Jennifer to a stalemate. Jennifer walked away from the screen and chose to ignore the behavior. As Carlos took control over the remote students and encouraged a banter amongst themselves, Xavier joined the battle so he could have quiet again.

Jennifer’s Revenge and Carlos’s (Somewhat) Defeat

Jennifer and Carlos battles extended throughout the school year. Jennifer had shared how Carlos did not attend synchronous learning or complete his work on time. Their encounter throughout the math lesson and games showcased the ongoing battle between them. I wonder who won this year-long battle? Carlos had an answer for that. I had asked Carlos about an activity I observed Xavier completing, a bio poem. Carlos had to write a biographical poem about himself or a famous figure. He was not present for that lesson but had the work to complete on his own time. This poem was part of a larger poetry project. The students had to write a book of poems, each poem on a different topic and in a different style.

Karen Ladendorf: How about for the bio poem or any of the poems that you did for Miss Jennifer? Do you feel like you got what she wanted you to get?
Carlos: Definitely got her revenge smirk and angled eyes
Karen: She got her revenge? What do you mean?
Carlos: deep sigh I don’t know. looked exasperated I actually don’t know.
Karen: Huh?
Carlos: Some of poems are hard to write.
Karen: They are?
Carlos: Yeah, like, the remembering is kind of hard, because it was just like,
because we had to like write down stuff. And she was like, actually had said them with long stuff. So, and then one of the other one was grammar poem which was like it was just short ones but like a lot of them, like a lot.

Karen: Oh, so was the revenge that she got you to do all the work?
Carlos: I guess you could say so.

Carlos did not want to complete the poetry project. He mentioned specifically that writing the poems was difficult, especially because some of the individual poems were longer. Although Carlos had no desire to complete them, in the end Jennifer “won.” He had completed the entire poetry book and Jennifer had gotten her “revenge” on him. He went on to describe how Jennifer continued to get her “revenge.”

Karen: So how else do you think she got revenge on you?
Carlos: Just like...not letting me sleep.
Karen: Were you sleeping, one time?
Carlos: I never...no...I never I never did, but I just, I would always get tired, like in the middle of the day.

Jennifer made Carlos conform to the school day and follow her expectations, including not sleeping in. In this sense, according to Carlos, Jennifer had gotten revenge on him. She had exerted her control and won the battle. However, Carlos continued to act out, did not make it to synchronous learning on time, and took longer on assignments. He felt that he had won the battle as well:

Karen: What did you like most about learning with Miss Jennifer this year?
Carlos: Getting revenge on her.
Karen: What did you do to get revenge on her?
Carlos: I don’t know...it’s just me...it’s just...like...learning is...whatever, like, I don’t like it and I don’t hate it.
Karen: Okay so for you was this just kind of like a, yeah, I just did the work like any other year?
Carlos: Yeah.

No matter what Jennifer tried, she could not force Carlos to like and fully engage in school. Whether he was remote or in-person, Carlos was going to fight for control over his level of
engagement. In the end, they both won the battle, and both lost.

YouTube, Netflix, and Games, Oh My!

All five remote students had a district-provided MacBook Air device to use throughout the school year. The devices had parental controls installed to block inappropriate sites and material from being accessed whether on the district’s network or a home WIFI. However, no system is perfect in keeping students from going online where they should not be during class. Jennifer mentioned this in one of her interviews:

Sometimes I wish a parent would check in on them, but just that, um just having to function, being able to not just get up and walk around or get off of the computer [program] and go on YouTube. I mean that I had someone on YouTube last week. And they unmuted themselves and they were full, full-on YouTube as they were supposed to be learning.

Jennifer’s statement showcased how students had the ability to go where they wanted online without the teacher knowing. The district’s computer monitoring software, LanSchool, did not work unless the students were on the district’s network. The students knew this and took full advantage of the inability for their teachers to monitor their every movement while at home.

Marcus openly admitted to taking advantage of the distance. He had previously pushed the line while physically in the building for 3rd grade:

Marcus: I mean, I kind of had a lot of deals with my computer in the past because, because LanSchool wouldn’t connect. So, so they [teachers] couldn’t see anything that I was doing. I was doing so much stuff that I wasn’t even allowed to do.
Karen: Like what? What were you doing?
Marcus: I would be really going on some website just be playing games.
Karen: In the middle of class?
Marcus: Not in the middle class. Slight pause Um, sometimes in the middle of the class, but the teacher let me. But usually, like, after school, I was just like, I don’t know, like, be playing games, watching YouTube. So yeah.

Marcus knew his actions in the past were not appropriate for the school device, yet he did it
anyway. He took control and used the device as he wanted. He went on gaming sites, usually when his teacher allowed him to. He also pushed the line and went on gaming sites and YouTube while at home where the monitoring software would not work. I questioned Marcus on his actions during remote learning. Was he still following these same habits?

Karen: How but are you still doing that this year too or…?
Marcus: Um, I think I stopped. I think in the beginning I stopped. And in the middle, I’ve started like growing it. But I think I stopped. Because, because I feel like what I need to go do is, that, I need to like clear the history, so they don’t find out, because probably if they find out I’ll get in trouble.
Karen: Alright so you’ve gotten better at tech?
Marcus: Yeah, I’ve gotten better and also less trustworthy.
Karen: *laughs* Got it, got it.
Marcus: Hopefully I can clear the history...

Marcus had continued to go to sites that were not allowed on the district device. He knew it was wrong but did it anyway. Marcus was taking control over the device and his actions. He went the extra step of attempting to clear his browser history, which he described in our later interview:

Yeah, I have so much stuff and I think a few days ago, I tried to clear my history, because I would use Safari, not Google Chrome, because, because of the Chrome extension for LanSchool and, and they could see what you will be doing on Google Chrome but not on Safari. And Safari didn’t have anything such as extensions. So, I use Safari for like, I don’t know, playing games, watching Netflix and stuff like that.

I had to laugh when I reviewed Marcus’ interview. Teachers and the Technology Department were not able to see what sites he was going to when he was at home whether he was on the Chrome or Safari browsers. Again, Marcus went to sites he knew he was not supposed to and looked for ways to erase evidence of that movement. His form of acting out and fighting for control manifested as going to sites he should not be at. While he claims to not have done this during class, Marcus still took control over his environment and went where we wanted online when he wanted to.
Passive Participation as Passive Resistance

I observed multiple times students choosing not to share or engage during synchronous instruction. This passive participation was a form of battling for control. Students chose to not engage, controlling what they said and how they engaged with the teacher and classmates.

One of the most common areas for passive participation was observed during morning circles. I observed both Jennifer and Anita during their initial morning circle. I was not able to make Caroline’s time due to scheduling issues. I observed during Anita’s class Aarav not sharing during the opening circle. Aarav opted to pass. He turned his paper to red and tried leaning it up against the computer so he would not need to hold it up. It didn’t work and he ended up holding the paper. He stared at the screen for the rest of the talking topic, but it was a distant look, almost as though he was zoning out. His eyes did not blink, he did not look around, just stared at his screen.

Aarav was not the exception in the class. Multiple students opted to pass when it was their turn to share during the morning circle. John opted to share an answer each time and felt that other classmates should as well: “I don’t really care if they pass, but I think it’s better if they say something because it’s more interesting kind of than just passing all the time.” John even engaged after the reading of the daily joke by adding “Hahahahahahahaha” to the Zoom chat box for the class to see. John saw sharing to control the circle and make it “more interesting.” Sharing allowed John to control his own reactions to the circle activity and hoped others would join in. Aarav, on the other hand, felt took control over his engagement by not sharing.

I observed similar behaviors with Xavier and Carlos. For my first observation, I joined Jennifer’s Zoom right as her morning circle was finishing. She was just starting to share the daily
joke. Xavier was on staring at the screen, emotionless. Carlos had a black screen, not sharing his video. Xavier did not participate or react to the joke. After the joke Carlos left the Zoom meeting. He did not come back on for the rest of the observation.

Like Aarav, Xavier opted for passive participation as a means of control. He did not participate in the circle and did not react to the joke. He opted instead to sit quietly and simply take in the activity on the screen. Carlos went an extra step and left the class completely. He started his battle for control by not participating or turning on his camera and extended to defiance by leaving the class. What better way to control his engagement than to leave when he did not want to be there?

My second observation of Jennifer’s morning circle revealed similar participation. Her question to the class was simply does anyone have anything exciting to share. Neither Xavier nor Carlos responded. Xavier sat and stared, sitting up straight. Carlos looked very tired. He leaned on his hand, and his eyes were half closed. Neither one raised their hand to share, nor did they react to their classmates’ statements.

My final observation of Jennifer’s morning meeting included the question “What was your favorite thing from 3rd grade?” Students raised their hands and Jennifer called on them. Xavier did not raise his hand, put his hood up over his head and sat quietly. Carlos did raise his hand and very quietly in a tired voice said he liked when they played charades once. He then went back to covering his face up with his hands. During this observation, both boys looked like they were trying not to be seen. They hid their faces, did not react to their classmates, and Xavier did not answer the question at all. While Carlos did, he retreated to his hands as soon as his answer was complete. Both took control by not only limiting their participation, but also physically hiding away from the class to not have to participate more than they wanted to.
I observed this passive participation in other moments as well. I observed multiple instances of the remote students staying on mute and not engaging with the teacher or their classmates. During a math lesson, Caroline was setting up a Quizizz game to continue reviewing decimals. While many of her remote students came off mute to make comments, joke, or groan about the activity, Marcus left his computer on mute and sat waiting for the quiz game to start. He did not react, roll his eyes, or smile at his classmates. He simply sat and waited. He did this throughout the math lesson. Where both his in-person and remote classmates had many comments, he simply waited quietly for the activities to begin.

Xavier had a very similar stance throughout his lessons and class discussions with Jennifer. During one observation, Jennifer was explaining to the class what the afternoon schedule would be. Xavier stayed on mute while his remote classmates came off multiple times to ask questions. He pulled out a blanket, kept his hood up over his head and leaned down on the blanket. He watched the screen from the blanket with an emotionless face. He was participating but not openly and eagerly. His staring at the screen from a large, fluffy blanket was as much engagement as he was going to give Jennifer.

The passive participation was also observed during group activities. I observed Anita teaching a math lesson. She created the activity in SMART Lumio, an online presentation tool. She needed all students to log into Lumio in order for the program to automatically assign partners. Anita struggled to get all her students into Lumio. One remote student held the class up. Anita said to the class, “We can’t move forward without everyone ready. We need you online so we can all start.” She wrestled control away from the student who was keeping the class from starting the activity. John and Aarav were both online ready to go but were not able to move forward or control their learning due to this classmate. The student got online, and Anita was
able to start the lesson, looking tired and frustrated.

During my observation of Anita’s math class, I followed Aarav into a Zoom breakout room to complete a series of word problems with two classmates. Aarav was sitting up, not talking but doing a lot of typing. His partners were talking back and forth as they seemed to be setting near each other in the classroom, both being in-person learners. Aarav stayed on mute and worked his way through the assignment while they talked. Aarav typed out a potential answer. His partners looked at it and went with it, “Thanks Aarav.” His partners asked him how he did the work, and he held his whiteboard up to the screen without saying a word. They continued in this manner for the next slide in their assignment with Aarav working on mute and his two partners talking to each other. Aarav did not make an attempt to talk with his partners. He stayed on mute and worked independently. He typed in the answers for the final slide of problems without coming off mute, seeming to ignore his partners. He went back and fixed a few more of his partners mistakes on the slides, which they said thank you for. Aarav stayed on mute, not reacting to his partners, or engaging with them.

Aarav did not want to be in the group setting. He took control over the learning environment by going at his own pace and working independently within the group. His engagement with his partners was limited to writing on the shared screen or holding up a whiteboard. This allowed Aarav to participate in the activity, complete the work, but all in his own comfort and manner.

All of these instances showcased the passive forms the students battled for control. Not participating or limiting the amount of participation allowed the students to control their engagement level. The teachers may have created structures, however the students had control over how much they engaged with those structures.
Questioning Authority and the Status-Quo

Marcus was very open in his questioning of school rules and requirements. He was passionate in his descriptions to me, especially on the topic of keeping your video camera on for synchronous learning. Marcus described an incident with a teacher, a classmate, and a clash over keeping the video camera on:

Marcus: The art teacher, she doesn’t really care if people’s videos are off, but the music teacher. She forces everyone to have the video turned on because it...because...honestly, like I understand that that like, like I understand that you need to see the child what they’re doing so like they’re not doing anything like going on the phone or whatever. But like what if there’s something like personal? Like, like, something bad happened, like you had a heart attack which, like, she needs to notice that?
Karen: Okay.
Marcus: She needs to know that every single person that turns off the video is not like on their phone.
Karen: Okay, how do you feel about that though being forced to keep your video on for music?
Marcus: Um...cuz, cuz I know that I, there’s just one person in another class. Like I remember at one point our schedule, we would have like the whole remote fourth grade, we would all just be in like one like PE or art or music or etcetera, or whatever. There was this one girl. Her hair was like all messed up she looked like, she looked like messed up. She even said out loud [her hair looked messed up], and the music teacher still forced her to turn on her video.
Karen: How did it make you feel?
Marcus: And I could tell her by her face, she felt uncomfortable, because I know. Because probably a lot of the students were like, pulling down [scrolling down the screen] trying to see what she looks like. And see like, oh, she looks ugly! Oh, like why is she here?
Karen: Alright, how did that make you feel hearing that? Like I know you weren’t involved in that, but you got to hear it. How did you, how did you feel hearing that back and forth?
Marcus: At first, I didn’t think she would look pretty messed up but as soon as she turned on video, I was surprised. I would [have] instantly turn off her video, and whatever, and I would tell the child like whatever, you do not need to turn on your video. You need to fix you.
Karen: Did you feel uncomfortable for her?
Marcus: I did feel uncomfortable. They said that if you don’t turn on your
video, you’re gonna be counted as absent. But like, I’m like, like, does that change your grade or like what does that do?

Marcus openly questioned the authority and control the teacher and school had put in place. Why did students need to have their cameras on all the time? What does being counted as absent do? Why would you be absent if you were still online just with a camera off? Further, Marcus expressed feeling uncomfortable for a classmate who was forced to turn her camera on. She did not look good that day and was possibly embarrassed being live online. In this scenario, the teacher’s desire for control over video cameras being on overruled a student’s comfort. Interestingly, Marcus always kept his video camera on. So, while he questioned the authority, he also complied.

Marcus also questioned authority when it came to his relationships with teachers. He spoke very fondly of his physical education teacher, who left in November due to health reasons. It is District policy to not share health information with students. Marcus lamented about this:

Marcus: Our original PE teacher, I think since November, he said to us he had to go to the hospital because he was, like, seems like really sick. So, from November we have [had] a sub
Karen: Yeah. Yeah, I know he’s been home sick.
Marcus: So, I don’t know if, cuz I don’t know what happened because like a lot of rumors were like going around our class like, oh, he’s coming back like oh he’s coming back. But like, like, I’m just wondering like what happened to him. Worried face
Karen: Okay,
Marcus: Like, like, is he okay you’re like, or like did he pass or like, oh, I just want to know. Worried face and sad tone of voice
Karen: All right, I can tell you no he didn’t die. He’s still alive, that I know. Marcus looks relieved But I knew you knew him before so you’re right you want to know what happened, right.
Marcus: Yeah, because it because, because we would have a pretty good relationship. Like we would like fight over like, like, which one’s better like Green Bay Packers or Bears, like, and I’m like Bears are better!
Karen: Nice so that was kind of hard to like in the middle of all this all of a sudden, you get a different PE teacher right.
Marcus: Yeah. *Sad facial expression and tone of voice*
Karen: Oh, man. Yeah, that would be hard.

Marcus was very worried about his teacher. They had formed a strong relationship over the years, and he had heard nothing about his status. I saw how sad and worried Marcus was, so I told him his teacher was still alive. That made Marcus physically look better. He knew the school would not tell him information about the teacher, and he was probably not expecting me to know anything. He still took the opportunity to question the authority and inquire about his teacher. Marcus seemed to pick and choose when to question or openly defy authority. He opted to keep his camera on and stay on mute during class but chose to eat during class when he wanted. The school and teachers had a high level of control, leading students to question yet still follow the rules imposed.

**Summary**

The students and teachers battled for control over the remote learning environment. The teachers and the school district exerted control through the computer screen, requiring students to follow physical school rules at a distance. Students stood for the Pledge of Allegiance, stayed on mute on Zoom, kept their cameras on, and raised their hands for permission to speak online. Eating during synchronous class time was not allowed, with notices sent home to all families that this school rule was to be followed at all times. Students were marked tardy for getting online late and sometimes would not be let into the Zoom room due to the tardiness. In-person learners could not attend remote instruction when they were running late, taking away the flexibility for families.

The students openly questioned the rules. They questioned why cameras had to be on even when someone was having a rough day at home. They questioned what the consequence of
not having a camera on was, though they never fought to find out. They also questioned why
they could not be informed about their teachers’ health situations when one was not in the
building for the year.

The students also fought back against the control. Some acted out, coming off mute when
they wanted and interrupting the teacher. They went to websites they knew they should not be at
during synchronous learning including YouTube and Netflix. They watched movies or listed to
music while working on their schoolwork. They also passively battled for control by not
participating in circle discussions or staying on mute during group work.

No one group won the control battle. The students won small battles by not openly
participating or going to unapproved sites. The teachers won small battles by exerting the control
overeating and physical participation at home. Despite the small battles won, neither group fully
won the war, splitting the control of the remote classroom down the middle between the students
and their teachers.
CHAPTER 7
THE GREAT DEBATE: REMOTE VS IN-PERSON LEARNING

The students and teachers had a mix of reactions to the remote learning year. While they had different perspectives on the experience, there were multiple similar themes and overlaps throughout their reflections. Mass-required remote learning had negative views from many adult stakeholders, as explored in Chapters 1 and 2. Two of the teachers interviewed, Anita and Jennifer, shared similar negative reactions to remote learning. Both felt that students belonged in the physical school in order to learn appropriately.

Perception of School

The teachers and students were mixed on what counted as “school.” Anita and Jennifer were very strong in their beliefs that remote learning was not appropriate and not true school.

Jennifer: Yeah, um, I think, when we went back in person, I think it should have been encouraged from the district that school is going back to, we’re going back to school in an email. I think it should have been the best choice for your child to be, unless you have a medical reason, is to be back in school. And I think some of them took it for granted that oh, what we chose we had to stick with and didn’t want to fight it or question it. But I think, I think it should have been schools back in session. This is what’s best. You have to do what’s right for you, but this is what we are encouraging. So, and then I think going forward, I mean, especially now seeing what’s going on in our country and how life is slowly but surely returning, that it’s not just out of convenience that people can be remote next year. It should be for a medically induced reason only, not just school hours or daycare or things like that. I think it should be. Because that’s what my, that’s my biggest fear. So going into next year is that there’s going to be those parents that this [remote] has been working for them
because they don’t have to make sure they’re up at 8am anymore because they’re just at home now. And if they come, they come or they don’t have to wait until after school to go to the grocery shop. And I mean I talked to other teachers here. They’ve got students that are leaving all the time because we had to go to the store now or we can’t come back for check in because we have baseball tonight. So, it’s just like...trails off with sad face
Karen: Your remote, but you’re not?
Jennifer: Right, you’re part-time, yeah. Part-time remote program.
Karen: Oh, interesting. So, it’s really so even like from a district level, emphasizing that school is happening?
Jennifer: Right.
Karen: And if you’re not going to send them in, school is still school?
Jennifer: Right, right.

