5-12-2022

Extended school closure: The perspectives from a rural school community

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A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Curriculum and Instruction
in the Department of Curriculum, Instruction and Special Education

Mississippi State, Mississippi

May 2022

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Date of Degree: May 12, 2022

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Title of Study: Extended school closure: The perspectives from a rural school community

Pages in Study 347

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The COVID-19 pandemic caused severe disruption to students worldwide, especially younger ones. This instrumental case study investigated how elementary students in a rural United States southeastern community experienced the sudden, extended closure of their school building facilities triggered by this health emergency. Multiple stakeholder perspectives were gathered through semi-structured interviews with the elementary school principal, three classroom teachers, three elementary-aged students, and three student family members, along with classroom observations as well as corresponding documents and artifacts. Interview commentaries and weekly reflective commentary journal entries were employed to address data validation and reliability issues. The findings demonstrate how the rural elementary school community leveraged its unique strengths (e.g., partnership with families, communal leaders, businesses, and local institutions) and overcame disadvantages under emergency conditions. Salutary lessons drawn from the COVID-19 extended school facilities closure were shared from the perspectives of the rural school stakeholders.

Keywords: rural elementary students, extended school closure.

DEDICATION

This dissertation is dedicated to individuals who are planning, embarking, or going on the arduous journey to achieve a doctoral degree. I consider myself particularly fortunate to be capable of completing the degree as the percentage of doctoral student completion was approximately 50%, the lowest amongst all academic degrees (Wollast et al., 2018). There were times that I thought that I could not reach the end of this grueling journey – being a part-time employee, a full-time graduate student, a "single" mother of three little kiddos, and then all of a sudden, the COVID-19 pandemic broke out... Friends kept asking me how I survived, wearing such "multiple hats," I simply replied, "Just do it!" Similar to the student participants in my dissertation study, my perseverance was propelled by the long-term goal which was the Ph.D. degree, and specific, feasible objectives paid off. I hope that my accomplishment can generate the necessary motivation for you on your doctoral journey!

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ACKNOWLEDGEMENTS

Sir Isaac Newton was quoted as saying, "If I have seen a little further it is by standing on the shoulders of Giants" (Martin, n.d., para. 2). This dissertation study would not be successfully completed without tremendous support from "Giants" including but not limited to my family, dissertation committee, research participants, department, and friends.

First, I would like to acknowledge my family for their wholehearted assistance and encouragement. There were times when my burdens became intolerable on the Ph.D. journey, my immediate family (i.e., my parents, my parents-in-law, my four children, and particularly my beloved husband) constantly raised my spirits with their kind words, reassurance, and succor. Even in the face of adverse circumstances, my husband always knew how to put a smile back on my face and showed me the other (positive) side of the coin.

Second, I would like to express my deep sense of gratitude to my dissertation committee members: Dr. Dana Franz, my committee chair and my major professor, who offered sensible advice and led me through the entire doctoral journey; Dr. Kathleen Alley, my committee member, who guided me through the academic writing process, as well as promptly and meticulously pointed out major writing-related edits that I needed to make in this dissertation; Dr. Jianzhong Xu, my committee member, who continually pushed me to my potential by provoking challenging questions and insightful comments; and especially Dr. Kristin Javorsky, my co-major professor, who twice sat down with me, putting herself in my shoes, helping formulate, and then developed possible research ideas for my dissertation. Additionally, Dr.

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Javorsky also leveraged her personal and professional resources to provide me with her best assistance for the completion of this dissertation project.

Third, I would like to show appreciation for Ms. Casey Glusenkamp, who offered her services and resources during the implementation of the dissertation project. Besides, I want to extend my thanks to my "devil's advocate," all the panel members, and research participants for their valuable time and contributions to this dissertation study.

Fourth, I would like to show sincere gratitude towards Department of Curriculum, Instruction and Special Education, College of Education, Mississippi State University, who financially and emotionally aided my study and research throughout my five years in the United States. This department is comprised of the most friendly and benevolent professors as well as supporting staff of the university.

Fifth, I would like to pay tribute to the generous support that my friends lent me from the date I planned to take the Ph.D. journey to the date of my graduation. I want to thank Dr. Dan Ho for relentlessly motivating me on this laborious journey. I want to send my thanks to Loan Kirkland, who showed me practical ideas of what I could achieve. I want to acknowledge Dr. Stephen Cottrell for his profound wisdom as a friend, a teacher, and a father. Lastly but importantly, I would like to extend my gratefulness to friends whose names are not listed here (due to time and space constraints), but without their help and encouragement, I would not have been able to cross the finish line of the Ph.D. journey.

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CHAPTER I

INTRODUCTION

A burning issue arising in the spring of 2020 that concerned human beings globally was the coronavirus pandemic or COVID-19. This pandemic is reminiscent in some ways of the 1918 Spanish influenza pandemic due to certain similarities. Both pandemics were caused by novel viruses for which scientists had not developed vaccines. As a consequence, the initial short-term response to both pandemics included few non-pharmaceutical measures such as self-quarantining, social distancing, and contact tracing. Another similarity between the two situations is the rapid spread of the viral infection as well as the high deaths. The 1918 Spanish flu infected 500 million people worldwide – approximately one third of the world population at that time, resulting in over 50 million deaths globally, including 675,000 victims in the United States. To date, the COVID-19 pandemic had 346,917,064 confirmed cases worldwide, causing 5,586,938 casualties as of January 22, 2022. The number of coronavirus cases in the United States reached 70,212,127 with 864,569 total deaths (Pettersson et al., 2022).

There are several differences between the two pandemics. First, the 1918 Spanish influenza is caused by a flu virus while COVID-19 is similar to chronic acute pneumonia. Other disparities are reflected in how one contracts the disease such as living conditions and the quality of the community healthcare systems. For example, the world's first influenza vaccine was not licensed until the 1940s in the U.S. In addition, crowded living conditions and poor hygiene, coupled to the global spread by World War I soldiers, the lack of antibiotics for secondary

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bacteria was yet another contributing factor to the global disaster of the 1918 pandemic. The world population in 1918 was approximately 1.8 billion, while the 2020 world population was estimated to be 8 billion people (Terry, 2020). With a denser population and the development of transportation, especially airlines, the cases of COVID-19 escalated rapidly. Since the 1918 pandemic was an influenza, it ended in the summer of 1919 due to higher levels of immunity in the community. Although global communication among researchers, scientists, and governments regarding pandemics, viruses, and their available treatments is far better today than it was in 1918, COVID-19 is not caused by a flu virus and consequently, resulted in multiple following waves of infection.

In the spring of 1918 when the Spanish flu pandemic arrived in the United States by returning military personnel, national public health leaders announced, "This is an ordinary influenza by another name … You have nothing to fear if proper precautions are taken" (Soucheray, 2020, para. 3). Consequently, not one American city imposed quarantines that spring. Schools in New York City and Chicago stayed open, and the outbreaks became very serious in those two cities. In places where early actions such as strict quarantines, no mass gatherings allowed, and school closures (See Glossary at the end of this chapter for definition) were enforced, lower death rates were reported (Mineo, 2020). On the other hand, it was the outbreak of the Spanish flu pandemic in the fall that provided natural immunity (Soucheray, 2020).

Similar to governmental leaderships' public statements in 1918, when the first cases of COVID-19 were confirmed in the United States in January 2020, the American president announced that the virus was no worse than a seasonal flu. Following the president's lead, several state governors did not mandate school closures (i.e., closing physical school buildings,

in-person and traditional methods of instruction) until the middle of March 2020. Due to the

exponential spread of COVID-19, most states made the decision in April 2020 to close schools

for the remainder of the academic year 2019-2020. This decision affected at least 124,000 U.S.

schools and 55.1 million students (Map: Coronavirus and School Closures, 2020).

Although some historians keep referring to the 1918 Spanish flu epidemic when

discussing the COVID-19 pandemic, the only applicable learned lesson from that pandemic was

that the earlier a city enforced school closures, the lower infection rates seemed to be (Sawchuk,

2020). Schools functioned very differently one hundred years ago when the Spanish influenza

epidemic broke out. The number of students enrolled in schools was much less since the majority

of jobs at the beginning of the century did not require applicants beyond primary education.

Also, secondary schooling was not mandated nationwide. Consequently, comparing student

populations of that era what schools looked like back then to those of today yielded very modest

benefits. It was more sensible to investigate how the pandemic was handled in 2020, and it was

important to note that tackling the pandemic was not and should not have been the same in all

locales because different student populations presented different needs. It was suggested to

examine how rural schools in remote areas dealt with small-scale closures in the past decade

since there exists limited literature regarding how lengthy school closures were handled. Stephen

Pruitt, president of the Southern Regional Education Board, commented, "There is no research

and there is no best practice for this kind of mass extended closure … This is going to be new for

everyone" (Blad, 2020, para. 4). This research study aimed to contribute to the aforementioned

literature gap by investigating one rural school community's response to an extended school

facilities closure (See Glossary at the end of this chapter for definition) through their

stakeholders' perceptions and responses to such an event. The results of such research can assist

rural school districts and communities in their strategic planning to mitigate the negative effects of extended school closures in the future.

The risks for children subjected to extended school closures may be similar to those identified in research on a well-known phenomenon called summer slide, summer setback, or summer learning loss when they missed three months of school in the summer (Alexander et al., 2014; Burkam et al., 2004; Downey et al., 2004; Entwisle et al., 2018; Heyns, 1987; O'Brien, 1999; Phillips, 2000). When the school closed for the summer break, children from well-off families enjoyed expansive summer experiences such as library trips, reading books at home, enrichment activities (visiting museums, attending concerts, field trips), vacations in foreign countries, organized sports activities, extra-curriculum lessons (music, swimming, gymnastics), which significantly exposed them to life beyond the classroom. On the other hand, students from low-income families without access to these experiences and activities were more likely to suffer a tremendous loss of academic skills over the summer months. Over time, this academic loss accumulated, creating an achievement disparity that was more apt to lead to permanent school dropout and its all-too-often negative social and economic consequences. In a longitudinal research study with a sample size of nearly 800 students in Baltimore in 1982, Alexander et al. (2014) monitored students' academic achievement from the first grade to adults (i.e., participants turn 28 or 29 years old). The gap in reading comprehension between the low socioeconomic and high socioeconomic students as measured by the California Achievement Test over the course of five elementary years was magnified by nearly three times after four summers.

Following the outbreak of the COVID-19 pandemic, U.S. elementary students lost more than five months of in-person instruction, yet the risks or the problems that resulted from this were not the same for all children. For those students already demonstrating below grade level

reading proficiency, the extended closure likely further exacerbated their academic difficulties. The impact on students would also differ, depending on their family's income level (e.g., high versus low socioeconomic statuses), their education level, their location (e.g., rural versus urban areas), and the supports that the students received from the school system (e.g., individualized education planning, response to intervention, English learner support).

Rural schooling issues are also different from urban ones; hence rural students, with both strengths and opportunities to succeed, faced some obstacles that their counterparts living in urban and suburban settings did not. Rural school districts might have certain limitations such as fewer financial resources, lack of Internet access, and low mobility for families. Yet, rural schools might possess inherent strengths such as small class sizes and less discipline problems (Barley & Brigham, 2008). In addition to strong ties with students' families, rural teachers received solid support from local institutions such as churches, social agencies, and community organizations (Azano et al., 2019). Rural students were also depicted as possessing funds of knowledge about the local place, their own independence, and autonomy that could be translated into curricular development (Moll et al., 1992). Under the impact of the COVID-19 pandemic, however, these advantages of rural schooling became constrained. For instance, the state closure together with social distancing practice resulted in the termination of the traditional support provided by churches and other local institutions, which, in turn, ended the assistance that rural schools received from these organizations.

This study explored one public elementary school in a rural school district with academic rank within the bottom 50% of the state's school districts, based on the combination of math and reading proficiency testing data. Sunshine Elementary School (pseudonym) was categorized as a Title I school, located in a rural town in the Southeastern United States. The student-teacher ratio

was 15.06% (National Center for Education Statistics [NCES], 2019a). At Sunshine Elementary, 100% of the students were eligible for free lunch under the National School Lunch Act. Approximately 75% of the students were African American.

It was very likely that having missed over five months of schooling had a disastrous impact on the student population; especially low-income students in the third grade and under. Douglas N. Harris, a Tulane University professor emphasized, "The key thing is all these things [extended school closure] point in the same way – it is not going to be good for student learning" (Sawchuk, 2020, para. 43). Since little research work has been done on the effect of lengthy school closure caused by pandemics on student learning, this research study attempted to add to scant literature available by exploring how elementary-aged students at a rural Southeastern United States public school experienced the school closure. The research question that guides the study is as follows:

How did rural elementary-aged students experience the 2020 extended school closure, as perceived by themselves and other rural school community stakeholders (i.e., school administrators, classroom teachers, and family members)?

Table 1

Glossary

Term	Definition
Child poverty	The share of children who are below the age of 18 living in families whose incomes are below the federal poverty level. For example, in 2019, a family composing of two adults and two children with the total annual income below $25,926 was in the poverty category.
Extended school facilities closure	An extended period of time (generally over 10 consecutive school days) when a school is closed under an emergency (e.g., climate-related disasters, public health orders) and hours of instruction are being provided to students using non-traditional methods (e.g., online/ remote learning platforms, low-technology print home learning packets)
Extended school closure	An extended period of time (generally over 10 consecutive school days) when a school is closed under an emergency (e.g., climate-related disasters, public health orders). During this period, hours of instruction may be either not provided to students at all or provided to students using non-traditional methods (e.g., online/ remote learning platforms, low-technology print home learning packets).

CHAPTER II

LITERATURE REVIEW

This literature review begins by presenting the conceptual frameworks that was employed as a lens to examine how one rural school community responded to the extended COVID-19 shutdown and the eventual re-opening of its elementary schools. Following this, the review defines the term "rural," followed by educational advantages and challenges experienced in rural communities. The review then examines the unique characteristics of rural students, rural teachers, and rural communities. The next section discusses how schools in rural locales were intentionally structured in response to their advantages and disadvantages. The chapter ends with a discussion about the unexpected and extended school closures due to the COVID-19 pandemic.

Conceptual Frameworks

When conducting research about rural education, Howley and Howley (2014) advised researchers to develop their appreciation for rurality. This means researchers had to obtain direct experiences with what was basically rural in a deep and extensive manner. For those who were brought up in urban areas, they needed to abandon their superiority attached to metropolitan culture and economic advantages. The research in this field often focused on the problems associated with rural schools, viewing schools in remote rural locales as deficient and in need of enhancement. The deficiency theme consisted of but was not limited to the followings: rural students, rural teachers, rural families, rural education facilities, and rural culture.

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In addition, having some rural background knowledge or experience was necessary to make connections with rural civilians. Rural stories, experiences, and background could assist researchers to foster relationships with the rural community. Reading local newspapers and viewing websites to get a sense of the current problems in the research site (e.g., amount of rainfall this year, the harvest last year) made it easier for researchers to enter the rural community and establish relationships. Halsey was once told, "We're sick of being research, you fellas get a Ph.D. and we get nothing" when he was working in a remote rural Aboriginal area (Bartholomaeus et al., 2014, p. 60). Therefore, it was critical for those researching rural contexts to connect with the people in those locales to show that they valued what rural communities could provide. In lieu of doing research "on" rural participants, researchers had to consider undertake research work "with" and "for" them (Bartholomaeus et al., 2014, p. 60).

The conceptual frameworks that undergirded the present study included Reflexive Inquiry (Brann-Barrett, 2014) and the Three Rs (Anderson & Lonsdale, 2014). Reflexive Inquiry developed by Brann-Barrett (2014) valued relationships, epistemology, and socio-culture. Creating the relationships amongst people during the research procedure was important in the sense that meaning was made via human communication. Researchers' relationships with participants and the communities had an influence on the research findings. Theories had a role in informing researchers' assumptions, how researchers approached their study, how they involved subjects, how the analysis process took place, and how results were presented. Social and cultural viewpoints were at the center of how researchers engaged with and interpreted the data. People tended to communicate their similarities and dismissed differences. Yet the differences were what made the world plural and brought about thorough mutual comprehensions. Reflexive Inquiry underlined the discovery of the overlapped as well as distinct

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socio-culture with subjects and their community. To understand the rural community, researchers consulted other researchers or experts in the field about what made community, globalization, besides personal "insider-outsider" reflection and notion of the rural community (e.g., local history, industrial to post-industrial shift, local economy, landscapes, etc.; Brann-Barrett, 2014, p. 77).

Importantly, participants' perspectives deserved considerable attention in Reflexive Inquiry. First, some connections with participants needed to be established in order to strengthen the research (Brann-Barrett, 2014; Hamm, 2014; Henderson & Lennon, 2014). Participants might assume that researchers knew all about what they said, so they might not elaborate their views. Relationships with participants helped engender ongoing discussions with participants, which clarified participants' points. Second, aware that researchers could never fully understand one's experiences, Brann-Barrett (2014) noted that researchers had to minimize their voices and maximize the time and plethora of ways to obtain participant's experiences. Interviews, focus groups, observations, self-produced arts (e.g., participants' paintings), media, visual methods (e.g., photo elicitation), music (e.g., lyrical music) were amongst the employed instruments to gather data. Using multiple tools helped provoke, stimulate, and trigger participants to express nuanced experiences through which researchers could understand, validate, interrogate, and discuss with participants.

There were some limitations with the use of multimedia tools. For ethical issues, participants were not allowed to take photographs of people or houses because these were easily recognized by others in a small rural community. Another limitation was that researchers needed to remind participants of what was not presented in their photos. These views might represent important points that could not be left out. Moreover, the power of relations between researchers

and participants (e.g., professors and college students) could not be neglected. Researchers needed to question whether participants were discussing what researchers wanted them to discuss or what truly reflected the rural community. Last but not least, it was a matter of equality that researchers shared what they found with the community and others. Researchers ought to disseminate their research findings in a way that respected participants, the community, and the research analysis. From the beginning of the research process, researchers needed to clearly state that researchers analyzed what participants shared in relation to the research inquiry. When sharing participants' standpoints, researchers assured that their voices were important and quoted in context. Beyond the community, research results could be disseminated in academic conferences and peer-reviewed journals.

Anderson and Lonsdale (2014) strongly recommended Three Rs for implementing rural research: respect, responsibility, and reciprocity. The first R, Respect, required researchers to show respect for both mainstream and non-mainstream (i.e., Western versus non-Western, White versus non-White) values. In other words, researchers needed to learn to abandon the western way of thinking to see the benefit and significance of other non-western ones. Also, the research settings needed to be recognized and embraced. In order to gain mutual trust and comfortability, researchers had to organize pre-meetings with leaders or key members of the rural community. The meetings could be in the form of office visits, workshops, group sessions, or informal dinners. In these meetings, researchers talked about the research purposes, research procedures, participants, research dissemination, etc. while allowing community members to voice their opinions and ideas. All information about how, when, and where the data would be published ought to be stated accurately and followed to maintain research responsibility. Participants should receive compensation for their time and recommendations. Thank-you letters should be

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sent out to participants as a polite manner. Consent forms including information about the research such as research purposes, procedures, location, time, participation, how information would be reported, etc. had to be sent and get approval by participants before the research was carried out.

Keeping participants' information confidential was another responsibility of researchers, even though this was quite challenging in a small remote rural community. Reciprocity meant that researchers created connections, relations, and collaboration with participants in a way that both parties interacted and contributed to reach the research outcomes. Lanas and Rautio (2014) stressed that reciprocity in research was not a simple one-time exchange between taking something and giving something back. Research studies became spaces where researchers and participant collaborated and worked towards the research purposes. The spaces were also based on the needs of participants besides research needs, so reciprocity relied on the relentless negotiation between participants' and researchers' changing needs. Reciprocal research mandated researchers to stay attentive and open to "positive actions," which were not anticipated before conducting the research (Lanas & Rautio 2014, p. 184). These actions were decided by participants' new realizations and/or ethical issues, positive contribution from researchers. Constantly reflecting on the arising needs (i.e., insecurities, feeling uncertain) led to fruitful findings. Reciprocity created the relation that made researchers and participants feel that they were in the same circumstances, learning from one another, making contributions, and strengthening positive interactions with their learnings.

