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PROVIDING HEAD START SERVICES AMID A GLOBAL PANDEMIC:  
A MIXED METHODS EXPLANATORY STUDY OF CAPACITY,  
RESOURCES, AND SUPPORT

by

Kelly L. Vigants

A dissertation submitted to the Graduate College  
in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
Education and Human Development  
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PROVIDING HEAD START SERVICES AMID A GLOBAL PANDEMIC: A MIXED METHODS EXPLANATORY STUDY OF CAPACITY, RESOURCES, AND SUPPORT

Kelly L. Vigants, Ph.D.

Western Michigan University, 2020

The COVID-19 pandemic altered education in dramatic ways including immediate building closures and the implementation of virtual instruction. In March of 2020, Michigan faced a statewide shutdown on all non-essential travel as Michiganders were ordered to “Stay Home. Stay Safe.” Head Start began to provide remote services to families and students. Head Start lead teachers were charged with using virtual methods to teach their students. With little direction in the beginning and many unknowns, Head Start lead teachers used innovative methods to promote family engagement.

This study used a mixed method, explanatory sequential design to evaluate the most effective methods of instruction through the perspective of Head Start lead teachers. Using a survey (N = 186) and interviews (N = 6), barriers such as technology, internet access, and concerns over health and safety were discovered. Facilitators of service included communication, professional development opportunities, focusing on the social emotional needs of teachers and families, and overall support from the Michigan Head Start Association and National Head Start Association. In the period of March 2020 to June 2020, Head Start has shown a great amount of growth and support.
ACKNOWLEDGEMENTS

There are few opportunities in this life to thank those who have influenced us to the core of who we are. I have been blessed by a large circle of family, friends, and mentors, but I also acknowledge those who put obstacles in my way. They have helped me to see that I am stronger than I thought I could be. Nevertheless… she persisted. This adventure has taught me more about who I am than anything else ever has.

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passion for faith that drives me to look deeper at everything, exploring its unique beauty. Jake, you have given me the gift of determination. You have never stepped away from a challenge, and that inspires me to persist. Trevor, your gift has been curiosity. You look at the world as if there are mysteries to be discovered every day. Kennedy, you give me a new way of seeing the world and remind me of the importance of coloring outside of the lines.

I am blessed with a tribe of women that have influenced and encouraged me every step of the way. Michelle, my best friend for over 20 years, the salty to my sweet, thank you for challenging me and helping me find my grit. Kara, you have a vibrant light which shines through any of the clouds that I might see ahead. Jenna, thank you for showing me just how much fun life can be! Lindsay, your encouragement from afar has been so helpful. Thanks for reminding me to dress for success!

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have allowed me tell your story during the COVID-19 pandemic, I acknowledge you.
Your tenacity and love for all children makes this world a better place to live in.

Kelly L. Vigants
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## DEFINITIONS OF KEY TERMS

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<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronavirus</td>
<td>Also known as COVID-19 or novel coronavirus</td>
</tr>
<tr>
<td>COVID-19</td>
<td>(Also known as novel coronavirus or Coronavirus): Novel coronavirus is a new coronavirus that has not been previously identified. The virus causing coronavirus disease 2019 (COVID-19), is not the same as the coronaviruses that commonly circulate among humans and cause mild illness, like the common cold. (Centers for Disease Control, 2020b)</td>
</tr>
<tr>
<td>Direct engagement</td>
<td>Defined as contact with families/students by phone call, personalized text, Facetime, or video chat.</td>
</tr>
<tr>
<td>DHHS</td>
<td>United States Department of Health and Human Services</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Education</td>
</tr>
<tr>
<td>ECLKC</td>
<td>Early Childhood Learning and Knowledge Center</td>
</tr>
<tr>
<td>Indirect engagement</td>
<td>Defined as contact with families/students through a webpage, newsletter, Facebook group, or packets/notes sent through the mail.</td>
</tr>
<tr>
<td>Lead teacher</td>
<td>This is the teacher charged with the overall programming, teaching, oversight of associate teachers and staff, and administration for the classroom.</td>
</tr>
<tr>
<td>MDE</td>
<td>Michigan Department of Education</td>
</tr>
<tr>
<td>MHSA</td>
<td>Michigan Head Start Association</td>
</tr>
<tr>
<td>NAEYC</td>
<td>National Association for the Education of Young Children</td>
</tr>
<tr>
<td>NHSA</td>
<td>National Head Start Association</td>
</tr>
<tr>
<td>Pandemic</td>
<td>For the purpose of this study, pandemic will refer to the COVID-19 pandemic that began in 2019</td>
</tr>
<tr>
<td>Shelter in Place</td>
<td>The order required that all non-essential travel banned as well as “prohibiting businesses from requiring workers to leave their homes unless they are necessary to sustain or protect life or to conduct minimum basic operations” (Fox 2 Detroit, 2020, para. 5)</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
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CHAPTER 1

INTRODUCTION

The benefits of high-quality instruction and caregiving in the first years of life are irreplaceable and pivotal for healthy social, emotional, and cognitive growth. Early childhood education is a valuable component of a healthy society (Heckman, 2011; Morrison, 2014). Dr. Heckman (2011) states that “educational equity is an economic imperative that has far-reaching implications for our nation” (p. 4). With this in mind, a high caliber education is a right, not a privilege. The Head Start program provides a quality educational experience to over 1 million children per year in the United States (ECLKC, 2020b). During the 2019–2020 school year, a global pandemic radically altered the practices of Head Start teachers around the United States and served as a transformational time in the history of early education. The Office of Head Start recommended “advising grantees to coordinate with local health authorities and implement their existing policies and procedures related to closure of Head Start and Early Head Start centers during infectious disease outbreaks” (ECLKC, 2020a).

Head Start classrooms in the state of Michigan were shut down on April 3, 2020, by Executive Order 2020-35. In Table 1, the sequence of events listed represent the series of Executive Orders put in place by Governor Gretchen Whitmer to address the COVID-19 pandemic. This timeline includes several of the more poignant Executive
Table 1

Timeline of Michigan Executive Orders Related to the COVID-19 Pandemic Response

<table>
<thead>
<tr>
<th>Executive Order</th>
<th>Date</th>
<th>Description</th>
<th>Rescinded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-4</td>
<td>3/10/2020</td>
<td>Declaration of a state of emergency</td>
<td>2020-33</td>
</tr>
<tr>
<td>2020-5</td>
<td>3/13/2020</td>
<td>Temporary prohibition on large gatherings and events, temporary school closures</td>
<td>2020-11</td>
</tr>
<tr>
<td>2020-16</td>
<td>3/18/2020</td>
<td>Provides expanded access for childcare services for essential workers</td>
<td>2020-48</td>
</tr>
<tr>
<td>2020-21</td>
<td>3/24/2020</td>
<td>School closures extended through April 21</td>
<td>2020-42</td>
</tr>
<tr>
<td>2020-33</td>
<td>4/1/2020</td>
<td>Declared a state of emergency and a state of disaster</td>
<td>2020-66</td>
</tr>
<tr>
<td>2020-51</td>
<td>4/15/2020</td>
<td>Expnded access for childcare providers, expanded scope, and extended duration.</td>
<td>2020-84</td>
</tr>
<tr>
<td>2020-55</td>
<td>4/20/2020</td>
<td>Created the Michigan Coronavirus Task Force on Racial Disparities</td>
<td></td>
</tr>
<tr>
<td>2020-65</td>
<td>4/30/2020</td>
<td>Suspension of K–12, GSRP, and early childhood programs for the remainder of the 2019–20 school year</td>
<td>2020-142</td>
</tr>
<tr>
<td>2020-83</td>
<td>5/13/2020</td>
<td>Extends duration and expansion of childcare services through June 10, 2020</td>
<td>2020-117</td>
</tr>
<tr>
<td>2020-88</td>
<td>5/15/2020</td>
<td>Return to School Advisory Committee created</td>
<td></td>
</tr>
</tbody>
</table>

Orders that involved childcare, education, and the formation of committees related to education. With facilities closed, Head Start lead teachers worked tirelessly to provide creative services to continue the education of preschoolers in Michigan. This was a large task considering that “early childhood educators must have or quickly develop the knowledge and skills needed to effectively meet the needs of their students and families who are caught in disasters” (Szente, 2018, p. 121). This study addressed facilitators
and barriers of providing Head Start services during the pandemic, as told by the Head Start lead teachers. Their stories and information serve as an avenue to prepare for unexpected disruption to services, such as the COVID-19 building closures.

**Literature Review**

**History of Head Start**

Teaching preschoolers in poverty has been a long-standing goal of the United States education system as a way to support families through social reform and provide greater equity among people (Cahan, 1989). The original intent of preschool programming for children living in poverty revolved around the belief that parents who were raising their children in poverty did not have the skill set to properly socialize their children (Tank, 1980). As a result, schools were designed to help children have appropriate socialization and fill in the gaps left from inept parenting (Tank, 1980). Throughout the 1900s, there were a variety of changes to early childhood education including the focus on academics, life skills, and added resources for families as a part of social reform.

In 1964, as a part of the “War on Poverty,” Lyndon B. Johnson created the Economic Opportunity Act of 1964 which included Head Start funding (Office of Head Start, 2019). Head Start was originally designed to support children entering first grade that had not attended kindergarten (Morrison, 2014). The Head Start program was implemented in the summer of 1965, serving over 560,000 children throughout the
country. That fall, Head Start began its first official school year calendar programs (Office of Head Start, 2019).

In 1967, the beginnings of the Early Head Start program were created to focus on children ages birth through 3 years of age and pregnant mothers, although official programming wouldn’t be funded until 1994. In 1968, the first report was produced detailing the population of children that were being served, along with educational outcomes focused on children ages 3–5. Starting in 1970, parents were required to have a part in Head Start policy making and operation of the programs through various means. In 1972, Head Start expanded services to include children with disabilities (Office of Head Start 2019). The original Head Start performance standards were created in 1975 (Office of Head Start, 2019). In the year 1982, summer-only Head Start programs were eliminated, allowing only school year calendar programs. The number of children served by Head Start programs soared to over nine million by 1984. In 1990, the National Head Start Association was created. During the Head Start Reauthorization Act, the mission of Head Start was broadened to include social emotional competency, school readiness standards, and full day, full year services.

Under the direction of President George W. Bush, Head Start success was scrutinized and a national reporting system was enacted. A series of mandates and political red tape began to lower the morale of Head Start staff. The final blow was a reduction in funding and a delay in reauthorization. In 2007, the Improving Head Start for School Readiness Act reauthorized the programs until 2012. Increased enrollment
and the implementation of the Classroom Assessment Scoring System (CLASS®) (Hamre et al., 2009) was widely used in 2009 under the American Recovery and Investment Act.

**Social and Emotional Health**

After 2010, Head Start began to focus more on the social emotional learning of its students and families through the creation of programming and intentional focus. The 2011 Head Start Parent, Family, and Community Engagement Framework focused on the building of relationships between parents, families, and communities. This included five content areas: (a) approach to learning, (b) social and emotional development, (c) language and literacy, (d) cognition, and (e) perceptual, motor, and physical development (ECLKC, n.d.c). This was an important step in validating the importance of social and emotional learning within early childhood environments. In 2016, Head Start performance standards were revised (Office of Head Start, 2019) to include new research and increased guidance for lesson planning.

In January of 2019, Head Start addressed the social and emotional impact of trauma and offered the Creating Trauma-Sensitive Classrooms to Promote Health and Safety as a topic through the Safe Futures, Healthy Futures campaign (ECLKC, 2014). This was a timely step. What was unknown at that time was that there would be a worldwide traumatic event that would change the way that we live, work, play, and interact, shortly after this campaign began.
Head Start and Disaster Relief

The Office of Head Start has a variety of established supports for programs that are dealing with natural disasters such as hurricanes, wildfires, and tornadoes. These types of disasters can cause major disturbances to programs including complete program closure like what was seen during the COVID-19 pandemic. The Generalized Disaster Recovery Flexibility (ACF-HS-IM-19-01) has program support such as guidance on how to run programs at temporary locations, best practices for safe environments, receiving additional children from other affected programs, and ways to accommodate families that have lost their homes such as providing access to laundry services, kitchens, computer labs, and charging stations. This document also provides guidance on how to continue to provide food and nutrition services. The guidance is complete and appropriate for what we have witnessed in the past, but not for a global pandemic that requires a shelter in place order.

The Office of Head Start has a variety of social media posts from Head Start locations throughout the United States, including ways that Head Start programs are providing services to families during the pandemic. Examples of how virtual learning was taking place included stories read by Head Start lead teachers over teleconferencing software, a YouTube video on handwashing for students, and class DoJos that are filled with activity ideas to promote learning. There was also a variety of teachers that described providing homework packets and activities to promote parent engagement, hosting a virtual spirit week, and partnering with other agencies to provide necessary
items like diapers, wipes and hand sanitizer. Some Head Start programs are providing grab and go lunches or meal kits for families to meet their nutritional needs.

**Educator Concerns During the COVID-19 Pandemic**

In a time of great uncertainty, educators are not alone in their concern for what this will mean for their profession and the families that they serve. Educators are worried about how this pandemic will affect all aspects of their lives (I-5). Rebecca Moshman, teacher and author, put the thoughts of many educators into words for an article on www.BoredTeacher.com, stating some of the questions that educators may have: Will students be safe and fed during this shutdown? How will state testing be handled and will we be held responsible for children who academically fall behind? Will the staff be paid, particularly the hourly workers that are colleagues? How do I manage my time as I try to make virtual lessons for my students, check in with each one, manage online staff meetings, and take care of my own children at home (Moshman, 2020)? Ultimately, many of these questions remained unanswered. We have not faced a similar situation in our lifetimes so there is no frame of reference. Programs like Head Start have guides for emergency shutdowns because of hurricanes, fires, and earthquakes, but not for a global pandemic.

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1 There were six interviews conducted with participants in the survey. They are identified in this research as I-1 through I-6 (see Table 2).
Barriers to Providing Head Start Services

Several factors were explored when looking at Head Start and the response to the COVID-19 pandemic. This study was designed to examine three main factors that help to define barriers and facilitators of capacity, resources, and support. The first factor is defined as capacity. This was determined by identifying how much support was available from local administrators, the Michigan Head Start Association, and the National Office of Head Start. For this research, capacity was defined as “the perceived abilities, skills, and expertise of school leaders, teachers, and staff” (Glossary of Education Reform, 2013), to provide educational programming during the Covid-19 pandemic. Support was used within this study as a method to assist lead teachers in facilitating learning and teaching.

The second factor is access and equity. For this study, the issue of technology devices, availability of high-speed internet, and availability of educational materials will be explored for both the teachers and the parents as a part of virtual learning and communication. These issues can be intensified by funding streams, location of programs, community support, the ability to obtain grants, and various other conditions. On a macrosystem level, it can be seen what the commitment level is to young children and their families. For example, the city of Seattle has made technology access and equity a priority through their program “Digital Equity Initiative” (City of Seattle, 2016). These initiatives are critical to expanding virtual learning access.

The third factor is family engagement and support. This can be in the form of direct or indirect engagement. Direct engagement is personalized and unique to the
student or family that the teacher is connecting with. Examples of direct engagement would be a phone call, personalized text, Facetime, or video chat. Examples of indirect engagement would be contact with families/students through a webpage, newsletter, Facebook group, or packets/notes sent through the mail. Support includes the educational tools needed to provide instruction including home office supplies, staff and supervisors who provide their skills and knowledge, financial support through continued compensation, emotional support, and connection to colleagues during program closure. Support will be defined as the materials, resources, and collaboration necessary to effectively provide virtual instruction and family engagement. Resources were described as the tools that are required for instruction which can include items such as books, computers, art supplies, and WIFI access.