Jennifer struggled throughout remote learning not having students physically in-front of her. She equated returning to in-person as school being back in session. Remote learning was not real school in her eyes, and she carried that perspective into her teaching. I observed her focusing on the in-person students and leaving her remote students multiple times throughout her lessons. She included them as best as she felt she could, but the priority was her in-person learners.

Anita had similar sentiments about remote learning and being back in the classroom:

They’re distracted by the things at home. Some people argue, know it’s, you’re more comfortable at home. It’s like yeah, you’re more comfortable but you’re also home. Home isn’t where you have your mindset of learning, right? So, I have a kid who was on [intervention team watch], you know? And it was like, oh my gosh, we need to get this kid in person. Cuz he’s like this at home laying back in chair, rotating around, lounging, not looking at me and he, you know, he’s slouching and he’s doing his work and he’s not able to focus. Like he would legitimately roll out of bed sit in his chair and log on to the Zoom. I mean, didn’t brush his teeth, didn’t comb his hair, didn’t change out of his jammies. And it’s like, you need to tell your brain that you need to be at school.

Anita’s frustration stemmed from the lack of seriousness she observed from her students during remote learning. She felt she could not fully control their behaviors or learning environment while they were not physically with her. At one point Anita stated, “Just give me your kids and let me teach.” Being on remote was not how Anita viewed school. Physically in the building was
Anita also had a negative perception of remote learning from the start. She had previously taken online courses but did not feel they were very effective.

Anita: Yeah, but you know I took online classes and stuff. Yeah, I think it’s contrived I think a lot of the stuff, you know, make a post, and then respond to two other people’s post. You know what I mean? Like every professor does that, I mean, that the type of assignments and the type of activities that you can do remotely. It’s lacking.

Karen: So, they need something more interactive hands on?

Anita: Even like even the interactivity of a Google Doc. Okay, you have a Google doc where they can type together, but it’s a discussion that makes it really interactive not just the typing.

Anita went into the school year with a negative bias towards remote learning. She knew what she had previously experienced in online classes and found herself recreating those same lessons. It seemed as though she did not know what to do to make remote learning interactive, nor was she open to trying.

Despite the negative hype around remote learning, the students seemed to describe remote learning as simply school at home. All five boys’ descriptions of activities, assignments, and remote learning in general included students feeling that school was happening normally with more flexibility. John described remote learning during the initial COVID-19 lockdown at the end of the 2019-2020 school year as being independent then, “After a couple weeks we started doing school fully again.” He was still remote, not physically in the building. However, he viewed doing structured work as being in school and “doing school.”

Carlos viewed remote learning and in-person learning as one-in-the-same. It was all school, and he was not a fan of school at all.

Carlos: This is one, like school is just one thing.

Karen: Okay, so you would just kind of, for you, school is school, you don’t love it, you don’t hate it. Remote, in person, all the same?
Carlos: *seems confused* Did I say I don’t like it, or I like it?
Karen: I think what you told me was you kind of like it, like it’s okay. *makes a scrunch up yuck face* No, you don’t like school?
Carlos: Nope

Carlos explained he did not like completing the assignments, did not like being with friends, and did not like assessments. He wanted time to be at home with his family, learning on his own schedule at his own pace. He wanted time to eat what he wanted, when he wanted. I asked Carlos if there was anything else he did not like. He responded: *deep sign* “Not really. But I still don’t like school.”

When discussing the new school year, the students looked ahead to their new grade levels in a traditional schooling sense. Their biggest concern was who their new teacher was going to be. Carlos specifically said he wanted everything to be normal but also, “I get a good teacher that I want.” Marcus was very excited about 5th grade and was hoping for his old 3rd grade teacher who was now teaching 5th grade. “Even though I got in trouble a lot, I liked her.” He was also looking forward to “Me being, getting to be the leader of school. Because I’m in fifth grade and like, like that’s like, like that’s the last year of school and next year I’m gonna be off to Middle School.” Marcus saw the new year as his chance to be a leader, never mentioning school starting back up or not being the same as his remote year. Lastly, Marcus was looking forward to having a personal desk and not sharing a table with his classmates.

Despite the teachers feeling in-person learning was “real school,” the students viewed remote and in-person equally. School still happened while they were on remote. The physical location did not determine if they were attending school or not. Their plans for the new school year involved desks, leadership, and the teacher they wanted. School went on as usual in their eyes, despite the unusualness of remote learning.
The Divisive Student Preference

The students were torn on their desires to stay on remote learning or return to in-person in the future. Multiple factors impacted the students’ preferences towards remote or in-person learning. Among those factors were the setup of the classroom, the freedom and flexibility they perceived, and the content area itself.

They Liked Remote…and They Didn’t

Aarav was very set in his decision. He did not like remote learning and wanted to be back in the physical school building.

Karen: Okay. Very cool. So, comparing like how things went at the beginning of this year to now you said you’ve gotten used to it, has it gotten better, remote learning?
Aarav: Yeah?
Karen: Do you like it?
Aarav: No
Karen: No? Would you prefer to be in school?
Aarav: Yeah.
Karen: Oh why?
Aarav: Because I learn better.
Karen: Oh, can you describe that more?
Aarav: Well, we learn the same things but it’s like she could like help you.
Karen: Oh, you mean like the teachers right there to help you?
Aarav: Yeah.

Aarav went on to describe his hatred for remote learning. He wanted the social and physical aspects of school back:

Karen: Yeah, get it. I absolutely get it. So, next year if you’re back in person, are you going to miss remote learning?
Aarav: Probably not.
Karen: No, you want to be back in person?
Aarav: Yeah
Karen: Do you want to, what do you want most to see your teacher to learn in person or to see your friends, or what do you think?
Aarav: All of those.
Karen: All of those?
Aarav: Yeah.
Karen: Does that make school better?
Aarav: Yeah.

I found it interesting that Aarav used the same language Anita did: in-person helped him learn better. I followed up with Aarav on this during our final focus group. He doubled-down and said he felt he was learning more being back in-person without any influence from his teachers.

John was torn in his desire to stay remote learning and be in-person:

John: I’d kind of like to go back to in person but I still like being in my home, because then I don’t have to go get picked up. I could just stay here, and everything’s just more easier. And if I want to go play outside or watch TV or play a game, I could just do it right away.
Karen: Got it. So why, why do you want to go back to in person?
John: Cuz I want to see like my friends, I want to see friends. I want to get the feeling of school again and what it’s like. And I want to know what the school is like. I want to see it - all the classes and stuff. So then if the Coronavirus doesn’t go away, we go back to school or we can do in person or my mom makes me go back to school, then I would already know everything. Then if I’m back on Zoom so I don’t really have to go on different classes. I could just be on the Zoom and go to different classes. So, if we do go back to school, like in the middle of the year or something like it’s not going to be as hard because then I don’t know anything about like the classes and where they’re at.
Karen: Okay, so you want to at least be able to start next year?
John: Yeah,
Karen: I got it. Okay, that way if you do have to go remote it’s not it’s like whoa, what do I do you want to be able to at least start the school year back in person?
John: Yeah.

John wanted the social aspect of school back. He wanted to be able to make friends, socialize, and see people. He also wanted to be familiar with the school and the teachers. However, he liked his freedom and flexibility. John would have benefited from a hybrid schedule where he spent part of his day or every-other-day in person and the rest of the time remote. He would have
had the best of both worlds.

Xavier personally enjoyed being on remote learning. He liked the freedom and flexibility remote offered him.

Karen: Are you, are you happy being remote?
Xavier: Yeah.
Karen: What do you like most about it?
Xavier: When I’m on breaks I can just either turn on the computer that you find that day or I could just go on my bed and use my iPad.
Karen: Nice, so you feel like you’ve got like some flexibility, you’re not stuck at a desk all day?
Xavier: Yeah.
Karen: That is nice, anything else you really like about being remote?
Xavier: Um...not really, I can’t, I can’t, I can’t, like, it’s hard to think of anything.
Karen: So if you had a choice for next year, would you do all remote all in person, or like a combination?
Xavier: All remote.
Karen: You like the flexibility?
Xavier: Yeah.

Xavier’s preference could also have been connected to his living arrangements. It was easier for him to attend school remotely without having a long ride from his current home. He also was able to switch homes and daily locations without much notice from friends or teachers. Remote offered Xavier a level of privacy and the ability to hide his homelessness, without realizing that is what he was doing.

Carlos also preferred remote learning. He wanted to be home originally because he did not like wearing the mask all day. “A mask always itches me, but I have to wear it whenever I have to. But since I have the option not to, I just prefer to be home because they really itch me.” Carlos, overall, did not like being in the physical school. Remote learning was his ideal learning environment.

Karen: So, um, is there anything else about you know just being remote and learning from home, that you really like, you like the setup?
Carlos: I like how I can just like, listen to the teacher, and, like, I can also, like, see my friends when she [Jennifer] turns the camera while still being at home. I just really like that.
Karen: You like being in your home and having school so you like having both?
Carlos: Yeah, cuz I kind of always wanted to be home schooled but I didn’t. Because I wanted to see my friends.
Karen: Okay, why would you want to be homeschooled?
Carlos: So, I can see, like, my mom more because she comes home at like six because she’s a teacher.
Karen: Okay. So, you like being home and getting to see your parents some more?
Carlos: Yeah. It was easier.
Karen: Alright, so what was what made it easy or easier?
Carlos: Like...um...I’m not really sure it just feels like it’s easier because like you’re more at home and you like I feel like better there because you can do more stuff.
Karen: Ooo, what do you like to do?
Carlos: Like play with my brother and eat.
Karen: You got your whole kitchen there, so you don’t have to worry: Carlos smiles and laughs about...Oh man, I didn’t pick that snack! Nice...So if you had a choice, right, like let’s say the school year wasn’t over I know tomorrow’s the last day, but let’s say it wasn’t over. And you could go back right now would you go back to in person or stay remote?
Carlos: Remote.
Karen: You’d stay remote?
Carlos: Yeah.

Carlos revealed he always wanted to be homeschooled. He wanted his mother to stay at home with him and be his personal teacher. He liked being home, surrounded by his family. Carlos did not like being in the physical building nor confined to a teacher’s schedule. In Chapter #6, Carlos demonstrated behavior that was not conducive to learning towards both Jennifer and his classmates. He spoke out of turn, attempted to distract his classmates, and looked for multiple ways to push Jennifer’s buttons. Carlos did not like traditional schooling. He wanted remote learning, on his own terms.

Despite his desire to stay remote, Carlos did admit to difficulties with remote learning.

“So, if you have a problem, you can’t really like, do anything you can’t like ask the teacher
because she’s not there.” Even Carlos had to admit he needed help sometimes, especially during his 2nd grade year with the sudden shift to remote learning. The activities were sometimes confusing, and he lacked the immediate help from his teacher, something he did feel in his 3rd grade year with Jennifer. This confirmed Jennifer’s struggle as well. She noted that it was difficult to help students in-the-moment, which led to additional struggles for them. Carlos also noted the lack of materials made it difficult for him. “[It is difficult] whenever I don’t have something that I need. Cause there’s no one to actually help me.”

Aarav agreed with Carlos on the lack of materials.

Aarav: And gym wasn’t the best because we didn’t have all the equipment.
Karen: So, what did you do when you didn’t have the equipment?
Aarav: We made like sock balls and a paper a ring.
Karen: Oh, so you had to make all your equipment then?
Aarav: Yeah.

Aarav did admit later that it was not overly frustrating to have to create all the equipment himself. However, the fact both Aarav and Carlos noted the missing materials showcased their desire for better planning and providing of equipment for remote learning. Remote learning was not as successful in their eyes due to the lack of proper equipment and materials.

**Technology Barriers and Needs**

ERI brought out the need to evaluate technology within the school district as well as community and home access. The students in this study were provided with a MacBook Air laptop device to use at home. It was the same device administrators and teachers used in the school district. The device itself was very powerful, and offered multiple opportunities to create videos, edit photos, and access digital resources from three different internet browsers. However, the students pointed out a need for more flexibility with their devices.
The students wanted the ability to write more throughout the ERI experience. All five students noted that math was a hard subject to complete on the laptop. They had to type out their work in either a Google Doc or SMART Lumio file, which did not offer flexibility for math equations and font. They also struggled when they completed their work on paper. They would need to take a picture of the paper, which was awkward with a large laptop that could not be picked-up or angled easily. Further, the picture would look backwards, causing students to have to edit pictures just to turn in a math assignment.

The district also had a small number of mobile hotspots available for internet access. However, this did not fully assist all the students. My department worked with the district’s communication’s team to send a survey to all families in the district, asking if they had access to reliable internet at home. We had a very low response rate, leaving me to guess at how many hotspots to purchase. Building administrators ended up finding out which students did not have access to internet when they made attendance phone calls. Families of students who had been absent multiple times were contacted to discover if the issue was health or technology related. I purchased multiple new hotspots throughout the school year as new families moved into our boundaries or families lost access to their internet in the middle of the school year.

Xavier’s family was issued a hotspot for instructional use. It did help him to access his synchronous Zoom links as well as all of his digital material. He still experienced multiple glitches from Zoom, some due to the limited bandwidth of the hotspot.

Despite the district’s best efforts, the technology was not fully ready for ERI. Lack of internet access at home as well as the inability to be flexible in how students share their understanding and learning by hand proved to be challenges for them. However, all five students felt they were confident with the MacBook and grew in their technology skills throughout the
school year. They had found workarounds and problem-solved access and typing. They had become adept at editing photos and at times abandoned it to simply find ways to use the font and editing tools provided by both SMART and Google to submit their work.

Last, Anita had two students who were new to the MacBook in fifth grade. John was one of those students. Anita felt she struggled to support John in using the MacBook at a distance. She opted to share her screen many times, create tutorial videos, and pull John into a small group to explain how to use the device or digital tools. Despite her frustrations, John felt she did an excellent job in teaching and support him, crediting Anita to his knowledge and new love for the MacBook.

**Content Area Matters**

The students called out specific content areas they would either prefer fully remote, prefer in-person, or prefer to not to have to attend at all. Aarav again was very consistent. He did not like remote learning with Anita nor with his exploratory teachers.

Karen: Have you liked doing music art and PE on, you know, on remote or would you prefer to be in-person?
Aarav: I like all of them in person because it’s just like better
Karen: Oh, what do you think it’s better.
Aarav: I don’t really know.

He had no reason besides that he did not like remote learning. Aarav wanted his teachers next to him helping him. He wanted to be with his peers learning from them in all his classes. The content area did not matter to him. Everything should be in-person in the physical school building.

Carlos and Marcus both agreed on their dislike for their music class. They did not enjoy the content and being on remote was just as bad as being in-person.
Carlos: I never liked music. Art was okay. Gym was okay. And I just, it’s, it’s always been okay except music. Music just always annoys me.
Karen: For remote and like it even before?
Carlos: No, never. Even in kindergarten, I just never liked it.
Karen: And now on remote, it’s the same?
Carlos: Yeah…Definitely hated music all the time.
Karen: Just did that like that one?
Carlos: No, no, I hated it and I still do.

Carlos was very set in his hatred for the music content. He purposely corrected me in stating he hated the class, not just disliked it. The content was not engaging to him, and he never made a connection with the teacher. Marcus felt the same:

Karen: How about like music, art, pe those classes? What do you think about those?
Marcus: Music and art are not really my thing. Like, I think, at the start of the class, I usually just turn off my video because. It’s because I’m not really type of like an artsy. It’s not that I don’t really enjoy crafts. But for music, our music teacher. She’s, she’s too much. It’s this, she’s like, like she like she would, like, I think there’s this one song. Is it like a like we have to do is I have to like, you have to blow on your tongue you have to like have like a stuffy nose. Like, that’s what it says in the lyrics. So, instead of her saying the lyric, she did it like, actually with the nose.
Karen: Oh?
Marcus: Don’t get me started on what she did!
Karen: Really? So, that was just way too much, you’re like this is not working for me?
Marcus: No.

Marcus also did not connect with the music teacher, calling her “extra” at one point. He never engaged with the content and complied to the most basic level he could. He did not want to get in trouble by not participating, but he did not enjoy the class and made sure to point out remote music was just as bad, if not worse, than in-person music.

Interestingly, Carlos mentioned wanting to be back in-person for physical education. He liked the hands-on experiences and the team games. Specifically, he liked dodgeball.

Karen: Okay. How about them PE?
Carlos: Too lazy get up.
Karen: So, if you were in person did you like PE?
Carlos: Yeah, cuz I like dodgeball.
Karen: Oh, you’re a dodgeball kid, huh.
Carlos: And like, it’s just causing the ball like going on their [classmates] heads. *we laugh* I don’t hit hard, but like, because we don’t do it often too.
Karen: Got it. But remote learning PE, did you like it much or no?
Carlos: There’s no way we can do dodgeball. And...no, because we can’t do as much activities and I don’t have as much space.
Karen: Got it. So, you would prefer to be back in-person for like PE?
Carlos: Yeah, okay. I mean, there’s never stuff...Yeah...and I don’t have enough room. There’s like more room in PE with the gym.

Carlos struggled to admit he wanted to be in-person for something. When I questioned him directly, he responded with, “Yeah, ok.” He then struggled to admit that he wanted more space and the school offered that for physical education. I could tell Carlos did not want to admit to wanting some form of in-person learning. He looked away from the camera and sat back, not making eye contact with me. In our follow-up focus group, Carlos again struggled to admit he was happy to be back for in-person physical education.

Carlos: I wish I was back at home.
Karen: Are you happy about PE though?
Carlos: *long wait time* Yeah…I guess. I like PE but I still want to be back at home for everything else.

While remote learning was still his preference, Carlos had to admit that at least one content area was better in-person from his perspective. It was a conclusion that Carlos struggled with.

John specifically brought up a computer and coding class as his challenging remote learning content area. John had not experienced a coding class in the past, and he felt confused throughout the class. In this district, the librarian provided weekly digital literacy, coding, or research classes, something John had never experienced before.