Definition of "Rural"

The National Center for Education Statistics (2006) defined the term "rural" using a locale classification system that was primarily based on the distance of an identified school

location to the closest urban area rather than the size of the local population and its county boundary. Each of the four major location categories – city, suburban, town, and rural – were divided into three subcategories, which made up twelve metrocentric codes. Rural locales were described in three subcategories: "fringe," "distant," and "remote." A fringe rural locale referred to a rural territory that was not more than five miles from an urban area, and not more than 2.5 miles from an urban cluster. A remote rural locale referred to a rural territory that was more than 25 miles away from an urban area and 10 miles away from an urban cluster. A distant rural locale referred to a rural territory that was located between a fringe and remote rural locale (i.e., a place that was over five miles but not more than 25 miles from and urban area, and over 2.5 miles but not more than 10 miles from an urban cluster).

In recent years, there has been a tremendous growth in rural student enrollment (Eckert & Alsup, 2015). According to the school locale classification system, one in every four public-school students attended a rural school in half of the U.S. states (NCES, 2015a). In some states, such as Maine and Vermont, the percentage of public-school students in rural schools has increased up to more than 50% (see Figure A1 in Appendix A).

Although the U.S. Department of Education released its definitions of rurality as mentioned above, Eckert and Alsup (2015) proposed that it was necessary to cross the geographical boundary and to discuss "rural" as the marker of identity with which people were associated rather than the distance from urbanity, population, or remoteness. A small rural K-6 school in Tennessee consisted of 350 students (a Tennessee rural school district might have enrollment between 1,500 and 3,500 students), while a rural K-8 school in Montana had only eight students enrolled (Pratt, 2018). Accordingly, the definition of rural schools needed to reflect a sense of the rural civilians' "feeling, community, and understanding" (Pratt, 2018, para.

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9). Likewise, Azano et al. (2019) assumed that the definition of "rural" used by the U.S. Department of Education relied primarily on geographic distance from urbanity, which fell short when it came to understanding the rural space and place in terms of history, economy, ecology, and politics. From the perspective of these researchers, rurality was multidimensional.

Negative Bias about "Rural"

Researchers argued that a simplified definition of rurality promoted a number of deficit stereotypes about rural students, teachers, schools, and communities. For example, American rurality, under biased rural representations by popular media and press, often invoked negative images of an abandoned one-room schoolhouse that was located on a featureless plain, or a news special about the failures of rural schools (Dahill-Brown & Jochim, 2018; Donehower, 2014). With needs being overlooked since the beginning of the 20th century, rural communities have been problematized as "backward" and "in need of modernization" (Dahill-Brown & Jochim, 2018, para. 12). These misrepresentations did not apply to any specific rural area, but they partly contributed to the negative storylines about rurality.

It was suggested that rural had to be considered as the core in itself. More than just distance from an urban space, rural needed to be understood with its social construction. Rural communities have developed strong senses of identity in opposition to external changes (Dahill-Brown & Jochim, 2018). For example, Azano et al. (2019) gave an example of a rural area still viewing itself culturally rural, despite a developing industry and a growing population.

Educational Advantages of Rural Education

The nature of teaching in rural areas might include benefits such as small class sizes, strong ties with families, communities, and rural institutions (Barley & Brigham, 2008). The

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small ratio between the teacher and students as well as relatively few disciplinary problems made the working environment for rural teachers seem to be more attractive compared with their counterparts in urban and suburban settings (Monk, 2007). The lowest student-teacher ratio in small rural public schools with less than 200 students was reported to be 9.4% (NCES, 2007). Teachers in rural schools asserted that they had more autonomy and influence regarding school policy, beyond a mere greater social bond (Monk, 2007). Rural teachers might receive support from local institutions such as churches, social societies, communal organizations, and extension offices in addition to developing close relationships with families and the local community (Azano et al., 2019). In addition, rural locales were usually associated with natural beauty, tranquility, and recreation, which turned several rural areas into popular resorts and increased the value of the local real estates. The higher the property taxes were, the more funding the rural schools received (Monk, 2007).

Challenges of Rural Education

Alongside its advantages, rural education nevertheless has been confronted with numerous and perpetuating challenges of which poverty has become the constant backdrop. Among these challenges were low literacy, underserved minority students, low academic achievement, lack of Internet access, etc. (Lavalley, 2018). In the United States, 244 of the 250 poorest counties in the country were located in the rural areas, and 2.5 million of the country's eight million rural children were brought up in low-income families (Monk, 2007). The rural South of the U.S. was reported to experience persistent poverty (i.e., poverty could last from generation to generation) – nearly 84% of Southern counties lied in this category (Lavalley, 2018). For example, intense rural poverty existed in the Southeast, specifically the Mississippi Delta, the Southwest, Great Plain, and Appalachian regions. Notwithstanding the particular state,

it was more likely for minority students (except Asian students) to qualify under the National School Lunch Act than it was for their Caucasian peers. In rural schools where more than 75% of the students were eligible for free or reduced-price lunches, only 8.6% and 6.7% of non-Hispanic White and Asian students respectively participated in the National School Lunch program, while the percentage of American Indian or Alaska Native, African American, Hispanic, Pacific Islander students who participated were 47.7%, 37.6%, 31%, and 24.4% respectively (NCES, 2015b). On the national assessment, when socioeconomic status (SES) was removed, the student performance gap between rural and suburban locales disappeared, which demonstrated the unceasing and enormous effect of persistent poverty on child literacy. While 43% of low-SES students were identified as struggling readers, only 20% of high-SES students were categorized into this group. While fourth graders who were eligible for the National School Lunch Program (NSLP) received the average reading score of 208 out of 500, other fourth graders who were not eligible for NSLP scored up to 236 points (National Assessment of Educational Progress [NAEP], 2018b). In the 2016 international literacy assessment PIRLS, fourth-grade students in schools of more than 75% of students eligible for free or reduced-price lunches attained significantly lower reading scores than the overall U.S. reading score (NCES, 2016).

Regarding students' ethnicity on the national level, the majority of rural students were Caucasian (72.4%), followed by Hispanic (12.2%), African American (9.3%), Asian (1.4%), Pacific Islander (0.2%), American Indian or Alaska Native (2.1%), and two or more races (2.4%) (NCES, 2013). However, the national picture did not reflect the distribution of diverse students at the state level. In Florida and Oklahoma, minority students accounted for nearly 40% of all rural students. Yet the percentage went up to 50% or more in South Carolina and Mississippi.

The percentage of students of colors varied from 3.7% (Rhode Island) to 85.6% (New Mexico) (Showalter et al., 2017).

These recently increasing numbers of minority students brought about the additional requirement for rural teachers to be capable of addressing English learners in their classrooms, which made staffing even more difficult. In the Cuba Independent School District, New Mexico, for instance, staffing was a problem because the school district had to compete against other districts to recruit certified teachers (Griswold, 2020). The majority of the students in the school district were Native American Navajo (71%), followed by Hispanic students (26%), and others (3%). Due to this student diversity, teachers did not always understand their students' languages and cultures. Yet, rural schooling issues were still quite beyond the earshot of policymakers. An analysis of bills introduced in National Conference of State Legislatures from 2001 to 2016 showed that only 71 in thousands of education-related bills explicitly discussed rural schooling and communities (Dahill-Brown & Jochim, 2018).

Furthermore, the low percentage of households with Internet access hampered rural education. Although the average percentage of U.S. households with Internet access was 81.9%, many southern states such as Florida, Georgia, North Carolina, South Carolina, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas had a lower percentage of household Internet access compared with the national percentage (NCES, 2018a). The percentages of households with Internet access in Mississippi and Louisiana, for instance, were 71.4% and 74.5%, respectively.

In addition to less technology access, many rural students also experienced less access to advanced courses, especially Advanced Placement courses that focus on Science, Technology, Engineering, and Mathematics (STEM) subjects. To illustrate, the percentage of STEM

Advanced Placement subject access for students in urban and suburban areas were 88% and 93% respectively, compared with only 62% for rural students (Mann et al., 2017). Lower college attendance rates, which also resulted from high levels of poverty, impeded the educational accomplishment of rural adults (Lavalley, 2018). It was less likely for rural students to hold a college degree than non-rural counterparts. While 62% of urban students received either associates, bachelors, or higher degrees, only half of rural students received these from post-secondary education (U.S. Department of Agriculture, 2017). Taken together, these statistics suggested that rural students' effort to achieve higher education was significantly hampered by financial burdens and physical distances combined with academic difficulties.

Rural School Students

Most of rural public school students across the country were described to be either Caucasian or Native American, with some African American or Asian (NCES, 1997). A small part of rural students (11.5%) had Individualized Education Programs for their special educational needs. School-aged child poverty were observed in small rural school districts situation in the South and West of the country.

Rural students usually did not see themselves or their rural communities in the textbooks. As the country shifted from rural to urban systems, rural school students have been unceasingly "unheard, unseen, and under-represented" (Donehower et al., 2007, p. 25). Cormack (2013) noted that science topics were metro-centric, discussing such matters that were irrelevant to rural school students such as traffic and pollution issues. Rural cultures were limited in their curriculum due to high-stake standardized exams. Despite its existence, local literacies were not recognized. Fishing families did not use standard English, but a nuanced language specific to their fishing practices and bioregions when communicating about fishing. The entire country

utilized standard urban literacy models. Consequently, it was not difficult to find examples of book illustrations of white, middle-class children living in urban locales. As Schultz (1999) pointed out, American textbooks illustrated families who possessed summer houses, their children had playrooms, kittens and rabbits as pets, and sometimes ponies. Hence, the image of a young girl sitting in her rocker with her feet resting on an upholdstered foot stool was not "unusual" even in the nineteenth century when ninety percent of Americans lived in rural areas (Schultz, 1999, p. 43). In the past, urbanity was more valued than rurality.

Similar to textbooks, testing did not echo rural cultures. Instead, tests with anti-rural bias negatively affected rural school students' performance. For example, the No Child Left Behind (NCLB) Act signed in 2002 required that all students had to perform to the norm, whilst norm-referenced tests reflected the values and practices of white American middle-class in urban existence. Consequently, most rural students did not perform well on these tests, and punishment for their literacy deviance was no different from punishing them for their race and class.

A U.S. public school would lose federal funding if it did not meet the performance standards of adequate yearly progress (AYP), which mandated that academic performance in the subsequent year was higher than that of the previous year. The quantitative measure of AYP did not work when applied to the low student population of rural schools because, as Monk (2007) observed, small and rural schools with low student enrollments made these schools more vulnerable to quantitative accountability, despite the teachers' exemplary teaching performance. When it came to assess student subpopulations, the problem was aggravated because the small number of students became even smaller. Rural schools were obligated to perform under the same AYP expectations as urban and suburban schools, but little was done to address these inequalities in the formula for federal school funding.

One unique attribute that distinguished rural students from their non-rural peers was the distinctive background knowledge which they brought to the classroom. Hattie (2015) concluded that this background knowledge accounted for up to approximately 50% of total student learning variance after conducting a synthesis of more than 1,200 meta-analyses. Experiencing historically and culturally developed ranges of knowledge and skills that were necessary for the function and well-being of their families, rural students possessed unique funds of knowledge (Moll et al., 1992).

> The funds of knowledge include information and formulas containing the mathematics, architecture, chemistry, physics, biology, and engineering for the construction and repair of homes, the repair of most mechanical devices including autos, appliances, and machines as well as methods for planting and gardening, butchering, cooking, hunting, and of "making things" in general. Other parts of such funds included information regarding access to institutional assistance, school programs, legal help, transportation routes, occupational opportunities, and the most economical places to purchase needed services and goods. (Vélez-lbáñez, 1988, p. 38)

It was observed that clustered households tended to be more self-sufficient than nuclear-based households, so they did not depend as much on technical assistance provided by the market. Accordingly, children living in clustered families, rather than nuclear ones, under their household cultural structures, gained experiences from working or playing individually and with others. To illustrate, a sample of family funds of knowledge that rural students might inherit from their families is presented in Table B1 (See Appendix B). In Moll et al.'s (1992) study, a Hispanic student named Carlos was described as having a rural fund of knowledge related to pharmacy, ranches, fishing, economics, international commerce (e.g., selling Mexican candies,

bike parts), and immigration laws. His parents demonstrated great care for their children and had their own principles of childrearing – supporting their children's learning to meet the goal of university education. They also ingrained in their children a strong sense of respect for others as well as the pride and distinct identity of the family.

Rural School Teachers

Rural schoolteachers, as described by Rural Education in America (2012a), were female (75.5%), white (88.7%), aged 30 to 39 (28.5%), and with a bachelor's degree (45.5%). The main teaching assignments for rural elementary teachers were general elementary (62.6%). The pupil/teacher ratio in rural public elementary schools was reported to be 15.2 (Rural Education in America, 2012b).

Amongst the many interventions implemented that claimed to enhance student learning such as teacher credibility, classroom discussion, feedback, providing formative evaluation, small group learning, concentration or engagement, professional development, computer assisted development, motivation, outdoor or adventure programs, exposure to reading, afterschool programs, summer school, exercise or relaxation, teacher verbal ability, class size, web-based learning, distance education, most of the interventions had a positive impact on students' learning. However, not all of these intervention influences were the same and of equal weight towards students' achievement across districts, states, and nationally. Some were more influential than others. Hattie (2015) examined over 1,200 meta-analyses involving 65,000 studies, approximately 250,000,000 students, and with 150,000 effect sizes, concluded that it was the teacher who exercised the most powerful impact on students' accomplishments. As the saying goes, the teacher with his or her teaching makes the difference in students' learning. In fact, this marked difference accounted for up to 25% of the total student learning variance. The

first two key findings from this synthesis included a teacher's belief that their major role was to evaluate the impact of their teaching ($d = .91$), and teachers collaborating to evaluate their impact of teaching ($d = .91$). In order to effectively evaluate his or her teaching, Hattie (2015) recommended a teacher follow the following strategy: (a) strategically plan and self-review his or her teaching periods to integrate feedback for interventions and the impact of teaching, (b) employ strategies to obtain the impact of teaching, (c) take students' voices into consideration for interventions, and (d) collect and analyze data to evaluate the impact of teaching. The strategy could be summarized as "teachers are to DIE for," with D standing for *D*iagnosing the students' status before the start of the lessons, I standing for a variety of *I*nterventions that a teacher utilized for intended impact, and E standing for *E*valuating the students' feedback to the teacher's interventions (p. 81). To put it another way, instead of having the mindset that students went to school to be taught, teachers had to think that they came to class to evaluate the impact of their teaching onto students. How teachers reflected on their roles, their teaching, and student learning was more critical than what they did in their teaching.

Collective Teacher Efficacy

Of 195 influences on student learning in Hattie's (2015) synthesis, collective teacher efficacy ranked second with an effect size of 1.57. Rooted in Bandura's (1997) social cognitive theory, collective teacher efficacy was an expansion of a perceived self-efficacy construct. Perceived collective efficacy referred to "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (p. 477). Goddard et al. (2000) defined collective teacher efficacy as follows:

Collective teacher efficacy is a construct measuring teachers' beliefs about the collective (not individual) capability of a faculty to influence student achievement; it refers to the

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perceptions of teachers that the efforts of the faculty of a school will have a positive

effect on student achievement. (p. 480)

When collective teacher efficacy was high, teachers relentlessly worked towards the

learning goals by planning more, taking on their responsibilities for student learning, even

accepting temporary failures. Working together as evaluators of their teaching, teachers modified

their teaching to maximize student achievement. Thanks to these shared beliefs, an individual

teacher with average teaching efficacy beliefs might put more effort in when collaborating with a

teacher who possessed high collective teacher efficacy. Aggregated teacher efficacy was

corroborated to be positively associated with student accomplishment. For each unit increase in

collective teacher efficacy, there was an increase of over 40% of a standard deviation in student

learning (Goddard et al., 2000).

In the same vein, Hargreaves and Fullan (2012) viewed teacher collaboration or social

capital as one of the three types of capitals that made up professional capital. The other two

powers were human capital (i.e., individuals' talent) and decisional capital (i.e., the capacity to

make accurate judgements about students). Social capital referred to the support and

communication among teachers in a "moving" school that helped the school attain academic

goals (Hargreaves & Fullan, 2012, p. 111). Without social capital, a school might have lower

achievement and thus became stuck. Teachers in "stuck" schools thought that teaching was not

difficult, so they preferred working alone and hardly asked for assistance from colleagues

(Hargreaves & Fullan, 2012, p. 111). With a collaborative culture, teachers in "moving" schools

trusted, respected, consulted, and shared expertise with one another, having confidence and

certainty about their actions as well as the best tactics to reach their goals (Hargreaves & Fullan,

2012, p. 111). Different forms of teacher collaboration were displayed on the following order (from weak to strong forms):

- Scanning and storytelling – exchanging ideas, anecdotes, and gossip

- Help and assistance – usually when asked

- Sharing – of materials and teaching strategies

- Joint work – where teachers teach, plan, or inquire into teaching together (p. 112)

To put it in a nutshell, Hargreaves and Fullan (2012) advised teachers to "[t]alk together, plan together, work together" to build collaborative cultures into the structures and organization of a school for the improvement of students' academic performance (p. 114).

According to Javorsky and Brenner (2020), teachers across content areas and even grade levels might have the chance to collaborate and create authentic, meaningful curricular units. Moll et al. (1992) cited an exemplary example of teacher joint work – the strongest form of teacher collaboration (Hargreaves & Fullan, 2012). In this example, teachers collaboratively translated the values and funds of knowledge of the students and their families into classroom lessons. Together with other communal resources, these teachers capitalized on their students' household values to organize high-quality classrooms. These three teachers developed a-week-long learning module about candy, based on the students' interests informed from the field work and interview notes with students and their families. In this manner, teachers became the agents who bridged their students' outside world, their rural funds of knowledge, their families' resources, and the school experience.

Employing brainstorming, K-W-L method, categorization, surveying, solving research questions ("What ingredients are used in the production of candy?") (Moll et al., 1992, p. 138), and inviting a parent guest speaker, the teachers in Moll et al.'s (1992) study covered a range of

content areas such as health, math, consumer education, science, advertising, food production, and cross-cultural practices. The students had the opportunities to exercise collective leadership, under adults' guidance. Starting with free associating with the topic about candy, the students had their ideas recorded on a large piece of paper, coming up with their own definitions of "candy," categorizing different kinds of candies mentioned. Using the KWL chart, the students told the teachers what they knew about the topic (i.e., the "K" column), what they wanted to know about the topic (i.e., the "W" column), and the last column "L" was used to record what the students learned at the end of the unit. A fourth column, another "W" column, was added to record the students' questions during the course of the unit to make the lessons coherent. After that, the students generated a list of research questions that they would like to answer, and then chose one research question, "What ingredients are used in the production of candy?" for the entire study (Moll et al., 1992, p. 138). In the next class, the students brought in all types of candy labels that they could find, graphing the frequency of various candy ingredients, then dividing them into U.S. candy samples and Mexican candy samples. In the next day, working in groups, the students designed advertisements for pipitoria – a Mexican candy – because the class was going to sell this candy treat at the upcoming school talent show. After that, Mrs. Rodríguez, a parent of one of the students, came and became the "teacher" of the class, teaching the students how to make pipitoria. The class had an interesting lesson about how to make different Mexican candies, differences between U.S. and Mexican food production and consumption, nutrition value of candy, and so forth. At the end of the class, the students wrapped and decided prices for their pipitoria. The unit closing activity was the students' summary and reflection of what they learned as well as wonderings for future research (e.g., "What is candy like in Africa?" "What candy do they eat in China?") (Moll et al., 1992, p. 139).

The Multiple "Hats" that a Rural Teacher Wears

Viewing "rural" as marginal to urbanity, a majority of teacher preparation institutions, even those located in rural locales, had programs focusing on urban education rather than rural education (Brenner & Franz, 2015). As a result, the cultural aspect of rural life added enormous challenges to novice teachers, even those who grew up in rural areas. Besides many stressors such as geographic distance, inadequate infrastructures, lack of resources, students with high poverty rates, social barriers, colleague isolation, scarcity of professional development opportunities, rural teachers wore multiple "hats" (Javorsky & Brenner, 2020). Due to the shortage of teaching staff, rural teachers had to fulfill multiple roles in a small school, teaching multiple content areas, even multiple grade levels, for students of multiage sometimes (Adams & Woods, 2015; Barley & Brigham, 2008; Monk, 2007; Osterholm et al., 2006). On account of cost sensitivities, different grade levels might be combined in small and rural schools. An elementary teacher might be required to deal with a mix of ages in multigrade classrooms. In secondary schools, a single science teacher, for instance, might need to teach all science subfields such as chemistry and physics from beginning to advanced levels.