**Capacity**

In 2018, federal funding for Head Start in the state of Michigan was over $322 million, serving 30,232 children. Not included in those figures is the amount of funding provided to Head Start for American Indian and Alaskan Native children which provides another $7.2 million to serve nearly 600 children (ECL KC, 2018c). It is estimated that nearly 96% of those children participate in center-based instruction (ECLKC, n.d.b). The average Head Start classroom can “consist of as many as 18 to 20 children (with a teacher, an aide and a parent volunteer)” (Head Start Bureau, 2005, p. 16). In Michigan, center-based instruction can occur 4 or 5 days per week and can be offered as part or full
days. It has been found that “adverse impacts of genetic, parental, and environmental resources can be overturned through investments in quality early childhood education” (Heckman, 2011, p. 5). This includes looking at the “whole child.” Nutrition services and basic health care (in the form of vision and hearing screenings, dental visits from area partners, and other services) are provided to the children enrolled (ECLKC, n.d.a).

The infrastructure of Head Start is complex. This federally funded program has an established hierarchy of roles that provide comprehensive support to teaching staff. From day to day operations such as being a program director, to more senior level positions focusing on curriculum and coaching, teachers are given the opportunity to work with experts in their field (LeBetti & Mead, 2019). The design of the leadership structure allows for multiple perspectives on challenging situations but can also make decision making more complex when there are time sensitive decisions that need to be made. I-1 described in the interview that conflicting information was frequently given. This led to frustration among teachers.

Access and Equity

There is concern over the accessibility of remote services due to the family risk factors associated with Head Start enrollment such as poverty, homelessness, and unemployment. In March 2020, families in Michigan were ordered to “Stay Home. Stay Safe.” if they were not considered “essential workers” (Executive Order 2020-21). Many businesses laid off their employees leading to an April unemployment rate of 22%
(Roberts, 2020). In early May, Michigan reported over 1.1 million people had filed for unemployment in the previous two months (Gardner, 2020). Resources were scarce and many programs and agencies that provide assistance to families are running at their maximum capacity. A Kent County food distribution event gave away 50 pounds of food per family to 1,000 families but was not able to meet the demand (Hicks, 2020). Although Head Start was encouraged to continue to provide food to families by using the Child and Adult Care Food Program funds, transportation may be a barrier to them receiving the food (ECLKC, 2020c). Public transportation was affected by the mandatory “Stay Home. Stay Safe.” order, resulting in consolidated routes or limited times.

Technology

“Education technology companies have stepped forward to help educators reach students in virtual ways” (Schaffhauser, 2020); however, basic internet connection is needed to utilize these services. Libraries, where many families access free high-speed internet, were closed. High speed home internet services were not a possibility for many families, including those in very rural areas or economically disadvantaged areas (Levin, 2020). Those who could access the internet often had slow connections that made downloading and streaming services difficult (ECKLC, 2018d). “Xfinity WiFi hotspots located in businesses and outdoor locations across the country will be available to anyone who needs them for free” (Comcast, 2020); however, with the stay at home ban in place, that still posed a challenge for families.
Head Start offered basic information on how to use social media to connect teachers to the families that they serve. It was shown that “technology tools can help educators make and strengthen home-school connections” (NAEYC, 2012, p. 7), but in this case, technology was the only option and not available to everyone. The Head Start technology guide had topics that included understanding how families use social media, important considerations, and a planning tool for parent engagement (DHHS, 2018b); however, these tools were not specifically designed to meet the pandemic program closure needs. There was no recognition of using technology as a platform for direct facilitation of student learning.

New York City Public Schools designed a website specifically for parents and teachers to understand more about learning from home and the availability to use an iPad during school closures (New York City Department of Education, n.d.). Although this website is a step in the right direction for New York City families, the teacher resource section does not offer any resources for under the age of Kindergarten. The other concern is that if a parent does not have access to the internet, how would they find out about what is available?

When technology is widely available, there can be issues that come up regarding the amount of time children are exposed to technology. In a study by Lampard et al. (2013) that looked at low income parents and their influence on media use in young children, it was found that “restricting screen time may be a low priority for low-income parents dealing with chronic stressors, including financial hardship, poor mental health,
or food insecurity” (Lampard et al., 2013, p. 529). During a pandemic, when resources are low and stress is high, technology can be used inappropriately. Head Start lead teachers can address the issue of technology to families in a sensitive way so that it is understood how technology is best used to educate, not just occupy, their child. In an interview, I-3 discussed the use of devices, stating that families may allow the child to use devices unsupervised which could have negative outcomes.

A 2018 study by Chen and Tu showed the direct impact of parental perception of technology on “its usefulness and effectiveness for enhancing learning performance and pedagogical practices in preschools” (p. 491). In the study, a questionnaire was given to 600 parents to provide insight into parental perspectives on the usefulness of technology, work value (finding job opportunities or learning new skills), preschool expectations (of technology use in teaching), teacher competence (designing and implementing technology into teaching), and learning performance (improvements in peer and teacher relationships as well as increase in learning). The study found that parents believed that technology improves children’s academic performance and the ability to express themselves socially, and that technology can be successfully integrated into teaching young children (Chen & Tu, 2018).

In 2014, a study of 1,234 early childhood educators (Blackwell et al., 2014) looked at barriers to technology use in early childhood instruction. Using a 48-point electronic survey, questions were asked that focused on access to, comfort of, and support in using various types of technology to teach young children. The survey also addressed
respondents’ personal attitudes about technology use in early childhood classrooms. The researchers found that attitudes, support, and confidence were the highest determinants to whether technology was used in instruction. Increases in teacher experience was positively correlated with an increase in utilizing technology (Blackwell et al., 2014). This was not the assumption of the researchers based on previous studies. There is a belief that “young adults are best positioned to incorporate technology because they are ‘digital natives’ and have the intuitive skills to use technology” (Hernandez et al., 2015, p. 8). However, in the study by Blackwell et al. (2014), they were able to hypothesize that “teachers with less teaching experience have more personal technology use experience, but they do not necessarily know how to effectively integrate it into the classroom” (p. 88).

**Head Start Supports**

Figure 1 displays the various levels of supports that are available for Head Start programs. This will be used in conjunction with Figure 2 (Ecological Systems Theory During the 2020 COVID-19 Pandemic; later in this chapter) to provide a framework for the interview and surveys. Figure 1 is broken down into three main categories: (a) capacity, (b) access and equity, and (c) family engagement. These categories directly relate to the research questions.
Figure 1: Head Start supports.

Resources

Head Start classrooms are equipped with a multitude of materials and use the Head Start Design Guide to assist programs in providing an ideal space for learning (Head Start Bureau, 2005). These spaces are designed with young learners in mind, including areas for quiet solitary play, music, messy play, indoor and outdoor gross motor experiences, science stations, and math manipulatives, just to name a few. Although home environments can be effective in teaching basic learning concepts, often the homes that Head Start children are in may not be as safe, healthy, or as well supplied
as classrooms. These homes may not offer the same level of daily socialization with other children, particularly during the shelter in place order. Some teachers, including I-4, found it difficult to prepare a lesson that every family from their class was able to complete using materials within their homes.

In 2015, the Office of Planning, Research and Evaluation (OPRE) released an executive study looking at how technology could support Head Start services. Technology was broken down into three categories: (a) curricula and instructional tools, (b) assessments, and (c) integrated curricula and assessments (Hernandez et al., 2015). What they found was the most common barrier to technology use was staff knowledge of technology. “Lack of knowledge and experience leads to feelings of discomfort and unease and hinders adoption and use of new technologies” (Hernandez et al., 2015, p. 7). The need for professional development, more support services, and adopting an agency wide view of technology as a teaching tool, was noted in the recommendations for Head Start. The hybrid learning approach was also discussed, pointing out that videos and online platforms could be utilized at more convenient times for parents and may add to classroom instruction (Hernandez et al., 2015).

The Office of Head Start began a new Twitter campaign called #HeadStartHeals in March of 2020. This campaign targets trauma and trauma-informed approaches among Head Start programs. Social media users can search for posts related to the hashtag and posts will show up in lists with the same hashtag (ECKLC, 2018d). This was a timely campaign; although not originally planned to address the COVID-19
concerns, these issues became critically important within days of the blog video given by Dr. Bergeron (2020). The goal of the Head Start Heals campaign used guidance from SAMSA and the “three E’s” (the event, experience, and the effect of trauma) to support families (Bergeron, 2020). The COVID-19 pandemic was a shared traumatic event among families and teachers. The experiences may have differed, but everyone was impacted. It is yet to be seen how and if this campaign directly addresses COVID-19 trauma.

On May 6, ECLKC provided Early Head Start and Head Start staff with 15 easy to duplicate positive messages to post specifically for Instagram or Facebook (ECLKC, 2020d). These short reminders addressed current issues related to the COVID-19 pandemic. They were designed to offer Head Start staff an easy way to connect with families using social media. The files were downloadable and modifiable for the unique needs of Head Start lead teachers.

Support

Lead teachers require many levels of support to be effective in their roles, including encouragement and materials from administrators, licensing guidelines, technology devices, and pay for their work. In the year 2020, there were 9,637 Head Start and Early Head Start employees in the state of Michigan (National Head Start Association, 2020). The Head Start State Collaboration Office (HSSCO) works with the Office of Head Start to provide leadership and guidance to Head Start staff. Part of the role of this office is to “support the development of multi-agency and public and private
partnerships at the state and national levels” (Michigan Head Start Association, n.d.b, para. 3). This agency is only one of many that are designed to offer support to Head Start programs and assure collaboration with other early childhood agencies for the benefit of at-risk children. The Office of Head Start provides federal policy direction and technical assistance, just as the Michigan Head Start Association provides state level oversight.

Local programs are mandated to provide appropriate supervision of services through (1302.101) of the Head Start Program Performance Standards. This requires that a program provide “regular and ongoing supervision to support individual staff professional development and continuous program quality improvement” as well as “budget and staffing patterns that promote continuity of care” and “appropriate training and professional development” (ECLKC, n.d.b, para. 3). Leadership is divided into specific roles based on a discipline such as mental health specialists, directors, site supervisors, family advocates, coaches, family engagement specialists, and a variety of other roles that may provide some level of leadership in their area of expertise (LeBetti & Mead, 2019).

**Facilitators of Providing Head Start Services**

**Family Engagement**

The Office of Head Start defines family engagement as “doing with or doing for families” and encourages working “together toward the goals that families choose for
themselves and their children” (ECLKC, 2018b, p. 2). An integral part of the Head Start program is helping families to set goals for themselves and their children to promote positive outcomes. This looks very different in a pandemic than it did previously. Teachers must have the ability to reach out to families and help them to adjust their goals and objectives to meet the current state of the world. This requires the technology and equipment to do so, for both the teacher and the family. “Twelve percent of teachers say that the majority of their students (over 60%) lack home access to the internet” (Fazlullah & Ong, 2019, p. 6).

Recent studies have shown a disparity between the access of high-speed internet and technology in the home between socioeconomic levels and rural versus urban areas (Connected Nation: Michigan, 2018). According to Connected Nation: Michigan, the percentage of availability to non-mobile broadband internet services of at least 25 Mbps download/3 Mbps upload speeds, varies significantly based on location in the state. The lower peninsula ranges from a low of 2.34% in Lake County to a high of 99.5% in Wayne County and the upper peninsula shows a low of 0.17% in Luce County to a high of 89.52% in Dickenson County (Connected Nation: Michigan, 2018). In general, lower income families have less accessibility to technology than families with a higher socioeconomic status. This is particularly impactful for Head Start families that are considered at risk due to the poverty level status. A recent study by Common Sense Media revealed that one third of low-income households with school aged children did not have high speed internet, compared with 6% of households with an annual income of $75,000 or
more (Fazlullah & Ong, 2019). Another study by Common Sense Media reflected on teachers’ perceptions of how classroom learning might be impacted by limited access to the internet and computing devices. They found that 30% of teachers said that it would have some impact while 29% of teachers said that there would be “quite a bit” or a “great deal” of impact on classroom learning (Fazlullah & Ong, 2019).

Facebook and YouTube are the most frequently used social media sites by adults 18 and older and are often used as a way to seek parenting advice (ECLKC, 2018a). Utilizing these platforms for connection with parents during program closure appears to be a viable and familiar option. Snapchat and Instagram are most popular with youth aged 18–24 (ECLKC, 2018a). A newer option for Instagram includes IGTV, a way to post videos, which may be the most effective way to connect with a younger generation of parents. It is important that programs assess which social media platform is the best fit for the population that they serve. Even in rural communities with slower internet speeds, 60% of adults report using YouTube (Pew Research Center, 2018).

**Potential Increases in Family Engagement**

Families may benefit from having increased time with their children and can use it to become more keenly aware of their children’s academic and social needs. An important component of Head Start standards is goal setting for the Head Start student using parent input (ECLKC, 2018b). With added time together as a family, there may be added awareness of their child’s skills and deficits, making goal setting more productive.
Families may also be more receptive to feedback from Head Start lead teachers as they try to navigate through the process of teaching their children at home. Although in the past family participation in schools may have looked more like volunteering in the classroom, providing a resource for the class, or attending a field trip, now families are doing the brunt of the teaching. “Participation in school activities provides parents with information about children’s learning and development plus insight into their child’s abilities that leads to improvements in how parents promote the development of their child’s school-related abilities” (Powell et al., 2010, p. 270). This can, in turn, offer teachers insight into goal setting with parents.

During the pandemic, goals will need to be reevaluated. Parent involvement may be looked at as “an increase in ‘Comments’ and shared photos or videos from parents showing how they are extending their children’s classroom learning activities at home” (ECLKC, 2018a) versus the traditional view of engagement. Evaluating success of posts may include things like the number of “retweets,” “likes,” “shares,” and comments that a post receives. The handbook “Using Social Media to Engage Families” (ECLKC, 2018d) offers Head Start programs a chart that can be used to determine which social media platform might be the most effective based on the purpose, goals, and objectives of the program.
Relationships Between Teachers and Families

The responsiveness of the teacher to the family can build a more positive relationship (Powell et al., 2010). This can be done by setting and honoring regularly scheduled meetings with the families by phone or video. These personal touches allow parents to experience a stronger connection with the teacher than they have perhaps had in the past with limited interactions. The Head Start PFCE Framework provides seven family outcomes that have been shown to create positive child outcomes (ECLKC, 2018b). Using these outcomes or this framework as a model, teachers may be able to adapt the student goals to a more generalized family goal during the shelter in place orders. Parents are a child’s first teacher, and in collaboration with educators, can “help children acquire the cognitive, social, and language skills needed for school” (Zigler, 1995, p. 8).

Another source of support for Head Start staff are the Relationship Based Competencies (RBC) that can assist a staff member in evaluating how effective their relationships are with the families that they serve. RBC is defined as a “set of knowledge, skills, individual practices, and other characteristics, including attributes, behaviors, and actions, that are necessary to be effective in one’s family engagement work” (ECLKC, 2018a, slide 11). The RBC provides knowledge, skills, and practices that can be followed when working directly with families. These skills allow for Head Start lead teachers to strengthen relationships while assisting families in reaching their goals related to the child and the family. RBC can also assist teachers in setting their own goals, identifying
their strong and weaker areas in developing relationships, and even creating their own professional development plans.