John: Something that was hard was library. Cuz, I thought in library, we just got to read but we kind of did the computer stuff also. So, it’s kind of computer stuff and reading.
Karen: What kind of computer stuff did you do in the library, or for the
library?
John: We made these things I forgot both of them. We did a couple weeks ago. We did like a blackout poem. The librarian would display a link in the Zoom chat. We just went to the link.
Karen: Really interesting!
John: But it was kind of hard doing that first.
Karen: Yeah? What made it hard you think?
John: Well, it was kind of that...long wait time
Karen: Cuz it was new and different? Nods head and looks away At your old school when you like saw the librarian did you have to do assignments like that too? Or did you just go check out books and leave?
John: So, we just like checked out books. We were renewing books and give them back after when we’d have one week.
Karen: Okay.
John: Or we could just keep them like for another week. But then we could just trade them off and stay in the library until it was done. We have a separate library class and a computer class.
Karen: Oh, okay. And did the librarian teach that computer class or was it two separate people?
John: There’s two separate people.
Karen: Okay. And so here, the librarian is the one who teaches library and the computer stuff huh?
John: Yeah.
Karen: Okay. So that was a little different.
John: Yeah.

John struggled with the difference in the role of the librarian. He saw library time as reading time, not additional computer time. The new role and content on the MacBook confused him and caused him to struggle.

Finally, Xavier noted that while he liked his exploratory classes, he ultimately preferred his time with Jennifer.

Karen: Do you feel that you learned a little differently with Jennifer than with your like PE art and music teachers?
Xavier: Yes, definitely.
Karen: What was big, like big difference?
Xavier: CATS (Creative Arts Times - music, art, physical education classes) was really easy. And music was easy too.
Karen: Do you think it was easier than with Jennifer?
Xavier: Yes.
Karen: And why do you think it was? Because of how they taught or just
because it was music, art and PE?
Xavier: Maybe, maybe because it’s music, art and PE.
Karen: …Which one did you prefer? Did you prefer learning with Jennifer, or did you prefer your CATS classes, like, which one did you like better?
Xavier: Um, Jennifer.
Karen: Why Jennifer?
Xavier: I feel like it was just easier because...because PE, I feel it was too easy, music was okay.
Karen: Okay. So, you wanted something like middle? Like Jennifer was kind of like middle for you and it was a little hard but a little easy and you’re able to figure it out?
Xavier: Yeah.

Xavier saw his exploratory courses as too easy. I got the impression that he was not overly engaged in those classes. He said multiple times they were “too easy,” and would roll his eyes when he talked about the classes. However, Jennifer challenged Xavier. Jennifer’s lessons were important to him and were challenging. Xavier liked the level of challenge and, from his perspective, desired that challenge.

“Is There Really a Learning Loss?”

There was a sharp divide between the teachers and their perception on student growth during remote learning. Jennifer felt her remote students were not performing as well as her in-person learners:

Jennifer: Some [assessment] gaps, some gaps. Now I also want to say it could be just the students too, okay? Because I know I was sharing my frustrations, but my teammate next door has her remote population is some of brighter kids. So, she doesn’t see it as much as I see it. So, it could be just, Yeah.
Karen: Do you think those remote kids would be performing slightly better or pretty much around the same if they were in person?
Jennifer: I would have to say my five I think could be doing slightly better.
Karen: Okay, but it’s not like they would be going from like lower to stellar?
Jennifer: No, no.
Karen: It would just be kind of like, yeah, a slight boost?
Jennifer: yes…Two of them are being real successful. Actually one, one and a half is being really successful the others I wish I could just see them and be
Jennifer noted her remote students were not performing well. She attributed much to being at home with multiple distractions. However, she also pointed out the individual students could also be the reason for their performance and not the remote environment itself. Jennifer struggled to place all the blame of her students’ performance on remote learning, knowing her partner teacher saw much success with her remote students. She also noted there was observed growth with her remote students, with a caveat:

Karen: Do you see a difference between your remote and your in-person as far as like their levels or the score?
Jennifer: In the beginning I wasn’t feeling I was getting, is the same quality of work out of the remote students but I think once they’ve caught on to my expectations and finding the paper in their portfolio packet that they got. And then seeing that oh, now we’re going to we’re going to do our sloppy copy and then we add it to our poetry book that’s it’s gotten better.
Karen: Do you feel like, academically, that they’ve made progress?
Jennifer: I feel for the most part yes. Um, but I do see differences from my in-person to my remote. And second trimester with my report cards like my remotes I saw, yeah, lower grades on things. And it was harder to catch things. Because we always didn’t have a paper copy test and if we were doing a boom card or Google Sheets for like a formative quiz sometimes it was done too late because I wasn’t going back to reteach it. I was going to do it in my small groups and it just…I just feel like in person, you get to see so much more rather than trying to make sure your kids are on Zoom and then you’re trying to get to the Google Form to check. I mean you could just walk around the room and see it right there. I just felt like, making sure everyone was accounted for was harder. In this case because you’re trying to manage so much.

Jennifer did not feel her remote students were performing as well as they could have been and attributed much of it to distractions, not being at home, and her struggles to provide immediate feedback. Anita agreed with this:

Karen: So, you’ve said like academically. How do you feel that your remote kids have done this year as compared to years past?
Anita: Oh well, you’ve got a lot of layers on that one laughs I would say that
my remote kids are not achieving where I would expect them to be able to achieve if they were in person.

Jennifer and Anita saw the physical distance between them and their students as a barrier to the learning and growth. While Jennifer also acknowledged the specific students on remote learning could be a factor, both teachers agreed that remote was not good for students because of the physical distance.

Despite the negativity towards remote learning from Jennifer and Anita, their students felt they grew. Carlos attributed his growth in learning to being in third grade and a higher grade level in general:

Karen: You feel that you learned a lot this year?
Carlos: Yeah.
Karen: Do you feel you learn more this year than you did in second grade?
Carlos: I mean the higher grade...the higher grade you’re in the more work, they give you. So...I guess you could say so.
Karen: Okay. And do you think that’s because of remote learning or just because it was third grade?
Carlos: Third grade

Xavier agreed with Carlos. He noted that the higher grade level made him feel like he learned more material.

Karen: Do you feel that you learned a lot this year?
Xavier: Um yes.
Karen: Do you feel that you learned as much as like you did last year in second grade?
Xavier: Um a little bit more.
Karen: A little bit more?
Xavier: Yeah
Karen: Do you think being on the computer and being remote helped you learn or it didn’t change it?
Xavier: Um, that it was on the computers made it a bit harder.
Karen: Okay what made it a little harder?
Xavier: When I was on camera and I would like glitch out.
Karen: Oh the glitching. But you feel you still learned more?
Xavier: Yeah.
Karen: Okay. Do you think that’s just because you were in third grade and last
Despite the technical issues, Xavier felt he learned and grew throughout his remote learning experience.

Xavier: It was a little bit harder to learn, but now in the past like month, um, as in the past couple of months, I have like mastered, mastered, like learning on the computer.
Karen: Really? That is really awesome! Proud, big smile What makes you feel that way?
Xavier: Like most of the time I don’t really like need introducing to anything, even if it’s something new.
Karen: So, you just kind of pick up the tech and you’d go with it? Now you figure it out?
Xavier: MmHmm
Karen: That’s awesome. Very cool. So last year [in 2nd grade], I know you said it was confusing it was kind of hard to learn. Was there anything good about remote learning in second grade?
Xavier: I think that like it was a new like technique and now, and then it would like help me like learn more about the iPads and stuff.

Xavier felt he grew in his technology skills. Though he admitted that 2nd grade remote learning was difficult, he was able to figure out the iPad independently, which he credited his independence in 3rd grade to. Xavier perceived himself to be very successful in 3rd grade. This was at odds with Jennifer’s perspective. She felt Xavier could have been achieving more if he had consistently been online or had returned to school. Xavier, however, saw growth in himself, despite the multiple challenges he faced at home during the year.

John and Aarav also felt their fifth-grade year was positive.

Karen: So, do you feel that you learned a lot this year in fifth grade?
John: Yeah. One thing I learned a lot more is about geometry. Cuz, I don’t think I really did geometry that much. I learned about like the shapes more like the parallelograms, square, rectangles, trapezoid, rhombus and a lot more of that stuff.
Karen: Cool, so you feel like you learned a lot of stuff in fifth grade. Do you feel like you learn more in fifth grade than you did in fourth grade?
John: Yeah, because I think we might have done a little bit of geometry or we
did like a unit, but I feel like that we did more in 5th grade. And since it was on Zoom and then we had our quiet space which gave me more time to think and concentrate so now that we’re doing, fifth grader, we did do it in fifth grade, I know way more than I did in fourth grade, like squares and rectangles and stuff.

Karen: Got it. And do you think it’s just because you were in fifth grade, or do you think remote learning can help you learn more?

John: Remote working because it’s more quiet and there’s also like classes all around you. Sometimes if you’d hear those classes. So, then it’s just harder to focus and pay attention and stuff.

John attributed his growth to being in a higher grade as well as being on Zoom. He had the flexibility to create a quiet environment for learning and felt he could concentrate more. His ability to control and personalize his space was a large factor in his perception of growth.

While Aarav did not like being on remote, he too attributed Zoom to his growth:

Karen: So, do you feel you grew this year that you learned a lot this year?
Aarav: Yeah, I think so.
Karen: Yeah? What makes you kind of feel like yeah, I learned a lot?
Aarav: Since it was harder, I was paying more attention.
Karen Ladendorf: Oh, okay, so you feel that the stuff that you were learning was harder this year?
Aarav: Yeah.
Karen: Do you think that’s because it was remote or just because it was fifth grade?
Aarav: Both.
Karen Ladendorf: Both?
Aarav: Yeah.
Karen: Why do you think both?
Aarav: Because it’s harder on Zoom and it’s like 5th grade.

Aarav saw Zoom as a challenge to overcome. Between the computer and the higher grade level, Aarav felt he accomplished much and grew in his knowledge throughout the year.

There was a definite disconnect between Anita and Jennifer and their students’ perspectives of learning and growth. Where Anita and Jennifer were looking specifically at grade-level scores and outcomes, the students saw learning in a holistic sense. They learned something new, were exposed to more challenging material, and felt good at the end of the
school year, even if their teachers did not concur. Interestingly, Caroline had a very positive outlook on her students’ growth:

Caroline: There are times where like I’ll notice like because most of the time when I get, like I gauge like if they know or they don’t know it’s typically like throughout the lesson, like I have one like we do one together to one on your own and so then I’ll pop by like you’re certain kids I fly by a lot more often, because I’m like I don’t really know if you got this so like I’ll fly by them a lot more often and kind of correct,
Karen: yeah. So, your remote kids were like right on the ball with the in person?
Caroline: Yeah
Karen: That’s awesome.
Caroline: As far as I could tell. Yeah.

Caroline felt confident her students were understanding the material and growing throughout the school year. She used her formative data and summative assessments to make this assertion. She also noted their iReady scores were positive at the end of the school year:

Yeah, my iReady data I guess they didn’t make their growth necessarily, but they don’t always make their growth. And but from getting a year from having kids in first grade, second grade level. Now they’re all third or fourth grade level, so like that is something to be said. I mean it’s, I don’t have kids, granted was one or two, but I don’t have them, they’re not in first or second grade anymore levels. They’ve moved up. Now whether environment has played a factor, they are at home for the first ones not really trying as hard as they were here, who knows or vice versa. Who knows but like, they have made growth...So you have your kids who go up 30 points you’re like holy, like I didn’t think it was gonna happen this year. So, you just don’t know.

Caroline had students at the beginning of the year scoring in the first and second grade level for reading and math. By the end of the year, they were scoring in the third and beginning fourth grade levels. She admits the system does not necessarily view that as on-target growth, however she saw the positive in their scores. This was a stark difference between her and her colleagues. Where Anita and Jennifer pointed out their remote students were not performing as well as they wanted, Caroline looked for the positive in her students and shared it proudly.
Caroline’s student, Marcus, also had a positive perspective of his growth during remote learning. He felt he was successful, tried harder and felt less stress throughout the year.

Karen: Do you feel you learned as much as you would have if you were in person?  
Marcus: long pause...Learned more in-person. Learning math in-person...wait...startled and shook head...no!  
Karen: It’s Monday morning. laughter  
Marcus: Because, because, in-person learning, it’s, I mean it’s fine. It’s fine. It’s stresses you out, because you don’t know if you’re going to get all the answers wrong, if you’re going to get the worse grade ever, like an F+  
Karen: Okay. So, in-person stresses you a little more? Nods head But if you were in-person you would learn more than you did remote?  
Marcus: No but I think I would learn no matter what, more in remote.  
Karen: So, you learn more, doing remote learning?  
Marcus: Yeah,  
Karen: Yeah. And is it because you kind of like it wasn’t as stressful like what you were saying?  
Marcus: Yeah.  

Marcus felt remote learning took away many of the stresses he felt about school. He did not have the pressure of the teacher “watching you like a hawk.” He also did not have the pressure of “racing” everyone in the class with being first or last done on an assessment. Remote learning gave him freedom, flexibility, and a calm environment to learn in. Caroline had created this environment for her remote learners, and it greatly assisted Marcus.

Caroline and I had a final conversation about soft skills and learning loss. She pointed out the growth she saw in all of her students with technology specifically:

Karen: So, you’ve seen fourth graders over the years, and looking at this group do you, do you feel that they’ve progressed, maybe as much or not as much as years past, or do you feel that they have?  
Caroline: It depends on what you’re talking about. Like I feel like their tech skills have grown. So, it’s hard to say cuz they always grow a lot, because they come from, like, they use technology a little bit, like occasionally to like we use technology a lot so there’s always a huge learning curve. So, it’s hard for me to say, I don’t know, I feel like they have grown a lot with their tech skills for sure.
Anita agreed with Caroline on the growth in soft skills. She pointed out students learned how to improvise, and problem solve on their own. If they lost material or did not have the materials on hand, they created it themselves. She saw students creating whiteboards out of paper at home and soccer balls out of rolled-up sweatshirts for their physical education class. Also, despite being a strong advocate for in-person learning, Anita noted the lack of self-advocating she observed with her in-person learners.

You know, once they came back in person, it [self-advocating over email] wasn’t as critical because they could talk to me, but they still do send some of the kids still send the emails, where I’m like, you forgot a book. You know, what is it gonna take for you to remember to bring that book? And they were like, can you email me? And I’m like, yes. And some of the kids never check their emails, some of the kids check. They have it on their phone, and they check their email. That is cool.

She had to remind students to use the tools they were accustomed to using during remote while they were in-person. Remote learning allowed Anita to lay the groundwork for independence but she still had to encourage it again once she was present in the classroom with the students.

The students noted they were more independent and felt self-sufficient due to remote learning. John, Aarav, Carlos, and Marcus all described reaching out for help when they needed it, using other materials their teachers provided online for support, and learning material on their own. Xavier’s statement stood out to me the most:

Karen: So, what about, like any of your other skills do you feel that you became more organized or more independent this year?
Xavier: More independent.
Karen: Okay.
Xavier: Definitely independent.
Karen: Very cool. What do you think really helped you do that?
Xavier: It like being home alone, because most the time generally, I’m at my house, like, yeah. And my mom would be at one of the schools nearby teaching or substituting. And then I’m only allowed to be here when it’s like the days where like, she’ll come like 12 or nine or something.
Karen: Got it. So, you kind of felt like you had to be independent?  
Xavier: Yeah.

Xavier had to be independent throughout his remote learning experience. He was alone some days and needed to know when to be online and what work to complete. While his academics may not have been as high as Jennifer had hoped, Xavier grew in his independence and maturity.

Jennifer and Anita had pointed out multiple times their distress over their remote students’ performances and lack of growth. Caroline, again, had a different view:

Caroline: Um, academically, some kids have grown tremendously. Some kids are just your average. It’s the same way, like you know what I mean? And then you have your kids who weren’t putting forth the effort, weren’t attending, weren’t doing all of that stuff, so they don’t make as much growth.  
Karen: Got it.  
Caroline: It’s like it’s, it’s like a typical year. Yeah, I’ll be completely honest like it’s not like they’re super behind. It’s not like they’re super ahead. It’s just kind of your average year.  
Karen: But it’s true. I mean, we’ve went into this and all you’re hearing constantly is there’s this learning loss and it’s gonna be crazy and..  
Caroline: Is there really a learning loss?

Caroline saw the positive in her students throughout the school year. She noted that some of her students started lower and grew to just on or just below grade level by the end of the year. She also pointed out their growth in flexibility, independence, and technology. She, like the students, saw this year as a typical year. The students felt they learned and grew, as did Caroline. The students were overall positive about their experience, as was Caroline. While not all the students preferred remote, the remote experience did not stop the students from learning. Caroline saw the positive as well and reflected on her year as a typical school year with the addition of Zoom.

The Impact of COVID-19

COVID-19 had a direct impact on the teachers and students in this study, and their
perspectives of remote learning. Remote learning would not have been an option without the virus, the initial State shutdown of schools, and the fear of sickness spreading amongst family members. COVID-19 caused the emergency remote instruction and took an emotional toll on educators and students alike.

The teachers all felt shocked to be starting the 2020-2021 school year on remote learning. The district had planned to be in-person until 4pm the day before the first institute day. This sudden shift caused stress and panic amongst the teachers. Jennifer remembers the start of the year as “terrifying.”

That [the start of the year] was terrifying, terrifying because I was thinking, oh my gosh, I can’t. How am I supposed to start a year doing this? How do we, I mean, yes, I ended up doing it but how do you start with a brand-new group of kids that you’ve never met, and how do you do this? And then for us, they came in on their iPads. Yeah, I have an iPad, but we use our MacBooks so just trying to learn that back I had to, like refresh my memory with the apps and the technology and just see that.

Jennifer struggled at the start of the year with setting routines and goals from a distance. She also juggled her own two children at home, which made her split her time between teacher and parent. On top of it, she had to remember how to use an iPad with students and support them from a distance. The start of the year was terrifying and stressful for her.

Caroline remembered the initial shutdown of 2020 and the shock it caused her and her students that school year.

I guess I was, like, shocked. Because you don’t know what’s gonna happen. Like, I didn’t think it was gonna happen, because everybody was like, oh, we’re not gonna close. And then we closed. And then just thinking like, thinking about my students, like which ones I guess I was more worried about them and like their emotional state and their home life and just like, worried about all like, their SEL components, not necessarily worrying about school, and then also like, oh, shoot, how am I going to still teach them?

Caroline was worried about her students and their emotional well-being. She knew it was a scary
time and the sudden shift meant her students were having to deal with the change on their own. While some had supportive families, she worried about the ones with unstable home lives who needed the support the school provided. She set aside the academics and focused on her students as individuals.

At the start of the 2020-2021 school year, Caroline had opted to be a full-remote teacher. She was ready to take on the challenge of remote learning and provide it full-time throughout the school year. The shift to remote learning for all students and staff did not bother her. She was mentally ready for it and had begun her planning and prep. Caroline used the COVID-19 emergency remote instruction to push herself, try a new approach to teaching, and experiment in remote learning. The emergency caused by the virus ended up being a new, positive opportunity for Caroline.

Unlike Caroline, Anita struggled with the initial shutdown in 2020. She felt her students that year were torn from her, and she was not able to have final closure with them. Yes, that class, I mourn them, you know what I mean? We were a tight group. We got along really well. It was great class personality. Now it was a, you know, it was a really great class. So, but yeah, it was really, really sad. Yeah, when you’re like, I’ll never see these kids again. I didn’t get to wrap up the year and like some of those end of the year activities that you do just to wrap things up.