Put multiple "hats" on one head brought about both advantages and disadvantages for rural teachers (Lotter, 2020). Sara, a science teacher, described her additional responsibilities as the chair of the science department, grade level team leader, and members on some afterschool committees as unparalleled experience working in small rural schools compared with non-rural ones.

… because there just aren't enough people, so everybody has to wear a lot of different hats. I think the opportunity to branch out to taking those leadership roles is probably

easier in a smaller school because there's more opportunity for each individual teacher.

(p. 40)

These add-on positions were often related to administration roles such as testing, scheduling, ordering materials, so teachers had the chance to gain knowledge and skills pertinent to running a school while making educational changes at the school and/or district level. Morgan, a high school science teacher, for example, commented:

I think one of the great things about working in a rural place is as a teacher, you actually have more power. And the reason why is you have to wear a lot of hats. I mean you think I'm a teacher in a classroom, but I direct a grant. I mean I don't think if you were a teacher in [a suburban district] that would happen…I do everything. I drive the bus on field trips. There are so many opportunities to do so many things in a rural community.

(p. 39-40)

One of the disadvantages of wearing multiple "hats" was that rural teachers' incomes barely increased. These extra duties were normally unpaid in addition to their full-time teaching jobs. Bailey, a science teacher, revealed, "In my school, we don't have department heads because we have no money to have department heads. But I do all the [science material] ordering" (Lotter, 2020, p. 40). Similarly, Joyce, a middle school math teacher, said, "You tend to have your teacher pay because that's your role. But you need to wear the other hats in order for the school to function and run smoothly" (Lotter, 2020, p. 40).

Furthermore, multiple "hats" worn on just one head cut off a teacher's intended time for lesson planning and preparation, colleague collaboration, as explained by a teacher named Daisy, "because you have so many other different responsibilities, you can't share and meet like you're supposed to share and meet" (Lotter, 2020, p. 40). Another negative effect of wearing multiple

"hats" was teacher overwork or burnout because of the weighty responsibilities on their shoulders that might be overwhelming while they attempted to strike a balance between teaching responsibilities and external roles. Terry, a high school science teacher, complained:

> You may have other things that don't relate to content under your umbrella. You may also have extracurricular activities of students that you may not necessarily get compensated for but you're in charge of that. Also, I'm trained in safety, so therefore, some years I may be a safety evaluator. So as a leader, you have to be flexible and accept any curveball thrown at you at any particular time. (p. 40)

Additionally, rural teachers might estrange themselves from their peers when making unfavorable leadership decisions, as disclosed by Jessica, "Talk about taking risks. I wrote the curriculum guide. If your name is associated with it, but you didn't put it the way they liked it, your name is mud all over the district" (Lotter, 2020, p. 40).

Rural Communities

A question that was often asked about rural communities, "If rural communities are struggling so hard, why don't people just leave?" (Smart & Russell, 2018, para. 12). Rural civilians over and over again responded that they would prefer to stay and collaboratively built better future for their communities through conversations, understandings, partnerships, and trust. Smart and Russell (2018) alleged that rural America was as an example of civil society:

> [C]ivil society exists when people who live in a defined geographic proximity work cooperatively – even when they strongly disagree with or dislike one another – to sustain mutually beneficial conditions. Think of civil society as a magic flying carpet that, to hold a community aloft, must contain many different fibers. Ideally, everyone in a community supplies at least one fiber to help weave this carpet and get it off the ground.

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Once in the air, some fibers naturally break off and float away, so all passengers have a

responsibility for continual care and reweaving. In densely populated areas, there are

enough citizens to supply fibers so that others can coast along for free. In small rural

towns, everyone must contribute multiple threads and stay especially vigilant when it

unravels to keep it from crashing to the ground. (para. 3)

Relationship between local community and school empowered rural schools. Wallace

School District was a rural school district located in the north of Idaho serving 500 students

living in five rural towns (Dahill-Brown & Jochim, 2018). Thanks to relationship with local

agencies such as chamber of commerce, Rotary Club, Elks Lodge, and the local community

foundation, in March 2018, Wallace School District received over 60% of votes approving the

local levy to maintain its funding and services, despite a statewide budget cut. Talking about the

secondary school of the district, Robert Ranells, superintendent of the Wallace School District,

shared, "Our secondary school is used nearly every night for some community event. The

people, the school is theirs, and they take pride in it" (Dahill-Brown & Jochim, 2018, para. 4)

Another example about the benefits that community-school relationships brought about

was Quitman County School District in rural Mississippi (Canter & Jossell, 2018). Thanks to the

partnership with Reclaimed Project, a community-based organization, in 2016, Quitman County

School District secured financial supports that helped attract teachers to this school district. The

partnership resulted in a rent-free 8,000-square-foot housing building for seven teachers, extra

incomes for teachers who did tutoring, coaching the football league, and additional salaries for

teachers of English language arts, math, and science. Besides, Quitman County School District

collaborated with all local nonprofit organizations to provide beneficial community services.

Using funding from Mississippi Department of Education's 21st Century Community Learning

Center's Program, the school district created a Parent Academy to better connect school and families. The academy aimed to empower parents so that they could help their children and thus strengthened the community. To achieve that goal, Parent Academy kept parents informed of their children's learning standards and curriculum, supplied them with General Educational Development classes and childcare. Additionally, the school district, following the example of the Harlem Children's Zone, underscored the significance of children's success that went along with the strong community.

The State Third-Grade Retention Policy

The COVID-19 pandemic not only shut down rural school facilities for over five months, but also impeded group literacy practices in rural communities due to the social distancing regulation. In addition to all challenges that victimized rural students, teachers, parents, school districts, the extended school facilities closure caused by the epidemic aggravated the rural communities in their attempt to meet the state third-grade retention mandates. According to Workman (2004), the third-grade year was the time that children formulated and developed their basic literacy skills for later use in sophisticated learning, so it was an imperative milestone in children's lives. It was corroborated that third graders who lacked reading proficiency were four times less likely to graduate from high school on time (Loewenberg, 2015). Additionally, if these students living in poor families for a year or more, they were projected to be six and a half times less likely to finish high school education on time. In fact, 63% of high school graduates who did not finish the twelfth grade on time did not attain proficient reading in their third grade (Workman, 2014). Furthermore, incapacity to reach literacy proficiency at the third grade might lead to school dropouts, which escalated the unemployment rates and threatened the social security and welfare systems. Seventy-eight percent of approximately 32 million students from

low-income families did not accomplish the required reading proficiency level in 2015, which meant about 25 million students might drop out of school (NAEP, 2017, 2018a). According to the estimation of the Annie E. Casey Foundation (2010), each student failing to complete high school incurred a loss of around $260,000 in salaries, productivity, and tariff to the United States. It was assessed that the U.S. Gross Domestic Product in 2008 could have been $1.3 trillion to $2.3 trillion higher if U.S. students had completed their high school education between the years 1983 and 1998.

As a result, many U.S. states have enforced a third-grade retention policy. According to this policy, third graders must obtain reading proficiency to move up to the next grade level. Sixteen states (e.g., Arizona, California, Connecticut, Delaware, Iowa, Michigan, Mississippi, Ohio, Washington, etc.) and Washington, D.C. passed third-grade literacy retention legislature, of which fourteen states endorsed conditional promotion (e.g., English language learners who are in the process of acquiring English proficiency for three years or fewer, students with special education needs, references from parent, principal, teachers, previous retention; Weyer, 2018). Eight states (i.e., Alaska, Colorado, Maine, Maryland, New Jersey, New Mexico, Oklahoma and West Virginia) accepted but did not mandate third-grade retention. On account of the expensive costs and negative impacts on students (e.g., stigmatizing children, lowering self-confidence, increasing dropouts), 40 states and Washington, DC provided supplementary reading intervention programs to sustain elementary struggling readers such as supplemental instruction (e.g., summer school, after-school program, etc.), academic enhancement plans, progress checking, and family involvement programs and supports (Diffey, 2016).

Additional Supports

Apart from educational advantages of rural education such as strong ties with families, solid supports from local agencies, students' funds of knowledge of which rural teachers took advantage in delivering instructions, afterschool programs in rural schools were also listed as invaluable resources. These afterschool programs offered children and adolescents care, protection, enrichment opportunities, playtime as well as tackling problems, training, socialization, and acculturation. Afterschool activities were designed according to students' interests and what adults thought children needed (Halpern, 2002).

In today's communities, the period between 3 p.m. and 6 p.m. on school days was reported to be the peak time for cigarettes, alcohol, drug experimentation, juvenile crime, and sexual activities (Afterschool Alliance, 2018). Yet up to 11.3 million children had to take care of themselves after school hours. Compared with teenagers who joined out-of-school programs, those who did not take part in afterschool structured activities were almost three times more likely to play truancy, use drugs (e.g., marijuana), consume alcohol, smoking, and sex.

Driven by local demands, establishing afterschool programs was a proven solution that assisted children, their families, and business (Afterschool Alliance, 2014, 2017). These programs helped to protect kids, enriched their learning, and aided their parents to get ahead in their careers. Research findings affirmed that parents whose children were in afterschool programs felt less stress in the workplace, had less unexpected absences, and worked more productively. Rural communities with limited local financial resources might have to rely to outside sources of funding to provide these opportunities to their rural students (Afterschool Alliance, 2007).

The 21st Century Community Learning Centers

Since 1998, the 21st Century Community Learning Centers program (21st CCLC), a U.S. Congress-awarded grant, has provided public students with afterschool services during the academic school year and summertime. This program financially supported the establishment of community learning centers for low-academic-performing students in schools with high poverty and low achievements to be capable of meeting the state and local learning standards in literacy and math (Office of Academic Improvement, 2018). This was a tremendous asset to support rural schools in meeting their rural students' needs.

These 21st CCLC offered academic opportunities that supported students' ability to reach the state academic standards. In addition, this program provided a variety of programs, services, and activities aiming at youth development (e.g., Science, Technology, Engineering and Mathematics, service learning, arts and music, nutrition and health, physical fitness and wellness, counseling, preventing drug and violence, environmental and financial literacy, career preparedness, internships and apprenticeships, etc.). Besides, the program also promoted meaningful and active involvement of students' families in their education (e.g., literacy and subject matters; Afterschool Alliance, 2017).

The success of afterschool services has been documented with the improvement of students' test results, school attendances, and classroom behavior. The Annual Performance Report by U.S. Department of Education (2017) about student performance associated with 8,556 21st CCLC indicated that many student participants ($n = 1,637,181$) demonstrated improved classroom behavior (54.6%), homework completion and class participation (62.7%), mathematics (47.2%) and English proficiency (46.3%). Results from a study conducted by Vandell et al. (2007) showed that over a two-year period, elementary students gained up to 20

percentiles in math test scores with a large effect size of .73 whist middle school students

attained a 12-percentile gain in math achievement test scores (effect size > .50), relative to those

who were unsupervised during afterschool hours (effect size = .73). Similarly, Naftzger et al.

(2015) stated that afterschool programs exerted a significantly positive impact on mathematics

and reading cumulative grade point average in both 30-plus-day and 60-plus-day afterschool

attendance levels. Afterschool Alliance (2018) affirmed that 45% of all 21st CCLC participants

enhanced their reading scores and 41% enhanced their mathematics scores. In the same vein,

Wisconsin Department of Instruction (2014) acknowledged that 21st CCLC helped students

improve in satisfactory homework completion (66%), on-time homework submission (65%), and

particularly academic performance (73%). Consistent participation in afterschool programs

bridged the math achievement amongst low-, middle-, and high-income student groups (Pierce et

al., 2013).

Public Schools in Rural Areas of Mississippi

From a historical perspective, public school students' academic achievement in

Mississippi has remained at the bottom of the national rankings. In 1992, Mississippi ranked 41

with an average 4th grade reading scale score of 199 while the national average scale score was

217 (The Nation's Report Card, 2020). Eleven year later, in 2003, Mississippi dropped its rank

down to 49 with an average 4th grade reading scale score of 205 while the national average scale

score was 218. After a decade, in 2013, Mississippi fell to rank 50th with an average 4th grade

reading scale score of 209 while the national average scale score was 222. Students' low

achievement was argued to be caused by several factors including poverty, limited school

funding, less qualified teachers, low teacher expectation, and less instructional time that were

intertwined with the distribution of the state students' ethnicity.

One of the main reasons for this failure was rooted in the constant poverty that has been passed on from generation to generation. According to National Kids Count (2020), it mattered if a child was brought up in a poverty-stricken family because poverty exerted a "wide-ranging and long-lasting repercussions" on the child (para. 1). Growing up in such disadvantaged home increased the child's risks related to health, behavior, and social-emotional wellbeing. Furthermore, child poverty decreased academic performance, opportunities for personal skill development, and the likelihood to graduate from high school. Moreover, Schaefer et al. (2016) purported the experience of growing up in a poor family located in rural community was even more problematic:

> Being poor in a relatively well-off community with good infrastructure and schools is different from being poor in a place where poverty rates have been high for generations, where economic investment in schools and infrastructure is negligible, and where pathways to success are few. The hurdles are even higher in rural areas, where low population density, physical isolation, and the broad spatial distribution of the poor make service delivery and exposure to innovative programs more challenging. (p. 1)

Children from poor families might not receive timely vaccinations, achieved less academic success, less engaged in activities at school, and were more likely to commit adolescent delinquency. All of these consequences created a dramatic impact on their wellbeing, incomes, and family lives. Examining the decennial census data in 1980, 1990, 2000, and 2008-2012 American Community Survey, Schaefer et al. (2016) found that the distribution of constant child poverty in the United States was not even. Persistent child poverty clustered in historically black counties along the Mississippi Delta. Compared with nonrural locales with 13% of children living in poverty, the percentage of rural children brought up in poverty was approximately 28%.

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The national rate of child poverty was reported to be 17.5% in 2017 and went down to 17% (or approximately 12 million children) in 2019, whilst Mississippi's child poverty rate stood at 27% in 2017 and increased to 28% in 2019 (National Kids Count, 2020). The percentage of students eligible for free or reduced-price lunch in the United States was 52.3% in the school year 2016-2017, whereas that percentage in Mississippi was 75% (NCES, 2018b). The 2019 reading results demonstrated that Mississippian fourth-grade students eligible for the National School Lunch program scored 215 while their peers who were not economically disadvantaged achieved a score of 238 (The Nation's Report Card, 2020).

Another reason that caused low academic achievement in Mississippian students was the inequality in funding related to the fraction of spending on students of color. With respect to student ethnicity distribution in fall 2020, the distribution of students across the country was 38.8% white, 17.2% African American, 16.3% Hispanic, 4.1% Asian/ Pacific Islander, and 1.2% American Indian/ Alaska Native (NCES, 2020b). Yet, Mississippi public schools had 51.1% African American students (the highest rate among the 50 states) enrolled in Fall 2020, besides 47.3% white, 0.8% Hispanic, 0.7% Asian/ Pacific Islander, and 0.1% American Indian/ Alaska Native.

Schools across the United States spent $334 more on every Caucasian student than on every African American student (Spatig-Amerikaner, 2012). In schools where 90% or more students were white, spending per student was $733 more than that in predominantly nonwhite schools. If mostly nonwhite schools received the same money as mostly white schools did, the annual increase would make a lot of differences. For instance, a predominantly nonwhite school of average size (i.e., 605 students) would have an additional amount of over $443,000. On average, a first-year U.S. teacher earns $36,780 annually, and an experienced teacher (i.e., 11 to

20 years of teaching experience) receives $47,380. The additional funding could be used to pay for 12 extra first-year teachers, or nine seasoned teachers, or a number of other school staff such as teacher coaches, school counsellors, or purchasing more computers and laptops as school resources. It was computed that for every increase of 10 percentage points in students of color, there was a decrease of $75 in spending per student. This decreased amount of funding for nonwhite students was not trivial when being considered with the academic gap between Caucasian and non-Caucasian students. While fourth-grade white Mississippian students scored 230 in the 2019 reading proficiency tests, the average scale scores were 209 and 221 for African American and Hispanic students respectively (The Nation's Report Card, 2020).

Another educational inequity that impacted Mississippian students' learning achievement was teacher quality. The percentage of African American students enrolled in schools with more than 20% of first-year teachers was 7% in the school year 2011-2012, compared to only 4% across the country (Office for Civil Rights, 2014). In addition, the percentage of students who attended school with over 20% of less qualified teachers (i.e., those who have not met the state licensure or certification requirements) in the school year 2011-2012 was 1.1% for all students in Mississippi, with 1.4% for African American students, in comparison with solely 0.8% for Caucasian students.

In addition, Gershenson et al. (2015) affirmed that teachers' expectations of student educational attainment played a significant role in developing students' beliefs about their academic progress, which then negatively influenced their academic performance. In general, teachers expressed lower expectations of achievement for students of different ethnicity than for those who shared the same race with the teachers. Non-African American teachers were 12% more likely than African American teachers to expect an African American student's highest

education attainment to complete a high school diploma. Despite the highest percentage of African American across the 50 states, the majority of public school teachers in Mississippi was Caucasian (73.3% white and just 25% African American; NCES, 2012). Regarding rural public schools, a typical teacher had the following characteristic: female (75.7%), white (89.7%), middle-aged (29.1% aged 40 to 49; NCES, 2019b).

Another issue related to the academic failure was the amount of classroom instruction that students of color received. African American students spent less time in their classroom because of discipline problems, which reduced their educational accomplishments. According to Office for Civil Rights, U.S. Department of Education (2016), African American public pre-kindergarten students were 3.6 times more likely than white peers to receive out-of-school suspensions. In the K-12 grade levels, the percentages for African American male students, African American female students to be suspended out of school were reported to be 18% and 10% respectively, whereas the rates for their white counterparts were 5% for male students and 2% for female students.

Regardless of limited resources, rural school administrators, teachers, students, families, local institutions, and other stakeholders intensified a determined effort to bridge the perpetuated achievement gaps. Results from the 2018-2019 statewide accountability data showed that 47% Mississippian students scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP mathematics or Algebra I assessment and 41.8% Mississippian students scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP ELA or English II assessment (Mississippi Department of Education [MDE], 2019a). On the national level, in 2019, Mississippi ranked 30 with an average 4th grade reading scale score of 219 while the national average scale score was 220 (The Nation's Report Card, 2020).

Rural School Structures

In response to the aforementioned challenges (e.g., lower literacy rates, a disproportionate number of English language learners, reduced opportunities for higher education, and limited Internet access) and educational advantages (e.g., small class sizes, high teacher autonomy and solid support from local communities), rural schools were more apt to be structured differently from those located in urban and suburban areas. One of the structures more common in rural areas was an intentionally shortened school schedule. Under this structure, rural schools adopted a four-day week schedule rather than the traditional five-day one. To compensate for the fifth school day, instructional time was increased on the remaining four school days. This special school structure was borne out with the initial intention of balancing low school funding. This trend tended to occur more often in those western rural schools with exceptionally low student populations because these schools were often in the situation of underfunding. In rural areas where natural disasters such as wildfires and floods frequently took place, small-scale school closure became the direct emergency response of the school districts.

Intentional Shortened Schooling

A primary reason that provoked interest in the four-day school week (i.e., school is in session for four, not five, days a week) was the fiscal issues that took place in the 1930s Great Depression, the late 1970s, and the early 2000s (Heyward, 2018; Thompson et al., 2021). The most recent 2000s energy crisis was reported to be the main reason that led rural school districts with vast geographic areas in Missouri to move from the five-day school week to the four-day school week (Pratt et al., 2020). This new schooling structure allowed these rural school districts to save money on fuel when they encountered the problem of doubling the transportation budget because of the increasing price of diesel.