**Professional Development**

The Michigan Department of Education (MDE) has a website (MDE, 2020) addressing the COVID-19 pandemic that has a multitude of resources for educators and parents. This website offers activities and websites specifically designed for Early Childhood, as well as a variety of other resources for parents, K–12 students, subject based information, and English Language Learner information. This site is web based and does require internet capabilities to access the content and video streaming for some resources.

Technology, when used correctly, can provide a new way to learn. The National Association for the Education of Young Children (2012) states that “with guidance, these various technology tools can be harnessed for learning and development” (p. 2). NAEYC does not recommend regular use of passive, non-interactive technology such as television viewing, since it can cause issues like disrupted sleep patterns, behavioral issues, focus and attention problems, and decreased academic performance (NAEYC, 2012). NAEYC does state that there is a place for technology in the lives of young children if parents “limit their children’s ‘total entertainment screen time’ to less than one to two hours per day” (McCarthy, 2013).
The literature is clear. Head Start offers a variety of useful tools and procedures to assist lead teachers. This, along with supportive administrators, can assist lead teachers in being very effective in their role. The COVID-19 pandemic was unprecedented and thus materials and protocols were not already in place. The study that was conducted will provide needed data to assist Head Start leaders and educators in preparing for virtual instruction if it is needed in the future.

**Research Questions**

The COVID-19 global pandemic changed the lives of individuals throughout the world. In December of 2019, the WuHan Municipal Health Commission disclosed a cluster of individuals originally reported to have a unique case of pneumonia that was later identified as a novel coronavirus, now identified as COVID-19 (WHO, 2020). The first case of COVID-19 was discovered in the United State of America on January 21, 2020. By January 30, the World Health Organization had declared a global health emergency (Schumaker, 2020). On March 11, 2020, the World Health Organization made the announcement that the COVID-19 outbreak could now be classified as a pandemic (WHO, 2020).

In the United States, the number of individuals with the Coronavirus increased from 88 cases on March 1 (Gamio et al., 2020) to 184,770 cases on April 1 with 3,746 deaths due to COVID-19 (Lutton, 2020a). This number continued to climb at an alarming rate. Just one week later, the number of U.S. cases more than doubled to 392,594, with the
number of deaths increasing well over 8,500 to a staggering total of 12,621 (Lutton, 2020b). As of June 15, the last day of this study, the numbers in Michigan stood at over 60,000 cases and 5,700 deaths (Ahmad, 2020), while the United States had recorded 2.1 million cases and over 109,900 deaths due to COVID-19 (Johns Hopkins University, 2020).

The impact of this virus was widespread with no area of commerce or society going untouched. The education system was unequivocally impacted as Michigan’s governor, Gretchen Whitmer, made the difficult decision to order all schools closed for three weeks beginning Monday, March 16, 2020 (Exec. Order 2020-5). This order was promptly extended to April 13, 2020 (Exec. Order 2020-21) by the shelter in place order. This forced closure meant that Head Start lead teachers and students would not be interacting and learning together in the classroom for a period of at least 4 weeks. Head Start programs were urged to continue to pay their staff through April 30 (ECLKC, 2020a), unless otherwise directed by the Office of Head Start. The Head Start lead teachers were directed to “continue to engage families and to deliver services to the extent possible, remotely” (Early Childhood Learning and Knowledge Center, 2020a). Eventually, the school closures were extended again to last throughout the 2019–2020 school year (Exec. Order 2020-35).

For many Head Start lead teachers, delivering services remotely was not something that they had been adequately trained for and some did not have the needed equipment to teach virtually (Dixon, 2020). The protocol for remote services had not been established. As one interviewee (I-4) stated, “I just can’t wrap my head around
this and I never expected to see something like this in my lifetime.” Home-based services are an option for Head Start families (ECLKC, n.d.a); however, this includes home visitation services which were not allowed during the “Stay Home. Stay Safe.” order (Executive Order, 2020-21). The resources available for Head Start programs during natural disasters did not automatically translate to the unique aspects of a pandemic.

The Executive Order 2020-35, delivered on April 2nd, announced that schools would not reopen during the 2019-20 school year, and more permanent plans were needed. The Michigan Head Start Association offered resources to its staff and families on the COVID-19 Information & Resources page (MHSA, n.d.a). This document had a variety of resources on federal and state mandates, payroll information, self-care, and educational resources, as well as on cleaning the center to prevent the spread of COVID-19, and how to effectively work from home. This was a positive step towards equipping teachers, but was it enough to promote the quality of education and engagement that was needed for Head Start children and families? Many of the sources designed for teachers heavily relied on technology as the primary method to connect with students and families. The issue of accessibility for teachers and families was a primary concern.

The literature provides a framework to build the research around access and equity, capacity, and resources. For this study, three questions were developed. Each question focused on a different aspect of how Head Start lead teachers were providing
services and continuing family engagement during the COVID-19 pandemic. This research will address the following:

1. What are the equity and accessibility issues related to Head Start staff and families during the COVID-19 building closures?
2. What are the capacity issues related to delivering Head Start teaching services during this time?
3. What resources and supports are Head Start lead teachers utilizing during the program closures to maintain relationships with their students and families? Do the teachers think that the resources and supports offered are effective?

**Study Objectives**

The Novel Coronavirus (COVID-19) outbreak had reached the pandemic level by March of 2020 (WHO, 2020), changing the way people lived, worked, and connected with others. Educators and agencies were forced to look at nontraditional methods of instruction to assure the education of children. The National Head Start Association offered basic information on how to use social media to connect teachers to the families that they served (ECLKC, 2020c); however, these tools were not specifically designed to meet the current needs of 100% virtual instruction (ECLKC, 2018d). There was concern over the accessibility of remote services due to the family risk factors associated with Head Start enrollment such as poverty, homelessness, and unemployment (Dixon, 2020). Families were being ordered to “Stay Home. Stay Safe.” if they were not considered
“essential workers” (Executive Order 2020-21). Many businesses laid off their employees. Libraries—where many families access free high-speed internet—were closed. High-speed home internet services were not a possibility for many families, including those in very rural or economically disadvantaged areas (Levin, 2020). Those that were able to access the internet often had slow connections that made downloading and streaming services difficult (ECLKC, 2018d).

The purpose of this study was to evaluate how Head Start lead teachers continued to provide educational services to children and their families during a program shutdown as a result of the COVID-19 pandemic. The capacity, resources, access, equity, and level of family engagement were examined. Head Start services were provided in a variety of settings including center based (96.4%), home based (1.6%), family childcare (0.2%), and other models (1%) (ECLKC, 2018c) prior to the COVID-19 pandemic. This research reflected on how lead teachers for center-based Head Start programs adapted services to continue engagement with families during program closures.

**Theoretical Framework**

A theoretical framework is designed to be a “visual display of interaction and interplay” (Miles et al., 2014, p. 24). For this study, the work of Urie Bronfenbrenner and his ecological systems theory will be examined. Bronfenbrenner, in his seminal work (1977), described an approach to looking at individuals and their environments, “but also the larger social contexts, both formal and informal, in which these settings
are embedded” (Bronfenbrenner, 1977, p. 513). To discover how education systems are being maintained during the COVID-19 pandemic, a closer look at the multiple layers of support needed to provide quality Head Start services was examined. Each layer will be discussed briefly in this chapter, and then once again in Chapter IV, as it relates to the results of the study.

As shown in Figure 2, the four layers of ecological systems theory are the microsystem, mesosystem, exosystem, and macrosystem. The chronosystem can also be described as the interplay of layers over time. A microsystem is described as the “complex of relations between the developing person and the environment in an immediate setting containing the person” (Bronfenbrenner, 1977, p. 514), or, in this case, individuals that are a part of the home or school. The microsystem of Head Start services during the pandemic includes individuals delivering the services to the child, which includes parents, teachers, and caregivers.

The mesosystem and exosystem address how educational agencies are maintaining the policy, equipment, and accessibility to facilitate learning, as well as the important factors of influence such as the mass media and executive orders. The mesosystems contain the interactions between the major settings such as the way that a local Head Start program connects with the parents to promote learning. The exosystem is just an “extension of the mesosystem embracing other specific social structures, both formal and informal” (Bronfenbrenner, 1977, p. 515).
The macrosystem is made up of the culture and norms of a society, in this case, how we value education, access, and equity as a society. This is reflected by how America views its early childhood systems and educating those who are most at risk through the policy and funding that we have in place. The larger issue of how the pandemic affects societal values, families, education, and equality/accessibility can be seen in the results of the study and literature review.

The chronosystem will look at all the systems and how they interact over time. This is an important piece of the study because the pandemic—although a small amount of time when looking at the overall picture—has been impacted by decisions before and after the COVID-pandemic. An example would be how to be prepared for closures and
virtual learning in the future. This study will provide information that should have an impact on the future of Head Start services by providing research and suggestions on change.
CHAPTER 2

METHOD

Over a period of four months in 2020 (March through June 15, 2020), a study was conducted to understand how Head Start lead teachers continued to provide services to families during the COVID-19 pandemic and the subsequent building closures. This event was as novel as the COVID-19 virus was, and many felt unprepared to provide remote instruction. Data for this study was collected in two phases using a mixed methods explanatory sequential design. The quantitative research was used to collect and analyze information that was used to inform the qualitative data using two parts within one study (Ivankova et al., 2006; Plano et al., 2016).

Researchers who chose to conduct a mixed methods sequential explanatory study have to consider certain methodological issues. Such issues include the priority or weight given to the quantitative and qualitative data collection analysis, and the stage/stages, in the research process at which the quantitative and qualitative phases are connected and the results integrated (Creswell & Poth, 2018, p. 5).

Research Design Overview

A mixed methods sequential explanatory designed allowed broadly distributed survey data to be analyzed in the first phase and be used to complement in-depth participant interviews in the second phase to make the research more robust (Ivankova et al., 2006; Tashakkori & Teddlie, 2003). This explanatory mixed methods study followed a QUAN → qual design with the weighting on the quantitative survey (Creswell et al.,
SPSS software was used in the quantitative section of the study to analyze the data and look for significant relationships between data. For the open-ended questions in the quantitative section, In Vivo coding was used as a first round. In Vivo coding uses “the exact words used by participants” (Creswell & Poth, 2018, p. 193) and is used with the goal of developing a “sense of categorical, thematic, conceptual, and/or theoretical organization” (Saldaña, 2013, p. 234). In Vivo coding “places emphasis on the actual spoken words of participants” (Manning, 2017) and is used to “develop a sense of categorical, thematic, conceptual, and/or theoretical organization” (Saldaña, 2013, p. 234). Figure 3 displays how the data was organized and analyzed.

<table>
<thead>
<tr>
<th>QUANTITATIVE data collection</th>
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<tbody>
<tr>
<td>Interpretation</td>
<td>Implications</td>
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Figure 3: Visual representation of mixed methods explanatory sequential design (Ivankova et al., 2006).
**Survey Design**

The sequential explanatory mixed methods design for this study included a basic survey with nominal and ordinal data, limited demographic information, and open-ended responses (see Appendix A). The instrument used collected scale-based information as well as participant written responses for analysis. At the conclusion of the survey, participants were asked if they were willing to participate in a potential interview to better understand their experiences. The intention of a post survey interview was to understand the teacher’s “situation via their own accounts of their perceptions” (Richards, 2015, p. 27) of teaching during the pandemic. Due to each teacher being its own case, the differences in stories and reflections, along with providing a more personal side of the data collected, offered a more in-depth study.

**Survey Rationale**

This design was selected for this study in an effort to understand this unique situation, gain knowledge, and learn best practices for teaching during a pandemic or other sudden program closure (Guest et al., 2013). Each person experiences a social phenomenon differently due to past experiences (Bronfenbrenner, 1977; Collingridge & Gantt, 2008). This being held true, a pragmatic approach to inquiry where it is understood that reality is subjective was applied (Creswell, 2014). A survey design, along with wide distribution through email, permitted participation from a variety of counties in Michigan without physically going to each location. This provided a large amount of
data and timely responses in spite of the pandemic. A survey was distributed to Head Start lead teachers still working at least 1 hour per week during the pandemic. The survey was evaluated utilizing quantitative methods of deduction for ranking and scoring questions, as well as the qualitative method of coding for all open-ended responses. Qualitative methods were also used through the process of interviewing six Head Start lead teachers. Interviews were chosen as a method of qualitative study to answer “the how and why questions for an unfolding event that will not be altered by the researcher” (Yin, 2014, p. 9). The process of methodological integrity was adhered to throughout the study from the interview process, coding, analysis, and discussion of findings. For the purpose of this study, methodological integrity was defined as “Integrity is established when research designed and procedures support the research goals, respect the researchers approach to inquiry, and are tailored for fundamental characteristics of the subject matter and investigators” (Levitt et al., 2017, p. 9).

It is important to be prepared for situations that affect the lives of children as well as families and teachers. In March of 2020, Head Start did not have any formal guidance for program closures and virtual instruction as a result of a pandemic. The materials available early in the pandemic addressed other natural disasters such as hurricane, flood, and earthquake, or influenza pandemic (AAP, 2020), but none of that information offered guidance for “shelter in place” events (ECLKC, 2020d).

Greenhow et al. (2016) offer support for using technology, particularly social media, to allow for opportunities to collaborate and share on a platform that can easily be
updated as needed. Virtual classrooms and social media were a way to keep connected to families when physical presence was not a possibility. It is recommended to “have time to experience and experiment with social media and reflect on how they can be used for teaching and learning” when this can be done at a slower pace (Greenhow et al., 2016); however, preparation time was not given during the pandemic.

Head Start is a comprehensive early childhood program that requires strong parental influence. This federally funded yet locally maintained program provides “medical and dental services, healthy meals and snacks, along with an educational program designed to further school readiness, including literacy, language, science, mathematics, and social-emotional development” for at-risk children (Bullough et al., 2014, p. 56). This structure allows for teachers and parents to work collaboratively for the benefit of the young child. During the COVID-19 pandemic, this was challenged by the necessity of virtual education. The literature review and theoretical framework provide the structure to discuss changes that are necessary to enhance Head Start services.

**Participant Recruitment**

In an effort to collect data that was reflective of the emergent state of the COVID-19 pandemic, an application and supplemental information was immediately drafted and sent to the Institutional Review Board for approval. A brief survey that included questions (both nominal and ordinal) and essay questions was drafted to determine the
levels of capacity, access and equity, as well as the levels of and methods for parent engagement during the closure resulting from the COVID-19 pandemic.

A mixed methods sequential explanatory design was used in this study. The quantitative survey was sent out to evaluate the current strengths and weaknesses of the current situation. Secondary, qualitative interviews were set up with willing lead teachers to help “understand their situations and account for their behavior” (Richards, 2015, p. 1). The researcher used a pragmatic model of study, understanding that there is no objective reality and that each individual has ideas and opinions that are socially constructed (Guest et al., 2013). The interview data was first put through a cycle of In Vivo coding. Mixed methods research is shaped by the “philosophical assumptions, theoretical models, and background knowledge” (Plano Clark & Ivankova, 2016, p. 210) of the researcher. These issues will be addressed in the section labeled “potential researcher bias.” Cases are defined as lead teachers that work for Head Start at least 1 hour or more per week.