Anita “mourned” her lost class. As a 5th grade teacher, she had specific items that wrapped up her year and prepared students to leave the building. She nearly cried when she described those students walking out of the building in March and never coming back to say goodbye.

Starting the year in remote learning was just as difficult for Anita. The district allowed teachers to work from home if they chose. Anita did not want to be in her house. She felt more productive in her physical classroom, similar to her perspective that school takes place physically
in the school. She held herself to the same standards she held her students to. School meant being physically in the school building. However, her colleagues did not feel the same when it came to their working environment. She described the beginning of the year:

It was lonely as hell. It was lonely, because like at the beginning of this year, not the beginning of COVID, people didn’t have to be in the building. They could choose to be in the building, they could choose to be at home. So, and I work better here. You know, I’m like, the mindset of I’m at work, I’m gonna do work. I’m not at home, you know, just for me. But like, nobody else was down in this wing. Nobody down this way, at all. And that’s very isolating. you know, and it’s like, hard to bounce ideas.

Anita struggled not having her students or her colleagues physically with her. Anita was a person who needed other people physically with her. She needed to see students in real-time and collaborate in the hallway with her teammates. COVID-19 took those opportunities away from her. The emotional toll of COVID-19 on Anita was visible all over her face during our first interview. She held back tears multiple times and her voice cracked. COVID-19 had been a virus that not only impacted people physically, but emotionally as well.

The emotional toll of COVID-19 was also apparent in the students. They all wanted to go back to “normal.” While some enjoyed remote learning and wanted to continue, they all wanted to see friends and be out in public again. John, who liked remote learning, wanted to see friends again.

Karen: What do you think you’re going to like about when you do go back to school, like when you’re back face to face someday?
John: I like seeing like people like your friends. Cuz, you haven’t seen them in a while.
Karen: All right, what do you what do you hope that school looks like next year. What do you hope it’s like?
John: I hope the COVID is over so that you can see your friends you could hang out with them. You don’t have to wear a mask all the time. Could just be anywhere and be good, like it used to be. A lot of the stuff is still closed, kind of. And a lot of the stuff you like to do, you could still do, like, go to a trampoline park or go to the pool.
Karen: Yeah, I get it. So, you want school to kind of be like normal next year?
John: Yeah, yeah well like how it used to be.

John wanted to stay remote, but also wanted to see friends, “like how it used to be.” He enjoyed remote learning and missed the socialization. He wanted both: learn remotely and have time with friends.

Marcus, like John, enjoyed remote learning and wanted to continue with it. However, even he wanted to see friends again.

Karen: What are you looking forward to when you go back in person? Like what’s one thing you’re really looking forward to?
Marcus: Just hanging out.
Karen: Seeing people again and hanging out with friends?
Marcus: Yeah, I miss them all.

Marcus had pointed out remote learning was less stressful and his preferred learning environment. However, even Marcus wanted “normal” again. He wanted to see friends, hang out, and socialize with people. He also pointed out school would be safe again:

Karen: Are you excited? So, are you excited to go back to in-person next year?
Marcus: Yeah, because my dad said that most of COVID would probably be escaped. So, either way I’m getting to school, and it will be safe.

Marcus pointed out that school would be a safe place again. For the 2020-2021 school year, school was not safe for many families. Remote learning was the safe and healthy option. The emotional toll of knowing your school, a place you spend multiple hours a day at, make friends, and build community in, is not safe is heartbreaking. Marcus was excited to go back because school would finally be safe again.

Xavier shared the emotional toll COVID-19 took on him without saying any words at all. During a morning circle where Xavier was present, but Carlos was absent, Jennifer asked her class questions about their hopes for the upcoming school year. One question was, “What can
your teacher do next year to help you feel good about coming back?” While Xavier did not answer the question directly, he nodded along and gave thumbs up as his classmates gave the answers:

- Keep masks on and keep a social distance
- Let us have group work
- Make sure everyone is safe and healthy when they come to school

Xavier agreed with his 3rd grade peers that he wanted school to be a safe and healthy environment again. Typically, students will say they want their teachers to provide choice, play games, and have fun. These students wanted their teachers to ensure they were safe and would stay healthy in the school building. When Jennifer posed the question, “What are you hopeful for next year?” the students responded with:

- No COVID
- No masks
- Vaccines
- Fun things/lessons
- Lunch in the building

Of the ideas listed, only one focused on lessons or activities with their teacher. The students, Xavier included, were again concerned about safety and COVID-19 going away. They brought up the hope to receive a vaccine and possibly getting to eat lunch in the cafeteria again.

COVID-19 caused havoc on the teachers and the students. Remote learning was a departure from normal. Remote learning brought about a physical distance from friends and teachers in the building, and not being able to see people outside of school hours. The isolation students and teachers felt was apparent throughout their interviews. They all wanted a return to normal, a return to being with each other. The physical distance was imposed, not chosen. While the teachers and students were split over their perspectives of remote learning, it must be noted the impact COVID-19 and the mandatory remote instruction had on those perspectives and
When Traditions and Bias Meet Remote Learning

Teachers and schools have traditional activities and celebrations they incorporate throughout the school year. During the shutdown at the end of the 2019-2020 school year, teachers still hosted virtual spirit days and had students take pictures to send in. My own children participated in a virtual ABC countdown at their elementary school. Traditions are an important component to a building’s culture. It was no surprise to me that both this school and Anita focused on end-of-year traditions.

The school’s behavior committee hosted an end-of-the-year celebration. It replaced the annual field day that involved social distanced games and activities. Anita had a big hand in planning the celebration. Our final interview occurred right after the celebration. She had been outside all day, without a mask, playing games with her students. They stacked solo cups, had water balloon fights, played with hula hoops, and a glowstick toss, and a shaved ice truck. I commented to her how happy she looked. “I am happy. Tired. And very happy.” I saw a spark of the Anita I had worked with for so many years. She was excited, smiling, and could not stop talking about the wonderful day she had with her class.

I brought up the remote students and asked if they had the option to come to school for the celebration. Anita was very short with her response. “Nope. Because they’ve chosen to stay at home, they are staying at home.” The exploratory teachers hosted a day-long zoom with all of the remote students and encouraged them to participate in modified versions of the games their in-person peers were playing. Anita made a point to say that all of the materials were sent home if families came to a material pickup day.
Despite Anita’s excitement over the day, the remote students seemed left out and forgotten. Yes, they had the materials sent home and the exploratory teachers were available. However, they missed out on the socialization with other classmates. Anita’s statement had a punishment tone to it. The families chose remote; therefore, the students could not come and have fun.

The remote students did not like the celebration day. Carlos did not participate at all. Xavier stopped after a few minutes. Aarav chose not to participate. John tried to participate but got bored. Marcus was the most outspoken:

On Friday, we had a celebration. It wasn’t really fun. Like, I mean I know the other teachers tried but I mean I know other kids probably just went click, click, click., like they were like making us play like boring games like, like, like when like we have a plate, right here, we have another plate it’s full of cotton balls we have to stack the cotton balls and put them on the other plate and the fastest one wins. I turn off my video the whole time. But when it was my turn to share, I turned on my video. I really didn’t even try. When I would be cheering on the other kids on like like I wanna go straight to my mic and I’ll just yell in it. The sound of I could literally hear the sounds from other kids’ computers from my noise. And then, and then I had so much fun, and then the PE teacher told me I had to stop, and it just made me depressed.

Marcus kept his video off and by the end felt depressed. While everyone in-person had fun, the remote students did not. It was not a celebration to them. The celebration day was a punishment for being remote; a reminder their parents had chosen for them to stay home and there was a consequence to that decision.

One personal tradition Anita was very connected to was her “Letters to Self” activity. This was an activity where Anita had the students write a reflective letter to their future 8th grade self. Anita held the letters until the students were in 8th grade and sent them after middle school graduation.
One thing I do is I make them write a letter to themselves and I mail it to them when they graduate from eighth grade...So I have three, I have 6th, 7th and 8th graders letters in my closet right now...I’ve been doing this forever...And that always helps because we review the whole year, we talk about what were things that we did, what do you remember? What were the jokes? What were the funny things? You know, and I write it all down. I do a Google doc, or I’ll do something on smart learning suite, yeah, and make it interactive. And then they can use that to frame their letter. And they write it to themselves. And they say, dear eighth grade me, from fifth grade me...And like, I’ll put their picture of their first day of school with their mask, that’ll go in there.

Anita structured the letter to be in three paragraphs, as seen in her outline in Figure 11.

![Letter to Self Outline](image)

During the introduction lesson, Anita told the class that the first paragraph should be all about the students’ interests and life right now in 5th grade. She really emphasized the second paragraph and encouraged the students to write as much as they could about remote learning and COVID-19. She reminded them multiple times that this would be over one day, and they would have their written memories of remote learning. Last, Anita wanted students to write about what they hoped they accomplished in middle school and what they would be looking forward to doing in high school and beyond.

Anita was very passionate about this lesson. She pulled out a large stack of letters she had saved from previous years that she was preparing to send out. I watched her go down memory lane mentioning student names, pointing out decorations the different students had given her, and telling short stories about them. It was obvious Anita loved her students and the opportunity for
both them and her to remember.

Her class for the 2020-2021 school year was especially special to her. Anita would be retiring when those students would be graduating. She made herself a graduation shirt with their year on it and called it her graduation year too. She felt especially connected to the students and the moment.

Despite Anita’s excitement and passion, her two remote students did not go into the depth of detail she was hoping for. John’s letter was short and divided between three slides in SMART Lumio. He mentioned his favorite games and sports. His paragraph about the current school year simply lists “We did Zoom every day for school.” After that, John describes his favorite lessons and online games. His letter is in Figure 12.

Figure 12. John’s Letter to Self

John’s letter was not very detailed, did not go into depth about remote learning, and made no mention of COVID-19. Aarav’s letter was slightly more detailed, as seen in Figure 13.
Aarav emphasized “WE HAD TO DO IT FULLY REMOTE” when describing his fifth-grade year. He says he was not allowed to go to school, but never mentions COVID. He described his difficulties with Zoom and the frustration of getting into the initial meetings at the beginning of the year.

Anita was disappointed with their letters. During our follow-up focus group I gave Anita copies of the letters to view again. Anita said, “I was really hoping they said more. John, like look. John was remote the whole time and never said he moved in or was moving again. Aarav was so sad that year and I thought he would say he missed friends and, like, school, like more. I just wish they said more. It would be better. Meaningful.” Caroline and Jennifer loved the lesson idea and were sad for Anita. Caroline did point out, “It was the end of the year and maybe by then they didn’t care it was remote and COVID. They were probably, like, meh, we’re over it.”

Anita’s perspective made COVID-19 and remote learning the central focus of the year.
Again, John and Aarav saw the year as school with a twist. School still happened as school would for them. There was a disconnect between the emphasis on the “remote” of the year, with the teachers emphasizing it more than the students even recognized it.

Summary

Reflections on the remote learning experience were mixed between teachers and students, amongst the teachers, and amongst the students. Some teachers felt remote learning was not “real” school. In-person learning was the only way to participate in school and teach. This bias was seen in the teachers’ exertion of control in Chapter 6, the reliance on their in-person lessons in Chapter 5, and their statements of remote being inferior to in-person in this chapter. These two teachers also showcased their bias against remote learning throughout their interviews. They described not allowing remote students to participate in the outdoor celebration in-person and wanted the students to reflect more on remote learning during the school year.

One teacher felt the year was a typical year, just taught on Zoom. She was open to the change and welcomed remote learning because she did not view it as a challenge. She also did not see remote learning as a negative situation but a fun opportunity to use the digital tools she had always used in the past.

The students felt that school still happened. Their perception was that school continued on as usual, just from their homes. They still participated in classwork, completed assignments, and worked with partners. They participated in morning circles, sometimes passively, and interacted with the teacher. The medium did not matter as much to the students. School happened online as it usually would.

The students either loved school or hated school as they usually would. Not all students
preferred the online setting, saying being in-person was their strongest desire. However, others preferred the privacy and quiet remote learning allotted them. The students’ preferences were related to the content area as well. They wanted to be back in-person for hands-on classes such as physical education. They also wanted opportunities to write their work out for Math and not type every answer.

Two of the teachers felt the students did not grow as much academically as they would have if they were in-person. They felt the students were not providing their best work or putting forth their best effort. One teacher did recognize the growth all her students showed during the year and questioned the idea of a “learning loss” due to remote learning. The students agreed with this teacher. They felt they learned and grew throughout the school year. Many attributed it to being in a higher grade and naturally learning new material.

Above all, COVID-19 had a dramatic impact on the students and teachers throughout the remote learning. The students were isolated from each other outside of school and were not able to see friends or engage with people outside of their homes. They feared getting sick or their family members getting sick if they were to go back in the school building. The teachers also experienced emotional trauma from COVID-19. They were isolated from their colleagues, were not able to support each other physically, and felt they lost track of students in previous years and this school year.

There is no one model that would have been perfect for every teacher and student in this study. Some preferred remote learning and teaching while others wanted to be in-person. Ultimately, they wanted a choice, which COVID-19 took away.
My youngest daughter was sent home from school in early March 2021. She coughed a couple times at school and the teacher indicated she had sniffed her nose a few times in class. She had no fever, no sore throat, no fatigue, and no other symptoms. However, the school determined she potentially had COVID-19 and insisted she be tested. Testing at the time could only be done through the local immediate care because home test kits did not exist yet. The school also sent home my oldest daughter because she was a close contact, requiring her to have a test as well. I took additional days off to get both girls to the doctor and be held down for the COVID-19 nasal swab, only to be told neither one was positive.

They also spent two days on remote learning. After the first day, both girls complained they were forgotten by the teacher, who emphasized their in-person peers over the two remote students. My oldest was in tears because she could not hear the lesson, let alone follow it. My youngest asked why she needed to attend. My response: if you don’t, you’ll be marked absent. I then questioned myself: Why was I forcing the girls to attend remotely? I could, as their parent, call them in sick and say we will wait for the test results. I did just that. They desperately wanted to attend but hated the disregard the school had for remote learners.

During the summer of 2021, I asked both of my daughters if they would want to do remote learning again in the future. My youngest, just finishing 1st grade, said no, but she said she also did not know what school would be like without COVID-19. My oldest, finishing 5th grade, said she would under certain conditions. She did not want to be “forgotten” by the teacher again. She wanted more freedom and flexibility in the schedule. Last, she wanted more chances to talk to her peers. “I would do remote again if I can still see my friends and go to gymnastics, and my teacher remembered I was online.”

Purpose of the Study and Research Questions

Forced remote learning on a large scale had never been seen in this school district’s history, nor in the history of the state and country. The school district in this study had also never
provided a remote option to families through concurrent teaching in the past. The remote learning experience of the 2020-2021 school year was new, unheard of, and uncharted territory for the school district, teachers, and students. Mass remote instruction had not been seen prior to COVID-19 and a definition for effective K-12 remote instruction was lacking (Barbour, 2012). Parents, school districts, and teachers’ voices had been shared throughout the 2020-2021 school year through social media, the local news, and board of education meeting. However, the student voice was lacking, with assumptions being made about their preferences and needs, as was seen in past decisions throughout educational policies (Corsaro, 2003).

The purpose of this multiple exploratory case study was to understand how elementary students perceived their learning and engagement in a remote learning environment by bringing their voices to the forefront. I focused on elementary students’ perspectives of the learning process, assessment practices they experience, and their participation I observed and as described by them. The opening title of the study, “Coming Off Mute,” became more apparent throughout the data collection and analysis. The students were trained to keep their microphones on mute throughout their synchronous learning experience. They stayed on mute on Zoom often, keeping their voices silent throughout the learning process. The study was their chance to come off mute and share their perspectives.

The five boys who participated in this study ranged from 3rd through 5th grade. All five boys had stayed fully remote throughout the 2020-2021 school year for different reasons. John’s family had just moved into the district and knew they would be moving again. Remote offered him the chance to learn with fewer disruptions and without leaving new friends made again. Aarav’s family feared the pandemic and worried for his safety if he and his sister were in the physical school building. Marcus’s family, like Aarav’s, wanted him to be safe and healthy.
Carlos hated wearing masks and did not want to be forced to wear one all day long. His family also took advantage of him being home to make errands and create flexibility in his schedule. Finally, Xavier’s family was moving multiple times due to homelessness. Remote learning provided stability to Xavier despite his constantly changing living situation.

I also sought out the perspective of their teachers to better understand the intent of the learning activity and assessments, as well as the learning environment the teacher sought to create. Teachers also shared the physical and emotional toll teaching remotely and concurrently during COVID-19 had on their professional and personal lives. Caroline, Jennifer, and Anita had differing backgrounds and views on technology and digital learning prior to the pandemic. Caroline had used digital tools for multiple years and saw remote learning as an extension of her past instructional practices. Anita, while having used technology multiple times, did not have a positive view of remote learning based on her own in experience in online graduate classes. Last, Jennifer had never wanted to use much technology with her students and saw remote learning as a challenge to her that could not be overcome.

The goal of this study was to understand the learning environment the teachers had created and then bring their students’ voices to the forefront. The research questions were formed based on Aparicio et al.’s (2016) E-Learning Systems theoretical framework. The framework identifies three components that need to be addressed in a remote learning environment: people, services, and technology. This study was guided by the following research questions:

RQ1: How do elementary students describe their learning and participation in a remote learning model?
RQ2: How do elementary students describe learning and assessment activities across the content areas in a remote learning model?
RQ3: What are the observed engagement behaviors online during both synchronous and asynchronous learning activities?
RQ4: What are elementary teachers views and perspectives of their students’ remote learning experiences and their experiences teaching remotely?
RQs: What are elementary students perceived wants and needs for remote learning?

Each research question is reviewed in the following sections. Themes from the data analysis are aligned with each research questions. The themes overlapped multiple questions and will appear in multiple tables.

School Still Happened: Research Question #1

The first research question focused on students’ descriptions of their learning and participation during remote learning. The question looked in-depth at the foundations and structures in place for students. It also focused on how students chose to use those structures to participate in remote learning. Multiple themes throughout the analysis aligned with research question #1. Table 4 shows the aligned themes.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Themes</th>
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<tbody>
<tr>
<td>How do elementary students describe their learning and participation in a remote learning model?</td>
<td>Personalizing the Home Learning Environment School still happened A Daily Schedule for Everyone The Intensity of the Schedule Independence and Flexibility in the Schedule Perception of School Is There Really a Learning Loss?</td>
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The aligned themes centered around the student experience during remote learning. Students shared their experiences and perspectives on the daily schedule, the intensity of the schedule and how they perceived school to function throughout the school. The teachers provided additional clarity for this research question by questioning the learning loss due to remote instruction and provided examples of their daily schedules.