The intentional shortened school week structure was not abnormal in the United States. In the 1920s, this school structure with classes starting from Monday through Thursday in one-room schoolhouses was quite popular in Missouri. The 20s trend in a four-day school schedule was on the rise even during the past decade. Nationally, the number of schools using this particular school structure increased from 257 schools in 108 school districts in 1999 to 1,607 schools in 662 school districts in 2019 (Thompson et al., 2021). Heyward (2018) also reported that half of all U.S. states had at least one school district adopting a four-day week schedule. In the past few years, some states such as Hawaii and Utah, under the pressure of budgetary crises, turned to a four-day school week temporarily. In Colorado, over half of the school districts implemented the four-day school week (National Conference of State Legislatures, 2020). According to the National Center for Education Statistics (2020), the shortened school week seemed to be more ubiquitous in small western rural schools. Currently, the percentage of rural schools using shortened school weeks was 4.6% while that of towns, suburbs, and cities was 2.2%, 0.8%, and 0.6%, respectively. More schools in the West had shortened school weeks (5.3%) in comparison with midwestern or southern schools (1.4% and 0.8%, respectively). Schools with fewer student enrollment (i.e., less than 200 students) were more likely to resort to shorter school week (7.1%) than those with more than 200 students (1.1%). This trend also occurred more often at combined schools (7%) compared with elementary, middle, or high schools (0.9%, 0.5%, and 3.3%, respectively). The eight states with the highest percentages of public schools using less than five-day school weeks include Wyoming (19.5%), Idaho (17.5%), Colorado (14.4%), New Mexico (13%), Oregon (12.7%), South Dakota (12.2%), Arizona (12%), and Oklahoma (11.1%).

Besides the fuel cost, it was projected that the school districts might save on ancillary items such as utility expenses because of the closed buildings and staff salary by utilizing the shortened school week structure. Lathrop was the first school district in Missouri to switch to a four-day school week. It was ten years since this rural school district started this type of schooling structure due to a decreasing student enrollment and low school funding. With this shortened schooling structure, Lathrop figured out how to balance the budget by cutting hourly compensation of non-certified teachers, custodians, secretaries, cooks, and transportation. Surprisingly, in the audio podcast episode hosted by Pratt et al. (2020), Turner pointed out that most of the Missouri school administrators who decided to shift to a four-day school week reasoned on other than the funding issue. In fact, Turner claimed that Missouri school districts with large geographic sizes would save no more than 2% on the entire school district budget. Likewise, Long (2016) stated that the cost savings from transportation, bus drivers, food service workers, cafeteria expenses ranged from 0.4% to 2.5% on the yearly school district savings.

Based on responses from 533 school districts nationwide, Thompson et al. (2021) observed two frequent rationales, besides financial motivation, for schools to switch to shortened school week. The first reason was the attendance problem due to long drives to school for sports activities or family schedule (e.g., medical appointments). The second reason was related to rural school issues such as recruiting and retaining teachers, long bus rides, family economic commitments (e.g., ranching or farming). Long (2016) added some more advantages of four-day school week such as higher students' engagement thanks to longer weekends, decreasing absenteeism, and lengthened time for teachers' planning and collaboration.

With respect to the shortened school schedule in Missouri, there were at least three reasons that appealed to school district administrators, as noted by Turner. One of the reasons

was to recruit and retain high-quality teachers in rural schools. With limited revenue, it was not easy for school districts in rural areas to compete against their urban or suburban counterparts in terms of teacher salaries. By reducing one school day per week or offering three-day weekends, these rural schools became more appealing to seasoned teachers who was in the profession for 15 years or longer. Another reason was the opportunity for refining pedagogical skills through teacher collaboration as well as professional development. Many teachers at rural schools did not live in the rural areas where their schools were located, so it took them quite a long time to drive to the schools. Scheduling all-day professional development in the school district calendar not only made the long drive to school less challenging for the teaching staff but also helped double the amount of academic training or support for them. The third reason for opting into a four-day week was that some school districts used the fifth day for noncompulsory student enrichment. For example, high school students might be taken to metropolitan medical centers, businesses, industries to learn more about future careers. Alternatively, school districts might also collaborate with universities to create college dual credit programs for students in high school.

Despite the aforementioned benefits of a shortened school week such as attracting qualified teachers and cost savings, the National Center for Education Statistics (2020) revealed concerns related to meal insecurity, childcare issue, and students' academic performance. In Pratt et al.'s podcast (2020), Turner said that most schools did not save much on energy usage on the fifth day because some teachers and students might come to do rehearsing, work on lesson planning, or prepare the room for the next week's teaching. Regarding care arrangement issue, apparently, it seemed that childcare on the fifth day became a problem when the schools shifted to a four-day schooling structure. In Missouri, when the shortened school week was implemented in the first year, the schools usually established a childcare option since up to 15% of parents

reported they struggled with this issue. However, by Thanksgiving of the first year, the number of students attending the childcare program dropped to almost zero; the parents might have solved the problem by having a family childcare with older siblings, relatives, or partnering with local agencies such as Boys and Girls clubs, YMCA, churches.

Concerning the impact of the shortened school structure on the students' academic achievements, prior research findings indicated mixed results. In the podcast episode with Pratt et al. (2020), Turner emphasized that none of Missouri school districts with shortened school week were reported to endure negative academic impact in all his research studies. Turner elaborated that the students' performance was maintained because the schools kept counting the same teaching hours by extending each school day by 25 to 35 minutes. When it came to state testing, the students who enjoyed the four-day school week and three-day weekends, tried their best to outperform on all the questions of the state tests. Likewise, Anderson and Walker (2015) stated that the alternative schedule had positive influence on the students' academic accomplishments. During the shortened week schedule, students were reported to study with more focus and better behavior. With more time allocated for planning and longer school day, teachers had the flexibility in employing various teaching methods and efficiently organizing lessons. Longer weekends allowed students to have more time spent on homework and preparing for the next week lessons. In addition, reducing the school week meant fewer long commutes for students living far from schools. Also, students were noted to have higher attendance in schools with shorter school week (0.6% improvement), which resulted in students' better performance on state standardized tests.

Using the standardized test scores from the Colorado Student Assessment Program (CSAP), Anderson and Walker (2015) examined the relationship between the four-day school

week schedule and students' academic achievements. A data set consisting of fifth-grade math CSAP test scores in 14 shortened school week schools during the school years 2001-2010 and fourth-grade reading CSAP test scores in 15 shortened school week schools during the school years 2000-2010 in Colorado revealed non-significant difference compared with test scores from schools following a traditional schedule. Interestingly, the percentage of students with math and reading test scores at proficient and advanced level increased significantly after the schools switched to the shortened school week schedule. For example, the percentage of proficient and advanced students in math increased from 4.66% (a year before the changed schedule) to 11.59% (two years after the changed schedule). The percentage of students who were proficient or advanced in reading rose from 2.59% (a year before the changed schedule) to 8.23% (two years after the changed schedule).

In contrast, Thompson (2019) found negative effects of the adoption of a four-day school week on student performance when studying the influence of this shortened school schedule on 3rd-to-8th-grade students' ($n = 471{,}518$) math and reading achievement in 13 school districts (38 schools) in Oregon from the school years 2007-2015. Specifically, the math and reading scores of students in a four-day school week were 0.144 standard deviation and 0.092 standard deviation respectively, lower than the average sample score (i.e., the sample included both four-day and five-day schools), while those of students in a five-day school schedule were 0.11 to 0.13 standard deviation, above the sample average score. Indeed, in schools where a shortened school schedule was adopted, students' math test scores decreased between 0.044 and 0.053 standard deviations and reading scores decreased between 0.033 and 0.038 standard deviations. The achievement losses were more pronounced for male students' math and reading scores while low-SES students were more negatively influenced than other student subgroups in terms of

reading test scores. Two main reasons that caused these detrimental effects included the early schooling start times (i.e., 7:58 AM in four-day schools versus 8:20 AM at five-day schools) and the missing three-and-a-half-hours of instruction time each week. The total amount of reduced instructional time substantially explained the declines in students' reading and math performance. The differences in findings between the reduced school structure in Colorado by Anderson and Walker (2015) and that in Oregon by Thompson (2019) might result from the fact that Colorado students received one and a half hours of instruction more than Oregon students. Another reason was the implementation of enrichment opportunities such as remedial, disciplinary programs, and activities for gifted students in Colorado schools whilst such programs were sparsely carried out in Oregon schools.

Results from another study regarding the effect of four-day school week structure on students' accomplishments showed a null impact. Utilizing difference-in-differences and semi-dynamic difference-in-differences specifications between the treatment group including school districts who adopted the shortened school schedule and the control group consisting of districts using the traditional school schedule in the same school year, Morton (2020) examined 2,800 district-level observations of K-12 students' math and ELA achievement data from rural Oklahoma public school districts from the school year 2008-2009 to the school year 2014-2015. The estimates of the effect of shortened school structure on students' standardized math and ELA test scores were statistically nonsignificant. The differences in the impact of the four-day school schedule on students' learning in Missouri school districts by Turner in Pratt et al. (2020), Colorado school districts by Anderson and Walker (2015), Oregon school districts by Thompson (2019), and Oklahoma school districts by Morton (2020) might result from the variation in terms of policies as well as the implementation of the four-day school structure across these states.

Specifically, an array of various but potential factors such as students (e.g., students' achievement, attendance, well-being), teachers (e.g., teaching pedagogy, quality, retention), instructional time, starting school times, long bus ride, supplemental enrichment opportunities, families, and communities might vary in different examined school districts.

A minority of states reinstated the four-day week schedule on account of varied reasons (Heyward, 2018). School leaders in Webster County, Kentucky moved back to the normal five-day school week in the 2014-2015 academic school year due to a decline in students' test scores and the fear that students might not be used to working a four-day week when being employed. Under the pressure of parents who did not support the shortened school week, the Michigan Association of School Boards decided to switch back to the normal school schedule in 2018. Because of insufficient academic progress, school districts in Minnesota with four-day weeks were required to return to a five-day week schooling schedule in the 2014-2015 academic school year by the Department of Education. Macomb Public Schools, Oklahoma, went back to a traditional five-day school week because the student performance was not improved and 76% of low-income students were cut access to school meals (Long, 2016).

Unexpected Small-Scale School Closure

Due to unanticipated events, rural schools were more likely to experience threats of temporary school closures. Some reasons for a small-scale school closure included climate-related natural disasters such as wildfires, floods, mudslides, and snowstorms, dilapidated infrastructure (e.g., power failures, asbestos, insect infestations, harmful traces of mold, contaminated water, plumbing issues in school buildings, broken septic tanks), and student safety concerns (e.g., potential mass shootings, bomb threats; Cano, 2019).

From 2015 to 2019, Californian students lost 10 or more school days hundreds of times because of wildfires – Valley Fire in 2015; Thomas Fire, Creek, Rye and Skirball fires, Lilac Fire, Tubbs Fire in 2017, Camp Fire in 2018, Kincade Fire in 2019 (Cano, 2019). To illustrate, on October 12, 2017, nearly 600 California schools with approximately 260,000 students were shut down because of fire threats and air quality risks. In 2018, over one million students in 180 school districts from San Diego to San Francisco throughout California, or more than one in every six Californian students, were sent home under the impact of the Camp and Woolsey fires in Butte and Ventura counties (Cano, 2018). These massive wildfires forced schools to shut their doors for one whole week or even longer in some school districts in Ventura County because of health concerns raised by fire danger, hazardous levels of air quality indexes, toxic smoke, and power outages. In some areas of Sacramento and the Bay Area, the air quality index (AQI) went up to over 460 while the normal AQI was no more than 275. In the school year 2018-2019, Camp Fire adversely affected 1,268,350 students (i.e., 20% of the total state students) in 2,262 schools with 4,898 days of school closure. According to CalMatters (Cano, 2019), between the school years 2002-2003 and 2018-2019, a loss of over 34,000 instructional days was accumulated in California schools due to climate-driven disasters, emergencies, and other threats (e.g., gun violence, epidemics). Approximately two thirds of these closure days were caused by wildfires. School closures deprived low-income students in terms of missing instructional time, nutrition problems, healthcare crises, and childcare arrangements for their parents.

Besides wildfires, other natural emergencies like hurricanes enforced students to experience lengthy school closures. Hurricane Katrina, a category 3 hurricane, that occurred on the morning of August 29, 2005, followed by Hurricane Rita a month later, displaced 1.5 million residents of Louisiana and Mississippi, including 163,000 children, who became evacuees across

the U.S. (Children's Health Fund & The National Center for Disaster Preparedness, 2010; Grier, 2005). Losing homes and/or employment, families lacked basic needs and services. For some families, children returned to New Orleans to continue their education, requiring separation from parents (Rangel, 2010). Prior to Hurricane Katrina, New Orleans schools with an enrollment of 65,000 students were infamous as one of the worst school districts in the country with rampant corruption and students' low testing scores. In the fall of 2005, 68 out of 108 New Orleans public schools were labeled "academically unacceptable" by the Louisiana Department of Education, and more than 50% of fourth-, eighth-, tenth-, and eleventh-grade students were below "basic" competence in English language arts and math (Rangel, 2010, p. 280). However, New Orleans per-student spending was the highest in the state of Louisiana (i.e., 7,893 dollars in New Orleans compared with 7,604 dollars in the rest of the state; Newmark & de Rugy, 2009).

Up to four months after the hurricanes, in January 2006, just three charter schools were able to open. Until April 2006, three more New Orleans schools opened their doors to welcome a total of nearly 11,000 students. Due to the severe shortage of teachers, many students were reported to stay at home without any schooling of the 2005-2006 school year. Even in Fall 2006, a year after the catastrophe, only 53 schools opened their doors to about one third of the students – 25,651 students. The yearlong uncertainty caused by Katrina led to psychological distress and life disruption for the students and their families (Rangel, 2010). According to a report by Children's Health Fund and The National Center for Disaster Preparedness (2010) about the status of students five years post-Katrina, 34% of middle- and high-school students were one or more years below grade level, while the percentage of all students in the south was 19% below grade level. Sixty percent of the students displaced by Hurricane Katrina, or at least 20,000

students, were either experiencing unstable housing and/or serious mental health problems such as emotional disorders and behavioral concerns.

In addition to climate-related disasters, school closures might be caused by other emergencies such as derelict infrastructure. It was reported by CalMatters (Cano, 2019) that at least 370 incidents of school closures in California were the results of school facility breakdowns such as polluted water, broken wells, water pipes, septic tanks, mold, asbestos. Massive toxic mold infestation or asbestos caused at least 38 closures in 29 Californian schools where over 11,000 students were impacted, and 33 of these closure incidents took place from 2014 to 2019.

Schools in rural areas were most disadvantaged and vulnerable to school closures because class cancellation occurred quite frequently for a variety of incidents, and both students and teachers struggled to return to normalcy after closures without school mental health professionals (Cano, 2019). For example, Jack Norton Elementary, a two-room school with approximately 30 students whose ethnicity was mostly Native American, located in Humboldt County, lost over 50 school days from 2002 to 2019 as a result of mold, snow, collapsed roads, torrential rains, landslides, wildfire, power outages, social media threats.

Contingency Planning

Unlike the two aforementioned schooling structures, the nationwide extended school closure due to the COVID-19 pandemic caused considerable, novel challenges. Students could not evacuate to neighboring counties or relocate to continue their education as they did in unexpected small-scale school closures. Additionally, disaster-related school closures usually lasted for a short period of time (e.g., approximately a week) whilst the COVID-19 pandemic-induced school closure extended over five months. Despite the reopening of public schools for in-person learning across the United States in the 2020-2021, the epidemic caused by

coronavirus was still rampant as of spring 2022 because of its various variants such as Alpha, Beta, Gamma, Epsilon, Eta, Iota, Kappa, Mu, Zeta, Delta, Omicron (Centers for Disease Control and Prevention, 2021), which engendered concerns for families whose children received face-to-face instruction. The COVID-19 pandemic did not affect students in a small area; it affected students on a global scale. According to United Nations Educational, Scientific and Cultural Organization (UNESCO; 2020a), the COVID-19 epidemic caused 23 countrywide closures and affected 224,068,338 students. Because no medical treatment was found for COVID-19 from its outbreak in late 2019 until the end 2020, viable precautions including therapeutic methods such as social distancing, requiring masking, contact tracing, hand sanitation, disinfection of frequently touched surfaces, and quarantine were the guidelines that schools endeavored to enforce. American schools, together with schools around the globe, closed their doors for the sake of students' safety while discussing proper actions regarding whether to open schools, when to open schools, how to protect students when they attend in-person classes, distance learning methods, etc.

Amongst different rural schooling structures, the first one – the shortened school schedule – appeared mainly in small rural western areas of the country (NCES, 2020a) under certain educational planning. The second schooling structure – small-scale school closure – shut down the doors for short terms in specific local areas. Nonetheless, the unintentional nationwide school closure due to the COVID-19 pandemic, unlike the first structure, took place without any planning across the country, which made it different from the second type of school structure as well. The lengthy school shutdown was not exactly similar to any of the past school closures; the COVID-19 pandemic forced American schools to be shut down for more than five months in an

attempt to contain the virus spread, which resulted in disastrous consequences for rural students, teachers, school districts, and parents.

Despite the closure of the school buildings and facilities, many school districts attempted to continue to provide instruction to students in some way. Nonetheless, the quality of instruction delivered during the extended school facilities closure were varied. More affluent school districts abruptly switched the learning format from in person to online. Yet "weakened" instructions combined with the absence of welfare services (e.g., free meals, medical care, dentistry) for vulnerable students during the COVID-19 epidemic made the "longstanding" achievement gaps between advantaged students and those who demonstrated below grade level reading proficiency become even broader (Sawchuk, 2020, para. 6). Additionally, not all lessons could be transferred from in person to online teaching model. For several particular topics like highly structured sequential lessons in early literacy, it was most effective for elementary students to be taught in person. Stacy Rasmussen, a Kindergarten teacher at Jefferson Elementary School, Minnesota, stated, "Doing that [guiding students as they learn their ABCs, the sounds letters make, and how letters' sounds form words] online was tricky" (Retter, 2021b, p. 9a). It was also noted that not all school districts, especially those located in remote rural areas with limited budget, had the required resources for the changed delivery of instruction. Consequently, low-technology solutions, like print home learning packets, were used during the school closure. Yet these solutions met with condemnation from classroom teachers. Anji Williams, an English teacher, uttered, "If you think you're going to send kids home with a packet, and that's going to be a substitute for being in a classroom for two weeks, it isn't" (Sawchuk, 2020, para. 24). Furthermore, it was argued that elementary students, especially those in early grades, faced more difficulties because they were not proficient at reading the online content (Pryor et al., 2021).

Additionally, without certain knowledge of technology, elementary-aged children might struggle with navigating online lessons. The effects of the 2020 extended school closure victimized the entire rural school communities, including rural students, teachers, school districts, and students' families.

Rural Students as Extended School Closure Victims

Under the circumstances of a five-month school closure as a result of the COVID-19 pandemic, rural students, especially low-income, Title I, minority students who were already in existing disadvantaged situations, might suffer other disastrous impacts not only in their education but also other life aspects (UNESCO, 2020b). First of all, when schools closed, students were deprived of the opportunities for personal development. Rural students who came from low SES families received even fewer educational chances beyond the school walls. Access to computers and Internet at home became the barriers that separated these vulnerable students further from more affluent students in the educational system. Steve Neuberger, principal of South Hamilton Elementary, Iowa, observed, "Some kids are getting it great, others are slipping behind" (Naughton, 2021, para. 10). Likewise, Heather Doe, the spokeswoman of the Iowa Department of Education, lamented that the results from literacy screening showed a statewide decline in literacy development from kindergarten through third grade, and first graders displayed the catastrophic decline. The achievement gap between high- and low-SES students could be up to 18% for low-SES students without learning activity during the closure period (McNulty & Baird, 2020). Secondly, when the school closure occurred, students lost social communication with peers, which was necessary for their learning and growth. With respect to student well-being, the extended school closure took away free meals from children living in poverty-stricken homes. These students depended on these free or discounted meals for their

nutrition. Educators might not be able to imagine how economic hardship affected their students. Christenson and Sheridan (2001) illustrated an example of a parent group meeting. The teacher, despite being aware of the high rate of low SES students in the class (93% receiving free or reduced-price lunch), complained the difficulty of teaching students attending class without bathing. One parent raised a hand and posed a question whether the teacher had ever had to choose between buying a loaf of bread and a bar of soap? The story implied that it was essential for school educators to take students and their families' perspective rather than following assumptions based on their own circumstances. During the school facilities closure, teachers and other school staff at Stanfield Elementary School District drove 150 miles a day on unpaved roads to deliver free meals and homework packets to the students (Hernandez, 2021). Melissa Sadorf, superintendent of Stanfield Elementary School District, disclosed:

> I didn't realize the depth and the breadth of need in terms of food until we started this program and started seeing the numbers of people that were showing up to get food… If we hadn't stepped in ... there are a lot of people that would have been hungry, a lot of kids that would have gone hungry. (Hernandez, 2021, para. 21)

In addition to learning gaps, peer contacts, and poor nutrition, rural students were traumatized by the effect of summer learning loss. According to Alexander et al. (2014), summer learning loss, summer slide, or summer setback, was a phenomenon that low-income children experienced involving a loss of academic performance over the summertime. When the school closed for the summer break, children from better off families enjoyed expansive summer experiences such as library trips, reading books at home, enrichment activities (e.g., visiting museums, attending concerts, field trips), vacations, organized sports activities, taking lessons (e.g., music, swimming, gymnastics), which reinforced and built up their learning. Students from

low-income families suffered tremendous loss of academic skills over the summer months because their families were not able to provide comparable experiences for them. Overtime, academic loss piled up, creating an achievement disparity that might lead to school or college education dropout, devastating consequences, and beyond.