The quantitative section of the study will be referred to as the survey. The 19-question online survey was opened for data collection on April 3, 2020 and closed on June 15, 2020. There were 241 Head Start lead teachers who accessed the questions for the survey. Of that 241, there were 186 lead teachers who fully completed surveys which were used as data for this study ($N = 186$).

In Figure 4, the represented counties are coded. Upper peninsula rural (light gray) had 14 responses, lower peninsula rural (light gray) had 92 responses and the lower
Figure 4: Survey responses by county.
peninsula urban (dark gray) had 80 responses. Upper rural includes all shaded counties in the upper peninsula: Houghton, Baraga, Marquette, and Delta. This represents 36% of upper peninsula counties. Urban counties with teachers that participated were Muskegon, Ottawa, Berrien, Kalamazoo, Eaton, Ingham, Jackson, Monroe, Wayne, Macomb, St. Clair, and Lapeer. This was 46% of all urban counties in Michigan. The remaining counties that are shaded are defined as lower rural and include: Cass, Ingham, Van Buren, Branch, Hillsdale, Osceola, Clare, Gladwin, Arenac, Oceana, Mecosta, Midland, Bay, Tuscola, Sanilac, Shiawassee, Cheboygan, Presque Isle, Otsego, Leelanau, Crawford, Oscoda, Martin, Alpena, Ogemaw, and Iosco. This represents 62% of all lower peninsula rural counties. See Table 2 for a summary of counties represented.

Table 2

Table 2

Number/Percentage of Counties Represented by Head Start Lead Teacher Participation

<table>
<thead>
<tr>
<th>County Designation</th>
<th>Total</th>
<th>Participation</th>
<th>Percentage of Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Rural</td>
<td>11</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>Lower Rural</td>
<td>42</td>
<td>26</td>
<td>62%</td>
</tr>
<tr>
<td>Lower Urban</td>
<td>26</td>
<td>12</td>
<td>46%</td>
</tr>
<tr>
<td>Total participation</td>
<td>79</td>
<td>42</td>
<td>53%</td>
</tr>
</tbody>
</table>

Note: A total of 53% of the counties in Michigan were represented by the research.

The last question of the online survey asked for interest in participating in the interview process. Of those who responded, eight lead teachers scheduled interviews. Of the eight interviews scheduled, only six were conducted. The remaining two decided after scheduling an interview not to participate. One lead teacher cited being over-
whelmed with her current duties and the other stated that they had changed their mind about wanting to be interviewed after receiving the consent form. The six individuals who participated in the qualitative interviews are identified by the number corresponding to the order in which they were interviewed (1–6). Table 3 summarizes the number of interviewees, the identifier for the purpose of the research, the date that the interview was conducted, and the classification of location. The interviews included representatives from each of the three categories including two from the upper peninsula rural, one from the lower peninsula rural, and three from lower peninsula urban settings. The breakdown of interview participant location was helpful to solidify the comments and ideas from the survey portion of the data. In most cases, the interviews confirmed the data and experiences shared through the survey.

Table 3

List of Interview Participants

<table>
<thead>
<tr>
<th>Number of Interview</th>
<th>Identifier</th>
<th>Date of Interview</th>
<th>Classification of Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1</td>
<td>I-1</td>
<td>5/18/20</td>
<td>Upper Penn. Rural (UPR)</td>
</tr>
<tr>
<td>Interview 2</td>
<td>I-2</td>
<td>5/20/20</td>
<td>Lower Penn. Urban (U)</td>
</tr>
<tr>
<td>Interview 3</td>
<td>I-3</td>
<td>5/28/20</td>
<td>Lower Penn. Urban (U)</td>
</tr>
<tr>
<td>Interview 4</td>
<td>I-4</td>
<td>6/1/20</td>
<td>Upper Penn. Rural (UPR)</td>
</tr>
<tr>
<td>Interview 5</td>
<td>I-5</td>
<td>6/2/20</td>
<td>Lower Penn. Rural (LPR)</td>
</tr>
<tr>
<td>Interview 6</td>
<td>I-6</td>
<td>6/3/20</td>
<td>Lower Penn. Urban (U)</td>
</tr>
</tbody>
</table>

To facilitate data collection, a survey was developed with questions relating to the facilitators and barriers of family engagement, capacity, and support. This survey was sent to the Institutional Review Board at Western Michigan University for approval
before distribution (see Appendices B and C). A list of directors from the Michigan Head Start Association was collected and used as a method to assure state-wide coverage in disbursement. An email (Appendix D) was sent to those directors that gave contact information, a brief summary of the study, and a request for each director to send the email and link to each Head Start teacher that they supervise. A short description of the study and the survey link for the Head Start lead teachers was included. The survey went live on Thursday, April 2nd. Within 24 hours the survey was completed by over fifty participants in twelve different counties. A second email went out to the same administrators on Tuesday, April 7th. The response from the administrators was overwhelmingly positive. Several administrators asked for survey results once the study was complete.

**Participant Sampling**

For this study, criterion sampling will be used to select “participants who have experienced the phenomenon of interest” (Collingridge & Gantt, 2008, p. 391). Recruitment involved using a Michigan Head Start Association (MHSA) director email list. Directors were encouraged to send the description and survey link with consent, to all Head Start lead teachers under their supervision. The inclusionary criterion was Michigan Head Start lead teachers currently employed at a center at last one hour per week or more. This was decided based on the Executive Order stating that all public schools must close from March 16 until April 6, 2020, subsequently another order that extended
that until April 13, 2020, and finally closed programs for the remainder of the 2019–2020 school year (Governor Whitmer’s Executive Orders 2020-5, 2020-21, 2020-35). A memorandum sent on March 17, 2020 by Dr. Scott M. Koenigsknecht, Deputy Superintendent P-20 System and Student Transitions, provided increased clarity as it pertained to Head Start programs in the state.

The exclusionary criterion for subjects will include not currently being employed in the role of a lead teacher for a Michigan Head Start program. If an individual began the survey but answered that they were not working at least one hour per week, they were immediately sent to a screen thanking them for their participation. The survey was then concluded. They were required to read and confirm consent before being allowed to continue to the survey. The only other exclusionary criterion was if they refused consent.

**Participant Recruitment Method**

Recruitment was done by sending an email to each director of the county Head Start organization as noted by the Michigan Head Start Association. The email contained a link to the survey with contact information of the student investigator (email) as well as the primary investigator’s information. Should initial recruitment efforts fail to recruit at least 50 participants, the investigators would send a second email and post a recruitment flyer on the MHSA Facebook page.
Informed Consent Process

Informed consent for the study included the following statement: “This study may be disseminated as a report to the Michigan Head Start Association, the Michigan Department of Education, and other interested stakeholders. It may also be disseminated in presentations and potentially journal articles.” The only risks associated with this study were that the participants may experience discomfort answering questions about an ongoing pandemic and the time that it takes to complete the survey. There were no predictable adverse events or unexpected problems that were forecasted. The potential benefits to participating in this study included the potential to impact public policy as it relates to teaching during a pandemic. The open-ended response questions allowed the participants an opportunity to process through and express their experiences about this unpredicted series of events in a constructive way. In addition, the needs described by teachers regarding resources and support to Michigan leaders are shared in this study.

Data Analysis

Analysis of the data was twofold. Questions that are scale based will be compiled using SPSS software. Each open-ended response question will be first coded using NVivo software, then compiled and holistically coded “to grasp basic themes or issues” (Saldaña, 2013, p. 166). Questions on the survey were derived from a theoretical framework describing three main areas of concentration or this study: (a) capacity, (b) access and equity, and (c) family engagement. These questions were modeled from gaps in the
literature of how these issues would translate to the current issue of a pandemic and program closure. Teachers were asked to share the experiences of their current setting and role. The nominal and ordinal questions were required for all participants and helped to address general themes. The long answer questions were designed to understand specifically the level of support lead teachers received locally and from the national organization. There were also questions that required reflection on what had gone well, what could be improved, what their needs were that had not been addressed, and any concluding thoughts.

Confidentiality of Data

There was no identifiable data taken during the survey for this study. All data is protected on a password protected database (Qualtrics) using a WMU network on a password-protected laptop. Each participant was automatically assigned a number based in Qualtrics. This was used as the original identifier. The interviews were recorded in a password-protected WebEx room. This information was transcribed by WebEx. The interviews were deleted once the transcription was retrieved and reviewed for accuracy. Electronic versions of the transcription were saved using a password-protected laptop. All information on the method, location, and data retention complied with Federal regulations for a minimum of 3 years once the study is closed. This data will be stored by the PI at Western Michigan University in a locked file and/or WMU network drive.
All field notes and reflective journals will be stored in a locked file cabinet. The computer used for the storage of data and analysis is password protected.

The interviews were conducted via WebEx using a private chat room with password access. The data was transcribed by WebEx and verified by the researcher. This was used to determine the most frequently used words or phrases. This was a similar method to the word map used in Figure 5. A word cloud (Figure 6) was used to display this data. This was used to confirm the alignment with the written statements from participants.

**Future Use of Information**

There has not been a time in recent history when the United States faced similar circumstances. There have been a variety of natural disasters that have created problems for the education system in isolated areas. In 1993, floodwaters took over Cedar Rapids, Iowa, leaving multiple Head Start facilities flooded with water and sewage (Cassity & McDaniel, 1994). Hurricanes like Sandy and Irma tore through cities and towns, ripping apart schools and Head Start centers, leaving families without power and necessities. In 2017, the California wildfires left towns charred and homes and schools empty. Although each one of these tragedies caused a strain on families, there has been no situation that looked like COVID-19. Head Start, and nearly every other agency in the United States, must now look at how to navigate a global pandemic and how to prepare if another one comes.
The information gathered will be used to inform practice and policy for Head Start and other organizations and schools. By looking at access and equity, opportunities for learning should be evaluated for feasibility for all students. For example, if not all students can access the internet, online schooling may not be possible. Alternate plans should be ready to address learning outcomes based on limitations of the student. Other options could include providing devices for families that need them. By looking at this study, new options and opportunities for virtual learning and alternative options may be discovered that will be helpful if a similar situation would occur.

Validity, Reliability, and Methodological Integrity

The issue of reliability was confirmed by reviewing the wording of the survey questions. There were not any questions that were negatively worded (Pallant, 2016). This assured that none of the questions needed to be reversed to be evaluated. The survey did not require participants to answer different questions based on their previous answers.

Recording and Transforming Data

Once the survey data was collected, there were several methods of reviewing the data. The nominal, ordinal, and string data from the 216 responses was transferred from the Qualtrics database to the SPSS software for analysis; however, only 186 responses were complete and used. This reduction came from attrition which is a typical phenomenon in research (Jupp, 2006). This attrition included 30 participants who did not answer
questions beyond demographics or were excluded due to not providing services at that time. When applicable, the data will be reported to assist the reader in understanding the survey participants. This includes using descriptive statistics and correlation. The open-ended questions on the survey were evaluated to determine the most frequently used words displayed in a word map (Figure 5). This information was used to inform questions for the interview component of the study. The results of the word frequency of the qualitative interviews were represented in a word cloud (Figure 6). The data shows strong correlation between the two forms of data analysis in both the qualitative and quantitative word frequency.

**Role of Researcher**

As an early childhood educator in the field for over 20 years, I have developed many connections. My interest in working with Head Start amplified in 2019. I hosted a workshop on trauma-informed teaching practices at Western Michigan University. Several Head Start administrators attended the session. I was asked to present to the Mental Health Task Force for Michigan Head Start in February 2020. This initiated contact within my local agency, Child Development Services of Ottawa County. I met with the administrative team to discuss the potential for using their site for my study. At that time, the study was focused on trauma-informed teaching practices. As the Ottawa County team and I were developing what the study would entail, COVID-19 began to impact the state of Michigan. After a couple of weeks, the virus had grown
Figure 5: Word Map displaying the most frequently used words during the survey.
and schools were closed by the mandatory “Stay home. Stay safe.” order (Exec. Order 2020-21). After exchanging thoughts regarding Head Start closure and methods of family engagement, it was clear that the research should focus on this unprecedented time.

**Researcher Assumptions**

My interest in this subject relates to my own experiences working in the field of early childhood. It is important to acknowledge that interpersonal and social influences
can have an impact on how a researcher acts and the decisions that they make (Plano Clark & Ivankova, 2016). This awareness of my previous roles in early childhood is part of the reflexivity of the study (Richards, 2015). Field notes are included in the appendices as a part of the self-awareness of my subjective reflexivity versus my disciplinary reflexivity (Finlay, 2012).

As a former home visitor in the field of early childhood education, I have some innate bias derived from my experiences. In the role as a parent educator, where I served for over 8 years, I was required at times to use a personal cell phone to reach families. This was not desirable to me as it blurred the line of professional and personal life. As an Early Childhood Consultant for over 20 years, I have worked with many Head Start lead teachers and administrators. I hold a belief that the Head Start program is of benefit to families and I have witnessed through my consultation role that Head Start lead teachers tend to be high quality early childhood educators. I have also had very positive experience with the Michigan Head Start Association and local Head Start administrators. This is a belief that I hold which may factor into a bias and should be considered.
CHAPTER 3

RESULTS

This study originated as a result of the COVID-19 pandemic and the subsequent Head Start program closures of Michigan. This study aimed at discovering potential equity and accessibility issues, capacity building, and available resources for Head Start programming during this unprecedented time. The results of the study revealed many positive and some negative outcomes including definitive trends resulting directly from the quantitative and qualitative data. In this chapter, these issues will be addressed by evaluating results for each of the research questions originally proposed in Chapter 1.

What are the Equity and Accessibility Issues Related to Head Start Staff and Families During the COVID-19 Building Closures?

Throughout the study, in both survey and interview responses, participants discussed three main issues with equity and accessibility during the COVID-19 pandemic program closures. The most common difficulty experienced by Head Start lead teachers related to the use of technology. The second issue was confidentiality as it relates to family information which was stored and shared. The third involved access to needed materials and resources for both teachers and families served.
Technology

The most common request from lead teachers was that they receive a cell phone provided by Head Start. The percentage of Head Start lead teachers who used a personal phone to contact Head Start families ranged from 86.5% in lower rural to 92.9% in upper rural Michigan. The percentage of Head Start lead teachers who were provided with a Head Start issued cell phone ranged from 0% in upper rural to 15.4% in lower rural Michigan. In both instances, numbers of urban Head Start lead teachers fell between the lower and upper rural areas’ percentages. Typically, Head Start programs are center-based and are required to have access to a phone line, per Michigan Child Care Licensing requirement R 400.8164 (eLaws, 2013). This may help to explain why many Head Start lead teachers did not have a company-provided cell phone to make the required calls to families due to pandemic-related program closures. Once program closures were announced, four of the six interviewed lead teachers stated that they had asked for a company-provided cell phones from their direct supervisor. Of the four that asked for the company-provided cell phone, none of them were granted this request. Buildings were closed, so using the phone provided on Head Start premises was not a viable option.

Devices

The lack of availability of devices and access to technology was widespread. There were programs such as the one described by Participant I-5 that offered a tablet to
each Head Start child, distributed by the teacher, within a few weeks of the program closure announcement. This program also offered Wi-Fi hotspots on each device until they were told by families that they had their own internet service providers. This allowed the teachers to know that every student had a tablet, the technological specifications and capabilities of the tablet, and internet access. The teachers could confidently offer equal learning opportunities to each of their students. Participant I-5 was asked about the funding for the tablet purchase and stated that the tablets were purchased with “emergency funds offered to the Head Start program.” Participant I-2 stated that Chromebooks were offered to students at the K–12 level but were not offered to her Head Start students directly. Participant I-2 realized that although they were confident that there were devices in most homes due to the Chromebook giveaway, they were not sure that the preschool aged children and their schooling would be put at the same level of importance when utilizing the technology offered.