School not only continued to happen during remote learning, traditional in-person
learning was recreated in a Zoom setting. The students created learning spaces for themselves at their homes. Four of the students had a desk and quiet study area. Xavier, who moved between homes, even found ways to create a learning space with a kitchen table, living room chair, or bedroom furniture. The personal space recreated the traditional desk the students would have used in the classroom. Their computer screen with the teacher front-and-center on Zoom brought the teacher to the front of their home. This was not the recommendation for remote learning, especially in an emergency situation (Hodges et al., 2020). However, without a set definition and guideline for successful K-12 remote instruction (Barbour, 2012), the district, school, and teachers moved forward with what they thought was best for students.

The students perceived that school was still happening. They did not see a break in school due to remote learning. They only saw a change in the format of attending school. They never once stated school was not in session or not happening. While the teachers disagreed with this statement, the students felt strongly school continued as usual.

The daily schedule was long and intense, as described by the students. They had to stay on Zoom with their cameras on from 8:45am until 12:50pm. Only then were they able to take a lunch break and relax. They were then back online for 30 minutes to 1 hour in the afternoon. They felt the time online was long and hard to handle. Marcus was very vocal about this, saying the long time staring at Zoom hurt his eyes and caused headaches. The extended time on Zoom required hours of additional screentime which was a challenge for the students (Tawfik et al., 2021). Despite the vocal dislike for the schedule, the school operated on this daily schedule, mimicking the traditional school day in a shorter amount of time.

The daily schedule also changed multiple times. The five students began the year fully remote. Carlos and Xavier saw their peers return to in-person learning and joined an afternoon
fully remote group of learners. All five boys saw their daily schedule change to an A/B group schedule prior to Thanksgiving. Just before Thanksgiving, the district returned to fully remote learning due to rising COVID-19 cases in the community. The students also switched back from the A/B group schedule to the fully remote schedule. In January, the students switched back to the A/B group schedule and Marcus, John, and Aarav saw their peers return to in-person learning. Finally, in April hybrid learning was expanded to concurrent learning schedule where the five boys saw their entire classes online with them, some in-person and some remote. The multiple changes were difficult for the students. Remote learning requires students to have strong self-regulation skills, something that was lacking going into COVID-19 (Carter Jr et al., 2020). While the boys in this study did not express difficulty with the changes, their teachers pointed out the need to prepare the students for the change and take an additional two weeks afterwards to get all students fully adapted to the change.

The teachers used the daily schedule to create a structure of students to participate in learning activities. They blocked out times for specific content areas, provided Zoom links for exploratory teachers and specialists, and incorporated digital tools that would verify if students were participating in the activities. This assisted the students with knowing the guidelines and expectations of assignments and attendance throughout the multiple schedule changes (Archambault et al., 2016). Digital tools such as SMART Lumio and Quizizz listed all connected students and their progress on activities. The five boys had to be online and participating because the tools themselves provided evidence of their progress. This mimicked the teacher physically walking around the classroom and observing student participation in learning activities. It provided a sense of connection and relationship between the students and teachers at a distance (Archambault et al., 2016).
The teachers also took the concept of a daily schedule and expanded to be an interactive tool through their LMS that allowed students to find the resources they needed and assignments. Anita specifically used the daily schedule to preview the next day’s activities and topics, as well as share which students needed to complete previous activities or receive additional assistance. The detailed schedules provided a means for students to focus and stay on task with their schoolwork (Demaray et al., 2021). Similar to daily schedules and flexible groups, the teachers moved these processes online to provide students with the information they would have seen on a bulletin board in the classroom.

There was one break from the traditional school day that remote learning provided: additional flexibility. Despite the intensity, the students were able to find some freedom and flexibility in the schedule. Remote learning created an alternative form of school that had built-in breaks, flexibility, and freedom, breaking down the walls between class and home (Corker, 2020). Break times allowed them to get off the computer and go outside to play, as John loved to pay soccer outside. They were able to play on an iPad or lay on their beds to relax. Carlos even left the house with his father to complete errands. Marcus and his sisters were able to see each other and play. Family time was built into the school day, giving the students the flexibility to not only take a physical break from learning but also a mental break.

The students felt they learned and grew during remote learning. They did attribute this growth to being in a new, higher grade level and learning harder content. However, they did not perceive they learned less than in a typical year. The teachers were split on this topic. Anita and Jennifer felt the students had not grown as much as they would have had they been participating in-person. Caroline was the divergent. She acknowledged the students were at lower academic levels coming into the school year and that they all made significant growth. While it may not
have been where she would want them to be by the end of the year, she still saw their growth as success and questioned if there was a learning loss as had been shared throughout the community and media. The mixed views of student achievement mirrors past conflicting research. Where Cavanaugh (2021) found no statistically significant difference in course and exam scores between online and traditional higher education learners, Barbour (2012) found remote higher education learners performed lower than their in-person peers. COVID-19 must also be taken into consideration when viewing student test results due to the emotional trauma students experienced over the years (Lewandowska, 2020). It would be wrong to look at student scores and determine the impact remote learning had without acknowledging the global trauma felt throughout the year.

The Ups and Downs: Research Question #2

The second research question built off the first question by exploring the students’ perspectives of their learning and assessment activities. This question focused on the activities students described, lessons teachers provided, and assessments taken throughout the year. Table 5 showcases the aligned themes.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do elementary students describe learning and assessment activities across the content areas in a remote learning model?</td>
<td>Asynchronous Learning Traditional Learning Moved Online Group Work Instantly I’m Crushing: Emotional Toll of Assessment Online Gaming for Learning and Engagement</td>
</tr>
</tbody>
</table>

The aligned themes centered around the students’ experiences during asynchronous and synchronous instruction. Asynchronous instruction was seen as a separate entity from
synchronous learning. Students described the learning activities they participated in, the group work they completed, and online games they played in class. The students also shared their views on the number of assessments and process of taking them online. The teachers provided additional clarity to the lessons, assessments, and their overall goals for the activities.

Not only did the students have to physically recreate school at home for remote learning, but they also experienced traditional learning activities online. The phrase “traditional learning activities” is used to described learning activities the teachers had created and provided in years prior to COVID-19. The five boys completed online worksheets through Google Docs, wrote poetry in a packet they then took pictures of for grading, and completed work out of their math workbooks. The teachers pre-planned their learning activities to ensure they sent home the correct materials well in advance for the remote learning students. Jennifer described planning out her topics and activities a month ahead as keeping her remote students at the forefront of her planning. However, the activities were not different from her previous years, just printed and sent home in advance. Anita was similar in this stance, while Caroline used her previously created digital lessons and changed some assignments to meet the needs of the students she was working with. Anita and Jennifer felt there were fewer opportunities to reteach or review concepts students did not understand due to the limited time in the schedule, while Caroline felt she was able to meet students’ individual needs. Murillo and Jones (2020) noted remote learning activities must be revised and adjusted for the available technology, resource access, and physical distance of the students. While these teachers did not take this advice, it can be attributed to the stress, trauma, and constant changes they were experiencing throughout the year.

Asynchronous learning was present throughout the remote learning experience, with it being built into the daily schedule for all grade levels at Armstrong Elementary School. It came
in multiple formats including catch-up time, small group instruction time, and choice boards. All three teachers provided a weekly choice board that was used for asynchronous work. The teachers also used asynchronous work time for students to complete required digital tasks in iReady for both math and reading. The teachers were gathering a lot of digital data throughout the remote instruction (Archambault & Larson, 2015). However, they did not have the physical time to review all of it and were not able to always assist students in-the-moment.

The teachers also used asynchronous learning time to meet synchronously with students individually or in small groups for personalized instruction. This was the one moment in the day the teachers felt they had to meet individual student needs, despite taking away their asynchronous, independent work.

The students felt they completed too many tests and assessments. Marcus especially felt he was stressed by each assessment and “crushed” from the pressure. Assessments were constantly used by the teachers to see how the students were progressing, though both Anita and Jennifer admitted to not being able to use that assessment data immediately and consistently. Tawfik et al. (2021) found similar results in their study of K-8 teachers during the COVID-19 pandemic, noting online learning limited teachers’ abilities to interact with students in-the-moment and their chances for timely feedback. Marcus did note taking his assessments at a distance relieved his stress because the teacher was not looking directly over his shoulder, and he was not pressured by his classmates finishing around him. Lazarevic and Bentz (2021) saw similar with their student of undergraduate remote students.

Group work was observed during synchronous learning, with the teachers using advanced Zoom features to provide opportunities for in-person and remote students to work together. Aarav worked with two in-person classmates on a collaborative math assignment while Marcus
was partnered with an in-person classmate to complete and compare answers to math problems in their workbooks. The students liked the opportunity to work with their peers, John and Aarav expressing their desire to work with classmates and learn from them. Student collaboration and interaction online can impact their satisfaction with the course (Cidral et al., 2018). However, this did not impact Aarav’s views and satisfaction with remote learning. Just as a teacher would see in a traditional school year, Marcus did not agree and would have preferred to work at his own pace by himself. Carlos and Xavier also opted not to join with partners during optional group time, preferring to work on their own quietly. It was surprising the teachers found ways to incorporate group work and peer-to-peer collaboration when other studies found teachers did not feel there were beneficial ways to include this into remote learning (Tawfik et al., 2021).

The teachers incorporated digital gaming tools into their learning activities for both immediate data as well as to engage the students in the learning process. Kahoot, Quizizz and SMART Lumio games were also used to review math facts. The students saw these games as a competition, allowing them to play while they were reviewing. They liked the games and wanted to see more of these. Even Carlos, who did not like attending school in general, became very competitive when his team was not winning at a math review game. The three teachers had previously used these games in their in-person learning, simply moving the old activities to Zoom. They did admit to using the games more for the immediate feedback, however the concept of gaming and competition in the classroom was not new to the teachers and another component of in-person learning that found its way to the remote classroom.

A welcome difference the five boys described was the absence of homework. All their work was completed during school hours. Once the school schedule was over for the day, they were done. When asked about homework, the five boys indicated it just did not exist during this
school year. Even Aarav, who did not like remote learning, admitted he liked not having homework and the freedom to end school at the end of the day.

**Reminding Myself I Observed Remote Learning: Research Question #3**

The third research question shifted the focus from the students’ voices to the students’ actions. This research question centered around my observations of the students throughout their online activities. It also included my observations of the lessons and interactions from the teachers. Table 6 showcases the aligned themes.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the observed engagement behaviors online during both synchronous and asynchronous learning activities?</td>
<td>Traditional Learning Moved Online Group Work Gaming for Learning and Engagement Structure Supporting and Ensuring Participation Attendance Enforcing Physical School Rules at Home Consequences at a Distance Acting Out Jennifer’s Revenge and Carlos’s (Somewhat) Defeat YouTube, Netflix, Games, Oh My! Passive Participation as Passive Resistance Questioning Authority and the Status-Quo</td>
</tr>
</tbody>
</table>

The themes included student actions during class including their participation in daily routines, rituals, and school rules. The themes also centered around their participation in class activities including gaming and group work. Finally, the theme centered around the students and teachers battling for control over learning and behaviors during remote learning. This included acting out, questioning authority, and consequences for behaviors.

I joined all three teacher’s classes via Zoom for my observations. I did this for multiple
reasons. First, the district was not wanting as many people physically in classrooms with students to avoid mixing groups for COVID-19 mitigations. Secondly, it was easier on my schedule to simply join on Zoom versus driving across the district. Finally, it gave me the opportunity to attend the classes just as the remote students were on Zoom. Despite knowing I was online, and physically logging into the Zoom meeting from my office space, I had to consistently remind myself throughout the analysis process that I observed a remote classroom at a distance. Lowrens & Hartnett (2015) noted students can participate online behaviorally, cognitively, and emotionally. I saw all three of these behaviors throughout my observations. It was difficult to remember because the classroom environment and student behaviors were exactly what I would see if the students were in-person. Remote learning again mimicked the in-person classroom through student behavior.

There was a large struggle for control and power in the remote classroom. This concept is not new to the elementary classroom. Teachers work hard to develop their classroom culture and classroom management strategies. Teachers manage behavior on a daily basis in-person. Remote learning was no exception.

What quickly reminded me of the remote setup were the topics of control the school and teachers attempted to exert over the students at home. Their attendance was counted daily as well as tardies for not logging into Zoom on time. Families who had opted for in-person learning could not have their students attend remotely if they were running late or did not feel like physically going into the building.

Students were expected to stand, place their hands on their hearts, and recite the Pledge of Allegiance every morning from their bedrooms. Teachers expected their remote students to be sitting at desks, dressed, not in their pajamas, and ready to learn each day. Lying in bed or on a
couch was not allowed. Additionally, eating during synchronous learning was not allowed. The school sent home messages to families indicating that students could only eat during designated snack and lunch times, not during synchronous learning activities. Finally, teachers required students to always have their cameras on and keep their microphones on mute. Students could only come off mute if the teacher called on them or specifically asked them to answer a question. If students came off mute without permission, the teachers were able to use their advanced Zoom features to force the students back on mute. Students who kept their cameras turned off at one point were counted absent, however not at the time I was observing. The school and teachers had managed to find a way to control student behavior through the computer screen.

In these instances, the school and teachers attempted to control the students’ behaviors online (Lowrens & Hartnett, 2015). The students were required to physically participate in a specific way by sitting at their desks, following daily rituals, and staying silent until it was time to talk.

As I would expect to see with elementary students, some of these five boys fought for control and battled with their teacher and peers. Marcus openly questioned authority, asking why the camera had to be on all the time and why he could not have that say over his peers seeing him in the privacy of his home. He was respectful in his questioning, and never disrupted the class activities, but still openly questioned. Marcus also admitted to going to websites he knew he was not supposed to go to during the school day, including YouTube. He listened to music or watched short videos in defiance of this rule, which he also admitted to doing during in-person learning in past school years. While Marcus questioned the control over his behaviors, he did not openly defy them.

Carlos, however, battled with Jennifer for control and power in her class. He played with
his camera to distract her and his peers, held up his middle fingers to get a reaction out of her, and walked away from the screen very often. He also came off mute during online games to complain that his teammates were not doing as well as him. He laughed, rolled his eyes at classmates and his teacher, and tried to get other remote students to join in and take over the Zoom. His classmate, Xavier, called him out at one point, demanding him to be quiet so Xavier could get his work done. These were typical behaviors I would see in the in-person classroom, with the only difference being that Xavier and Carlos were battling through Zoom.

Carlos responded to the control of his behaviors through emotionally participating and reacting to the class (Lowrens & Hartnett, 2015). He looked for ways to have control by laughing, poking fun at classmates, and disturbing the class.

A final behavior that was observed was passive participation. Aarav and Xavier were observed online, but not participating more than they had to. They stayed on mute, did not react much to their peers, and passed up opportunities to share during morning meetings. While John was open in liking to participate through the chat and sharing when allowed, Aarav and Xavier kept quiet. They both admitted to being like that during in-person learning as well. In these times it was difficult to tell if the students were participating cognitively or not (Lowrens & Hartnett, 2015).

Mourning and Surviving: Research Question #4

Research question 4 diverged from the student perspective to the teacher perspective. While this study focused mainly on the elementary students’ perspectives and experiences, the teachers still played a role in the project. This is due to the fact the teachers are the ones who created and brought to life the remote learning experience. The student perspective alone would
not have answered all the necessary questions about the learning outcomes, goals, and purpose for activities. The teacher perspective fills in the gaps for the story of the remote learning experience. Additionally, the students spent the majority of their class time with their classroom teacher. Armstrong Trail Elementary School did not have students switch teachers beyond specialists such as music, art, and physical education. The students and classroom teachers were in direct contact with each other on a daily basis and formed relationships throughout the school year. The teachers’ perspectives were as much a part of the students’ experience as their daily activities were. Table 7 outlines the aligned themes for this research question.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are elementary teachers views and perspectives of their students’ remote learning experiences and their experiences teaching remotely?</td>
<td>Traditional Learning Moved Online</td>
</tr>
<tr>
<td></td>
<td>Supporting Students Online</td>
</tr>
<tr>
<td></td>
<td>The School and Teachers Exert Control Over Students at Home</td>
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<tr>
<td></td>
<td>Attendance</td>
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<tr>
<td></td>
<td>Enforcing Physical School Rules at Home</td>
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<tr>
<td></td>
<td>Student Consequences at a Distance</td>
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<tr>
<td></td>
<td>Teachers’ Explicit Attitude as a Barrier to their Control</td>
</tr>
<tr>
<td></td>
<td>Perception of School</td>
</tr>
<tr>
<td></td>
<td>Is There Really a Learning Loss?</td>
</tr>
<tr>
<td></td>
<td>Shifting Roles</td>
</tr>
<tr>
<td></td>
<td>Impact of COVID-19</td>
</tr>
</tbody>
</table>

The aligned themes centered around control. The teachers sought control over the students’ learning, behaviors, and participation at a distance. They built out remote learning activities and lessons that either mirrored or were nearly exact replicas of their in-person activities. Their roles shifted to include technology support, social emotional support, and parental support. They were also greatly impacted by COVID-19 professionally and emotionally.

The three teachers still felt the effects of the initial March 2020 shutdown. Anita
“mourned” the loss of her fifth-grade class of 2020, knowing they left in March, and she never saw them in person again. Anita’s reaction was similar to teachers, parents, and community members who saw losses of celebrations and traditions due to COVID-19 (Peterson et al., 2020). Jennifer recollected worrying about her students, her own children, and her struggles with technology in March 2020. She had a difficult time balancing the work of a teacher and the work of a mother. Jennifer’s experience echoed the teachers from Whittle et al.’s (2020) survey of in-service teachers who were worried about and focused on students and personal well-being. Caroline echoed those sentiments, noting that while it was wonderful to be home with her children, she still struggled to balance the work. She also noted the need to remind the parents of her students that she was not available 24-7, and would not be able to join conferences, calls, or return emails late into the evening. Caroline’s experience was similar to remote teachers prior to COVID-19 and the struggle to balance home and work (Anderson & Hira, 2020). The 2020 shutdown blurred the lines between school and home, making balancing the workload and homelife a difficult task for the teachers.

The start of the 2020-2021 school year was also met with shock and disbelief for the three teachers. They did not realize until hours before the start of their institute day they would begin the year fully remote. They had no planning ready, no preparations for remote learning, and were thrust into emergency planning meetings. They spent the additional institute days shifting their lessons from in-person to fully remote, reminding themselves of the digital tools available, and struggling to consider how to build relationships at a distance with new students. Jennifer described this time as “terrifying” and stressful. Anita described it as “lonely as hell” without her colleagues nearby to support her. Caroline felt confident going into the school year and saw it as a fun challenge. This showcased the multitude of emotional reactions to a stressful
situation.

The role of the teacher expanded throughout the school year. Teachers were the first line of technology support to both the students and the parents, as was typical for remote instructors (Amro & Borup, 2019) but new for these teachers. Anita described onboarding students that had not used a MacBook prior to starting the school year as a difficult task. Jennifer also had to transition her entire class from iPad tablets to the MacBook over the course of a few weeks. This added to their stress and workload, but it was a necessary addition to their support of their students (Slagter van Tryon & Bishop, 2009).