In a longitudinal research study with nearly 800 students in Baltimore City started in 1982, Alexander et al. (2014) monitored students' academic achievement from first grade to adults (i.e., participants turned 28 or 29 years old). Low-SES students' literacy competencies fell far behind their high- and medium-SES counterparts, as measured by reading comprehension using the California Achievement Test over five school years; the reading score gap between high- and low-SES students at the beginning of first grade was 26 points, and this score gap magnified up to 70 points at the end of the fifth grade. After only four summers in the primary school years, the total summer gain of high-SES students was 46.6 whilst that of low-SES students was -1.9.

In addition to the elementary cognitive attainment, summer learning differences exerted an effect on student learning outcomes in upper grades, according to Alexander et al. (2007). Two-third of ninth graders' achievement gap between low-income and better off students was explained by summer learning loss in elementary years. Just 13% of low-income students participated in a college preparatory program, compared to 62% of high-income peers. Over a third of students with low backgrounds dropped out permanently, while the percentage in high group was just 3%. Forty percent of disadvantaged students did not finish high school with diplomas. Nearly 60% of advantaged students were enrolled in a four-year college by the age of 22, compared with just 7% of low-income students. At the age of 28, only 4% of students from low-income families earned a college degree versus 45% of peers from advantaged settings

(Alexander et al., 2014; Rosen, 2014). All of these statistics demonstrated the catastrophic repercussions of summer learning loss throughout the primary school years that could negatively impact low-socioeconomic students' academic accomplishments, high school certificates, college path, and employment opportunities. It was strongly recommended to offer low-SES students strategically structured summer enrichment experiences that were engaging in a way that built up the knowledge and skills acquired during the fall and spring semesters. For students who attended school districts that employed Achieve3000 Literacy, an online literacy learning platform, it was estimated that summer slide, together with the school closures due to the COVID-19 pandemic, caused students to lose up to 49% of students' potential learning gains by Fall 2020 (McNulty & Baird, 2020). This amount of learning loss was equal to about five months of literacy instruction, which might severely impact student learning. Taken together, rural students, especially those in Black and Hispanic communities, might not be able to meet academic goal standards due to the lengthy school shutdown, which Tornillo and Fort Hancock educators named as "COVID slide" (Jimenez-Rivero, 2020, para. 53).

Rural Teachers as Extended School Closure Victims

During the extended school facilities closure starting from March 2020, not knowing when school buildings would resume, teachers were faced with confusion and stressful situations (Sawchuk, 2020). Uncertain of their responsibilities, teachers were baffled with how to support student learning, and how to make connection with students and their families. Also, most teachers, who were trained to teach students predominantly face to face, fell short of the mandatory and sufficient knowledge and skills to conduct online classrooms in the event of online learning. Results from a national survey conducted at the end of the 2019-2020 school year revealed that only 27% of teachers had some professional training for technology-based

remote instruction, and that their learning about remote instruction was primarily informal and self-instructed (EdTech Evidence Exchange, 2020). As a consequence, transitioning from in person to distance learning platforms was frustrating and chaotic.

Moreover, small class sizes in rural schools combined with limited equipment (e.g., computers, iPads, Internet) required for students to access virtual learning mandated teachers to expend more time and energy for lesson planning and instructions to meet students' learning needs. Shifting all schools countrywide to remote learning led to exponential demands for online software, Internet access, and equipment to access instruction. Moreover, turning homes into places for education in such an unanticipated and hurried circumstance resulted in both technical and human difficulties. Concerning educational assessment, the extended school facilities closure triggered stress among school administrators, teachers, students, and their families. Scheduled exams, especially required high-stakes standardized ones, were questioned because there might be issues of fairness when administering these exams online (UNESCO, 2020b). Rural school educational advantages such as strong ties with families, wholehearted supports from local agencies, due to the pandemic, seemed to vanish. Even on the simplest level, people were advised to stay away from one another at least six feet, following the social distancing practice.

Rural School Districts as Extended School Closure Victims

As school districts across the country attempted to deliver schooling to students in a safe manner, rural school districts were confronted with unique difficulties. Amongst these difficulties included diminished human and facility resources, ethnicity inequities, inadequate transportation, and limited Internet access (Institute for Nonprofit News, 2020). These issues, together with the virus epidemic itself, exacerbated rural communities' response to this event, regardless of whether schools tried to deliver instruction virtually or in-person, or in a hybrid

method. Winona Area Public Schools (WAPS) in Minnesota, for example, did not meet any goals set for the school year 2020-2021 because of the COVID-19 extended school facilities closure, despite being cautious about the academic school year (Retter, 2020a). Unlike previous years, WAPS did not make a decision on the 2020-2021 academic goals until May 2020. Yet, at the end of November 2020, WAPS publicly confessed their failure to achieve all accountable goals proposed for the 2020-2021 school year. None of the five goals were met: getting students ready for school, third graders reading at grade level, closing the achievement gaps between students of different races and SES statuses, twelfth graders graduating from high schools, and graduate students fully prepared for college and careers. Third-grade students, on account of the extended school facilities closure in spring 2020, did not take their reading test. Instead, their reading skills were tested using the Formative Assessment System for Teachers reading assessment in fall 2020 when they were in fourth grade. As victims of the COVID-19 extended school facilities closure, only 56% of the students were at grade level.

While figuring out how to successfully transition from traditional to remote learning, Ashley Fredo, the principal of Morningside Elementary School in New Braunfels, Texas, compared the challenges they faced with the task of "building the highway while driving 80 miles per hour" (Justin, 2020, para. 9). Concerning small school districts like Channing Independent School District in Channing, Texas, the modest number of school staff made the pandemic toll even worse. There was only one school serving students in K-12 in Channing Independent School District. The school district superintendent, Michael Stevens, who also worked as the school principal, divulged:

> When you're talking about big schools, you've got a lot of kids and a lot of teachers, but
>
> you also have a large support staff… But here, it's just three or four people. You don't

have the assistant principals, executive directors...you don't have all that. You're it. (Justin, 2020, para. 5)

The COVID-19 pandemic also caused concerns to parents who decided to withdraw their children from the school to do home schooling. South Hamilton Community School District serving rural students living in Ellsworth, Randall, Stanhope, and Jewell, Iowa lost approximately $100,000 in state funding because 17 students left the school (Naughton, 2021).

Rural Parents as Extended School Closure Victims

The COVID-19 pandemic not only caused a "shock" to schools, but also families. "…[A] bunch of parents [whose jobs are not in labor contracts, hourly workers, or those have low-wage jobs] will be unemployed, or that their savings will have vanished, or that someone in their family is sick," as anticipated by Joshua Goodman, an associate professor of economics at Brandeis University (Sawchuk, 2020, paras. 7-8).

Under the impact of the school closure resulting from the coronavirus epidemic, students moved all their learning from school to home where parents suddenly became amateur "teachers." Many parents found it almost impossible to perform this teaching task because of their limited capability, educational resources, and time constraints.

Unable to manage childcare during the school closure, children might be left home alone and develop undesirable behaviors such as peer pressure, illegal substance abuse. Parents were not able to maintain their work schedule and could have been required to leave work for family issues, which reduced their productivity as well as their salaries. In the case that parents were healthcare workers and needed to take leave from work for childcare because of a school facilities shutdown, health care facilities were then in serious shortage of these medical professionals whilst COVID-19-infected patients need them the most.

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When some schools reopened, it was a challenge for educators to keep the dropout rates low. Being unemployed by the pandemic, many parents were financially distressed, which might intensify the pressure their children felt to skip school to work and help contribute to the family income. Linda Pfeilsticker, Winona Education Association president, observed the following supporting this notion, "There's economic stress. Maybe they [students] feel they need to work more. School may not feel like the priority to have an economically secure family situation" (Retter, 2020c, p. 5a).

Responses to the COVID-19 Pandemic School Closure

The advent of the COVID-19 pandemic caused catastrophic consequences for school communities including families, students, teachers, and school administrators. "It's a shock to school life – but it's also a shock to home life," as observed by Joshua Goodman, an associate professor of economics at Brandeis University (Sawchuk, 2020, para. 8). Dr. Goodman continued, "I don't think we've had a shock to educational systems of this magnitude, at least to instructional time…And part of that is the number of weeks and months of school students are going to be missing" (Sawchuk, 2020, para. 7).

Families

Speaking about his employment, Matt Millar, a parent living in rural Blue Mounds, Wisconsin, complained about the school facilities closure period:

> As parents, we're used to the kids being home. There's in-service days, there's parent-teacher conference days, there's snow days, there's kids-getting-sick days. It's not like we're incapable of dealing with kids being home from school. It just can't be every single frickin' day. (Cameron, 2020c, para. 49)

Another parent, Amy Jo Hellenbrand, described her children's schooling being relocated to the family kitchen table, "It was wild, it was chaotic, stressful. I broke out in hives because of the stress and anxiety. I was on steroids for a while" (Cameron, 2020b, para. 7).

In rural border school districts located in Texas, the majority of parents were essential workers, so it was a difficulty to communicate with them. And even when rural teachers could meet with these parents, literacy and technology were matters of concern. These rural parents, not only lacked the skills to navigate online platforms, but did not understand the English language or how to deliver the learning materials provided, so they could not help their children with learning at home. A parent named Marisol Chavez in Fort Hancock, Texas revealed, "My children often had questions, and felt lost, and when they would ask me for help, I did not know what to answer or how to help them" (Jimenez-Rivero, 2020, para. 41). Another parent Dalila Estrada, shared her concerns about the effectiveness of learning packets sent home:

> My son is in second grade, and he received packets in the spring. He focused sometimes. I would divide his work, but it was hard sometimes because his teacher taught him different methods than I did, and he would get confused. (Jimenez-Rivero, 2020, para. 70)

Students

During the spring 2020 when all in-person instructions were abruptly shifted to online platforms, even a high school senior, Vanessa Silva, struggled with the new learning method, "I was frustrated because I couldn't ask as many questions during the Zoom session, but I had less homework and more time to turn in my work" (Jimenez-Rivero, 2020, para. 37). Concerning English learner students, online learning was even more challenging. Amber Moseley, a Fort Hancock English teacher, said, "I can tell ESL students are struggling without having a friend

beside them to translate. They will have to learn new strategies to succeed in the classroom" (Jimenez-Rivero, 2020, para. 77). Realizing new issues in virtual classes, Fort Hancock parent Yadira Macias noted, "My sons spend a lot of time behind the screen, and my younger son does not know how to navigate windows on Google. Some of the children do not have online etiquette and often distract the other students" (Jimenez-Rivero, 2020, para. 80).

Teachers

In the spring 2020, despite purchasing new learning materials to prepare for distance instruction, Fort Hancock Independent School District, Texas, did not provide training to help teachers make the most of the materials in their classroom teaching. Aurelio Saldaña, a history teacher, divulged:

> There was a great availability of online resources, and the school acquired them because they did not know what would work. We provided a lot of feedback back and forth to figure out what was best. Maybe if we had more financial resources, we would have more online tools tailored to our needs. (Jimenez-Rivero, 2020, para. 31)

Describing the transition from face-to-face to remote instruction, Amber Moseley, an English teacher, admitted, "The transition was stressful because there was a lot of background work that had to be done, such as training the parents and teachers to use Google Classroom" (Jimenez-Rivero, 2020, para. 36).

Recounting the sudden learning shift – from in-person instruction on Friday to digital platforms the next Monday, Amy Lund, a social studies teacher in La Farge School District, Wisconsin, voiced, "To be honest, we kind of floundered at first, because we didn't really know what we were doing. We went into it thinking it would only be two weeks" (Cameron, 2020b, para. 34). Kurt Kiefer, an assistant state superintendent for the Wisconsin Department of Public

Instruction, uttered, "It was pandemonium," when teachers had to quickly learn and extend on how to deliver lesson using online platforms such as and Google Classroom (Cameron, 2020b, para. 35).

With regards to student evaluation and grade advancement, a retired teacher, Deanne Sczepanski, Whitehall, Wisconsin, expressed her grave concern when the rural school district where she taught allowed the students to pass all the tests and move up to the next grade level, regardless of their academic achievements. "I was horrified to read that no Ds or Fs would be given to students of WAPS this year. That is absolutely ridiculous," stated Sczepanski (Sczepanski, 2021, p. 5b). Sczepanski elaborated the consequences of such a decision, "As a result, pupils are frustrated, and the teenage suicide rate escalates. Imagine just passing all these kids this year on to the next grade, even though they have not earned the right" (Sczepanski, 2021, p. 5b). Instead of having students pass all exams and advance to the next grade, Sczepanski suggested:

> I would hold all children back to repeat this academic year, with exception of those few who actually excelled. Those could be given the choice to advance to the next grade, or to stay with their present classmates and help tutor next year. (p. 5b)

On a national level, a nationwide survey conducted when the school year 2019-2020 ended demonstrated that although 82% of teachers assumed that students needed more individualized instruction to fulfil their academic needs, 81% of teachers reported to deliver their teaching less than typical or provide no new learning materials in spring 2020 (EdTech Evidence Exchange, 2020). Another intriguing number from this national survey result was the high percentage of teachers (i.e., 76%) asserted the negative impact of the COVID-19 pandemic on students' academic learning, followed by teachers' career stress and mental health.

Results from a national survey with U.S. school leaders by Education Week Research Center revealed school districts with more students demonstrating below grade level reading proficiency had less capacity to provide online learning than more affluent ones (Sawchuk, 2020). Furthermore, 41% of school administrators, at the onset of the distance learning stage, stated they could not support remote learning.

Besides, school principals had additional responsibilities as coordinators of student social services such as supplying meals to students, managing childcare, trying to keep learning opportunities continue for students, and dealing with the shortage of digital devices and Internet access for students. Also, school administrators had to provide social and emotional support for teachers and other school staff. "This is stressful. I'm trying to maintain myself, and keep a level head, and be an example to my employees by staying calm and collected, even though inside, I may feel like I'm falling apart," disclosed by A. Katrise Perera, the superintendent of Gresham-Barlow School District, Oregon (Sawchuk, 2020, para. 15).

The confusion from the government administration's guidelines intensified the stress on school administrators (Superville, 2020). At the beginning of March 2020, the Centers for Disease Control and Prevention (CDC) stated that closing schools for less than eight weeks would not be sufficient in containing the spread of the virus, giving the example of Hong Kong. After that, CDC recommended that a gathering should be less than 50 people. In the middle of March 2020, CDC suddenly canceled a teleconference scheduled on March 17, 2020 with the school district leaders at the last minute. On March 16, 2020, President Trump, in an attempt to halt the spread of coronavirus, advised parents to have children at home "if possible" and recommended gatherings of not more than 10 people at the same time in the same room

(Superville, 2020, para. 4). All of these ununiform messages, especially those from the president, caused the school superintendents to be bewildered about whether their schools should shut down and the length of time that their schools should close. Daniel Domenech, the executive director of the American Association of School Administrators, questioned, "How can you recommend no groups of 10 or more [people] and not recommend that schools be closed?" (Superville, 2020, para. 5). Daniel Bittman, superintendent of Independent School District 728, Minnesota, complained, "We were not able to do that with 250, let alone 10," and then continued, "We cannot function as a school system, in terms of only having 10 people at a time in an area… We don't have the space, we don't have the staff, and we don't have the capacity to do that" (Superville, 2020, paras. 23-24).

On the bright side, with small class sizes, rural school administrators found it easier to arrange classes following social distancing guidelines than metropolitan counterparts. Jeff Kruse, superintendent of Ar-we-va Community School District in Westside, Iowa, said, "With our small class sizes, we've been able to mitigate easier than some larger schools" (Naughton, 2021, para. 39).

Digital Chasm

According to Griswold (2020), the pre-existing rural "digital divide," due to the advent of the COVID-19 pandemic, became the "digital chasm" (para. 21). The dearth of high-speed Internet isolated rural areas during the COVID-19 pandemic. This problem was more like an access rather than an affordability issue, unlike non-rural places (Valley & Rodriguez, 2020). John Windhausen, executive director of the Schools, Health and Libraries Broadband Coalition, an advocacy organization based in Washington, DC, added, "I think it [high-speed Internet access] magnified the problem" (Valley & Rodriguez, 2020, para. 16). He also pointed out that

"there is a racial element to this lack of connectivity because it's tending to impact the black, Hispanic and tribal consumers at a greater rate than Caucasians" (Valley & Rodriguez, 2020, para. 29).

In Wisconsin, for example, 43% of rural residents lacked access to high-speed Internet (Cameron, 2020a). Due to the poor Internet service at home, a teacher named Traci Newcomer had to drive to the parking lot of a nearby college to use their Wi-Fi: "Today I put the computer on my passenger side seat and turned sideways and conducted my class that way," divulged Newcomer (Cameron, 2020a, para. 4). Students also struggled with connectivity issues. For example, two sisters struggled with snail-like Internet at their rural home near Monroe, Wisconsin, forcing them to alternate their use of the Wi-Fi to do their homework while the connection was not reliable.

Internet hiccups became a daily headache for Angela McVicars's family (Valley & Rodriguez, 2020). McVicars, an elementary teacher living in McGill, Nevada (population: 1,068), had to either upload her lessons before her children's virtual learning started or drive 13 miles to the White Pine County seat of Ely, where she could use her phone's Wi-Fi hotspot. The "digital divide" caused the superintendent of the Clark County School District to declare publicly that he could not ensure all his students received learning. With learning now being delivered using online platforms, students needed a laptop or tablet and Internet; however, not all students at the Clark County School District had both a device and Internet access, and many had neither.

In Hudspeth County, New Mexico, the percentage of residents with broadband Internet was reported to be 45.6% in 2018. Therefore, Fort Hancock Independent School District had to apply for CARES Act funding to purchase 400 Chromebooks and 200 wi-fi hotspots for their rural students. Even so, hotspots sometimes did not work properly in Mexican towns across the

border with Mexico like El Porvenir or Caseta. Tornillo Elementary School Principal Myrna

Lopez mentioned, "Students whose hotspots didn't work in Caseta always found a way to turn in

their work one way or another. It required a lot of constant communication with the parents and

patience" (Jimenez-Rivero, 2020, para. 25). Likewise, in Cuba Independent School District, New

Mexico, a large number of students did not have access to broadband service (Griswold, 2020).

As a result, the students had to drive to an Internet hotspot location to download lessons using

school district-provided special bracelets with a built-in USB-drive. At home, without Internet,

students had to use laptops supplied by the school district to upload the lessons and study with

the learning material packets sent home by bus. Due to the shortage of Internet at students'

homes, bus drivers of Cuba Independent School District were tasked to deliver education kits to

students. Kelly Maestas, a bus driver of the school district who drove 112 miles on rural, dirt,

and tribal roads daily, said, "The virus has impacted students on my route… Everyone is hurting

right now" (Griswold, 2020, paras. 12-13).

In Nevada, when learning instruction swiftly changed overnight, school board members

and superintendents madly scrambled through the spring shutdown (Valley & Rodriguez, 2020).