During the interview with I-4, they discussed the use of a new program called the “Lifeline Project” which would be offering the internet at a cost of only $9.25 per month to families. The Head Start program reached out to families to let them know of this new resource. The Michigan Department of Education website lists many cost-effective options for internet services, including programs through Spectrum ($14.99/mo.), Comcast ($9.95/mo.), Century Link ($9.95/mo.), and AT&T from $5–$10 per month (MDE, n.d.). These were the prices discovered as of mid-June, using the MDE website, and are variable based on the timing and services available in the area.
When devices were available for students, teachers were unsure of the capabilities that each device used might have to connect with their learning platforms. The software mentioned most throughout the survey and interviews as a program that teachers would like to make available to their families was “ReadyRosie.” This is an “early education tool that helps families, schools, and communities across the nation deepen and scale their family engagement efforts” (Roden, 2020, para. 1). This program offers videos that are age appropriate, modeling opportunities, program specific objectives, and a multitude of resources including professional development (Roden, 2020). ReadyRosie can be accessed via paid subscription service and participant I-1 reported that their program did not offer this subscription to the staff or families.

High-Speed Internet

The issue of high-speed internet was addressed in several ways throughout the survey and interviews. Survey participant number 157 stated, “Many of our families do not have reliable access to internet and do not have devices other than cell phones. It’s hard for their children to use online resources without tablets or computers and internet connections.” Figure 7 shows the percentage of families served that have access to internet, as perceived by the lead teachers. The figure shows a count listed on the left side and the perceived percentage on the bottom of the graph. Both the lower rural and the urban show a similar trend with between 25-74% of their families having internet
access. The upper rural area shows an increase in number as access increases with the highest number of teachers selecting that 76–100% of their families had access to the internet. The lower number of respondents in the upper rural area does give some concern about using this data to make a generalized statement about overall accessibility in that area. More data would be required to make an accurate assessment.

Of the 186 teachers who responded, 14 had no access to high-speed internet. Although that is only seven percent of the 186 respondents, not having access to the internet when virtual education is required causes a substantial barrier for these teachers. One participant number 141 stated that the “internet source is my personal hotspot
from my phone.” Survey participant number 59 voiced the biggest concern was that “some families do not have access to the internet or cell phones that get good reception.”

**Comfort/Knowledge with Technology**

The survey participants and those interviewed discussed how their comfort with technology was reliant on the amount of knowledge that they had on available technology resources. One survey participant, number 123, wrote “I would like some direction as to what tools are available and useful for teachers,” while participant number 175 noted that they “would have liked more training on technology.” The most mentioned programs and resources used for virtual instruction included Facetime (iPhone App), Facebook, Zoom, Microsoft TEAMS, YouTube channels, Google Meet, and Class DOJO. A Head Start lead teacher stated, “I am not a social media person and have never used class Dojo or other class groups” and expressed a desire to learn how to use technology as a tool for learning. Participant I-5 recognized that technology access was not an issue in her county, but the challenge was “using it in a totally different way.”

**Parent Engagement Methods**

The study indicated that there was no significant difference between locations (lower rural, upper rural, and urban) when determining frequency of contact, whether direct or indirect. Indirect instruction included newsletters, Facebook groups, and YouTube channels, accounting for a large number of interactions. Lead teachers reported that 79% have some level of indirect instruction with their students weekly.
There was no significant difference in program location as it related to frequency of indirect contact. A 3 x 4 chi-square test indicated that the relationship between program location and frequency of indirect contact was not significant, ($\chi^2(6, N = 187) = 9.439$, $p < .05, V = .159$). Seventy-eight percent of teachers responded that they were in direct contact with their families at least weekly. A 3 x 4 chi-square test indicated that the relationship between program location and frequency of indirect contact was not significant ($\chi^2(6, N = 187) = 8.324$, $p < .05, V = .15$).

When discussing the differences between accessibility in texting versus home internet access for families, there was a significantly higher likelihood that a parent would have access to text messaging ($M = 3.66$) over access to home internet ($M = 2.56$). This may impact implications when looking at delivery methods of virtual instruction. As the world becomes more reliant on cell phones and mobile telecommunication, user-friendly apps may be more beneficial than traditional methods of newsletters and paper packets.

In the study, three different forms of technology were discussed as possible modes of family engagement. These three were Facebook, Facetime (or other person-to-person meeting platforms), and Zoom (or other group meeting platforms). There was no statistically significant difference between the groups of lower rural, upper rural, and urban. There were differences in how comfortable lead teachers were with using the three forms of technology (see Table 4). The higher the mean, the higher the level of comfort was with the technology ($1 =$ Novice, $2 =$ Competent, $3 =$ Expert). Very few
lead teachers consider themselves an expert in video conferencing technology such as Zoom (M = 1.62). Facebook (M = 2.08), and Face Time type technology (M = 1.94) are more comfortable forms for Head Start lead teachers, although this may be difficult when it comes to running a virtual classroom which often requires a video conferencing platform and high-quality internet service.

Table 4
Level of Comfort with Various Types of Technology

<table>
<thead>
<tr>
<th>Form of Technology</th>
<th>Novice</th>
<th>Competent</th>
<th>Expert</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>35</td>
<td>102</td>
<td>82</td>
<td>2.08</td>
</tr>
<tr>
<td>FaceTime</td>
<td>52</td>
<td>94</td>
<td>92</td>
<td>1.94</td>
</tr>
<tr>
<td>Zoom</td>
<td>82</td>
<td>40</td>
<td>12</td>
<td>1.62</td>
</tr>
</tbody>
</table>

Confidentiality

Many teachers were using their own laptops or devices to contact families. Under 1303 Subpart C—Protections for the Privacy of Child Records, the confidentiality of a child’s information is described, including the requirements under the Family Educational Rights and Privacy Act (FERPA) and Part B or Part C of IDEA (ECLKC, n.d.a). The requirement includes protecting a child’s personally identifiable information (PII). By using personally owned laptops and cell phones without the assurance of proper password protection or methods of erasing the student data, PII may be accidentally shared with someone not affiliated with the Head Start organization. This is a potential
violation of FERPA and IDEA and a valid concern for Head Start lead teachers as well as Head Start programs.

Participant I-1 had concerns about conflicting information regarding the use of technology to reach families. A survey participant reported that they were not allowed to use Facebook as a method of contact before the COVID-19 program closure, but shortly after they were told that they were expected to use Facebook or a similar method to keep connected to families. The issue of confidentiality comes to light when members are listed on a Facebook Group page. Appropriate safety and privacy features must be utilized to assure confidentiality. Participant I-1 stated it is “important to review the confidentiality policy and how that will continue to play out in the future when we are trying to make these home to school connections.”

A program frequently used by Head Start lead teachers was the Remind App. The Remind App allows for one-to-one interactions “and allows you to text, make calls, send reminders, share video and photos” including tracking interactions (Portland Public Schools, 2020). When using the Remind App, phone numbers and contacts are scrambled, allowing for complete confidentiality for the families. Participant I-1 reported that by using email to contact families, even if using BCC functions, when a family inadvertently uses the “reply all” function, information can be shared among the group and confidentiality can be breached. When discussing the issue of personal cell phones and potential breach of confidentiality, Participant I-1 expressed disliking the need to use a personal cell phone for business but felt there was no other option.
Participant I-3 discussed satisfaction with how many families answered the phone when they were called or texted from the personal cell phone, while participant I-2 stated that the foreign personal cell number associated with the personal phone being used was not well received by the families, and often they did not answer the phone when called.

Access to Resources

Many of the Head Start teachers referenced needs of their students and families for essentials like food, help with rent or utilities, and childcare for essential workers. When it came to connecting Head Start families to needed resources, there were mixed responses. Some Head Start lead teachers, such as participants I-3, I-4, and I-5, took on the responsibility for connecting families to these services. Others, such as survey participants 44, 54, and 59, relied on other Head Start employees such as Family Advocates. Concern for their students included “a safe place to stay and food” (survey participant 125), “the children’s safety and wellbeing” (survey participant 127), and “that they are safe and cared for” (survey participant 175).

In addition to unmet basic needs, many families were challenged by inadequate tools to implement lessons, particularly if a virtual component was required. A total of 11 survey participants mentioned using learning packets with their families and another four stated that they would have liked to supply them. Participant I-5’s program allowed teachers to drop off packets with an accompanying bag of materials. These
bags included markers, paper, scissors and playdough, books, assessments, and resources that would not only help in the learning process but also assured that each child had the materials needed to complete the activities. Participant I-1 discussed using household materials like silverware to do math lessons to assure that every student could complete the work.

Head Start lead teachers struggled to acquire the needed tools to teach due to building closures. Many resorted to purchasing items through Amazon or other online retailers to set up their virtual classrooms. Participant I-2 was told on March 13 that “we were not going to be allowed to enter the building for several weeks, and that we could stay until the end of the day, but that we would need permission to even come in that weekend.” This respondent had an assistant take over teaching responsibilities to have time to create packets for students to take home. They described how there was very low enrollment that day and they were able to assure that eight out of the 15 students received learning packets to take home with them. Participant I-5 worked in a school district that provided a “teaching resource bag” that was given to each student; however, they commented that “it was cobbled together... I don’t feel that it’s very useful to the family.” In addition to what was supplied, participant I-5 collected monetary donations from the community to supply families with items such as glue sticks, construction paper, scissors, crayons, and markers. These items were delivered to each student’s house, along with items left behind in the classroom such as artwork.

“I feel good because I got something tangible in their hands,” stated I-5.
The open-ended questions on the survey asked what was still needed to effectively provide remote learning to families. Of those that answered the question, resources (14%) and technology (16%) were the two most common responses. Most requested resources included items such as school supplies for teachers and students, information on various learning topics, and access to classroom materials. The technology most frequently requested were laptops and cell phones. Survey participant 195 stated:

I wish I had a work phone because it would make it easier to contact families without worrying about your personal information being put out there. I would be able to have direct contact with families weekly and even daily if I had a phone to use.

Survey participant 201 stated that they “do not always feel comfortable contacting them via my personal cell phone.”

**What Are the Capacity Issues Related to Delivering Head Start Teaching Services During This Time?**

**Communication During the Program Closures**

Situations changed rapidly during the spring 2020 segment of the COVID-19 pandemic. There were a significant number of unknowns surrounding what the virus was, how it was spread, and what could be done to stop the spread. Due to the unprecedented nature of the situation, communication was compromised. Survey participant 182 described the following:

due to the fluid nature of the epidemic there are no clear expectations for us. We have been provided a way to keep our personal phone numbers private but still
have no way of actually getting emergency cards so that we can contact families because we are not permitted in the building.

Communication appeared to improve as time went on and more concrete information was available. Participant I-1 reported that although there was little communication and no expectations set in the first couple of weeks, that changed in a more positive direction as weeks went on. Participant I-4 stated that they felt that they could communicate with their supervisors about work related issues, but also convey the things that they still needed to be successful. Communication also included meeting frequently over Zoom or Microsoft Teams to discuss the current trajectory of teaching.

Levels of Support

Head Start lead teachers reported several levels of support received by their local program, including from their principal, superintendent, Head Start coaches, family advocates, and other administration. Positive comments included “they gave me patience while I learned new technology” (survey participant 124), “they have given any support that I needed” (survey participant 180), “giving us general guidelines and options as to how to contact, communicate and document information with families” (survey participant 178), and “they have sent encouragement for us personally and as teachers” (survey participant 71). Although 65% of survey participants stated that they felt very supported by their program, there was additional feedback on ways that communication could have been made better during the program closures. Survey participant 204 stated that there was mixed communication, stating “it took a long time
to get direction and even then, it wasn’t clear.” Others discussed “waiting on direct
instruction as to what is required of teachers” (survey participant 142), “I feel as though
I am somewhat supporting them” (survey participant 184), and “the only support I
have received is a whole lot of emails” (survey participant 180). Approximately 6% of
respondents felt unsupported during this time by their local Head Start program.

Beyond local levels of support, the Michigan Head Start Association (MHSA)
and the National Head Start Association (NSHA) provided both statewide and national
insight into providing service during a pandemic. One method of reaching teachers,
staff, and families on social media was the introduction of “kitchen table talks” every
Wednesday beginning in April, hosted by the National Head Start Association.

“Kitchen table talks” provided information in a less formal way to communicate and
were centered around topics related to COVID-19. Participant 157 stated that they
“really enjoyed the table talks as a part of my week.” Survey participants noted that
they had frequent communication with supervisors (38%) and were provided
appropriate learning resources (41%), which were the greatest supports provided
during the program closures from the NHSA. Other benefits acknowledged included
continued pay (5%) and an ample amount of webinars and professional development
opportunities (8%).
Standards and Expectations

Communication during the program closures was difficult due to the unprecedented experience faced by Head Start leaders, as well as by the general population. The COVID-19 virus spread rapidly and varied media sources provided information about closures and state mandates. Participant I-4 reported that “Information was changing constantly, not just daily, but hourly, from the CDC, the Health Department, from Head Start of Michigan, and the Department of Education.” Participant I-3 was told “this is a pending closure, and at the end of the day we’re going to be locking down the building.” There was no prediction on how long the program closures would be or what the future would look like for teachers and students. At the national level, Head Start programs were being closed per state guidelines meaning that not all Head Start programs were being closed throughout the United States. The National Head Start Association was working with a variety of changes to stay current during the COVID-19 pandemic, which were widely dependent on state mandates.

Participant I-4 stated that it was more of a “trickledown effect” in their area. They heard that the public schools would be closed, and because they were within the public-school building, their program would be closed as well. The independent Head Start program in their area did not close until the following week. As Participant I-4 stated, “parents started getting panicky so then we closed at the end of that week all of our programs and immediately began to serve families remotely.”
Administrative Support

When asked about the level of administrative support, the results were mixed. Participant I-4 stated that they “have a really good, solid team in the agency, so we just went through it and everybody gave their all and we figured it out.” In contrast, Participant I-1 found inconsistencies with how expectations were handled within the agency. When discussing the use of technology and virtual teaching, Participant I-1 mentioned that some had to seek supervisor approval, while others could post without any monitoring. There was a “difference between the expectations and how they go about getting them implemented” and that things were “just getting sprung on you quickly.”

Expectations for frequency of staff meetings ranged from no expectation or planned meetings (14%) to at least biweekly (3%). Survey participants reported meeting with their supervisor or teaching team using Google Meets, Zoom, or Microsoft Teams. Participant I-2 reported that their instructions were to “check email daily and have one voice conversation with the primary caregiver of the child once per week.” There was an expectation for most teachers that they would meet with their students at least one time per week, making direct contact of some kind. There was flexibility in what that contact would look like, but could include things like a text message, phone call, FaceTime, or Zoom. Participant I-3 discussed a “continuity of learning plan” where there was one learning contact each week in addition to the direct contact with the student or family.
Participant I-5 discussed how their administrator’s gave expectation that lessons revolve around four main areas of concentration. These areas were social/emotional, math, language and literacy, and gross motor/music and movement. Teachers were directed to provide enough activities to do without overwhelming the parents and families even more than they already were. It was a difficult balance for Participant I-5, considering some of the families still had caregivers that were working. This was compounded by the fact that many lead teachers were parents themselves, balancing working at home with caregiving for their own children.