The teachers also felt a sense of pressure to complete the district’s mandatory curriculum. The school district had provided multiple pacing guides, informing teachers where they should be in the curriculum at specific times of year. The pacing guides added stress to the teachers, making them feel behind in the curriculum while juggling teaching the curriculum in a remote context. The teachers had not been trained or prepared for remote instruction (Kennedy & Archambault, 2012), creating additional stress on them. They felt a large sense of relief when the district eased back on the pacing of the curriculum and said to get as far as possible. However, the required guides added to the teachers’ need to exert control over the students.

The teachers felt without control the students were not growing at the pace they should. The teachers needed the students to attend synchronous learning on a daily basis in order to move the students forward. Both Anita and Jennifer felt students were absent more on remote learning and encouraged families to return to in-person as soon as possible. These two teachers worked with their building administration to convince families with students that were falling behind in grades or not attending consistently to leave remote learning and attend in-person, more so when the expanded hybrid and concurrent learning schedule was implemented. Anita
and Jennifer’s perceptions were school was meant to be in-person, students were more successful in-person, and every family should elect to return as quickly as possible. The teacher attitude can also impact student satisfaction and participation in the online setting (Cidral et al., 2018). While Anita did not have negative reactions from her students to her instruction, Carlos was not satisfied with his lessons with Jennifer. This could be due to multiple reasons, including Jennifer’s lack of training, preparation, and bias against remote instruction (Cidral et al., 2018).

In an effort to show that school was still happening, Armstrong Trail Elementary School teachers required students to participate in daily routines and rituals. Students stood for the Pledge of Allegiance, kept their microphones on mute and raised their hands when they wanted to speak, and were marked tardy for not logging into Zoom on time. Students were also not allowed to switch between remote and in-person learning, making students who were in-person unable to use a flexible schedule and attend remotely if they were running late or overslept. School rules applied at home, including not eating during class to limit distractions and views of chewing mouths for the teachers. This again brought the physical school to an online setting, something Hodges et al. (2020) do not recommend for ERI.

While the control seemed extreme, upon further reflection I can understand where the teachers and school were coming from. The schedule changed multiple times, the teachers and students were nervous and scared of the virus, the traditional pacing of instruction was not happening, and changes came quickly without explanation for the teachers. They felt as though they needed to control the students’ behaviors, activities, and routines to ensure school continued remotely. Additionally, the teachers knew the students would one day be back in school. Keeping routines in place over remote learning made the shift back to in-person instruction easier for the students to adapt to and for the teachers to manage.
Flexibility, Independence, and Normalcy: Research Question #5

Research question 5 returned to the student perspective and explored their wants and needs for remote learning. While these students did not go on to continue in remote learning for the 2021-2022 school year, their perspectives on what went well and what did not provided recommendations for not just remote learning but hybrid and digital learning in general as well.

Table 8 outlines the aligned themes.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are elementary students perceived wants and needs for remote learning?</td>
<td>Personalizing the Home Learning Environment</td>
</tr>
<tr>
<td></td>
<td>Flexibility to Meet Their Personal Needs</td>
</tr>
<tr>
<td></td>
<td>Independence and Flexibility in the Schedule</td>
</tr>
<tr>
<td></td>
<td>They Liked Remote…and They Didn’t</td>
</tr>
<tr>
<td></td>
<td>Content Area Matters</td>
</tr>
<tr>
<td></td>
<td>Technology Needs</td>
</tr>
</tbody>
</table>

The themes centered around a split in preferences from the students. Each individual student had their own experiences throughout remote learning. While their experiences had multiple overlapping themes, ultimately their needs and desires are their own. The themes focused on the impact of content areas on their preferences, their need for different or expanded access to technology, and their want for independence and flexibility in their days.

The students were open with their wants and needs for remote learning that bled into in-person learning. They were split on their desire to continue remote learning and ultimately showcased the need for family and student choice when electing for remote learning. Aarav specifically did not like remote and had no desire to continue with it in the future. He wanted in-person learning and the opportunity to be back in the classroom with his teacher and peers. The
other four boys, however, liked remote learning and possibly would have opted for it if giving
the opportunity in the future.

Marcus enjoyed not having the teacher always over his shoulder and feeling less stressed
doing his work at home. John liked the peace and quiet of his room and the ability to easily hear
his teacher because his peers were on mute. Xavier liked he could be home and get his work
done quickly while Carlos wanted more time with his family. For these four boys, remote
learning provided the freedom and flexibility they wanted in school.

The students liked the ability to create their own learning environments at home and
personalized it to meet their needs. They liked the quiet and distance from the pressures of
school remote learning offered. They wanted more flexibility and independence in the future.
They did not like being on Zoom for over four hours straight each day. They wanted more down-
time and asynchronous work incorporated into the day. They also appreciated being able to get
their work done during school hours and not having additional homework to complete after
Zooming was done.

John, Aarav, and Xavier were very compliant and completed the work without
complaints. Marcus completed his work but questioned the number of tests and activities he had
to complete. Carlos was the only student to openly defy his teacher by not attending each class
nor turning in all his work. Despite completing their work, the students wanted different learning
activities. They liked hands-on opportunities, group work, and games. They wanted to interact
with each other more through group work and games. They also wanted more opportunities to
choose which assignments they completed and what that completion looked like. The learning
activities and assessments were very traditional, teacher-guided activities during remote learning.
This was different from the choice-based, student-centered learning environments recommended
for remote learning (Land et al., 2012).

The students also wanted the freedom to change the manner in which they completed their work. They called out math specifically as being easier to complete by hand, and not on their MacBook computers. The inability to handwrite on the MacBook made turning in math homework difficult. While students could take pictures of videos of their work, the laptop device was large and difficult to maneuver safely and accurately. Any pictures and videos also required editing to the orientations, mirroring, and additional steps to upload to the LMS. The students showcased the need for flexible technology that met their needs and would still provide reliable access to Zoom and digital resources.

They also wanted a video communication system that did not freeze or lock them out of their online classes, issues they ran into with Zoom. Zoom constantly froze, locked them out of the link, and crashed. This was a daily occurrence due to the large volume of users around the globe. The crashes usually began immediately in the morning when the Midwestern and Eastern states were beginning class. It would then happen again between 10:30am and 12:30pm when the West Coast states were beginning class. Zoom’s servers could not handle the additional traffic, nor could it handle the use of the platform for streaming videos and sharing multimedia over screens. Zoom was also not a tool traditionally used with elementary students. This made the platform unfamiliar and not user-friendly for students. Aparicio et al. (2017) found university students felt more successful and satisfied with remote learning when the platforms were reliable and perceived to be high-quality. Aarav’s lack of experience with Zoom prior, combined with a system that was glitching and difficult to use, created stress for him and a dislike of remote learning in general.

Finally, the students showcased the need for expanded internet access at home. Xavier
was without consistent, reliable internet until the district provided his family with a paid-for mobile hotspot. His experience was like many Black and Latinx students throughout the country, as Francis & Weller (2020) found in their survey. The need for expanded access to internet was necessary for Zoom to work properly and for Xavier to access the digital resources. Accessible and reliable internet increased student independent participation in remote learning activities by 1-2 hours a week (Francis & Weller, 2020). Xavier’s experience showcases the need for school districts to work with communities to provide reliable and affordable internet for all families.

**Clarifying the E-Learning Framework: Recommendations**

Aparicio et al. (2016) proposed the E-Learning Systems Theoretical Framework as a holistic framework to explain the components of remote learning and how those components interact with each other. They name three main components: people, technologies, and services. I have taken their framework and simplified figure 1 from Chapter 2 below in figure 14.

![Figure 14 E-Learning Systems Framework Simplified](image-url)

I simplified the framework figure to showcase the three components. People, technologies, and services are all necessary components to a successful e-learning system. Further, all are present
in each e-learning system and have unique characteristics. Aparicio et al. (2016) call out specific people such as students and teachers, specific technologies such as content and collaboration providers, and specific services such as pedagogy and instructional strategies.

The simplified view in figure 14 also points out how Aparicio et al.’s framework does not indicate how the areas overlap. Throughout this study it became evident that people, technologies, and services are separate components but also directly impact each other. The available technology impacted services, services required additional support to people, and people had specific technology needs.

It is my recommendation to reimagine the E-Learning Systems framework not as individual triangles, but connected ones, as seen below in figure 15.

The framework itself is still intact. The three components are still present and called out in colors to showcase how each one is a stand-alone need and focus. The addition of the arrows showcases the overlap that exists between the components. This overlap accounts for the impact the components have on each other within an e-learning system.

Reorganizing the framework is not the only recommendation. Reimagining the
framework requires us to also assess how the components must be strengthened individually and in tandem for an e-learning system to be successful. Further, the COVID-19 pandemic forced emergency remote instruction to be implemented across the country, and specifically at Armstrong Trail Elementary School. While the school district did strengthen the three components individually, the overlapping needs were not always acknowledged and met. Each component must be strengthened individually and in tandem with the other components to ensure success for students and teachers in an emergency or traditional remote learning situation.

Aparicio et al. (2016) were correct in the acknowledgement of the three components of remote learning systems. The next question to consider is how to improve remote learning knowing these components exist, interact, and impact each other? Mishra (2019) noted the importance of teachers understanding the context of their instruction. Am I teaching online or in-person? Is this a hybrid model? What will my schedule look like? School and district administration must ensure teachers understand online instructional needs, especially if the context of their instruction is fully remote. The inclusion of TPACK and how technology, content areas, and pedagogy combine to enhance instruction can help school districts focus their instructional goals, review the technology in place and identify new tools, and determine the needed support for both students and teachers (Tawfik et al., 2021).

The E-Learning Framework components interact and impact each other just as the components of TPACK interact with each other. The following sections break down the E-Learning Systems Framework into individual component recommendations as well as recommendations to address the overlap between the components. Elements of TPACK are also addressed in components and overlap as appropriate.
Meeting Individual Needs: Recommendations for People

Remote learning as an option for students and teachers can be a positive experience for everyone. However, forced remote learning and a lack of choice created stress and hardships on teachers in this study. The presence of COVID-19 and the forced mitigation strategies showcased how remote learning is not the best option for every student and teacher. Where some students and teachers thrived in remote learning, others struggled and needed in-person to feel connected and successful. Remote learning should be a choice for students and teachers, not forced on everyone.

The district and building administration also play a key role in the design and implementation of remote learning at the elementary level. It was the district that determined the length of synchronous learning and the attendance policy. It was the building administration that enforced school rules and attendance at a distance. However, as a district administrator, it was not until I was observing and participating alongside these students that I realized how the district’s policies were impacting students and teachers. The teachers had to navigate changing policies and new mitigation strategies for them and students, alongside building and district requirements, making the transition in both 2020 and the 2020-2021 school years difficult to manage (Tawfik et al., 2021).

Administrators need to not only set policy but experience the policy themselves to see if it is viable and make changes as needed. Further, administrators need to provide freedom and flexibility to teachers within the polices, ensuring teachers can provide freedom and flexibility to their students on scheduling, assignment choices, and number of required assessments. School district also need to communicate with each other on practices they found beneficial and
successful to remote learning. Tawfik et al.’s (2021) study of K-8 teachers found, among the participating teachers, the remote learning was freeing in ways. It took away rigid guidelines and allowed teachers to present material and pace curriculum in ways that worked for their individual students. This was not the sentiment of the teachers in this study. Additional communication and learning from each other on a district-to-district, county, or state-wide level is not only beneficial for the teachers, but also necessary for teacher and student success.

Finally, although absent from this study, parents play a large role in remote learning. Parental involvement is essential for student success in the remote classroom (Curtis & Werth, 2015). Elementary students cannot create their learning environment at home without the parents’ providing the financial and physical means to do so. Further, the parents or adults are ultimately in charge of the students at home, needing to ensure their attendance to synchronous learning sessions. Parents cannot close a student’s bedroom door and assume the school will take care of everything during remote learning, due to their role as proxy educators (Davis et al., 2021). Just as schools desire parental involvement and support during in-person learning, it is extremely necessary for remote. Many parents felt anxious and nervous about assisting their students during the remote instruction due to their lack of preparedness and understanding of education (Hinderliter et al., 2021). School districts need to partner with parents, so a remote learning situation is not a shock but merely an extension of the work schools and parents do together to ensure students learn and grow (Davis et al., 2021).

“I Expected Different Things…”: Recommendations for Services

Carlos lamented during his interview, “Learning is…whatever. Like, I don’t like it and I don’t hate it…I mean I expected different things, but thing that I hate the most and still is the
time 10:05 to 12:15 [when I must be online the whole time].” He expected something different from remote learning and instead was met with the same instruction that he had experienced in the classroom. He did not like school and saw remote the same as in-person learning.

Remote instruction needs to be interactive, and student led. Aparicio et al. (2016) recommended a student-centered learning environment to engage university students in interactive content, communication, and collaboration. The same is needed for elementary students. Choice and flexibility in assignments is wanted by students. Further, student-centered learning could potentially increase engagement and growth in content understanding.

Coker (2020) noted the need for different instruction online to engage students. “The static ‘worksheet approach’ and extreme isolation needs to be jettisoned. Schools need to think Xbox or Play Station, not assigning a reading passage, answering questions, and waiting for the teacher to respond,” (p 83). Coker put into words what Carlos could not. There is not only a need but a desire for instruction to change. Remote learning provided an opportunity for school districts and teachers to try something different in their pedagogy. However, that is not what happened. Teachers stayed with their old worksheets, simply moving them online. While this was due to the rapidly changing situation and stresses teachers felt during the pandemic, lessons can still be learned for future remote learning environments. Moving to a student-centered learning environment with collaboration and inquiry built into the instruction would not only engage students, but reformulate schools (Coker, 2020).

The students also experienced much stress and anxiety from the remote learning experience. Remarry et al. (2021) found students were worried about falling behind in their work and overwhelmed with the amount of work online. They lacked the organization and motivation skills necessary for them to be successful in remote learning (Farmer & West, 2019). Although
the students in this study felt successful, their teachers saw differently at times. The teachers built elaborate schedules and resources to assist the students, something Farmer and West (2019) recommend for all remote instructors. A set schedule with organization and lessons on the organization will help students to be successful in the remote setting in the future.

Remote students also need socialization in the virtual setting. They need opportunities to connect and work with each other. The teachers in this study built in group work and team games to provide students with connection and socialization. When the socialization aspect is lacking students could become less motivated to learn (Sari & Maningtyas, 2020). Schools and teachers need to provide students with opportunities to work together online to not only build their content understanding but their social skills as well.

Digital Access and Accessibility: Recommendations for Technology

Technology has advanced since the early remote learning opportunities of satellite correspondence, fax machines, and video cassette recordings. However, more advances must be made to ensure successful remote learning at all grades in K-12 education. The video communication tool used in this study, Zoom, froze and locked students out of meetings multiple times. It is an excellent tool, but not specifically an education-based tool. School district and technology companies should partner together to create a safe video conferencing tool that is easy for students and teachers to use, secure, and limits the freezing so students can participate fully in remote learning. The poor or inconsistent quality of the communication tool effected the students’ and teachers’ perceptions of remote learning in a negative way (Aparicio et al, 2017).

Digital tools should also be examined and reviewed by school districts. The teachers in this study did not branch out into new tools and instead relied on old activities that were not
interactive to provide instruction to students at a distance. Teachers need professional development on new and interactive digital tools, as well as follow-up support and time to plan and implement these tools into the remote learning and in-person classroom. Additionally, districts should invest time and funds into specific tools that meet the needs of teachers and students. Too many digital tools could overwhelm teachers and be counterproductive (DeCoito & Richardson, 2018). The additional support will not only help teachers find and use new tools but will also ensure they are using it with fidelity and that the district’s investment in these tools is being put to good use.

Finally, the individual computing device needs to be reviewed when implementing remote learning. This district provided an advanced MacBook air to each student prior to remote learning starting. While the students were able to use the MacBook efficiently, they noted the difficulty in completing some content areas on the device. Math was one content area the students said would be easier if they could write their work out and not type. Further, they wanted hands-on and creative opportunities built into their day. While the MacBook offers these tools, the device was perhaps too advanced for the students. An iPad or Chromebook with a touchscreen display and ability to use a stylus would have provided the students with more hands-on flexibility and choice. The correct device should provide opportunities that allow students to be creative (Al-Bogami & Elyas, 2020). Accessibility features can also assist students in accessing material and showcasing their understanding in formats that physically work for them (Smith et al, 2017). School districts should review not only the features of computing devices, but also the needed tools for sharing and completing remote work across all content areas.
Supporting the Impact: Recommendations for People and Services

Emergency remote instruction required teachers to think differently about teaching, starting the school year, and working with students in a virtual setting. Additionally, the ever-changing mitigation strategies and schedules required teachers and students to adjust in-the-moment. Students wanted something different from remote learning, but teachers were not sure how to adapt their instruction with a moment’s notice. It is vital that K-12 institutions consider the needs of students and teachers for developing and navigating online instruction. Figure 16 isolates these two components and their overlap.

![Figure 16 People and Services Overlap](image)

The design of the remote learning environment should center around the instructional practices being used. Teachers and administrators need to first focus on their knowledge of pedagogy across the content areas. What works? What provides the most engagement? What does the instruction look like during in-person learning? Secondly, the emphasis of pedagogy must be on student-centered learning and problem-solving. Providing students inquiry-based opportunities such as problem-based learning (Hmelo-Silver, 2004) and situated cognition
(Brown et al., 1989) in science or communities of practice and inquiry (Wenger, 1998) in math and social studies would provide the engagement, collaboration and different learning activities students are asking for. Interactive and collaborative learning design and pedagogy would allow students to demonstrate their understanding of topics in an authentic manner and relieve them of the standard assessment that causes them stress (Herrington et al., 2014).

In the event of another pandemic or remote learning event, teachers will need additional training and support for what remote learning looks like and how to create student-centered learning opportunities online. The summer of 2020 should have been spent preparing for potential remote learning and creating professional development opportunities and a system of support for teachers to begin the year remote. Even though students returned to in-person learning and many K-12 districts abandoned remote learning, as this district did, COVID-19 has taught us that emergencies can happen at any moment. Teachers should be prepared for remote learning in the future by incorporating innovative and student-centered learning with technology devices into their in-person instruction now.

Aparicio et al., (2017) found the success of an e-learning system was explained more by the level the students were satisfied with the activities and learning rather than by the details of individual technology, LMS, and policies. A focus on the instruction and pedagogy used in remote learning would increase that satisfaction. While Aparicio et al. (2017) surveyed university level students, the same can be suggested for K-12 students. The elementary students in this study wanted more interaction and creative instruction. An emphasis on student-centered learning, inquiry, problem-solving and gamification could benefit future elementary remote instruction satisfaction.

Students also need support and guidance for breaking down assignments, assessments,
and workload (Demaray et al., 2021). The large amount of work created stress and anxiety with some students. Students at all levels would benefit from guidance and support in navigating a student-centered learning environment. New, innovative learning requires instruction not just for teachers but for students on operating in a different learning environment. Teachers, parents, and the school system as a whole should look for ways to help students manage their work and lower their stress levels around workload and assessments (Remarry et al., 2021). This could be done by emphasizing the use of authentic learning activities and assessments in the classroom as opposed to the traditional rote memorization and long worksheets.