Finally, they identified the problem that needed to be tackled: bridging the digital divide.

Throughout the summer of 2020, educators unceasingly worked hard with state leaders to bring

Internet connectivity to all students, especially rural ones. Eureka County School District

Superintendent Tate Else showed concern, "As far as getting WiFi into every student's house

here, that's still a plan we're working on and it's a big one" (Valley & Rodriguez, 2020, para.

41). During spring 2020, lacking a "meaningful mechanism [computer or iPad and Internet

access] to introduce new curriculum," students of the Humboldt County School District had to

rely on an "awful lot of packets" (Valley & Rodriguez, 2020, paras. 52-53). Parents picked up

these distance learning packets and then dropped them off at school sites while practicing social distancing. "This creates a scenario where my most at-risk student population now have inadequate access to a 21st century curriculum," admitted superintendent Dave Jensen of the Humboldt County School District (Valley & Rodriguez, 2020, para. 55).

In rural places where Internet broadband coverage did not exist like Cuba Independent School District, New Mexico, a non-Internet-based program was created to meet the needs of the students (Griswold, 2020). During summer 2020, the school district operated a four-week culturally relevant educational program for 85 students, mostly Navajo, funded by the state's Indigenous Education Initiative. Instruction boxes with several books and materials were distributed to K-12 students so they could successfully complete two projects: weaving a Navajo rug and growing a garden of corn, beans, and squash. These lessons brought students back to the days when our ancestors did not rely on technology for life. By weaving the rug, the students developed coordination between hands and eyes, learning history, science, culture, and even geometry (choosing the designs for the rugs). Gardening helped students to develop motor skills and increase their attention spans.

In spite of the challenges caused by the unanticipated school closure, McNulty and Baird (2020) found that 24.4% of school districts were successful in maintaining the level of student usage of an online reading platform, Achieve3000 Literacy. This finding came from analyzing real-time reading data encompassing 1.6 million U.S. 2nd-12th grade students learning with Achieve3000 Literacy. During the closure time, students' needs at these school districts were fulfilled. Besides the most urgent needs such as meals, equitable resources and support were provided to all students to sustain their learning. To illustrate, Duval County Public Schools in Florida created a website called Virtual Home Room to provide students and parents with grade-

level instruction for learning routines and all the district's resources for at-home learning. Students who did not have a device and/or the Internet were issued laptops and wireless hotspots so that their online learning with Achieve3000 Literacy was not halted.

In preparation for the school year 2020-2021, McNulty and Baird (2020) recommended that schools plan for modifications and improvements for distance learning, in addition to evaluating existing online instruction. Also, it was imperative to make good use of the summertime to support students overcoming summer learning loss. Further, it was predicted that the majority of students would fall behind on account of the extended school closure, especially those at or below the 25th percentile in reading proficiency. Accordingly, these lower-performing students would need to be provided with scaffolds, supports, and robust distance learning resources that were particularly designed to accelerate their reading growth. Moreover, it was understood that both teachers and students had to learn to master virtual teaching and learning based on technology as in-person learning was not automatically transitioned to online instruction smoothly. In Irving Independent School District in Texas, teachers were reluctant to use online platforms before the closure time; however, thanks to continuous one-to-one support by the district coordinators and the Achieve 3000 team offered to each teacher at the onset of the distance learning phase, teachers became engaged and successful in using online instruction.

The COVID-19 Pandemic Post-School Closure

Although it was seven months after the start of the extended school closure (March 2020), many students across the country did not have the access to the online classroom doors. It was revealed that 25% of all students did not possess either a digital device (e.g., iPad, tablet, laptop, computer) or broadband Internet (National Education Association, 2020). This disparity was unfortunately associated with students' ethnicity and locales. The likelihood for economic

disadvantaged students living in rural locations and African-American students to lack connectivity was quite high. For example, the percentage of school-aged students with full access to broadband and web-enabled devices in the rural areas was 63%, while the percentage of their non-rural peers was 77%. In terms of access to devices, 91% metropolitan students owned digital devices for online learning, while the percentage of their peers in rural areas was 87% rural students. The most serious gap was the access to broadband Internet, with 66% rural students having Internet access versus up to 80% nonrural counterparts. African American, Hispanic, and Native students lagged behind their white peers in terms of either devices or broadband access, or both. To illustrate, whilst 80% of white students had full access to Internet and devices, only 62% African American did.

Describing the experience of virtual learning, 10-year-old Adara Millar living in rural Blue Mounds, Wisconsin, said, "It wasn't very much fun. You're looking at a computer screen for six and a half hours," so she had to struggle to keep her attention to the lessons on the iPad screen (Cameron, 2020b, 2020c, para. 2). This little girl of the Barneveld School District also learned a salutary lesson caused by the epidemic, "You don't really know how lucky you are to have a normal life until you can't have a normal life" (Cameron, 2020b, par. 69).

When schools reopened for in person learning, the entire school community were enthusiastic about going back to normalcy. A fifth-grade student kept talking about returning to school for days, discussing what she was going to wear with friends over the phone. Her mother, Josie Deiss, described her daughter's excitement as being "over the moon ecstatic" (Retter, 2021b, p. 1a). Erin Van Beek, a parent of a fifth-grade student and a second-grade student said, "It was hard to be away from other kids, definitely…To be socially responsible, there's a lot of times we didn't see people, so they're very thrilled to be back with their friends" (Retter, 2021b,

p. 9a). Chris Leblanc, a parent of a kindergarten student stated, "We feel that's [in-person learning's] the best way for him to learn, and other students to learn as well" (Retter, 2021b, p. 9a). Likewise, Stacy Rasmussen, a Kindergarten teacher at Jefferson Elementary School, Minnesota, said, "Just having them back and smiling and seeing their friends again is what I'm most excited for, because they've missed each other" (Retter, 2021b, p. 9a). Viewing the classroom as a community of both the teacher and the students, Tammy Eastep, a first-grade teacher at Jefferson Elementary School, Minnesota, stated:

> We talk about our classroom. It's not my classroom; it's our classroom. It's family… This will be good for them to know they're coming to school, they're safe, they're loved… They're being fed. They can see their friends again in person instead of just on a screen" (Retter, 2021b, p. 9a).

With respect to student evaluation, parents showed concerns related to how their children were assessed just like they were in a "normal" academic school year whilst the learning models kept changing from in person to online in fall 2020. A parent named Shelly Merchletwitz said that her child spent only 18-day in-person learning in the school building, and then the reclosing of the school facilities resulted in 10-day online learning via Zoom (Dakota, 2021). For Fall 2020, her child spent a total of 28 instructional days while students were supposed to have at least 40 instruction days in one quarter of a normal school year. As a result, this caused a conflict between the less amount of instructional time and the unchanged grading system, as articulated by Merchletwitz:

> The classes seem to be progressing through the same amount of materials with less than half the instructional time. How can students be expected to learn all the material with less instruction and yet be graded as if everything were normal (Merchlewitz, 2021, 4a).

For some teachers, when schools reopened in Fall 2020, the likelihood of contracting COVID-19 drove them out of the teaching profession. Hundreds of teachers across the U.S. reluctantly opted out of the career by retiring early, taking extended leaves, or leaving the profession. Results from a nationwide poll revealed that approximately one third of teachers stated that the COVID-19 pandemic caused them to either retire or leave the job (Flannery, 2020b). This number included 20% of newly recruited teachers whose teaching experience was under 10 years, 40% of teachers with 21 to 30 years of teaching experience, and 55% of veteran teachers with over 30 years of teaching experience. This rate aggravated the acute shortage of high-quality teachers, especially in rural areas. As the teaching workforce was battling with the diversity issue, 43% of African American teachers affirmed that they would take early retirement or simply leaving the career because a sizable proportion of African American and Hispanic people died of COVID-19. National Education Association (NEA) President Lily Eskelsen García said:

> Educators and parents want nothing more than to return to in-person instruction, yet the Trump administration has provided no real plan to educators, school administrators, parents, and students on how to reopen school buildings safely and equitably… Educators believe they are viewed as expendable, and they feel forced to choose between their jobs or the health of themselves and their loved ones. (Flannery, 2020b, para. 7)

However, a report by EdWeek in November 2020 showed that teacher attrition due to COVID-19 pandemic varied across different regions of the United States. Despite various influencing factors, Richard Ingersoll, a professor of education and sociology at the University of Pennsylvania, acclaimed that the spike in teacher retirement or resignation in certain school districts or states in 2020 might result from the COVID-19 epidemic (Will et al., 2020). In New

York, between April 1 and October 1, 2020, there was a decrease of 20% in teacher retirement (i.e., 1,100 teachers retired in 2020 compared with 1,377 ones in 2019). However, 65% more teachers retired in September 2020 (i.e., 177 teachers) than in September 2019 (i.e., 107 teachers). In Arizona, the number of teachers leaving the classroom went up to 75% at the end of August 2020 (i.e., 751 teachers left the profession by August 2020 compared with 427 ones by August 2019). Approximately 43% of teachers who left mentioned the coronavirus as the main reason.

Cassie Piggott, an English language arts teacher at Rutherford County, Tennessee, chose to resign from her career because of health concerns relating to her nine-year-old son (Flannery, 2020b). Piggott's son was living with an immune disorder although he had a bone marrow transplant five years ago. Infected with COVID-19, Stefanie Beth Miller, a Broward County (Florida) teacher stayed two months in the hospital and 21 days on a ventilator. A Pasco County sixth-grade teacher died from COVID-19 at the age of 51 (Flannery, 2020a). Yet President Trump and Secretary of Education Betsy DeVos pressured school districts to open their doors physically every day for every student if school districts still wanted to receive federal funds. Following this, Governor Ron DeSantis (Florida) mandated the emergency order to reopen school for in-person learning, which caused the Florida Education Association to file a lawsuit against the physical school reopening order in July 2020. NEA President Lily Eskelsen García voiced in an online press conference:

> The command from Gov. DeSantis is reckless, unreasonable, and unnecessary. It's a false choice to keep schools closed and stop learning, or to open unsafely. There are places all over the country, in fact all over Florida, that are planning very creative ways to deliver education safely. (Flannery, 2020a, para. 6)

Ariel Franchak, a Pennsylvania reading remedial specialist, divulged about her heartbreaking decision to leave the teaching career, "I wanted to work virtually, but I was told to either come to work or resign… It kills me to leave, but I think it would kill me—literally—to stay" (Flannery, 2020b, para. 8). In the resignation letter, Franchak wrote:

> I love my job as a reading specialist and am extremely passionate about what I do. It hurts my heart to give up something that I love so much. I have stayed up late at night in tears thinking about this. I have spent weeks agonizing over the loss of a job, a job that I don't even consider "a job," because I love it so much. To engage students in reading, to help them find books that they love and to help students become lifelong readers- that is my passion. I love what I do so deeply, it feels as though I have lost a part of myself in this process, a part that I am not sure I will be able to get back. But what choice do I have, really? To put myself and my family at risk? Not for one second, will I ever regret this decision. Not for one second will I ever regret protecting my health and safety and the health and safety of those whom I love. The choice was simple, easy, yet heartbreaking and painful. (Franchak, 2020, para. 1)

At the end of the letter, Franchak suggested, "Again, I remind you that you have the power. Teaching can be done remotely. Is it perfect? No. Will it save lives? Yes. The choice is really that simple" (Franchak, 2020, para. 2).

Another thing that concerned teachers when schools reopened in Fall 2020 was students' attention. Educators kept comparing how students showed distraction just like students at the end of the previous school year. Kevin Genisot, the superintendent of the Hurley School District, a rural school district in Wisconsin, revealed, "For some kids right now, it feels like the end of May. We definitely struggle with that… We've lost control" (Cameron, 2020c, paras. 43, 45).

Likewise, it was reported that African American and Hispanic students were 10% less engaged in the virtual learning than their white and Asian counterparts (Jimenez-Rivero, 2020). Student engagement during online learning might be driven by some factors related to students' home situations. Cecilia Aceves, a teacher in Fort Hancock, Texas, described one of her students taking care of a younger sibling:

> The child is not old enough to provide good, essential care to his siblings, but ever since the schools closed, that is just the way it is. Even some older students still need someone to look over their work before turning it in. One can only imagine how tough it is to babysit a child when the babysitter is still a child himself. (Jimenez-Rivero, 2020, para. 49)

Similarly, Linda Pfeilsticker, Winona Education Association president, noted, "Some [students] will have mental health issues … maybe they don't have a space to learn in that's very conducive, if they're watching younger siblings" (Retter, 2020c, p. 5a).

Another factor that kept students disengage from virtual lessons was being ashamed of their situations at home. Cecilia Aceves explained, "Some students had family members always interrupting their classes, and others just worried about what their classmates would have to say about their home" (Jimenez-Rivero, 2020, para. 50). Interestingly, technology in itself was a distraction for students. They explored the Internet, spending a great deal of time on social pages and entertainment websites, if not being supervised by parents. Cecilia Aceves and other teachers said they usually received assignments turned in at 3 a.m. Without limits on screen time, students might have suffered from eye strain and/or sleep deprivation.

Comparing online learning with face-to-face learning, Kevin Genisot, the superintendent of the Hurley School District, stated, "There's nothing that beats being in person for school. It's

much more than academics. It's social behavior. It's social norms. It's learning to handle adversity. It's the real life experiences that teach you to deal with that" (Cameron, 2020c, para. 46). Genisot also further anticipated that some students' academic performance would decrease in the post-school facilities closure school year (Cameron, 2020c). As a parent of two young students, Matt Millar, similarly, claimed that his two sons Matthias, 5 years old, and Sterling, 7 years old, did not greatly benefit from distance instruction. "I think you get 80% of the benefit of in-person [instruction] and 80% of the safety of virtual [instruction]," acclaimed Millar (Cameron, 2020c, para. 47). Erin Van Beek, a parent of a fifth-grade son and a second-grade daughter, similarly said of her son, "He [her son] has made comments that he learns so much better when he's in school…And I think he really thrives on that, more of an all-day, teacher-led interaction" (Retter, 2021b, 9a).

Due to the rise of COVID-19 infected cases in the country, some rural school districts were compelled to shut down school buildings and move to online learning after reopening for in-person instruction at the beginning of the 2020-2021 school year (Retter, 2020b). Lewiston-Altura School District in Minnesota moved all grade levels to distance learning beginning November 2, 2020. On November 17, 2020, pre-kindergarten through fourth grade students returned to in-person instruction in separate and smaller classrooms, but fifth grade through twelfth grade students would be in a remote learning model until at least January 4, 2021. During this facilities shutdown, all afterschool extracurricular activities, athletic practices, and games were cancelled. Galesville-Ettrick-Treampealeau School District in Wisconsin shifted to an online model for all students K-12 on November 18, 2020 and remained in distance learning until January 4, 2021 (Retter, 2020d). Michele Butler, Galesville-Ettrick-Treampealeau School District administrator, said:

The spread of the virus is now impacting our schools through both close contact tracing

and positive cases. We are not only experiencing staffing shortages, but we are seeing

classes where the majority of students are now learning virtually due to large numbers of

students under quarantine. (Retter, 2020d, p. 4b)

Cochrane-Fountain City School District in Wisconsin shut down schools to move to a virtual

model for all K-12 students from November 16, 2020 to November 29, 2020 (Retter, 2020b).

Similarly to Galesville-Ettrick-Treampealeau School District, Cochrane-Fountain City School

District experienced serious staffing problem. Jo-Ellen Fairbanks, Cochrane-Fountain City

School District superintendent, revealed:

Other teachers, paraprofessionals, administration, secretarial staff, and substitutes have

been going above and beyond to help fill staffing gaps and supervise in-person students.

We were at a point where that was no longer a sustainable solution and it increased the

health and safety risk to remaining in-person students and staff. (Retter, 2020d, p. 4b)

Another devastating consequence that rural school districts suffered was the impact of the

2020 extended school closure on student enrollment (Retter, 2021a). Families with young

children chose to have their children enroll in kindergarten a year later. Some decided to keep

their children at home and started homeschooling. Other parents made the decision to send their

children to different schools. Low enrollment equated to lower funding that the school district

received. WAPS anticipated that the capture rate (i.e., the number of kindergarten-aged students

who enroll at WAPS) dropped from 42% in the school year 2019-2020 to 30% in the school year

2020-2021.

The review of the related literature demonstrated that rural schools and rural communities

have been "blind spots" in educational research because the frequent focus was skewed towards

teaching and learning in urban or suburban areas (Lavalley, 2018). In fact, less than 25 major studies published from 1980 to 2005 addressed rural communities (Donehower et al., 2007). It was undeniable that the consequences that the COVID-19 school closure brought about were devastating, particularly for disadvantage students; however, little research work has been done on the impact of extended school closures, regardless rural or non-rural locales, on students' achievements (Sawchuk, 2020). This research project aimed to fill in the aforementioned gap and extend the literature by exploring how a rural school community responded to the extended school facilities closure to support their elementary students' learning.

CHAPTER III

METHODS

Research in education has been critiqued to skew toward schools in urban and suburban areas (Donehower et al., 2007; Lavalley, 2018). Rural students have been "unheard, unseen, and under-represented" in both textbooks and standardized tests (Cormack, 2013; Donehower et al., 2007, p. 25; Monk, 2007; Schultz, 1999). Accordingly, this study aimed to extend the literature by exploring how a rural Title I elementary school community in the Southeastern United States experienced the 2020 extended school facilities closure. Specifically, this research project attempted to explore elementary-age students' experience of the spring shutdown, as perceived by different stakeholders in the research school community including the school administrator, classroom teachers, students, and their families.

This chapter presents information regarding how the data were collected and analyzed. The first section discusses the research design of the study, followed by a section about research context. In the next section, research participants with inclusive criteria are described. Following this, the data gathering process and different data sources are introduced. The next section explains how collated data were analyzed and how ethical issues were addressed during different phases of the study. The chapter ends with various procedures that were utilized to substantiate data validation and reliability.

Research Design

A qualitative case study was conducted to explore the perception of a rural school community in the Southeastern United State regarding third-grade students' experience of the 2020 extended school facilities closure. The research question that guided this study was: How did rural elementary-aged students experience the 2020 extended school closure, as perceived by themselves and other rural school community stakeholders (i.e., the school administrator, classroom teachers, and family members)?

In general, qualitative research design had its advantages and disadvantages (Rahman, 2017). The limitations of qualitative research included its time-consuming process and employment of a small sample sizes. The strength of qualitative research lied in its in-depth exploration into the subjects' understandings, thoughts, feelings, perceptions, perspectives, experiences, and behaviors, which brought about in-depth insights for the researchers to address the investigated phenomena.

Qualitative research was chosen for this project because of the following three rationales. First, there was a need to study how a rural school community with its educational advantages as well as unique challenges responded to an extended school closure. The review of the literature in chapter 2 revealed there was meager research on how rural school communities experienced closures. Second, it seemed that quantitative measurement did not "fit the problem" because the studied variables included experiences, perception, responses, and interactions amongst people with differences in ethnicity, gender, SES, profession, besides other distinctive individual characteristics (Creswell, 2013, p. 48). Hence, only by sharing, listening directly to people's stories within their own contexts, and minimizing the researchers' voice could researchers develop a complicated and comprehensive understanding of the explored issue (Creswell, 2013,

2014). Likewise, Brann-Barrett (2014) advised researchers to keep their voices to a minimum so that they could concentrate on gathering multiple forms of data from participants. Third, Corbett (2014) commented that qualitative data played such an important role in his teaching profession that it became "a way of life" (Bartholomaeus et al., 2014, p. 59). Gathering these data about the nearby community kept educators informed of student needs, which led to effective teaching. Rural research was closely connected with researchers' personal experiences and their life in rural locales. Therefore, qualitative research was a great tool to obtain rural data to make rural schools visible in the world of education.

Though I possess 10 years of teaching experience in urban areas in Vietnam, I have learned a little about rural schools through my parents. Both were born and grew up in a small rural village in the North of Vietnam. Schools in their memories were closely connected with occasional bomb attacks and classes being cancelled. My mother had to leave school when she was in middle school to help my grandparents with rice planting in paddy fields. My father usually told the story of his walking a couple of miles from home to school. He also kept telling me to study hard because I was so fortunate to study in schools with decent facilities located in the same neighborhood where I lived. When I moved to the United States to follow a doctoral program, I did not pay attention to the location of the public university until my arrival. Departing from the airport, I was amazed by line after line of trees on the two sides of the road I traveled in a university transport car (I did not see that many lines of trees in Ho Chi Minh City, Vietnam).