Head Start lead teachers reported that they had a variety of supports through their local Head Start programs. I-4 reported that they were given support on multiple levels. Communication was described as a strength of many programs, including not only professional communications on issues such as resources and COVID-19 related information, but also personal connections such as checking on the teacher’s social and emotional health.

**Meeting the Needs of Students, Families, and Teachers**

**Physical Needs First**

It was clear through speaking with the Head Start lead teachers that the need for safety and physical needs came before the educational component for their students. This included things such as making sure that the families had necessary food, shelter, and resources. This was not only conveyed in the interviews but also throughout the
surveys. Lead teachers referred to safety as the first and most important factor of teaching and living through a pandemic. Of the 186 survey participants, 32 teachers (17%) mentioned the health and safety of not only their students and families, but also their own family. As their biggest concern since the start of the pandemic.

A concern for not only Head Start lead teachers, but also most adults, was continuing to be paid during this time. With more than 1.8 million Michiganders filing for unemployment from March to June of 2020 (Bruckner, 2020) having a reliable paycheck was invaluable. Head Start lead teachers praised the organization for assuring them that they would continue to be paid as long as they continued to provide distance education and parental engagement. The financial security of having a regular paycheck allowed lead teachers to be able to focus on virtual instruction and meeting the needs of the families that they served.

Social/Emotional Needs

The social/emotional needs of the student, their families, and teachers were discussed in a variety of ways throughout the survey and interviews. The stress of the uncertainty revolving around COVID-19 and the health and safety of their families and communities took a toll on most teachers. One Head Start lead teacher mentioned that the relationship with her families had strengthened through this experience. Participant I-3 stated that they connected on a deeper level with a family in particular that experienced the birth of a child through the COVID-19 pandemic. This teacher was able to get
the physical needs of the family met, such as diapers and food, but also the emotional support that the new mother needed. Survey participant 96 commented on how the supervisor for the program checked in daily with each teacher. Another teacher stated that “fellow teachers have provided me with support and encouragement during this uncertain time” (survey participant 118).

One family that worked with Participant I-6 experienced a job loss and had their phone disconnected. The dedication to the Head Start program was apparent in the grandmother’s willingness to the student, sharing her phone to make sure that he did not miss the Google Meet session with his teacher. That was just one testimony that conveyed how connected the students and teachers are even though they were separated by physical distance.

**What Resources and Supports are Head Start Lead Teachers Utilizing During the Building Closures to Maintain Relationships with Their Students and Families?**

**Technology**

The use of technology in early childhood teaching has not been studied in depth. The research has shown that there is a need for professional development surrounding technology. Blackwell et al. (2014) found that there are primary reasons why technology isn’t used in early childhood instruction including a lack of devices and training, teacher belief systems about technology and young children, and a lack of time to invest in learning new skills. Secondary reasons included the perceived value of this type of
instruction (Blackwell et al., 2014). These concerns became secondary due to the immediate need to provide some level of virtual instruction and parental engagement.

The program ReadyRosie was brought up by several survey participants as a program that has been used for parent engagement. Participant I-1 reported that they were interested in the ReadyRosie program, but that their Head Start program did not pay for access. ReadyRosie is discussed in Chapter 4 as a potential program that has been used by many Head Start programs and has reported a high level of success as it relates to parent engagement.

The Remind App was used by many programs to connect with their families. Participant I-1 used the Remind App basic subscription, which had a limit to the number of characters used. This participant reported that large files, such as videos, could not be sent and that text messages were limited to a certain amount of characters. There were many positives about this app, including how it scrambled phone numbers so that teachers could be assured of confidentiality for themselves and their families. Participant I-6 was disappointed in the Remind App as they were unable to see if families had opened the messages.

Participant I-5 discussed the frequency with which the students were able to connect to the programs that they had established for families. Using a program called “Happy Numbers,” the teacher was able to access data on how many students logged in. In total, 34 students signed up for the free subscription, and 75% of students were doing activities on the site the first two weeks. The number has decreased over time,
and after a period of one month, the number was closer to 25% of students. For this lead teacher, the fact that nearly one quarter of her students were still accessing the site regularly was a positive.

The use of technology in preschool aged children must be looked at carefully to assure the right balance of virtual instruction, social interaction, and opportunities for physical activity. It has been shown that for young children exposed to four or more hours of media per day, there is an 82% reduction in sleep time consistency (Rapoport et al., 2019). It is important to assess the appropriateness and time spent on virtual instruction being informed of the social, emotional, physical, and cognitive effects on children. The study done by Rapoport et al. (2019) recommended after their research that the American Academy of Pediatrics revise their standard of media exposure for young children to one hour or less per day based on the negative effect that media use had on sleep patterns. By introducing methods of instruction that encourage active caregiver participation like the suggestion made by I-1 to incorporate household items into learning, there can be a better balance between virtual instruction and real-life experiences.

**Professional Development**

Professional development opportunities were increased during the program closures and Head Start lead teachers took advantage of the non-classroom time to increase their knowledge. Survey participant 147 stated that their program encouraged
“several different avenues for professional development to be used during this time.”

Professional development is a requirement for teachers and it is often difficult with a full classroom of students to find the time to participate. As one teacher stated, “they have offered me multiple training videos to claim my time for” (survey participant 146). Participant I-6 mentioned that they had participated in the “Essential Literacy” training that had 10 virtual sessions and would be required to implement in the fall to align with the local school district. This virtual learning opportunity allowed for Participant I-6 to complete the training and claim the hours spent on training towards her weekly schedule. Another professional development course that was cited frequently was Conscious Discipline. During the pandemic, the Conscious Discipline site offered free resources and training to teachers. Webinars were cited as the most frequently used professional development method \((n = 26)\).

**Overall Perspective on the Building Closures**

**Biggest Concerns**

The concerns listed in the survey revolved around four major ideas. The first concern was personal in nature and related to childcare challenges experienced by Head Start teachers. A survey participant stated that “meeting childcare for my own children while attempting to work remotely is a huge challenge.” As one teacher stated, there was concern that they were “putting the job before my (their) own children and needs.” Another personal concern brought up was the cost of home office supplies. In
the program that Participant I-2 worked for, purchases for ink, paper, and other basic supplies were going to be reimbursed by the program.

One survey participant was concerned about contracting the virus and bringing it home to their family. The same participant was required to volunteer in other programs such as Meals on Wheels and food banks to receive full pay, in addition to doing the work with their Head Start families. The health and well-being of Head Start lead teachers and their own families during the pandemic was a frequent concern. This was to be expected considering the changing information and uncertainty with a novel virus.

The second area of concern was for the health and safety needs of the students and their families. Head Start families needed food, diapers, and access to needed services, but also social and emotional needs. Participant I-6 discussed meeting the physical needs of the families including by providing daily meals for children and bringing the food to families without access to transportation. Survey participant 136 stated “it is obvious a lot of them don’t have enough food to keep them from being hungry.” Teachers identified the desire to have continued interaction with the teachers and other students as well as consistency, supervision, and structure in the child’s day. Lead teachers mentioned “the unknowns of what my children in my class are experiencing at home” (survey participant 114) and “the lack of routine and structure” (survey participant 61) as concerns. “I am also concerned if we go back it will be too soon and the fact that I have an underlying health issue, I may get sick (just being honest, it scares me a lot)” (survey participant 118).
The third concern for Head Start lead teachers was the lack of closure for themselves and the children and families that they serve. Survey participant 67 stated that “It’s hard not being able to say goodbye to our students. No closure.” Another mentioned the sad reality that “so many of them are used to people coming in and out of their lives without saying goodbye and I just became one of them” (survey participant 104). The inability to say goodbye to students and provide adequate assessment and information to pass on to future teachers created worry and sadness for some teachers. As survey participant 14 stated, “the sudden cut off of contact and what that means for trust and care in a child’s eyes” is the biggest concern that the teacher could imagine.

A fourth concern that was conveyed repeatedly was that the unknown circumstances were disturbing and caused an immense amount of pressure for them personally and professionally. “I will not be able to see my children and families for the rest of the year and it causes a great deal of anxiety trying to find ways to connect meaningfully with them” (survey participant 76). Another teacher wrote that the biggest concern was “how to deal with the stress and unknown for teachers and students” (survey participant 58). In an interview, participant I-5 discussed the changes in personal life that caused a great amount of stress, including things like wiping down groceries that have been delivered to prevent COVID-19 spread, and locking down businesses in the community. “It is a very uneasy time” (participant I-5). Participant I-3 described the uncertainty as the “Corona coaster has the ups and downs of the pandemic. One day you’re loving the
bubble (you are in), doing workouts, and baking sourdough bread. The next you’re drinking wine for breakfast and missing people you don’t even like.”

The last, and possibly the most concerning ethically, was the confusion regarding confidentiality during the program closures. One survey participant stated that “our confidentiality guidelines have truly minimized our communication options.” Another participant stated that the program that they worked for did not have a “plan on how to interact with families through supportive technologies.” Participant I-1 reported that they were instructed to leave all Head Start items at the school. The only information for families that was brought home was through the Remind App, and luckily, Participant I-1 had all the families on the app. There was some concern for coworkers who did not have all families on the app and may have not been able to get in contact with their families during the closure. Although confidentiality is of utmost importance, and required by law, there was confusion on how teachers should handle situations like this one where there was very little notice given.

Positive Outcomes

When the teachers were asked what went well during the program closure, three main themes were identified. The first was the acquisition and enhancement of technology in the form of Facebook, the Remind App, Google Hangouts, Microsoft Teams, YouTube channels, virtual parent-teacher conferences and IEP meetings, the use of the ReadyRosie program, and Zoom meetings. Some of the most mentioned ways that
teachers used technology were posting videos for their families to view on Facebook (15%), using the Remind App to send pictures and instructions (7%), and some mentioned doing their own read alouds on Facebook groups or creating a YouTube channel for students. Survey participant 56 stated that the staff “created a YouTube channel so that all teachings staff could say their hellos and read/do activities to connect to families.”

Communication was highlighted as the second strength during this time, including how Head Start teachers were able to stay connected to their families and colleagues. Survey participants noted that their administration had adequate communication with them during the transition to online learning and they were given the information in a timely manner (7%). One survey participant wrote that they felt “very lucky to work for Head Start during this time” and that Head Start is “going above and beyond public schools in the area.” Another survey participant noted that the “agency has done a pretty good job maintaining contact with us and providing instruction in a timely manner.” Participant I-3 stated, “I felt that they did a lot to try and make sure we had the resources to pass along.” Survey participants reported that although there were many links sent out with resources, there wasn’t always follow-through from the administrative team with a clear direction on how to use the links.

The last strength noted among survey respondents was support from the Head Start organization. Head Start provided continued pay and health benefits to Head Start lead teachers during the pandemic, and many reported that this allowed them to
focus on learning new technology skills and keeping connected to families. A survey participant appreciated being “able to stay home and healthy with my family, while still able to connect to students weekly.” Teachers reported that Head Start has given them a high level of flexibility within their position. This flexibility is acknowledged as a strength, particularly during a difficult time like the COVID-19 pandemic.

**Final Thoughts**

The results of this study revealed many things that are going very well for Head Start programs and teachers during the pandemic. These strengths can continue to be enhanced to assure that the programs and services offered are effective, efficient, and sensitive to the unique needs of individuals and families. Although much of what was found was positive, areas needing improvement were also evident. Survey participants noted some areas for concern such as “there haven’t been any expectations set of how and when to communicate with families” (survey participant 170), and “I have to use my own phone and personal laptop to keep up with my work” (survey participant 31). Although concerns were not as frequent as positives, each comment should be taken with care and consideration as new policies and changes are made in the face of the pandemic. With uncertainty ahead due to the continued increase in COVID-19 patients, it is critical to reflect on the lessons learned from the first three months of program shutdown. Preparation must be made for the potential of more virtual learning if
necessary. In Chapter 5, guidance for improving services will be provided along with the limitations of this study, and implications for future practice.
CHAPTER 4

DISCUSSION

Implications and Limitations

This study looked at the implications of the COVID-19 pandemic on Head Start lead teachers. Several areas were studied including issues of capacity, access and equity, and support for Head Start lead teachers. This study used a mixed methods explanatory sequential design to provide a framework that described the experiences of Head Start lead teachers during the global pandemic. The purpose of the study was to explain access and equity, resources and supports that were available to teachers and families as well as areas that could be enhanced for increased lead teacher satisfaction and higher levels of parental engagement. Figure 8 lists the overall recommendations for Head Start programs facing providing services during a local pandemic. Although this list contains several items of discussion, it is by no means a comprehensive list of all the changes that are possible using this data. This information is being provided to assist decision makers in education and to address the issues that frequented the comments of the research.
Urie Bronfenbrenner identified Ecological Systems Theory in the mid-1970s (Bronfenbrenner, 1977). Using this as a theoretical framework, the roles and services for Head Start students were defined (see Figure 1). Each layer of the system was identified within the context of providing Head Start services during the COVID-19 pandemic. By utilizing the data collected during this study, deficits in services, equity, and accessibility were found. These deficits are areas that can be improved to provide a high quality of support for Head Start students, families and teachers. The use of pragmatism in understanding the data, allowed for a deeper understanding of how the levels of Bronfenbrenner’s ecological systems theory could be used for this study and this real-
world scenario. In the following sections, each layer of ecological systems theory will be discussed along with the possible implications for service. To provide an adequate overview of the implications for further study and reform, Figure 9 displays the findings as they relate to the theoretical framework discussed in the introduction chapter. Each system will describe how the findings can be used as a framework for change. These changes will help to assure that if sudden program closures occur in the future, Head Start will be prepared to meet the challenge and provide high quality instruction with optimal parental engagement.

Figure 9: Ecological Systems Theory Head Start program implications as a result of the pandemic of 2020.
Chronosystem

This study encompassed a very short period of time. The months of March through June 2020 were filled with novel situations that required Head Start leaders to think reactively. As of August 2020, COVID-19 continues to show widespread devastation to our Michigan communities and the world. Figure 9 displays guidance for Head Start programs to assist in proactively looking towards future practice. These suggestions should be used with immediacy.

Macrosystem

Many lessons can be learned as we reflect on overall access and equity in the state of Michigan. There is a technology divide in the United States (Fazlullah & Ong, 2019). That gap was brought to light during the necessary action of virtual instruction. “I understand the difficulty in them being able to take advantage of the resources whether it be because of access/technology or time/energy after taking care of their kids and themselves all day” (survey participant 121).

The nation must look at current supports and policies in place to support the efforts of Head Start programming as well as the overall value placed on early childhood education. This can be done by reviewing the lessons discovered during the COVID-19 pandemic. This study provides a framework for improvements that can alter negative outcomes for at risk families and their teachers.
Providing professional development in technology was a request that nearly 10% of teachers mentioned. Survey participant 157 stated the need for “training on how to use all the technologies available.” This need is one that should be addressed immediately considering the uncertain future due to the COVID-19 pandemic. Teachers are eager to learn new technology and implement the most effective methods to keep students and families engaged. When asked about what was going well during program closures, 29 teachers mentioned learning new technology skills. Another 26 teachers stated the biggest unmet need that they had was additional training on technology. The National Head Start Association should provide increased direction on how to implement high quality virtual teaching as well as supplying programs with subscriptions for research-based, effective early childhood programs such as ReadyRosie and the Remind App.