Revisit and Review: Recommendations for People and Technologies

District administrators, teachers, and students must expand their knowledge of technology and content-specific technology to ensure the right tools are being used. Districts must also consider how to best support the people of the e-learning system with the technology while also ensuring the technology meets the needs of the people. Figure 17 isolates the technology and people components as well as the overlap.

Figure 17 People and Technologies Overlap
District and building leaders and teachers need to review their bias for or against technology and how it impacts its use in the classroom. A negative attitude towards technology can lead teachers not to use any technology in the classroom (Ertmer et al., 2012), which is a disservice to our students in our current digital world.

Simply purchasing the most expensive device on the market will not immediately offer students and teachers the opportunity to try new and collaborative learning designs. The technology must match the needs of the pedagogy, teachers, and students. Simply providing worksheets to complete at home while sitting on Zoom does not create a student-centered, inquiry-based learning environment. Educators at all levels in an elementary district need to expand their knowledge of technology integration and be willing to try new technologies to enhance their instructional practices (Koh et al., 2014).

Teachers need to know what technology tools they have available to them and the context of how to use them (Mishra, 2019). Upfront sharing, training, and reinforced support from the district and building administration levels will assist teachers in using the technology they have available to them.

Students need additional support and guidance with technology to be successful in remote learning. They need the training on the devices and specific lessons on how to communicate in an online setting. This will allow them to not only function in the online classroom but also be able to work in a collaborative group setting online (Slagter van Tryon & Bishop, 2009).

Igniting Instruction: Recommendations for Technologies and Services

Carlos wanted “something different” from his remote learning experience. As discussed earlier, student-centered learning can provide students with authentic learning activities that
engage and motivate them online (Land et al., 2012). Opportunities to collaborate with peers, share ideas, and use authentic and varied assessments to demonstrate knowledge and understanding are all characteristics of a student-centered learning environment (Herrington et al., 2014). Remote learning requires the technologies and services components to not just overlap, but also work together to bring SCLE to the virtual classroom. Figure 18 isolates these components and showcases the overlap.

Digital resources can be both production and creativity-based as well as specific content-based (Lauricella & Jacobson, 2022). Teachers should have options in both categories to meet the needs of students and their instruction. Digital resources should provide interactive content as well as opportunities for students to demonstrate their understanding in creative and authentic manners (Lauricella & Jacobson, 2022).

Coker (2020) stated, “Pedagogy, not technology dominance or other top down, quick fixes, drives change and improvement in education,” (p. 83). For the services and instruction to meet these needs, elementary school districts must consider TPACK (Koehler & Mishra, 2008) when designing the remote learning experience.

Remote teachers need to have a strong foundation in their knowledge of online pedagogy, knowledge of their content, and knowledge of technology to be successful in remote learning (Archambault et al., 2014). Building professional learning opportunities around TPACK will
help districts support teachers in their understanding of online instruction, technology, and support for students. Districts should also build instructional goals with TPACK in mind. Simply rewriting a curriculum and including a digital textbook will not bring about a student-centered learning environment. As districts revamp curriculum, administrators and curriculum writers need to incorporate technology tools that will meet the given standards for the content area and provide opportunities for student creativity and student-led learning.

Technology has the potential to empower students to take ownership of their learning through creativity, motivation, and collaboration (Greenhow & Chapman, 2020). Providing the correct technology to students as well as building the technology into the learning environment will set students up for success in the remote classroom.

The E-Learning Systems Framework has the technologies and services components at the bottom of the triangle, forming the foundation for holding people up throughout the remote learning system. Technology must be connected with instruction to be used appropriately, fully, and to support students in their educational endeavors.

Future Research

This study focused on the lived experiences of five elementary boys who participated in remote learning for the entirety of the 2020-2021 school year during the COVID-19 pandemic. Their experiences, while specific to them and their individual lives, give us a glimpse into remote learning with younger students. The research continues to be lacking in this area and must be expanded. Research should focus on the instructional practices students experienced online, the support they were provided, and their overall outcomes. This study did not explore the academic growth of the five students, which would be another area for future research.
COVID-19 offered a unique opportunity for researchers, in that K-12 students across the country were forced into a remote setting, whether the families would have opted for it or not. The 2021-2022 school year saw the return to in-person learning and a drastic departure from remote. School districts and parents wanted a return to traditional schooling practices. Research should be conducted on the impact remote learning had long-term, specifically on younger elementary students who have multiple years left in the K-12 education system.

Finally, the return to in-person learning potentially offered teachers the opportunity to take any lessons learned from remote back into the classroom. Research should be conducted on changes in instructional practices that occurred, if any, due to remote learning. Further, researchers should continue to provide guidelines and practices to K-12 education system on incorporating digital learning tools and collaborative pedagogy that can transfer between remote and in-person learning.

Heeding Caution When Reflecting on Remote Learning

While this study offered a view into remote learning from these five students’ eyes, it is imperative to remember this was during the height of COVID-19. As stated in Chapter 7, COVID-19 greatly impacted families, students, and teachers. The students in this study were isolated from their peers, with no option to join the school community for celebrations or events. The boys were not able to stay in contact with friends, meet for playdates, or visit peers’ houses. COVID-19 not only forced remote learning, but it also forced isolation.

The remote learning of the 2020-2021 school year was Emergency Remote Instruction (ERI), not typical remote instruction. Take-aways from this study must be looked at through the context of the year. Restaurants, stores, sporting events, and entertainment centers were closed.
Families were not gathering for holidays or celebrations. After school clubs and sports, if they were taking place, were limiting student interaction for safety purposes.

Simply leaving ERI and returning to in-person learning was not the simple solution either. Students were still isolated during the 2021-2022 school year. Everyone in the school buildings was required to wear a mask, social distancing was still enforced, and classes could not mix. While students were back in-person, the social isolation of COVID-19 remained (Demaray et al., 2021). The concerns over academic progress, socialization and behavior were not solved by removing the remote instruction. It was all still present and, I personally predict, will be underlying issues years to come.

Lessons Learned from Our Participants

Each of the participants in this study had their own unique experiences during ERI. I end with a short lesson gained from each one as well as my own. I begin with the teachers to lead into the lessons from the students. I implore school districts to take these lessons to heart as curriculums shift, technology changes, and remote learning on a large scale comes to an end.

Jennifer was frightened of remote learning. She was not a “techie” teacher, nor did she feel confident in her technology skills and abilities. She also was unsure how to begin the school year over Zoom and build relationships with her students. She ended the year feeling successful in that she survived. She was happy to put the year behind her but also proud of what she had accomplished. She had taught remotely and concurrently and successfully survived the year. From Jennifer we learn to celebrate our accomplishments, no matter the size. We also take away the need to support our teachers with remote instruction and technology professional development that is authentic and goes beyond a one-and-done session.
Anita was devastated by the pandemic. She mourned the loss of her class at the end of the 2019-2020 school year. She struggled with isolation in her building and the inability to interact with her colleagues. She needed to be physically in the building with her colleagues and her students. Anita ended the year exhausted and emotionally drained. From Anita we learn that not every educator belongs in a remote instruction setting. Also, we take the lesson that our teachers experienced trauma throughout the pandemic. Their mental health was just as important as our students. Moving forward, districts need to support the mental health of their teachers and for ways to take away some stress in a very stressful situation.

Caroline was not fazed by teaching remotely. She had offered to take a full remote class before the entire district went fully remote at the start of the 2020-2021 school year. Caroline relied on her past use of digital tools, innovative instructional design, and problem-solving approach to the constant changes to make her school year successful. From Caroline we learn to not only celebrate the positive instruction that happened during remote learning, but to also share it. Knowledge of Caroline’s instruction did not go beyond her teammates and me. She should have not only been celebrated but looked to as a guide and potential model for remote instruction throughout her building.

Aarav did not enjoy fifth grade. He hated being isolated from his peers in his house. He wanted to be back in person and viewed remote learning in a negative light. While he felt successful and participated fully in his online learning, he was not happy. Aarav felt he would have learned more had he been in-person and directly with Anita. The screen separated him from his classmates, his teachers, and his success. From Aarav we echo Anita’s lesson: not every student belongs in a remote setting. Remote learning should be a choice for families and not a forced situation. Additionally, students should have a say in their placement, no matter their age.
John’s fifth-grade year was filled with changes. His family moved to the district and knew they were moving out at the end of the year. Remote learning offered him the opportunity to attend school, develop a relationship with Anita, and not feel the pain of leaving friends he created at the end of the year. Alternatively, John did not form friendships with his classmates and felt he did not know them very well. Moving at the end of the year made this not a large issue for him. From John we learn that remote learning can be beneficial for the transient student. Moving in and moving out is a lot of change for a young child. Remote learning provided John with education and the opportunity to move on without emotionally leaving his classmates.

Marcus enjoyed the freedom and flexibility remote learning offered him. He liked being able to spread out across multiple screens in his office. He also enjoyed being able to build time to play, explore other websites, and be with his family. Marcus felt less stressed with assessments and assignments at home because a teacher was not constantly hovering over his shoulder. From Marcus we learn that remote learning can relieve stress for some students. Remote learning can provide an alternative placement for students who feel anxious in the classroom setting. We also learn that the number of assessments should be reviewed by districts. Too many assessments have the potential to cause stress and anxiety in our students.

Carlos did not like school prior to the pandemic. He did not like remote learning. He did not like being back in-person. Carlos did not like being in the traditional school setting. He wanted freedom, flexibility, and less work. He truly wanted to be homeschooled or experience something different online. Carlos fought for control over his situation throughout the remote learning by not attending, creating distractions, and arguing with his teacher and classmates. From Carlos we learn that students behaved online as they would in-person. Remote learning did not fix behaviors, nor did it hurt all behaviors. We also learn that some students need an
alternative style of school. Remote learning has the potential to support this need.

Xavier’s homelife was in a state of change that added to the multiple changes he experienced during remote learning. His family became homeless, he moved multiple cities away, and did not have a consistent place to physically learn from each day. He did not have access to consistent internet without the school district’s help. Remote learning provided Xavier with a constant in his ever-changing life. He always had his teacher on Zoom as well as his same classmates every day. Despite Jennifer feeling lost amid the multiple changes, Xavier welcomed her as a consistent face he saw each day. From Xavier we learn that remote learning both exasperated the lack of resources families experienced as well as aided in filling the gaps. Without remote learning Xavier would not have received mobile internet, nor been able to make it into class daily from his new town.

As for myself, I have learned so much from these students and teachers. I went into the 2021-2022 school year with new goals to better meet their needs in technology with more consistent support. I began providing additional professional development on targeted technology tools. I also worked with the curriculum department to reduce the number of approved digital resources in the district to better support teachers and students. Finally, I began a device review committee to explore if the MacBook laptop was the best device for our students or if the iPad would offer the flexibility that was needed during remote learning.

Above all, I learned the importance of looking for the overlaps in systems. Departments, schools, and teachers operated in silos throughout the ERI. We all looked to survive the year without necessarily knowing how our survival impacted another department and ultimately students. The ERI taught me that my role in technology spans multiple departments and can be a bridge that connects everyone together. ERI also gave me hope that educational systems can
reflect on what has and has not worked instructionally and in regard to technology in the past, learn from those reflections, and make changes moving forward.

Change is not easy, and many schools will continue with old practices due to the fear of change (Coker, 2020). We can learn much about instructional practices, needed technology, and important support for students and teachers during ERI. However, we cannot judge the overall impact of remote instruction on students and teachers’ mental and emotional state. Forced ERI was just one component of the isolation, fear, and challenges of COVID-19. We must take the lessons learned with an open mind and consider how these practices could be improved not just for future remote opportunities, but for an educational system with technology and online learning now a part of it.
REFERENCES


APPENDICES
APPENDIX A

RECRUITMENT SCRIPT
Hello Mr./Ms. Last name,

My name is Karen Ladendorf and I am the Director of Innovation and Technology for CCSD 93. I am also completing my doctorate in Instructional Technology at Northern Illinois University. I have reached the dissertation phase in my program. I am completing a case study on elementary student’s perspectives of the remote learning they have been participating in and would love to have child’s name as part of the study. I am interested in gathering elementary student’s opinions and perspectives on their remote learning experience including what worked, what they liked, what they did not like, and what they would want changed in the future.

A case study is a qualitative study. I will interview child three times and observe child three times in a class of their choice (Math, Science, etc.). All observations will be done on Zoom and the classroom teacher will provide the Zoom link to me. All interviews will be completed on Zoom as well. I will not use child’s given name in any of my write-ups and instead use a pseudonym. The school’s name will also be changed to keep child’s name and school confidential. I will not video record any of the class observations and instead take hand notes. I will video record our interviews so I can accurately transcribe them. All video recordings will be stored on a separate hard drive that is not connected to the internet. I will use quotes from their interviews and observations, always with the pseudonym, but never their face in any write-up or presentation. Last, child’s name would be invited to participate in an opening focus group with other participating students on Zoom to learn about the observations and interviews and to ask any questions they may have. We will also have a final focus group with all participating students at the end of the year so I can share any themes in the data I see, gather the student feedback, and provide the students with a final chance to share their thoughts. All interviews and focus groups will take place outside of direct instruction time.

I will not share any specific quotes, opinions, or ideas child has with their classroom teacher or building administration. Everything child tells me will be kept confidential and associated with their pseudonym.

Please let me know if you have any questions. I hope child is able to participate in this study. I really feel they can give us great insight into remote learning, what worked for them, and ways to improve it for all elementary students in the future.

Thank you for your consideration,

Karen Ladendorf
APPENDIX B

FIRST STUDENT FOCUS GROUP PROTOCOL
Student Focus Group #1

Focus Group Information

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<td>Time &amp; Length</td>
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<tr>
<td>Participants</td>
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<tr>
<td>Location</td>
<td>This meeting will be completed online with video conferencing software.</td>
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Part 1: Introduction
I will introduce myself and have the students introduce each other if they are comfortable

Part 2: Study review
I will review the study with the students
- Purpose of the study
- How they were chosen
- What interviews will be about and like
- How observations will look and what I will be looking at
- What our final focus group will look like
- What I hope to do with the information
I will explain the privacy of the study
- All of our conversations are private
- I will change all of their names for the write-up
- They are welcome to stop the study at any time
- All teachers will find out is over-all themes – nothing specific to individual students

Part 3: Questions and clarifications
- This will be a chance for students to ask any questions they may have

Jottings and summaries in the moment

Transcription with additional notes
APPENDIX C

FIRST STUDENT INTERVIEW PROTOCOL
Student Interview Protocol #1

Interview Information

Date

Time & Length

Participant

Location

1. Introduction questions
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Ready to go?

2. Think back to when we all went to remote learning last year.
   a. What did you think and feel then? Why?
   b. Did it surprise you? Why or why not?
   c. What do you remember most about last year?
   d. Why does that stand out to you?
   e. What were some of your biggest challenges with remote learning last year? Why do those stand out to you?
   f. What were some of your biggest successes with remote learning last year? Why do those stand out to you?

3. Think back to when this school year started
   a. What were your thoughts at the beginning of the school year when we went fully remote?
   b. How did you get to know your teacher?
   c. How did you get to know the other students in your class?
   d. What went well at the beginning of the year? Why?
   e. What did not go well at the beginning of the year? Why? Were you able to overcome it?

4. Additional Questions
   a. How long have you been back for in-person learning?
   b. How did you feel when it was time to come back to school? Were you nervous, excited, etc? Why?
   c. What was the easiest thing about coming back to in-person learning? Why?
   d. What was the hardest thing about coming back to in-person learning? Why?
   e. Did it become easier or harder to be in-between learning environments? Why?
   f. Which have you preferred – all remote or remote and in-person learning? Why?

5. Moving Forward
   a. Which class would you like me to observe (first, second, third choice)? Why that class?
   b. Is there anything that you want me to pay attention to or look for?

Jottings and summaries in the moment

Transcription with additional notes
APPENDIX D

SECOND STUDENT INTERVIEW PROTOCOL
### Student Interview Protocol #2

<table>
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<td>Date</td>
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<td>Time &amp; Length</td>
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<tr>
<td>Participant</td>
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<td>Location</td>
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1. **Introduction questions**
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Is there anything you wanted to add from our last talk? Anything that was on your mind then and you wanted to share now?

2. **Organizing for class**
   a. When you are not face-to-face, are you at home or someplace else? Do you like this arrangement? Why or why not?
   b. What is your remote learning environment like? How do you have yourself organized and set-up?
   c. How do you keep yourself on track with your remote/asynchronous work and your face-to-face/synchronous work?

3. **Think back to the class I observed. I will also add questions that are specific to the class that I observed and the behavior I observed.**
   a. What was the class I observed? What were you learning in the class?
   b. Walk me through what happened in the lesson – what did you do as a class, by yourself, focus on, first, second, third, etc.
   c. What did you like the most about the class? Why?
   d. What was challenging about the class?
   e. Did you have to do anything to prepare for the lesson (homework, classwork from the day before, etc.)?
   f. Did you have any work after the lesson to complete?
   g. Do you feel you were able to connect with your teacher and classmates? Why or why not?
   h. Do you feel you were able to learn what the teacher’s goal for you to learn that day? If yes, why? If no, what would have helped?
   i. Is there anything you would have like done differently in the lesson? If so, what and why?

4. **Digital tools**
   a. What digital tools have you been using this year?
   b. Did you learn a new tool this year?
   c. Which tool has been your favorite to use? Why?
   d. Which tool has been your least favorite to use? Why?
   e. How well do you feel you have picked up on the digital tools?
   f. How much technology do you feel you are using this year? Just enough, too much, not enough? Explain why.
   g. Is there anything you would change about the digital tools you have and are using in class? Why or why not?

5. **Additional Questions**
   a. Which are you preferring now – remote or in-person? Any changes from our last discussion?
6. Moving Forward
   a. Which class would you like me to observe next (first, second, third choice)? Why that class?
   b. Is there anything that you want me to pay attention to or look for?

Jottings and summaries in the moment

Transcription with additional notes
APPENDIX E

THIRD STUDENT INTERVIEW PROTOCOL
Student Interview Protocol #3

Interview Information

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<td>Participant</td>
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<td>Location</td>
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1. Introduction questions
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Is there anything you wanted to add from our last talk? Anything that was on your mind then and you wanted to share now?

2. Think back to the second class I observed. I will also add questions that are specific to the class that I observed and the behavior I observed.
   a. What was the class I observed? What were you learning in the class?
   b. Walk me through what happened in the lesson – what did you do as a class, by yourself, focus on, first, second, third, etc.
   c. What did you like the most about the class? Why?
   d. What was challenging about the class?
   e. Did you have to do anything to prepare for the lesson (homework, classwork from the day before, etc.)?
   f. Did you have any work after the lesson to complete?
   g. Do you feel you were able to connect with your teacher and classmates? Why or why not?
   h. Do you feel you were able to learn what the teacher’s goal for you to learn that day? If yes, why? If no, what would have helped?
   i. Is there anything you would have liked done differently in the lesson? If so, what and why?