Time flew. I had been living in the rural south of the United States for five consecutive years and developed a scholarly interest in conducting research with rural communities. As I considered topics for exploration, the COVID-19 pandemic occurred and forced schools to close

their facilities to students, providing instruction in alternative formats. Though I possessed no experience regarding unexpected and lengthened school closures, I was intrigued by how schools, administrators, teachers, students and families responded to this challenge. Thus, I wanted to conduct my dissertation research to explore how a rural school community in the Southeastern U.S. experienced, perceived, and responded to the 2020 extended school closure. Under the supervision of a dissertation committee at a public southern U.S. university, I carried out this research study to partially fulfill the requirements for the Doctor of Philosophy degree.

When conducting research with a rural community, I was reminded of Howley's and Howley's (2014) advice regarding appreciation for rural communities. Spending most of my childhood in a metropolitan area (i.e., Ho Chi Minh City, the largest city in Vietnam), I had to learn to abandon the thought that urban economy and cultures were superior to rural ones and criticized the deficit stereotypes about rural education (Azano et al., 2019; Donehower, 2014). The research study that I carried out was not "on" the rural school community, but "with" and "for" this rural community (Bartholomaeus et al., 2014, p. 60). Besides financial-related challenges, schools in rural locales had to be viewed from positive angles with its educational advantages such as small class sizes, strong ties with families and communities (Azano et al., 2019; Barley & Brigham, 2008), relatively few student disciplinary problems, teachers having more autonomy and influence on school policy, maybe gaining more funding thanks to local tourism (Monk, 2007). This knowledge informed all my subsequent decisions.

This research project utilized case study as the research method. A case study was defined as a qualitative research approach that allowed researchers to explore an actual, current case situated in a certain place and time or a "bounded system," or multiple cases (Creswell, 2013, p. 97). In order to provide detailed, in-depth description of the case or cases, data were

typically collected from a range of extensive information sources such as observations, documents, reports, audio-visual materials, and interviews. For this research project, the intent was to develop an in-depth understanding of how a rural school community perceived elementary-aged students' experience of the 2020 school closure. The focus was on the young students' experience during a school closure rather than the whole case itself. Consequently, instrumental case study was selected as a vehicle to better understand the issue (Stake, 1995).

There were several reasons why a case study was chosen as the method for this project. First, the purpose of the project was to develop a comprehensive description as well as analysis of a bounded system (i.e., a rural school community during an extended school closure from March 2020 to August 2020). Second, the target subject of the project was a single rural school community including the school administrator, teachers, students, and family members. Third, a case study approach was best employed because the types of data for collection and analysis supported my depicting a detailed picture of the case of how the rural school community experienced an extended school closure within its context.

Research Context

This research project was conducted at a rural Southeastern elementary school that served students in third and fourth grades. This elementary school was titled Sunshine Elementary (pseudonym), residing in the same state where the university I have been pursuing my doctoral degree was located. Sunshine Elementary was also chosen because of its surrounding community, its school district, and the school itself. Many characteristics of Sunshine Elementary were typical of a small rural school in this rural Southeastern area and nationwide.

As informed by NCES (1997), rural schools were generally situated in a small school district or a unified district with a small number of schools. According to this report, most

schools served primary grades, while secondary grade levels were housed in one or two secondary schools. The majority of students in small rural school districts were reported to be either white or Native American, with a few African American or Asian students. Yet the trend of student ethnicity in the rural school where this dissertation study took place was quite different from the national one: three quarters of this school's students were African American (NCES, 2019a).

The Community

The rural community surrounding Sunshine Elementary, according to Education Demographic and Geographic Estimates (2019), had a population of nearly 20,000 with an average annual household income of $31,923. The majority of residents were African American (60%), followed by white (39%) and Hispanic (1%). More than half of the households in the community (51%) were single-mother families. The percentage of male householders without wives was 10%. About one third (38%) of families were married couples. Approximately half of the housing status of families (46.6%) were renter-occupied. Concerning educational attainment, 9.1% of adults did not complete high school, 34.3% of adults finished high school, 34.3% of adults earned some college or associate's degree, and 22.1% achieved a bachelor's degree or higher. The unemployment rate in this community was 15.7%. There were 7,755 households in the community; yet only 66.7% of the households had access to broadband Internet. The community had a high poverty rate: 36% families having income below the poverty line and 36.8% families depending on Food Stamps or SNAP benefits for living. Most of the children in the community (98.9%) spoke English only.

In an attempt to generate more funding, the school district where Sunshine Elementary was located was consolidated with a neighboring rural school district on July 1, 2015 (Office of

Chief School Performance Officer, 2015). There were four elementary schools and two secondary schools in the consolidated school district (Common Core of Data, 2019). One elementary school served pre-Kindergarten to sixth-grade students, one served pre-Kindergarten and Kindergarten students, one served first- and second-grade students, and Sunshine Elementary served third- and fourth-grade students. One secondary school served students in grades five to seven, the other secondary school served students in grades eight to twelve.

The School District

In the school year 2018-2019, this consolidated school district served 3,000 students, including 25 English language learners and 378 students receiving support from an Individualized Education Program. The ratio of student and teacher in the school district was 14.62, and per-pupil expenditure was $8,936.98 (MDE, 2019a). Results from the 2018-2019 statewide accountability data showed that 41.5% students in this consolidated school district scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP mathematics or Algebra I assessment and 32.2% students scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP ELA or English II assessment. As a whole, the school district ranked within the bottom 50% of the state in the school year 2018-2019, based on reading, math, history, science proficiency testing data, reading, math growth, English learner progress, college and career readiness, participation rate, and graduation rate (MDE, 2019b).

The School

Sunshine Elementary was a Title I elementary school, with 100% student eligibility for free lunch under the National School Lunch Act. Approximately 75% of the students in the school were African American, based on demographic data provided by National Center for

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Education Statistics (2019a). Distribution of male and female students were roughly the same in Sunshine Elementary. The student/teacher ratio was 15.06. In the school year 2018-2019, the number of teachers was 18, including 10 third-grade teachers and eight fourth-grade teachers. Per-pupil expenditure in the school year 2018-2019 was $7,551.81 (MDE, 2019a). Results from the 2018-2019 statewide accountability data showed that 40.1% students scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP mathematics or Algebra I assessment and 38.7% students scored proficiency or advanced (i.e., levels 4 or 5) on the MAAP ELA or English II assessment. Demographic information of the participating school is provided in Table 2.

Table 2

Sunshine Elementary School Demographic Information in the School Year 2019-2020 (MDE, 2021c)

| | | Sunshine Elementary | |
		Number	Percentage
Ethnicity	Asian	*	*
	African American	321	75.71
	Hispanic or Latino	*	*
	Native Hawaiian / Pacific Islander	*	*
	White	85	20.05
	Two or more races	10	2.36
Gender	Male	199	46.93
	Female	225	53.07
Grade	Third grade	227	53.54
	Fourth grade	197	46.46

Note. *Represents suppressed data to prevent the identification of individuals in small cells or with unique characteristics.

Participants

Since the aim of this research project was to explore how a rural students experienced the extended 2020 school facilities closure, the participants were purposefully selected to represent

the rural school community as much as possible. Participants included one school principal, three

teachers, three students, and three family members (one for each student participant; See Table

3).

Table 3

Participant Profiles

Pseudonym	Age/ Age range	Gender	Ethnicity	Role in the school community
Caroline	30-39	Female	White	Principal
Clara	30-39	Female	White	Third-grade teacher
Krasava	30-39	Female	White	Third-grade teacher/ K-12 instructional technology coach
Jade	30-39	Female	African American	Third-grade teacher
Margaret	9	Female	White	Fourth grader
Bob	9	Male	White	Fourth grader
Colton	9	Male	African American	Fourth grader
Frida	20-30	Female	White	Margaret's mother
King	46	Male	White	Bob's father/ school district administrator
Jasmine	30-39	Female	African American	Colton's mother

School Administrator

A typical rural public-school principal in the U.S. was described as a male (53.6%), white

(88.3%), aged 45 to 49 or aged 55 and over (22%), earning a master's degree (62.1%), having 10

to 19 years of teaching experience before becoming a principal (47.4%), and serving as a

principal for three or fewer years (40.1%; NCES, 2019c). The school principal at Sunshine

Elementary shared some of the aforementioned characteristics such as being white (88.3%) and

earning a master's degree (62.1%).

School Teachers

Following the description of Rural Education in America (2012a), teacher participants

were recruited based on the following characteristics: female, white, aged 30 to 39, possessing a

bachelor's degree. Another inclusive criterion was to select teacher participants whose main teaching assignment for the school year 2019-2020 was teaching general elementary, third-grade students due to the enforcement of the state-imposed third-grade retention policy at the state where Sunshine Elementary was located (Weyer, 2018). In order to explore in-depth experiences, perceptions, thoughts, opinions, and feelings of participants for this case study project, only three out of the available ten third-grade teachers were chosen for the study. With respect to the amount of teaching experience, all three recruited teacher participants were seasoned teachers (i.e., having at least five years of teaching experience).

School Students

For the purpose of in-depth understanding of the case, only three students who were third graders in the school year 2019-2020 were invited to join the study. These participating students were at the end of fourth grade in the school year 2020-2021 when this study was conducted (April 2021). Additionally, the participating students were representative of Sunshine Elementary with the following traits: African American or Caucasian, either male or female. Additionally, following the typical traits of rural public-school students as described by NCES (1997), participating students were not enrolled in Individualized Education Programs for special education and their first language was English at the time of recruitment.

Family Members

Three family members, one for each of the three participating students, were invited to participate in the research project. These family members were either parents, grandparents, siblings, extended relatives, or the student's guardian. The recruited family members were adults

(18 years and older) who spent ample time living in the same home and taking care of the participating students.

Participant Selection

Using a purposeful selection method, I meticulously selected participants by contemplating who were the best people to talk to using the aforementioned inclusive criteria for each type of participants (i.e., following the national demographic for rural school principals, rural teachers, and rural students), how to reach these people with the assistance of the identified helpers, and how many people were needed for the interview data given the method of collection (e.g., choosing a small number of participants in order to develop a deep, detailed understanding of the participants and the investigated case).

After receiving the approval from the university Institutional Review Board (IRB), I started participant selection by asking for permission from Sunshine Elementary principal. The next step was to introduce the research project to potential participants by sending recruitment letters. I emailed a recruitment letter (See Appendix E) and an informed consent form to the school principal for review. Employing Reflexive Inquiry theoretical framework (Brann-Barrett, 2014), I built up relationship with the gatekeeper as well as other participants because this enhanced the communication between researchers and participants, which then influenced the findings of the study. The recruitment letter was written in a polite and respectful manner. In the letter, I introduced myself, the research project (i.e., purpose, procedures), asked the potential participants for their voluntary participation, and underscored the importance of the participants' voices. The informed consent form was created following the university guidelines (Mississippi State University, 2015).

Following the first R (i.e., Respect) in Anderson's and Lonsdale's (2014) Three Rs theoretical framework, I communicated via email and then had a short meeting with the school principal to further discuss the research project to develop trust and rapport. In this meeting, I talked in more details about the research purposes, procedures, potential participants, participants' harm and risks, benefits, confidentiality, research reporting and sharing. Also, I listened to the school leader's opinions about the discussed matters. In addition, reciprocity (Anderson & Lonsdale, 2014; Lanas & Rautio, 2014) was included in the meeting agenda. Besides the research needs, I expressed my intention to be responsive to the participants' evolving needs during the implementation of the research study. In this way, the interactions between researchers and participants became positive. Both parties worked collaboratively to learn from one another, which resulted in rewarding research findings. The meeting was arranged virtually for safety reasons.

After being granted permission from the school principal, I emailed recruitment letters (See Appendix E) and informed consent forms to all the teachers who taught third-grade general elementary in the school year 2019-2020. Similar to the recruitment letter sent to the school principal, the recruitment letters sent to classroom teachers were written in the same respectful and polite tone, providing the same information about the research study (Anderson & Lonsdale, 2014; Brann-Barrett, 2014). These potential teacher participants were encouraged to contact me (using my email address or phone number in the recruitment letter) if they had questions or concerns relating to the project. They were also asked to return signed consent forms if they would like to become a research participant. There was no coercion if the invited teachers decided not to participate in the project. I attempted to ensure that their participation was

confidential. Three third-grade teachers were selected based on the aforementioned criteria for teacher participants.

In the next step, I asked the school principal and the participating teachers to help with recruiting students and family members for the study. The principal and the three teacher participants were provided with packets including recruitment letters, informed consent forms, parental consent forms, and student assent forms. These recruiting packets were sent home to family members of all the students. The recruiting letters for family members were also written in a polite, respectful manner, providing similar information about the research study just like the recruiting letters for teachers (See Appendix E). The only difference in the recruiting letters for family members was to invite both a family member and their child to participate in the study. Family members and their child were encouraged ask all questions related to the research project such as the purpose, the data collected, the research procedure, and voluntary participation prior to signing the consent and assent forms. These pieces of information were explained in detail to the participants. I used the aforementioned criteria to choose three student participants. Hence, I shared the student participant criteria with the principal and the teachers so that they would be able to help recruit the participating students. Criteria for potential student participants included but was not limited to the following:

- being a fourth grader (participated in a third-grade classroom at Sunshine in the school year 2019-2020)
- being either African American or Caucasian
- at least one of the three students was African American
- at least one of the three students was either male or female
- not receiving special education services

Data Collection

In qualitative studies, researchers collected various forms of data, ranging from documents and artifacts to audio-visual materials, observations, and interview for detailed and thorough understanding of the research matters. If researchers relied on solely one type of data, the research study did not develop sufficient comprehension of the research issues. The purpose of the research study was to understand how a rural elementary students experienced the school closure. Consequently, instrumental case study was employed to gain insight into the inquiry. Adhering to Stake's (1995) guidelines, the crucial components of the data-gathering plan consisted of defining the case, framing research questions, identifying data collection helpers, sources of data, time allocation, costs, planning for data report.

Regarding case defining, the case in this research project was a Title I elementary school community comprising of the school principal, general elementary third-grade teachers, third-grade students, and family members of the third-grade students. The investigated school was located in a rural area in the Southeastern United States and served students in the third and fourth grades. Because the 2020 extended school closure took place from March 2020 to August 2020 for most public schools in the U.S. (*Map: Coronavirus and School Closures*, 2020), this period of time (i.e., March 2020 to August 2020) was chosen to be the time frame of the case. All of the students in the investigated schools were eligible for free school lunch under the National Lunch Program (NCES, 2019a). Approximately three quarters of the students were African American. The number of male and female students were about the same. The student/teacher ratio was reported to be 15.06 in the school year 2018-2019. The school district that housed this elementary school ranked within the bottom 50% based on the 2018-2019 state testing data (MDE, 2019b). Specifically, in the school year 2018-2019, 40.1% students in this

investigated school attained proficiency or Advanced (i.e., levels 4 or 5) on the statewide MAAP mathematics or Algebra I assessment and 32.2% students gained proficiency or advanced (i.e., levels 4 or 5) on the statewide MAAP ELA or English II assessment (MDE, 2019a).

The research question concentrated on how rural third-grade students experienced the extended school shutdown from their own perspectives and other school stakeholders' perspectives. One of the helpers was a university professor who was my co-major professor. This university professor implemented a literacy afterschool program at Sunshine Elementary for a few years prior to the advent of the COVID-19 pandemic, so she assisted me to gain access from the gatekeeper (i.e., the principal of Sunshine Elementary) to conduct the study at Sunshine Elementary.

Data Sources

The data sources included four instruments: (a) in-depth, semi-structured interviews with each participant, (b) documents and artifacts, (c) virtual classroom observations, and (d) a reflective commentary journal. The employment of different instruments was to triangulate different pieces of data for validating the congruence of the information as well as to develop a profound understanding of the rural school community's experiences and perceptions of students' learning during the extended school facilities closure (Brann-Barrett, 2014).

Interviews

One of the purposes of conducting interviews was to obtain descriptions and interpretations of the research issue from others (Stake, 1995). Since different people possessed different perspectives on the same matter, having unique, special experiences to share, interview became "the main road to multiple realities" when researchers aggregated understandings or

knowledge from various interviewees (Stake, 1995, p. 64). There were ten individual interviews with ten stakeholders who represented the rural school community (one interview for each participant): one school principal, three teachers whose main job assignments were teaching third grade in the school year 2019-2020, three four-grade students who were in third grade in the school year 2019-2020, and three family members (one for each student participant). Responses from various school stakeholders helped develop the "multiple realities" that Stake (1995) recommended (p. 64).

After receiving consent and assent forms from the ten participants, I conducted ten initial individual interview sessions. Besides the actual spoken words, I paid close attention and took notes of the participants' reaction to the interview questions, changes in voice, their facial expression and body language while responding. As noted by Stake (1995), the meanings that the participants tried to convey during the interviews were of utter importance. As a consequence, I sat and composed a commentary including the participants' main ideas and my interpretation immediately after each interview.

Semi-structured interview protocol was chosen for this study because I could gently use the set of core questions as a guide for the conversation, allowing me to follow a "winding path" depending on the interviewee's responses, and then return to the core questions (Brounéus, 2011, p. 130). The complete version of the interview questions was particularly tailored according to the research questions as well as review of the literature. For example, all interviewees were asked about how students experienced the extended school shutdown from their viewpoints. Moreover, interviewees were asked about challenges as well as educational advantages of rural schools such as small class size, bonds with families, support from local institutions, etc. (Azano

et al., 2019; Barley & Brigham, 2008; Monk, 2007), and how those strengths were leveraged during the lockdown period.

As suggested by Rubin and Rubin (2012), the video-recorded semi-structured interview protocol included the following sections: an introduction, a transition to the next section, primary questions, probing questions, and then an ending question (See Appendix C). During the interview sessions, the most important thing that I did was to listen to the interviewees, whilst controlling the gathered data and planning the form of the account in the report (Stake, 1995). Similar to Rubin and Rubin (2012), Stake recommended the employment of key questions, carefully created probes, and sometimes "dumb questions" to verify what was said or to ask for clarification (p. 66). An example of a dumb question was asking the interviewee about what he or she did not mean after he or she meant something else. The introduction section was used to set an informal and conversational tone for the interview. Small talks were used in the introduction to create a friendly and welcoming atmosphere, which made it easy to approach the participant's feelings and thoughts (e.g., "How are you doing today?"). Afterwards, the key ideas in the consent form such as the participant's voluntary participation, withdrawal from the research project any time without consequences, and response confidentiality, the purpose as well as the importance of the research project, my enthusiasm for the researched phenomenon were briefly reiterated and related to the participant's opinions about the extended school facilities closure.

In the next section of the interview, main questions were crafted in a manner that allowed the participants to freely narrate about their experiences (e.g., "Tell me about the 2020 extended school closure"). These key questions were followed by probes with different purposes such as to assist the participant to provide more details on the mentioned experience, to redirect the

dialogue to the researched phenomenon, to introduce significant variables, or to introduce a pertinent topic (e.g., "Tell me more about the coping strategies that you used during the extended school closure"). At the end of the interview, the participants were asked to confirm their specific responses and given the chance to expand their voice on any relevant matters in case they wanted to talk about (e.g., "Is there anything about the 2020 extended school closure that I have not mentioned but you want to discuss?").