Providing adequate equipment, high speed internet access, and basic technology training on a platform such as Zoom or Microsoft Teams would assure connection with staff. Teachers need to be informed of appropriate platforms and technology available to meet the need for virtual instruction and connection. This is not present in a universal way. The data shows a distinct difference in the comfort level of lead teachers using common technology such as Zoom, Facebook, and Facetime (see Table 2).
Access to Computer Programs. ReadyRosie partnered with Teaching Strategies in 2018 to enhance their capabilities of reaching families. For Assessment, Head Start Early Learning Outcomes align with Teaching Strategies GOLD (DHHS, 2015). ReadyRosie is now research-based and offers insight into how their program aligns with the “National Head Start Parenting Curriculum Decision Making Checklist” (Roden, 2020). By using a program that is currently aligned with the Head Start Early Learning Outcomes, more streamlined programming and assessment is possible.

Another program discussed frequently by Head Start lead teachers was the Remind App. Several participants used the free version to stay connected, although teachers stated that the benefits of using the version that is paid would be immensely helpful. The free version that was available had limits on characters in text messages. To access the full capabilities and unlimited text, a paid subscription must be used. The Remind App utilizes text messaging as part of the services provided. Survey results show that families are more able to receive text messages compared to their abilities to access and/or use other forms of technology. This may prove to be a valuable resource to connecting to more families while simultaneously maintaining confidentiality.

Provide Technology or Reasonable Assurance. Technology and the use of devices is not universal and many families don’t have access to the internet (Levin, 2020). When discussing K12 education in Michigan, the superintendent of Manchester Community Schools noted that due to the lack of accessibility, the work completed would be considered an ‘engagement activity’ and not graded to comply with the
equitable access laws in the state (Levin, 2020). Differences in devices and access can cause difficulty for teachers to adequately assess which programs, apps, and methods can reach 100% of their students. The Head Start program that participant I-5 was a part of offered the same device to all students. This allowed the teacher to adequately plan an equitable learning experience. The cost of tablets can be a significant expense for a program. This may not be financially feasible for all programs; however, if quality virtual instruction is to be offered, this is an issue that must be addressed. If universal offering is not possible, talking with each family at enrollment about their family’s ability to access and use technology would be an important step toward reasonable assurance and equity.

Protocol in Place. The COVID-19 pandemic was an event like no other. This virus, and its consequences for Head Start, could not have been predicted, although there were warnings from other countries that first battled COVID-19. Head Start offered plans for natural disasters that were adequate for known scenarios but must now look at program closures as a result of a global pandemic. As one survey participant stated, “we did not have a plan on how to interact with families or supportive technologies.” This can be addressed with direction from the National Head Start Association.

Confidentiality. Head Start programs had an adequate set of guidelines for programming to assure confidentiality based on how programs had previously
operated, but these guidelines did not apply to the swift program closures that occurred in conjunction with the COVID-19 pandemic. Teachers did not have a clear understanding of how to utilize confidentiality practices when they were being asked to use personal devices. Due to the possibility of leaking personally identifiable information (PII) by using personal devices, it is recommended that devices be provided by Head Start and have adequate password protection. If this is cost prohibitive, a signed agreement of confidentiality and standard protocol between the Head Start teachers and Head Start when using personal devices should be implemented.

Mesosystem

**Basic Needs.** The COVID-19 pandemic reinforced the reality that many American families are lacking their basic needs. Most Head Start families meet the income guidelines of being below the poverty level (ECKLC, n.d.a). “Research has shown that lower income communities of color have been hit especially hard by COVID-19” (Bauman, 2020). It has been shown that black and Latino communities have higher death rates compared to those communities that have lower numbers of black and Latino residents (Bauman, 2020). Head Start programs function as beacons in their communities, offering information on local resources for families. Although the Head Start staff were able to refer families to resources, and sometimes directly provide them, there was simply not enough to go around (Hicks, 2020). The need outweighed the resources.
The macrosystem, valuing all people and their well-being, regardless of their financial status or racial and ethnic backgrounds, should be addressed.

**Social/Emotional Needs.** The COVID-19 pandemic caused a variety of emotions as noted by the interview and survey participants. Some of those emotions described included “frustrated” (Participant I-1), “thankful” (survey participant 115), “sad” (survey participant 76), “worried” (survey participant 96), and being “very stressed” (survey participant 171), just to name a few. During this unprecedented time, many people found it difficult to maintain any sense of normalcy (survey participants 53, 61, 103, 104, 119). Head Start offered teachers support by offering flexible work arrangements and providing check-ins with supervisors. It is important to continue basic routines. In an interview with ECKLC, Sangeeta Parikshak described how to best support children, stating that “even though maybe they can’t go to school right now… implementing a routine… makes the world of difference for them” (ECKLC, 2020c). Head Start is providing resources which describe activities focused on enhancing social and emotional well-being during the pandemic. This should continue and expanded. This information should be widely available in a variety of formats including paper copies for those without internet access.

**Microsystem**

Starting with the exosystem, all families should be equipped with the necessary equipment and access to high speed internet, capable of streaming video. At the
microsystem level, providing individual families with knowledge related to assisting their children in learning through virtual platforms will be necessary. This can include supports such as informing childcare providers or other caregivers on what learning platform will be used and how to properly utilize technology and programs. This could be done through a parent night at the beginning of the school year, if there is in-person instruction allowed, an at-home learning guide that walks the caregiver through the basics and problem solving, or a web-based training only if 100% of families would have access. After experiencing a program closure due to a pandemic, it’s essential to be ready to revert to virtual instruction quickly and efficiently. Preparing our staff and families is a necessary component of that readiness. Hybrid instruction methods, where in-person instruction and online instruction are both a possibility, may be valuable options for communities that cannot assure adequate access once the stay at home order was lifted.

**Technology.** Teachers must have all necessary equipment, including consistent Wifi with enough bandwidth to support video streaming and online recording, and relevant training related to technology usage. Among survey respondents, 7% reported not having internet access, and reported spotty or unreliable service. Virtual instruction is not always possible within our current system. Unreliable computer and internet access are liabilities preventing adequate instruction.

The most frequent request for equipment (13% of survey participants) was a Head Start-provided cell phone for engaging with families while maintaining confi-
dentiality. This request may be a newly identified concern considering that all Head Start classrooms must have access to a phone onsite. In the past many teachers had not been using a personal device and phone number. When polled, only 23 of the 186 survey participants had a company sponsored cell phone at the time of the pandemic. This is an identified gap that needs to be addressed if another rapid program closure occurs. Cell phones must be provided by Head Start when virtual instruction is required. If this is not feasible, reimbursement for the cost of a personal device and a confidentiality agreement for usage of personal technology to perform work tasks must be obtained. Allowing these phones to be used as WIFI hotspots may also curb the internet accessibility issue.

**Preparedness.** Head Start has designed many protocols and resources for a variety of situations and natural disasters. Many of these procedures were effective, but most were not applicable to the COVID-19 pandemic. As a leader in early childhood, the National Head Start Association must make changes now to avoid issues in the future.

**Limitations of the Current Study**

**Sample Size**

This study had a sample size of 215 participants, with 186 completed surveys that were used for data purposes. This sample included 41 counties throughout Michigan, including those in the lower and upper peninsulas and rural and urban settings. Although the overall number of respondents was sufficient, the upper
peninsula made up only 7% of the survey participants. The interviews that were done after the quantitative data was reviewed and analyzed confirmed many of the themes shared. The six interviews covered all three main geographic areas, although not equally (upper rural = 1, lower rural = 2, and urban = 3). There was a total of 21 individuals who requested to be interviewed at the time that the survey as completed. However, when contacted again, only six participated. This could have been due to the slight delay in being approved for the qualitative study component through the Institutional Review Board, or a variety of personal or professional reasons. That is not known.

There was a high rate of participation for the short period of collection and the life experience of a pandemic occurring at that time. The six interviews offered additional insight into many of the concerns that were brought up in the survey. Qualitative data, in combination with the quantitative data, was combined to create a more robust understanding of the issues (Tashakkori & Teddlie, 2003). It is also important to note that over 50% of the counties in the state of Michigan were represented in the research.

Access

The survey was sent via email to the Head Start directors in each county. It was the responsibility of those directors to pass the survey to their lead teachers. This second party avenue was not ideal and could have skewed the data. If a director was not happy with how the program had been performing, they may have chosen not to distribute the survey to their program’s lead teachers. There is no way of knowing if this happened or, if so, how frequently it occurred.
The timing of the survey was critical to capture the essence of teachers’ experiences; however, it was a very difficult and chaotic time. Survey participant 58 stated that their biggest concern was how to deal with the stress of the unknown for teachers and students. Even the basic functions of living such as getting groceries and having a routine during a pandemic were difficult. To complete the survey, lead teachers needed time, technology access, and the ambition to complete a voluntary survey. That could have been too difficult at that time. However, if the survey would have been introduced later, teachers’ raw emotions may have been lost in the information that would have been shared.

Access to the survey was online, meaning that if a teacher did not have internet access in their homes during quarantine, they may not have had the opportunity to share their story. For this survey, 7% of teachers stated that they did not have adequate internet services. It is unclear how many lead teachers may have not been able to complete the survey due to lack of access or inadequate technology. Teachers lacking in home internet access would not have been able to complete the survey during the two-month long stay at home order.

Personal or Professional Bias

I have been in the field of early childhood for over 20 years and have some implicit bias because of working with Head Start in the past. As a researcher, I have worked to minimize that bias by using anonymous data in the quantitative section and
none of the interviews that were conducted were individuals that I had worked with previously. I had no personal investment in any of the information revealed about specific programs that were revealed during the interviews.

**Lessons Learned**

This research was conducted during the COVID-19 pandemic. Although the information could not have captured the depth and breadth of the experience of Head Start lead teachers if it were not done during this time, it was challenging. My family, like most others, was contained for a substantial period and put under a significant amount of stress as we sat and watched the pandemic unfold. Information was coming at a rapid pace, but it was not always correct, and it changed frequently. The challenges of conducting research without being physically able to access the university resources was difficult. Assistance was available through virtual means and a great amount of progress was made during a difficult time in history.

I was surprised at the amount of data collected in a short amount of time. I feel that this was since the inquiry was time-sensitive and critically important in the lives of Head Start lead teachers during the collection period. This timely data collection and interviews allowed the research to reflect the lived experiences of educators teaching through a global pandemic. Head Start lead teachers were open about their perspectives of teaching through a pandemic. This willingness to share is powerful and should be acknowledged. By using this information to change policy, add programming and/or
resources, and provide protocols, the lead teachers will know that their voices have been heard.

The higher education system that has prepared teachers can also learn from these experiences. Higher education programs should prioritize emergency management, virtual education, and the use of technology in teacher education programs. Although it could not have been predicted, it is now evident that these skills could have been utilized during the COVID-19 pandemic. Teachers adapted quickly and became resourceful virtual instructors. The higher education program in teacher education must not turn a blind eye to the lessons that have been learned through this experience.

**Areas for Future Study**

This research has the possibility to be added to with a longitudinal study that could address any of the main issues of capacity, resources, or access and equity. Utilizing the lessons learned and recommendations, it is suggested to look at what changes were made because of this data and the ongoing information on COVID-19 over a period. This longitudinal look could help to address how the information was used to inform and better the educational process of virtual teaching, learning, and family engagement.

In the case of the COVID-19 pandemic, our essential workers were those that worked in the service industry, often Head Start families, and were required to continue to work. Family engagement was restricted due to technology issues, continued
employment, family stress, and more immediate needs. There was no plan in place for how to stay actively connected to these families. This is an area that should be studied in greater depth.

**Dissemination**

The information gathered through this study can be useful for many agencies and programs beyond Head Start. The lessons learned can be applied to all education systems that have employed virtual methods as an instruction method. Providing not only adequate technology devices, but also adequate training, can increase the likelihood that teachers will use the technology that they have been provided with (Blackwell et al., 2014). The programs mentioned and professional development information can be immediately used. This can be said of all education systems including more traditional K–12 settings. This information should be distributed to not only Head Start administrators, but also to nationwide education systems that desire to have more effective family engagement and virtual instruction.

Issues of access and equity in the form of technology and resources were brought to the forefront due to the research and the population served. This information can be used by local, state, and federal government, as a springboard to change. Head Start programs serve those that are below the poverty level, and thus highlight the issues of limited resources, access to technology, and the equity of how resources are distributed. This is a larger social issue, a macrosystem level change, that must start now.
Closing Remarks

This study aimed at identifying the barriers and facilitators of Head Start lead teachers during the COVID-19 pandemic. There were many lessons to be learned by the 186 teachers who participated in this study. Head Start lead teachers continued to serve their students and families, assuring that children have the best opportunity to learn. Although there were daily changes and an onslaught of information, sometimes conflicting, being dispersed on a daily basis, Head Start teachers stayed focused on the needs of their students. Survey participant 7 stated that “parents have been using the ideas that I have sent them and are sending me pictures, messages, and videos of their child.” Another survey participant (11) discussed the pride that they had “learning new ways to connect with families.” “Parents have been very supportive along with asking questions and interacting with me when they are able” (survey participant 13). One lead teacher (survey participant 15) said that their “families seem genuinely happy to hear from me twice a week.” These are just a few of the stories that were shared about how Head Start lead teachers are making the best of the situation during the COVID-19 pandemic. This speaks to their fortitude and dedication to the families that they serve, even during a time when the teachers themselves may be facing challenges (Dixon, 2020).

Head Start has faced many challenges over the more than fifty years that it has been in existence. As an organization, it has faced challenges big and small to serve those children who are most at risk. The COVID-19 pandemic is a prodigious time in world history. The events that have unfolded have brought out the very best in many,
tested resiliency, and exposed shortcomings in our systems. Head Start, and all education systems, have learned a great deal in 2020. The lessons learned during this novel time will be important measures of success in the future.

Looking through the lens that Bronfenbrenner gave us in the mid-1970s using Ecological Systems Theory, the layers of community are displayed. Starting from the macrosystem, including our beliefs and values in education and early childhood, it is apparent that there are holes in the systems that shape and preserve the importance of young children. The exosystem layer revealed more areas for growth in the access and equity of technology as well as professional development to assist teachers in providing high quality virtual instruction. The mesosystem layer focused on the physical, social, and emotional needs of families and teachers. The financial impact of the COVID-19 pandemic created needs that were unable to be met by current systems (Bauman, 2020; Bruckner, 2020). Families were struggling to provide the necessities of life for their families. Head Start was able to supply some of those needs through food distribution (Hicks, 2020). Lastly, the microsystem (those most influential on the day to day lives of children) were impacted. Teachers worked to provide stable relationships with their students and families during an unsettled time. Parents worked to provide learning support within the homes, but also faced challenges of their own with employment and lockdowns.

This study aimed to provide a framework for Head Start programs facing the COVID-19 program closures. The lessons learned from this are specific, measurable
methods of improving a system that was not fully prepared for the pandemic.

Although Head Start programs could not have been totally prepared for this novel virus, the inequalities in technology, access, and services were highlighted. Stakeholders have a moral and social responsibility to the children and families to provide high quality education that spans the digital and socio-economic divides.
REFERENCES

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Appendix A

Survey Questions
Title: Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers

The following questions are designed to assess your experience as a Head Start Lead Teacher during the COVID-19 pandemic and Head Start program closures.