3. Think back to the third class I observed. I will also add questions that are specific to the class that I observed and the behavior I observed.
   a. What was the class I observed? What were you learning in the class?
   b. Walk me through what happened in the lesson – what did you do as a class, by yourself, focus on, first, second, third, etc.
   c. What did you like the most about the class? Why?
   d. What was challenging about the class?
   e. Did you have to do anything to prepare for the lesson (homework, classwork from the day before, etc.)?
   f. Did you have any work after the lesson to complete?
   g. Do you feel you were able to connect with your teacher and classmates? Why or why not?
   h. Do you feel you were able to learn what the teacher’s goal for you to learn that day? If yes, why? If no, what would have helped?
   i. Is there anything you would have liked done differently in the lesson? If so, what and why?

4. Additional Questions
   a. Do you feel there is a difference in your learning between core classes and exploratory classes? Why or why not?
   b. Which do you prefer this year – core or exploratory?
c. Which are you preferring now – remote or in-person? Any changes from our last discussion?

5. Moving Forward
   a. What do you hope next school year is going to look like?
   b. Are there elements from this school year that you want to see happen next year? If so, what and why? If not, why?
   c. If you could go back to “normal” right now, what would you most look forward to? What would you not look forward to?
   d. Do you want to see any changes to learning and school next year? If so, what and why? If not, why?
   e. Any final thoughts you would like to share with me?
APPENDIX F

MODIFIED SECOND STUDENT INTERVIEW PROTOCOL
MODIFIED Student Interview Protocol #2

Interview Information

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<td>Participant</td>
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<td>Location</td>
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</table>

1. Introduction questions
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Is there anything you wanted to add from our last talk? Anything that was on your mind then and you wanted to share now?

2. Organizing for class
   a. When you are not face-to-face, are you at home or someplace else? Do you like this arrangement? Why or why not?
   b. What is your remote learning environment like? How do you have yourself organized and set-up?
   c. How do you keep yourself on track with your remote/asynchronous work and your face-to-face/synchronous work?

3. Think back to the class I observed. I will also add questions that are specific to the class that I observed and the behavior I observed.
   a. What was the class I observed? What were you learning in the class?
   b. Walk me through what happened in the lesson – what did you do as a class, by yourself, focus on, first, second, third, etc.
   c. What did you like the most about the class? Why?
   d. What was challenging about the class?
   e. Did you have to do anything to prepare for the lesson (homework, classwork from the day before, etc.)?
   f. Did you have any work after the lesson to complete?
   g. Do you feel you were able to connect with your teacher and classmates? Why or why not?
   h. Do you feel you were able to learn what the teacher’s goal for you to learn that day? If yes, why? If no, what would have helped?
   i. Is there anything you would have like done differently in the lesson? If so, what and why?

4. Digital tools
   a. What digital tools have you been using this year?
   b. Did you learn a new tool this year?
   c. Which tool has been your favorite to use? Why?
   d. Which tool has been your least favorite to use? Why?
   e. How well do you feel you have picked up on the digital tools?
   f. How much technology do you feel you are using this year? Just enough, too much, not enough? Explain why.
   g. Is there anything you would change about the digital tools you have and are using in class? Why or why not?

5. Additional Questions
   a. Do you feel there is a difference in your learning between core classes and exploratory classes? Why or why not?
b. Which do you prefer this year – core or exploratory?

c. Which are you preferring now – remote or in-person? Any changes from our last discussion?

6. Moving Forward
   a. Which class would you like me to observe next (first, second, third choice)? Why that class?
   b. Is there anything that you want me to pay attention to or look for?
   c. What do you hope next school year is going to look like?
   d. Are there elements from this school year that you want to see happen next year? If so, what and why? If not, why?
   e. If you could go back to “normal” right now, what would you most look forward to? What would you not look forward to?
   f. Do you want to see any changes to learning and school next year? If so, what and why? If not, why?
   g. Any final thoughts you would like to share with me?

Jottings and summaries in the moment

Transcription with additional notes
APPENDIX G

SECOND STUDENT FOCUS GROUP PROTOCOL
Student Focus Group #2

Focus Group Information

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<tr>
<td>Participants</td>
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<td>Location</td>
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Part 1: Introduction
Review the project with everyone and what we did
- Interviews
- Observations

Part 2: Emergent Themes
I will review the emergent themes that I have found so far
- Word clouds
- Visual display of themes

Part 3: Questions and clarifications
- Do the themes make sense?
- Anything surprise you?
- Anything you disagree with?
- Anything to add?

Part 4: Celebration
- Thank you for participating and helping me!
- Celebrate the work they have done in remote and hybrid learning this year
- Share my next steps

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Jottings and summaries in the moment

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Transcription with additional notes
APPENDIX H

FIRST TEACHER INTERVIEW PROTOCOL
**Teacher Interview #1**

**Interview Information**

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<td>Participant</td>
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<td>Location</td>
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1. **Introduction questions**
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Ready to go?

2. **Think back to when we all went to remote learning last year.**
   a. What did you think and feel then? Why?
   b. Did it surprise you? Why or why not?
   c. What do you remember most about last year?
   d. Why does that stand out to you?
   e. What were some of your biggest challenges with remote learning last year? Why do those stand out to you?
   f. What were some of your biggest successes with remote learning last year? Why do those stand out to you?
   g. What challenges did students have last year? Successes?

3. **Think back to when this school year started**
   a. What were your thoughts at the beginning of the school year when we went fully remote?
   b. How did you get to know your students?
   c. How did you help students get to know each other and build a learning community with them?
   d. What went well at the beginning of the year? Why?
   e. What did not go well at the beginning of the year? Why? Were you able to overcome it?
   f. What went well for students at the beginning of the year? Why?
   g. What did not go well for students at the beginning of the year? Why?

4. **Current instruction**
   a. Walk me through your typical teaching day now:
      i. Set-up
      ii. Lessons/content
      iii. Planning and prep
      iv. Delivering instruction and assessment
      v. Engaging students
   b. Which do you prefer – all remote or in-person learning as we currently have it set-up? Why?
   c. Describe your class now:
      i. Participation
      ii. Engagement
      iii. Attendance
      iv. Work completion
      v. Academic success
      vi. Social Emotional Learning
   d. Is there anything going well now that was not at the beginning of the year for you and your students? If so, why do you think that changed?
e. Is there anything that was going well at the beginning of the year but is now a struggle for you and your students? If so, why do you think that changed?

5. Digital tools
   a. What digital tools have you been using this year?
   b. Did you learn a new tool this year?
   c. Which tool has been your favorite to use? Why?
   d. Which tool has been your least favorite to use? Why?
   e. How well do you feel students picked up on the digital tools?
   f. How much technology do you feel students are using this year? Just enough, too much, not enough? Explain why.
   g. Is there anything you would change about the digital tools you have and are using in class? Why or why not?

6. Additional Questions
   a. How long have you been back for in-person learning?
   b. How did you feel when it was time to come back to school? Were you nervous, excited, etc? Why?
   c. What was the easiest thing about coming back to in-person learning? Why?
   d. What was the hardest thing about coming back to in-person learning? Why?
   e. How do you feel your students adjusted to being back to in-person learning? Why?

7. Moving Forward
   a. Any final thoughts?
   b. We will be meeting again for a follow-up – please continue to think of anything you want to share.

Jottings and summaries in the moment

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Transcription with additional notes

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APPENDIX I

SECOND TEACHER INTERVIEW PROTOCOL
Teacher Interview #2

Interview Information

Date

Time & Length

Participant

Location

1. Introduction questions
   a. How are you doing and how are you feeling?
   b. Do you have any questions about the study or interview?
   c. Is there anything you wanted to add from our last talk? Anything that was on your mind then and you wanted to share now?

2. Questions based off of instruction I observed I will also add questions that are specific to the class that I observed and the behavior I observed.
   a. Walk me through the lesson I observed with the students.
   b. What were you hoping the students gained or learned during that lesson?
   c. Would you make any changes to that lesson? Why or why not?
   d. Do you feel the students met your goal for the lesson? Why or why not?
   e. Do you feel the students were engaged and interested in the lesson? Why or why not?
   f. Was there anything that occurred in this lesson that was unusual or out of the ordinary? If so, what and why do you think that happened?
   g. Anything else you want to add about the lesson?

3. Additional Questions
   a. Do you feel there is a difference in your instruction fully remote and in-person? Why or why not?
   b. Which are you preferring now – remote or in-person? Any changes from our last discussion?
   c. Is there anything else we as a district should change for the students and their learning this year? If so, why?

4. Moving Forward
   a. What do you hope next school year is going to look like?
   b. Are there elements from this school year that you want to see happen next year? If so, what and why? If not, why? How will this assist students?
   c. If you could go back to “normal” right now, what would you most look forward to? What would you not look forward to?
   d. Do you feel the students would do better in a fully remote, fully hybrid, or fully face-to-face learning environment? Why?
   e. Do you want to see any changes to learning and school next year? If so, what and why? If not, why? How will this assist students?
   f. Any final thoughts you would like to share with me?

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Jottings and summaries in the moment
Teacher Focus Group

Focus Group Information

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- Anything to add?

Part 4: Celebration
- Thank you for participating and helping me!
- Celebrate the work they have done in remote and hybrid learning this year
- Share my next steps

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Jottings and summaries in the moment

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Transcription with additional notes
APPENDIX K

STUDENT OBSERVATION PROTOCOL
### Observation Protocol

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<td>Observation style:</td>
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<td>Description of lesson being observed and location of student</td>
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Jottings and summaries in the moment

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Transcription with additional notes
APPENDIX L

PRINCIPAL LETTER OF PERMISSION
March 24, 2021

To Whom It May Concern,

I have spoken with Karen Ladendorf and reviewed her plans for the evidence gathering process for her study, "Coming Off Mute: A Case Study of Elementary Students' Perceptions of Remote Learning During the Height of the COVID-19 Pandemic." The study is appropriate for our current setting and will not impact the learning process.

I approve this study and look forward to the opportunity for our students to provide their feedback on remote learning. I also look forward to seeing the overall results and how we can use these results to better plan instruction for remote and blended learning in the future.

Thank you,

Steven Kyle
Principal
Carol Stream School

Community Consolidated
School District 93
230 Covington Drive
Bloomingdale, Illinois
60108-3106

Tel 630-893-9593
Fax 630-539-3450

www.ccsd93.com

David H. Hill, Ed.D.
Superintendent of Schools

Early Childhood Center
Carol Stream School
Cloverdale School
Elsie Johnson School
Heritage Lakes School
Roy DeShane School
Western Trails School
Jay Stream Middle School
Stratford Middle School
APPENDIX M

CLASSROOM TEACHERS WRITTEN PERMISSION
Informed Consent

You have been invited to participate in a research study titled “Coming Off Mute: A Case Study of Elementary Students’ Perceptions of Remote Learning During the Height of the COVID-19 Pandemic” being conducted by Karen Ladendorf, the Director of Innovation and Technology for CCSD93 and a doctoral candidate in the department of Educational Technology, Research and Assessment at Northern Illinois University.

The purpose of this study is to gather observations of and interview with elementary students who have experienced remote learning throughout the 2020-2021 school year. The goal is to discover the students’ perspectives of learning activities, assessments, collaborating with peers and teachers, and their overall thoughts and feelings about remote learning. Students will be interviewed three times and observed three times in a class or lesson of their choice. Your participation in this study will consist of two recorded interviews conducted via Zoom approximately 45 minutes long focused on your perspectives of the students’ participation and the lesson goals. You will also need to grant the researcher access to your Google Classroom so she can gather course materials and work examples from participating students.

Benefits from this study include you giving perspectives on remote learning, your views of student participation, and help researchers and educators learn from the COVID-19 remote learning experience what could potentially be positive experiences for elementary students in remote learning.

Participation in this study is voluntary. You will be asked to indicate individual assent to be involved immediately prior to participation and will be free to withdraw from participation in the study at any time.

There are no potential risks and/or discomforts beyond normal activities for this study. All information gathered during this case study will be kept confidential including not storing your name or other personal confidential information and using pseudonyms. All audio and video recordings will be kept password protected on an external hard drive. Information obtained during this study will be used and presented in a dissertation as fulfillment of the requirements for a PhD in Instructional Technology and may be published in scientific journals or presented at scientific meetings but using only pseudonyms for you and the school’s location. Contact Karen Ladendorf (630-539-3149; ladendk@ccsd93.com) with any questions. You may also contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588 for further information regarding your child’s rights as a research subject.

Northern Illinois University policy does not provide for compensation for, nor does the University carry insurance to cover injury or illness incurred as a result of participation in University sponsored research projects. By signing this consent form, you understand that consent to participate does not constitute a waiver of any legal rights or redress you might have as a result of your participation, and you acknowledge that you have received a copy of this consent form.

Please return by **Friday, April 9, 2021**, to Karen Ladendorf, Director of Innovation and Technology.

_____ Yes, I consent to participating in the case study including being interviewed and video recorded.

_____ Yes, I consent to participating in the case study, but audio recorded only.

_____ Yes, I consent to participating in the case study but not audio or video recorded.
No, I do not give consent to participating in the case study.

__________________________________________
Print Name

__________________________________________
Signature Date
APPENDIX N

IRB APPROVAL
Approval Notice
Initial Review

07-May-2021

TO: Karen Ladendorf (z1812617)
   Educational Technology, Research and Assessment

RE: Protocol # HS21-0371 “Coming Off Mute: A Case Study of Elementary Students' Perceptions of Remote Learning During the Height of the COVID-19 Pandemic”

In a preliminary review, the Initial Submission of the above named research protocol was determined to meet the definition of human subjects research according to the federal regulations. The submission was then reviewed and approved by the Institutional Review Board through the expedited review process under Member Review procedures on 07-May-2021. Please note the following information about your approved research protocol:

Protocol Approval period: 07-May-2021 - 06-May-2022

It is important for you to note that as an investigator conducting research that involves human participants, you are responsible for ensuring that this project has current IRB approval at all times. If your project will continue beyond the above date, or if you intend to make modifications to the study, you will need additional approval and should contact the Office of Research Compliance, Integrity, and Safety for assistance. In addition, you are required to promptly report to the IRB any injuries or other unanticipated problems or risks to subjects or others.

Please note that the IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Informed Consent:

Unless you have been approved for a waiver of the written signature of informed consent, this notice includes a date-stamped copy of the approved consent form for your use. NIU policy requires that informed consent documents given to subjects participating in non-exempt
research bear the approval stamp of the NIU IRB. This stamped document is the only consent form that may be photocopied for distribution to study participants.

If consent for the study is being given by proxy (guardian, etc.), it is your responsibility to document the authority of that person to consent for the subject. Also, the committee recommends that you include an acknowledgment by the subject, or the subject’s representative, that he or she has received a copy of the consent form.

**You are responsible for retaining the signed consent forms obtained from your subjects for a minimum of three years after the study is concluded.**

**Continuing Review:**

Continuing review of the project, conducted at least annually, will be necessary until data collection is complete and you no longer retain any identifiers that could link the subjects to the data collected. Please remember to use your **protocol number** (**HS21-0371**) on any documents or correspondence with the IRB concerning your research protocol.

**Closing the Study:**

Please note that a **final report submission** should be created in the record in lieu of an annual continuation form if data collection has ended and the data are free of identifiers. The final report is a separate submission form in the list of options in the InfoEd record, and it may be submitted prior to the annual review deadline.

With all of this said, the IRB extends best wishes for success in your research endeavors!

Please see the RIPS website for guidance on the impact of COVID-19 on research (including face-to-face data collection) [https://www.niu.edu/divresearch/covid/index.shtml](https://www.niu.edu/divresearch/covid/index.shtml)
APPENDIX O

PARENTAL WRITTEN PERMISSION
Parental Information and Permission

Your child has been invited to participate in a research study titled “Coming Off Mute: A Case Study of Elementary Students’ Perceptions of Remote Learning During the Height of the COVID-19 Pandemic” being conducted by Karen Ladendorf, the Director of Innovation and Technology for CCSD93 and a doctoral candidate in the department of Educational Technology, Research and Assessment at Northern Illinois University.

The purpose of this study is to gather observations of and interview with elementary students who have experienced remote learning throughout the 2020-2021 school year. The goal is to discover the students’ perspectives of learning activities, assessments, collaborating with peers and teachers, and their overall thoughts and feelings about remote learning. Your child’s participation in this study will include 3 interviews approximately 30 minutes long, 3 class observations approximately 30 minutes long, and two focus group sessions approximately 30 minutes long. All interviews will be video recorded for transcription purposes. Videos will be kept password protected and not shared with anyone beyond the researcher or her three-member professor committee. Class observations will not be video recorded. Your child will be asked to:

1) participate in an introductory focus group to explain the research project, process, and ask any questions they may have
2) participate in three 30-minute video recorded interviews via Zoom
3) be observed in three synchronous classes/lessons for approximately 30 minutes each, classes/lesson of the student’s choice
4) continue their regular work in Google Classroom and other resources as assigned by the classroom teacher; the researcher will observe and gather work samples as needed
5) participate in a final focus group at the conclusion of the study in May to review emergent themes and give any final thoughts to the researcher

Benefits from this study include your child giving perspectives on remote learning at the elementary level, including what they enjoyed about the experience, what worked for them, and what would make any future remote or online experiences better for them in the future.

Participation in this study is voluntary. Your decision whether or not to allow your child as well as his/her assent to participate will not negatively affect you or your child. Your child will be asked if they would like to continue to participate (individual assent) immediately before each interview and observation and will be free to withdraw from participation in the study at any time. Your child will continue to participate in their remote class with their same classroom teacher on all teacher-assigned work and assessments.

There are no potential risks and/or discomforts beyond normal class activities for this study. All information gathered during this case study will be kept confidential including not storing your child’s name or other personal confidential information and using pseudonyms. All recordings will be kept password protected on an external hard drive and not shared with anyone beyond the researcher or her three-person professor committee. Information obtained during this study will be used and presented in a dissertation as fulfillment of the requirements for a PhD in Instructional Technology and may be published in scientific journals or presented at scientific meetings but using only pseudonyms for you and the school’s location. Contact Karen Ladendorf (630-539-3149; ladendk@ccsd93.com) with any questions. You may also contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588 for further information regarding your child’s rights as a research subject.

Northern Illinois University policy does not provide for compensation for, nor does the University carry insurance to cover injury or illness incurred as a result of participation in University sponsored research projects. I understand that my consent for my child to participate in this project does not constitute a
waiver of any legal rights or redress I might have as a result of my child’s participation, and I acknowledge that I have received a copy of this consent form.

Please return by **Friday, April 9, 2021**, to Karen Ladendorf, Director of Innovation and Technology.

_____ Yes, I give permission for my child, ____________________, (print name) to participate and be video recorded and interviewed as part of the case study.

_____ Yes, I give permission for my child, ____________________, (print name) to participate and be interviewed as part of the case study, but audio recorded only.

_____ No, I am not interested in having my child, ____________________, (print name) participate in the case study.

________________________________________________________
Signature of Parent/Guardian                                Date