1. County in which you are a Lead Teacher for Head Start:
   (List counties- dropdown menu)

2. Years as a Head Start Teacher: 1-2 3-5 6-10 11+

3. Is your program currently providing classroom instruction to children?
   Y  N  If yes, please provide the date of reopening: __________

Capacity

3. How many hours are you currently working during the program closure?
   I am not working 1-10 11-20 20-30 Fulltime

4. Please rate your comfort level with using these forms of technology

   Facebook Group pages (or similar)  Novice  Competent  Expert
   FaceTime (or similar)  Novice  Competent  Expert
   Video Conferencing (Zoom or similar)  Novice  Competent  Expert

Access and Equity

5. Do you have access to high speed internet in your home?
   Y  N  N/A

6. Do you have a cellphone that is provided by your program to connect with families?  Y  N  N/A
7. Do you ever use your home phone or personal cell phone to call or text your families?  
Y N N/A

8. What is your estimate of the percent of your preschool families that have access to high speed internet at home?  
0-24% 25-49% 50-74% 75-100%

9. What is your estimate of the percent of your preschool families that have access to receiving text messages?  
0-24% 25-49% 50-74% 75-100%

Parent Engagement- For the next section,

“Direct engagement” is defined as contact with families/students by phone call, personalized text, facetime, or video chat.

“Indirect engagement” is defined as contact with families/students through a webpage, newsletter, Facebook group, or packets/notes sent through the mail.

10. What percent of preschool families from your classroom have you been able to participate in direct engagement with since the program closure?  
0-24% 25-49% 50-74% 75-100%

11. How often have you attempted direct engagement with your preschool families since the program closure?  
Daily Weekly One time I have not contacted my families

12. Since the program closure, how often have you attempted indirect engagement with your preschool families?  
Daily Weekly One time I have not contacted my families
Long Response Questions

13. How has MHSA supported you in your role as a teacher during the program closure?

14. How has your local Head Start program and administration supported you in your role as a teacher during the program closure?

15. What additional needs do you have that have not yet been met?

16. Since the program closure, what has been your biggest concern?

17. Since the program closure, what is something that has gone very well?

18. Is there any additional information that you would like to provide regarding your experience as a Head Start teacher during the program closure?

19. If you would like to have the opportunity to be interviewed, please leave your contact information below. (This is NOT mandatory)
Appendix B

HSIRB Approval for Survey
Date: March 31, 2020

To: June Gothberg, Principal Investigator
    Kelly Vigants, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 20-04-02

This letter will serve as confirmation that your research project titled “Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers” has been approved under the exempt category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., add an investigator, increase number of subjects beyond the number stated in your application, etc.). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) March 30, 2021 and each year thereafter until closing of the study. The IRB will send a request.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.
Appendix C

HSIRB Approved Survey Consent
Western Michigan University
College of Education and Human Development

Principal Investigator: Dr. Andrea Smith
Student Investigator: Kelly Vigants
Title of Study: Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers

You are invited to participate in this research project titled "Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers".

STUDY SUMMARY: This consent form is part of an informed consent process for a research study and it will provide information that will help you decide whether you want to take part in this study. Participation in this study is completely voluntary. The purpose of the research is to evaluate how Head Start lead teachers continue to provide educational services to children and their families during a program shutdown as a result of the COVID-19 pandemic and will serve as Kelly Vigants’ dissertation for the requirements of the PhD in Education and Human Development. If you take part in the research, you will be asked to answer semi-structured interview questions. Your time in the study will take approximately 1 hour for completing the interview questions. Possible risk and costs to you for taking part in the study may be discomfort from answering questions about teaching during an evolving pandemic and the time to complete the interview. Potential benefits of taking part in the research study may be informing statewide or local policy and program supports. There are no other benefits. The alternative to taking part in the research study is to not to take part in it.

The following information in this consent form will provide more detail about the research study. Please ask any questions if you need clarification or assistance in deciding if you would like to participate in the research study. You are not giving up any of your legal rights by agreeing to take part in this research or by signing this consent form. After all of your questions have been answered and the consent document reviewed, if you decide to participate in this study, you will be asked to sign this consent form.

What are we trying to find out in this study? The information is being gathered in an effort to understand the unique experiences of Head Start Lead Teachers during the COVID-19 pandemic. The questions asked will focus on three areas of concentration: capacity, resources, and support. There will be an opportunity to share personal stories if you would like to.
Who can participate in this study?
Participants of this study must be currently employed Head Start Lead Teachers in the state of Michigan.

Where will this study take place?
The data will be collected via a secured WebEx meeting that can take place in any location that the participant chooses. Please consider a secluded area that has a low amount of background noise. The researcher will be interviewing from her home office that is secluded away from others.

What is the time commitment for participating in this study?
Participants should expect the interview to last approximately 1 hour to complete the WebEx virtual interview.

What will you be asked to do if you choose to participate in this study?
If you agree to participate in the study, you will be asked to participate in a virtual interview that will ask questions on the three areas of capacity, resources and support, as well as any additional information that you would like to share about your experience teaching during the COVID-19 pandemic.

What information is being measured during the study?
Your personal experiences will be compared with other lead teachers to determine if there are patterns, similarities, or differences between teachers throughout the state.

What are the risks of participating in this study and how will these risks be minimized?
The only known risks and costs associated with this study is that the participants may experience discomfort answering questions about an ongoing pandemic and the time that it takes to complete the interview. If any additional risks or costs are identified by the researcher, the study will be stopped immediately and the researcher will contact the IRB for further direction.

What are the benefits of participating in this study?
Potential benefits to participating in this study include the potential for a study that can impact public policy as it relates to teaching during a crisis. In addition, investigators will share the needs described by teachers regarding resources and support to Michigan leaders. The semi-structured interviews allow the participant an opportunity to process through and express their experiences about this unpredicted series of events in a constructive way. There are no other known direct benefits to the participants.

Are there any costs associated with participating in this study?
There are no costs associated with participating in this study.
Is there any compensation for participating in this study?
There is no compensation or participating in this study.

Who will have access to the information collected during this study?
The information provided, including the WebEx virtual interview and recording will only be viewed by the Primary Investigator and Student Investigator. All of the information and saved recording of the interviews will be saved with password protection. Only the PI and SI will have access to the information.

What will happen to my information or biospecimens collected for this research project after the study is over?
After information that could identify you has been removed, de-identified information collected for this research may be used by or distributed to investigators for other research without obtaining additional informed consent from you.

You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study.

The investigator can decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact Dr. Andrea Smith at andrea.smith@wmich.edu or (616)771-9913 or Kelly Vigants at kelly.vigants@wmich.edu or (616)540-0468. You may also contact the Chair, Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298.

This consent document has been approved for use for one year by the Western Michigan University Institutional Review Board (WMU IRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant’s signature ___________________________ Date ___________________________

OR verbal consent given over recorded WEBEX interview and witnessed by:

Witness name ___________________________ Date/Time ___________________________
Appendix D

Scripted Email to Head Start Lead Teachers
Dear Head Start lead teachers,

Thank you for your service to our young children and families in Michigan during this time of uncertainty. You play a critical role in supporting those that are most vulnerable in our state. We appreciate the hard work that you have been putting in, especially now as many of you are facing unknown circumstances in your roles and with the families that you serve.

My name is Kelly Vigants. I am a doctoral student and adjunct professor at Western Michigan University. I have been researching the effects of trauma in early childhood. The COVID-19 pandemic has made me take a closer look into how we serve our highest risk families during program closures. We are all experiencing some level of trauma during this pandemic, including yourselves. As a country, we were not well-prepared for a catastrophic event like this. Head Start, like many other programs, did not have an established protocol for a “Stay Home. Stay Safe.” order.

I am asking you to participate in an important research study. I will be conducting an anonymous online survey that will take Approximately 20 minutes of your time and could serve as the data needed to inform capacity, resources, and potentially policy for handling situations such as these now and in the future. If you are willing, please follow the link at the bottom of this email. It will take you to a consent form that further explains the study. If you agree, it will take you to the anonymous survey. The data collected will be compiled with the results from other Head Start lead teachers throughout the state of Michigan. This information will be shared with the Michigan Head Start Association, the Michigan Department of Education, and other relevant stakeholders to support staff to provide needed services to families during this and future events. Your input is very valuable in this effort.

If you have any questions or concerns about this study, please contact me or the Primary Investigator, Dr. June Gothberg. We will respond to you as quickly as possible. This survey will stay open for one month. It is our hope to capture the essence of this critical time.

Take care and stay safe,

Kelly
Appendix E

IRB Approval for Interviews Informed Consent
Date: May 14, 2020

To: Andrea Smith, Principal Investigator
Kelley Vigants, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 20-04-28

This letter will serve as confirmation that your research project titled “Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers” has been approved under the expedited category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., add an investigator, increase number of subjects beyond the number stated in your application, etc.). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) May 13, 2021 and each year thereafter until closing of the study.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.
Appendix F

Interview Protocol
Providing Head Start Services Amid the Global Pandemic: Facilitators and Barriers of Capacity, Resources, and Support for Lead Teachers

Introduction (10 minutes):

Good morning/afternoon. Thank you all for agreeing to participate in this conversation. I am Kelly Vigants from Western Michigan University.

I asked to speak with you today because you are a lead teacher and completed the Head Start COVID19 Survey in March/April. This survey has helped me to begin to understand your experiences moving to distance education. I am interested in gaining a better understanding about your experiences in regard to capacity, resources, and support. The information you give me today will be used to share experiences of and give recommendations for Head Start lead teachers. I really appreciate you taking time out of your busy schedule at a time like this to help me.

Before we get started, there are a few things you should know.

- I am very interested in your point of view. There are no wrong answers.
- It is very important that I understand your experience, so please stop and ask me about anything that doesn’t make sense to you.
- I promise that I will remain objective. I ask that you please say what you think, not what you think I want to hear.
- The conversation will be audio recorded. This will allow me to go back and listen, take notes, and then write a short summary about what was said. I want to reassure you that I will not share this audio recording. All of your comments will remain anonymous. This means your name will stay secret and won’t be linked you to what you said.
- If there is anything that I ask you that makes you feel uncomfortable, just tell me you don’t want to answer. You can also stop this interview at any time.

Do you have any questions before we begin?

Background:

If you don’t mind, please share with me:

- Your first and last name
• What county you are a lead teacher in Head Start
• The approximate date of program closure

Section 1: Capacity (15 minutes)
Overall research question addressed in this section: What is the capacity of lead teachers to provide educational opportunities to Head Start families while buildings are closed?

Read this to the participant: For this first section, I would like to learn more about your experience as a Head Start lead teacher since your building’s closure and about your capacity to provide distance programming.

Question 1: How were you informed of the pending program closures?

Question 2: How much time was given to you to prepare your students and families?

Question 3: How prepared did you feel to provide education from a distance?

Section 2: Resources (20 minutes)
Overall research question addressed in this section: What resources are lead teachers using or still need to provide Head Start services during building closures?

Read to the participant: For this second section, I would like to learn more about the resources you are using or still need as a Head Start lead teacher during building closures.

Question 1: What did you find are the most successful methods to connect with families during the program closure?

Question 2: What are your main concerns about technology during the pandemic? (cell phones, computers, WIFI access)
Question 3: What resources were given to you by your local Head Start program?

Question 4: What resources were given to you by the Michigan Head Start Association?

Question 5: How else have you gotten resources to assist you? (you might need to prompt here – Google search, teacher pay teachers, Pinterest, colleagues, etc.)

Question 6: What other resources do you still need to support your teaching?

Section 3: Support (20 minutes)

Overall research question addressed in this section: What support has been given to or still needed for lead teachers to do their work remotely?

Read this to the participant: For this third section, I would like to learn more about the support you have been given or still need as a Head Start lead teacher since your build’s closure.

Question 1: Please describe what information you were told on providing services to families during the program closure within the first week.

Question 2: How has that changed now?

Question 3: What methods have been used to help you say connected to administration and teammates?

Question 4: What professional development have you had access to since the building closure? (probe on this one to see if administration supported PD or if it was a self-effort)

Question 5: What other support do you need?
Section 4: Personal Stories

Question 1: What professional challenges are you facing as a teacher during the program closures?

Question 2: What personal challenges are you facing as a teacher during the program closures?

Question 3: What is one thing you feel you have done really well for Head Start students and their families since building closures?

Question 4: Is there anything else about your experience since building closures that you think would be helpful for others to know?

Conclusion: Thank you for participating in this conversation. I appreciate your openness. I want to make sure I get your words right, so I may be back in communication to share the de-identified interview transcription. If you have any questions or concerns please don’t hesitate to call or email me: Kelly Vigants, 616-540-0468 (cell), kelly.vigants@wmich.edu.
Appendix G

Codebook
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<th>Measurement Level</th>
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<td>How many times have you had direct contact</td>
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Appendix H

Interview Field Notes
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<tbody>
<tr>
<td><strong>1</strong> Houghton</td>
<td>Prepared to use technology, used mainx to reduce costs but did not understand technology at first.</td>
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<tr>
<td><strong>2</strong> Kalmaro</td>
<td>Kalamboi library was often used by many teachers.</td>
</tr>
<tr>
<td><strong>3</strong> Houghton</td>
<td>Families did not have enough devices, many families did not have access to the internet.</td>
</tr>
<tr>
<td><strong>4</strong> Houghton</td>
<td>Students were not prepared for lessons.</td>
</tr>
<tr>
<td><strong>5</strong> Houghton</td>
<td>But they were prepared and had access to devices.</td>
</tr>
<tr>
<td><strong>6</strong> Houghton</td>
<td>They were able to access the internet.</td>
</tr>
</tbody>
</table>

**Technology**

- Remind APP was used for messaging.
- Google Classroom was used for lessons.
- Zoom was used for video conferencing.
- Microsoft Teams was used for collaboration.

**Communication**

- First week had no expectations. 
- Students were given instructions on how to use technology.
- Remind APP was used for messaging.

**SPP and Program Use**

- Remind APP was used for messaging.
- Google Classroom was used for lessons.

**Expectation**

- Some teachers expected students to complete lessons in a timely manner.
- Others expected students to complete tasks at their own pace.

**Conclusion**

- Technology was an important tool in the virtual learning environment.
- Teachers had to adapt their teaching strategies to accommodate different learning styles.

---

**Focus on Tech**

- Students were given opportunities to use technology in the classroom.
- Teachers were encouraged to incorporate technology into their lessons.

---

**Focus on Language**

- Teachers were given training on how to teach language effectively.
- Students were given opportunities to practice language skills in a virtual setting.

---

**Focus on Social Emotional Learning**

- Teachers were provided with resources to support social emotional learning.
- Students were given opportunities to express their feelings and emotions.

---

**Focus on Reading**

- Teachers were given resources to support reading instruction.
- Students were given opportunities to read and discuss books.

---

**Focus on Writing**

- Teachers were given resources to support writing instruction.
- Students were given opportunities to write and receive feedback.

---

**Focus on Math**

- Teachers were given resources to support math instruction.
- Students were given opportunities to practice math skills in a virtual setting.

---

**Focus on Science**

- Teachers were given resources to support science instruction.
- Students were given opportunities to conduct experiments in a virtual setting.

---

**Focus on Art**

- Teachers were given resources to support art instruction.
- Students were given opportunities to create art projects in a virtual setting.

---

**Focus on Music**

- Teachers were given resources to support music instruction.
- Students were given opportunities to participate in music performances in a virtual setting.