Each interview session was initially scheduled to last for an hour. However, an actual interview with a student participant lasted from 30 to 45 minutes while that with an adult participant ranged from one to two hours. Using the guidelines provided by Rubin and Rubin (2012) and Stake (1995), the interview protocols were structured into five parts for all participant groups: general background information, academics and instructions, assignments and assessment, relationships between the school and families, social-emotional wellness during the school closure from March 2020 to the end of the 2019-2020 school year, and the effect of the closure onto the 2020-2021 school year. The interview protocols generally comprised of, but not limited to the following categories of questions:

- background information about the interviewee (roles or responsibilities, teaching experience)
- perspectives/ experiences relating to the 2020 school facilities closure
- stress related to school facilities closure (Cameron, 2020b; Jimenez-Rivero, 2020; Superville, 2020)
- daily teaching and learning
- how to fulfill students' academic, social, and emotional needs
- assignments or homework

- technology use in literacy teaching and learning (Griswold, 2020)

- school-family relationship

- school locale (Griswold, 2020; National Education Association, 2020)

- comparing teaching and learning before and during the 2020 extended school facilities closure

- additional literacy support (e.g., afterschool program) (Office of Academic Improvement, 2018)

- personal coping strategies

- how rural schools' strengths were leveraged (Azano et al., 2019; Barley & Brigham, 2008; Moll et al., 1992; Monk, 2007)

- how rural schools' challenges were alleviated (Adams & Woods, 2015; Barley & Brigham, 2008; Javorsky & Brenner, 2020; Lavalley, 2018; Monk, 2007; NCES, 2018a, 2018b; Osterholm et al., 2006; The Nation's Report Card, 2020, etc.)

- state third-grade retention policy (Weyner, 2018)

- how teachers improved teaching effectiveness

- how collective teacher efficacy were practiced (Goddard et al., 2000; Hargreaves & Fullan, 2012; Hattie, 2015)

- students' social services (free meals, health care, childcare) during the school facilities closure (Sawchuk, 2020)

- short-term and long-term impact of the 2020 extended school facilities closure on the 2020-2021 school year

- preparing for possible future closures

Though the above list provided a general overview, different participant groups were presented with particular questions specific to their group. The categories of questions listed above might be included as applicable. For illustration, the interview questions for the school principal underscored the leadership or administrative role with schoolwide policies and support to fulfill the needs of the students (e.g., "The extended school closure made everyone feel stressful, how did you model yourself as an effective leader for your teachers and staff members at your school?"). The questions for teacher participants focused on the act of teaching and learning inside the physical or virtual classroom (e.g., "How did you address students demonstrating below grade level reading proficiency in your class during the 2020 school closure?"). As for student participants, the questions concentrated on their experiences, their opinions, their feelings, their interests, and the like (e.g., "How did you feel about not going to school in person?"). Family members received more questions relating to the connection between home and school, as well as how they helped their child to overcome the school facilities closure (e.g., How did you contribute to your children's actual reading and writing minutes at home?").

Immediately after the completion of each interview session, I spent ample time at my working place to reproduce the interview in written account with main ideas, episodes, and commentary (Stake, 1995). Jotting down the interview verbatim was less important than capturing the meaning that the interviewees communicated. Nonetheless, the recorded interviews were later transcribed verbatim into written form so that they could be imported to the research project in NVivo 12 (QSR International, 2018).

After the first interview, all adult participants were invited to participate in a follow-up individual interview. The follow-up interview was scheduled a few weeks or a few months after

the first interview, depending on the participants' availability. Some participants even voluntarily participated in the third round of interview. Each follow-up interview lasted about an hour.

Using the same semi-structured questions as in the first interview, the second interview also targeted elementary students' experiences during and after the 2020 extended school facilities closure. The purpose of these subsequent rounds of interview was to elaborate on the responses from the first interview. In other words, the content of the questions was created based on the responses of the participants in the first interview. For instance, student engagement and meaningful tasks came up in the teacher participants' responses in the first interview, a question in the follow-up interview was: "Your colleagues mentioned engaging students and using meaningful tasks as important jobs of teachers. What do you think about this? How do you engage students in your class?" Another purpose was to listen to and triangulate these rural school stakeholders' voices with what was said in the first interview (e.g., "A teacher said that learning at home was new for the students, and that the parents needed to step up. What did you and [Sunshine] do to support the families with helping the students to learn at home?"). The follow-up interview yielded interesting data about the long-term effect of the 2020 school closure on elementary students during the 2020-2021 school year, which are shared in the next chapter.

Documentation and Artifacts

Almost all researchers found the collection of relevant documents such as annual reports, meeting minutes, correspondence, and newspapers necessary for their research studies (Stake, 1995). These documents became the "recorder" of activities that researchers could not directly observe, as commented by Stake (1995), "Sometimes…the recorder is a more expert observer than the researcher" (p. 68). While reviewing these gathered documents work, researchers were

advised to organize their thoughts, adhering to the research questions, yet open to unanticipated clues.

There were two sources for documents and artifacts: publicly available records/ artifacts and the participants. Prior to gaining access to the research site, I gathered existing documents and artifacts that relate to the case investigated. Howley and Howley (2014) strongly recommended qualitative researchers do this step to get a general sense of the rural community. Accordingly, I examined the rural school community by reading the local newspaper (e.g., Daily Times, a newspaper that has been serving the community since 1867), viewing community-based groups' webpages (e.g., the local Junior Auxiliary) and other related websites (e.g., National Center for Education Statistics, U.S. Census Bureau, Mississippi Department of Education, Mississippi Succeeds Report Card, White Water Consolidated School District). While exploring these documents and artifacts, I fortunately identified the potential participants for later reference (e.g., teachers receiving the Teacher of the Month Award and/or Teacher of the Year Award). Information relating to the rural school community such as how the school helped students during the 2020 school facilities closure, their standardized test reports, the rank of the school on the state level, the state percentage of households having access to digital devices and the Internet, and so on was beneficial for my understanding of the case I was investigating.

From the state department of education and the school district webpages, I collected documents including administrative materials regarding the school policies, educational plans, official forms, teacher/student records, and databases. From the Facebook pages of the school district and Sunshine teachers, I gathered documents and artifacts that Sunshine teachers and students worked on during the school closure period (e.g., a read-aloud book named "I want to be a doctor," another read-aloud book titled "George shrinks" followed by an assignment based

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on "One Inch Tall" by Shel Silverstein as well as several students' responses, "A Think, Draw, Write!" activity for pre- K through third-grade students) (See Appendix H).

The other source for documents and artifacts was from the participating principal, teachers, students, and family members. Participants were asked to provide any documentation and artifacts that were pertinent to the teaching and learning of elementary students during the 2020 extended school facilities closure. I gathered students' work such as finished products (e.g., Reading Fair Board), audio-visual materials (e.g., YouTube videos starring students reading aloud their favorite books), etc. Besides, pertinent school documents including but not limit to math and ELA textbooks, Zoom lesson resources for distance learning, a blank student report card, teacher newsletter to students and families, books borrowed from the library, educational websites were collected and examined. These documents were gathered during the data collection phase. The collated data varied in formats such as hard-copy documents (e.g., print brochures, records, curriculum, books, teaching plans, lesson plans, teaching schedules, letters, homework, personal journals), audio-visual materials (e.g., videos, photographs, digital files, Internet websites), electronic communication (e.g., Facebook posts, tweets), artifacts (e.g., crafts), and so on.

The gathered documentation and artifacts reflected the chronicle of the 2020 extended school facilities closure. Starting from March 2020, the school received guidelines from the state department of education and the school district superintendent about the school facilities closure and the change of learning from in person to remote model. The school principal and the classroom teachers sent letters, text messages, and mass emails to communicate with students and their families about the closure and the shift to remote learning. Family members were given flyers or brochures on how to help their children with learning at home. At-home learning

packets were printed and provided to family members at the school office door. After the assignments were completed, family members were asked to return them to the teachers for grading purposes. Classroom teachers explained to family members about how to log in to some literacy and math software applications (e.g., Moby Max, Reflex Math.), how to monitor and assist their children's learning. Additionally, family members received updates about the school board decisions, distribution of school meals, free Internet access, school closure and reopening plan, cancelled testing schedules, etc. on the school district official website and Facebook page. The collection of such documents and artifacts, along with interpretive commentaries from the interview sessions, was helpful in constructing a detailed picture of the rural school community in the context of a school facilities closure as well as how school stakeholders perceived and addressed the students' needs.

Virtual Classroom Observations

Initially, observation was not chosen as a data source for this research study because I thought that it would be too coercive to conduct such sessions. However, during an interview, I was invited to participate in virtual classroom meetings by the school principal to witness how distance learning took place during the 2020-2021 school year at Sunshine Elementary. There were two reasons that prompted me to accept the principal's invitation: (a) distance learning was employed in the 2020-2021 school year as a direct result of the 2020 extended school closure and rampant COVID-19 pandemic, and (b) distance learning was one of the two delivery methods at Sunshine Elementary in the 2020-2021 school year. After that, I contacted the teachers and received their permission for my observation. I also added this amendment to the IRB protocol and granted approval (See Appendix D).

I attended a total of 12 virtual classroom meetings via Zoom with two Sunshine teachers (e.g., a third-grade teacher and a fourth-grade teacher) and their 58 third- and fourth-grade students. Each classroom conference lasted approximately an hour. At the beginning of each class observation, I pleasantly greeted the teacher and the students. During the meeting, I took notes of teacher's activities, the lesson taught, technology used, teacher's class management, students' activities, academic behaviors, discipline, teacher's and students' computer skills, etc. in a least intrusive manner. I also particularly observed the student punctuality, learning postures, engagement/distraction, level of enthusiasm, mastery to cross check with what was collated from interview data source about the effect of the 2020 extended school closure onto the students' learning in the 2020-2021 school year. After the observation sessions, I had short conversations with the teacher focusing on the students' academics (e.g., student engagement/distraction, literacy/math activities used, standards) as well as their behaviors (e.g., learning posture, distance learning etiquettes). I also had a chance to observe a teacher-parent conference in which Laquita, a third-grade teacher, relayed her concern about a student's below-grade-level performance in math to his parent after the virtual class meeting. Observation data were meticulously recorded on Microsoft Word documents which was imported in the NVivo 12 project for later analysis and interpretation (QSR International, 2018).

Reflective Commentary Journal

It was importantly noted that researchers became "critically self-aware" for any undertaken research work (Anderson & Lonsdale, 2014, p. 201). Meta-level reflecting on what was done as well as the processes, researchers' preconceived assumptions and ideas assisted researchers to be sensitive to others' perspectives, expertise, knowledge, and skills. Reflections could take the form of listening to the recorded interviews with participants and reflecting on

what was said, what was not said, as well as the pauses in responses. Researchers and participants could also listen to the questions in the interview protocol and read them again to contemplate on why the questions were followed by the next ones. Did the researcher respond to the participant's answer or guide the interview with his or her own perspective? Reflecting on the research nature also helped researchers gain insights regarding their own thoughts and assumptions. The following were self-critique questions suggested by Anderson and Lonsdale (2014):

- Is the methodology appropriate to the audience?

- Do community members think about concepts like time or distance in the same way as researchers?

- Do they value oral or written traditions?

- Do they see value in the research being undertaken?

- Who decides such research is of value?

- Who will benefit from the research?

- How else might information be shared, other than in formal academic writing? (p. 202)

Additionally, self-questioning helped researchers reflect on their work as collecting information, analyzing it, writing up and publishing the information. Smith (2012) recommended researchers self-reflect on the following questions while working with rural communities:

- Whose research is it?

- Who owns it?

- Whose interests does it serve?

- Who will benefit from it?

- Who has designed its questions and framed its scope?

- Who will carry it out?

- Who will write it up?

- How will its results be disseminated? (p. 10)

It seemed that the rural communities had limited control over how the information extracted from them was used. These questions reminded researchers to think of the research context, the real "owner" of the amalgamated data, and showed respect and value to the knowledge acquired (Anderson & Lonsdale, 2014). Besides, researchers had to ponder over the writing and dissemination of the research report.

Bearing such self-critique and self-reflecting questions in mind while collecting qualitative data, I utilized reflective commentary journals during the data collection phase to document the data collection procedure, the progress of the research project, as well as my developing thoughts, ideas, feelings, opinions, perceptions, and especially prejudices. These journal entries also functioned as audit trail, discussing the data gathering (e.g., what was done, what was deviated from the research protocol as well as justifications) using the conceptual frameworks (i.e., Brann-Barrett's (2014) Reflexive Inquiry and Anderson's and Lonsdale's (2014) Three Rs). The use of audit trails helped enhance the trustworthiness and rigor of the research project. Following the weekly journal entries were debriefing sessions with an expert in the field to discuss the development of the research project and to challenge my interpretive commentary.

All of the gathered data were categorized, and then securely and confidentially kept in separate folders in my password-locked computer. To protect participants' anonymity, identified information such as the name of the rural school, participants' names, places, organizations were replaced with pseudonyms. Individual responses or data were coded and developed into

composite profiles. Only the dissertation committee and I had access to identifiable information of the investigated school as well as the participants. Gathered data were archived and remained confidential (i.e., protected with a locked computer) for five years before being destroyed.

Data Analysis

Instead of waiting for all the data to be collated, I started to analyze the data during the data collection phase, as recommended by Creswell (2013). This helped to inform me of what pieces of data needed to be captured next. For instance, when a participating teacher referred to a school project partnered with a local agency in an interview, I searched the Internet for newspaper accounts of the project and triangulated what was written with what the participating teacher said in the interview. In addition, the continual analysis of data informed me when the amalgamated data was sufficient to understand the case and when no new information was necessary (i.e., data saturation). For the analysis of the collected data, I followed the first cycle and second cycle coding methods proposed by Saldaña (2016) while using NVivo 12 (QSR International, 2018) as a tool to store and access the codes.

There were several reasons I chose NVivo 12 as a computer program to conduct data analysis. One of the substantial benefits of this software application was that NVivo 12 managed numerous data sources (e.g., text, audio files, videos, images, and others) on just one working platform, which allowed me to easily navigate the entire database during analysis and interpretation. Also, this program encouraged me to read the text in lines carefully while pondering the meaning of each word, phrase, or sentence. In addition, with built-in tools such as query, visual tools, theme sorting, the software helped me to think visually about the relationships amongst various codes and themes. Additionally, I was able to retrieve annotations, memos, or locate specific content imported in NVivo 12 nearly effortlessly. Another advantage

of NVivo was its support of different levels of abstraction. For instance, the concept of nodes and child nodes in NVivo 12 stood for parent codes and less abstract units of information. Using graphical hierarchical organization of nodes and child nodes, NVivo showed me the interrelations among different levels of codes from the raw data to aggregated themes.

Definition of a Code

A code was defined as a word or a phrase symbolically assigning a "summative, salient, essence-capturing, and/or evocative attribute" for an individual datum for the purposes of categorization, theme identification, developing propositions or assertions, and other analytic procedures (Saldaña, 2016, p. 4). According to Saldaña (2016), qualitative data analysis was a "cyclical" rather than a "linear" process because "data are not coded – they're *re*coded" (p. 68).

Codes-to-Theory Model for Qualitative Inquiry

The collected data were coded and recoded following the Codes-to-Theory Model for Qualitative Inquiry proposed by Saldaña (2016) (See Figure 1).

Figure 1

A Streamlined Codes-to-Theory Model for Qualitative Inquiry
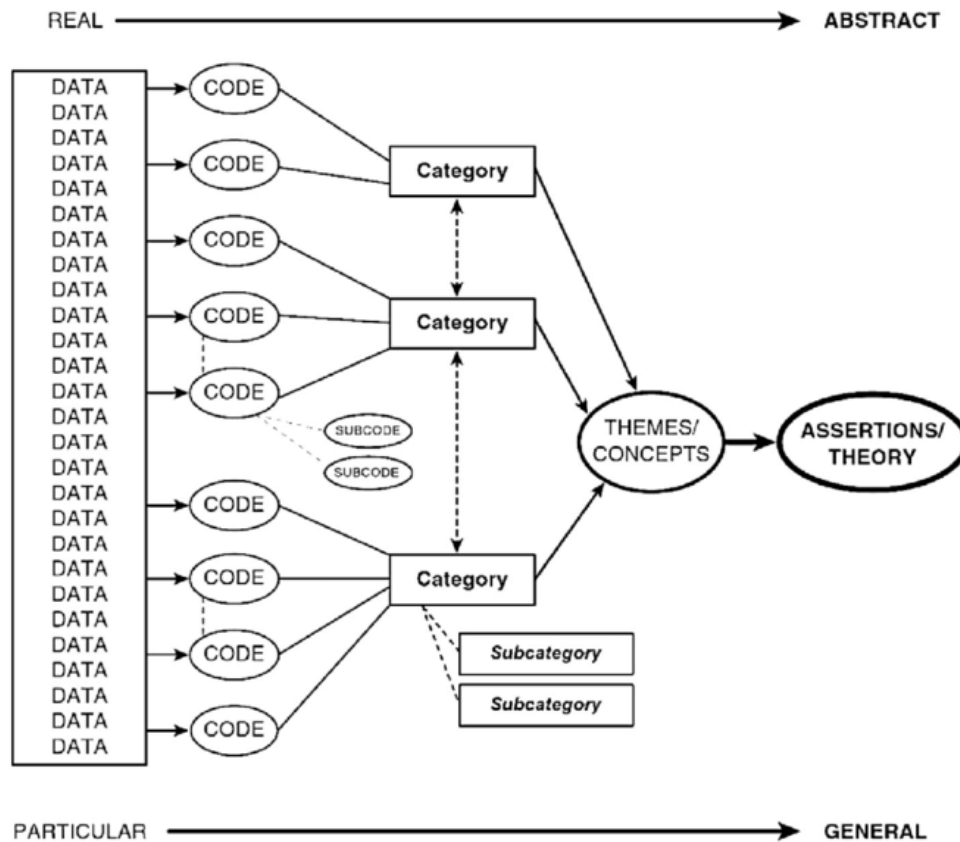
Amalgamated data were coded during and after the data collection phase. During this analytic process, data were divided, compiled, classified, labelled, and connected in a manner that manifested meaning and clarification. Coded data that shared characteristics were grouped together. For example, all pieces of data related to boredom caused by the distance learning were categorized under the node "boredom"/"mundane." Coded data were often recoded and recategorized during data reviews to attune to my interpretive thought. To illustrate, I initially

might have created a code to capture data, but later changed the title during a second analytical iteration to group it as a subcode under a different node.

Clusters of coded data were subsequently synthesized to form categories of "consolidated meaning" (p. 10). Subcategories were also created to demonstrate the nuances of meaning. For instance, several subcategories were organized under a node to illustrate connected concepts. Next, main categories were compared and consolidated to develop themes and concepts. Concepts and themes were more general and abstract constructs that the diversity of data represented. Prior to formally coding the dataset, I noticed some themes while I meticulously read and reviewed the data. Finally, the generated themes and concepts were systematically interrelated and transcended into assertions, which demonstrated the progress from the specific to the general. A key assertion was defined as "a summative and data-supported statement about the *particulars* of a research study, rather than the suggested generalizable and transferrable meanings of [the] findings to other settings and contexts" (Saldaña, 2016, p. 282).

Coding Methods

Data coding was conducted using the first cycle and second cycle coding methods (Saldaña, 2016). In the first cycle, Attribute Coding, Provisional Coding, Descriptive Coding, In Vivo Coding, Emotion Coding, and Simultaneous Coding methods were utilized for data management, description, and classification. After the first coding cycle, Eclectic Coding technique was used as the hybrid method between the two cycles. In the second cycle, Pattern Coding was selected to classify segments of coded data into themes.

First Coding Cycle

Attribute Coding method was applied to all collected data at the beginning of the data collection phase to provide notation of basic information about data format, data context/setting, participant demographics, as well as other pertinent variables. For example, Attribute Coding was assigned to locate a student participant named Bob as follows:

Pseudonym: **Bob**

Age: **9**

Gender: **male**

Ethnicity: **Caucasian**

Role in the school community: **student**

Grade level: **4th grade** (2020-2021 school year)

Academic performance: **advanced in reading and math**

Social class: **middle - upper middle class**

School name: **Sunshine Elementary** (pseudonym)

Data format (collected): **interview transcript, documents/artifacts**

Site: **WebEx**

Time frames: **May 2021**

Additional information: **a member of the school gifted and talented group**

Attribute Coding was necessary to set the contexts for data analysis and interpretation and future references or exploration. This method provided data with "addresses" to be located easily in the corpus (Saldaña, 2016, p. 83).

Provisional Codes generated from the theoretical frameworks, research question, review of prior literature, and interviews with 20 panelists were assigned to the collected qualitative

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data. These codes were then reviewed, revised, and modified following the data analytic coding process.

Descriptive Coding was adopted to label data with a summative word or short phrase. This technique compiled a comprehensive inventory of the contents in gathered documents and artifacts. Descriptive Coding was also referred to as "hashtag" coding because it detected and connected datum of similar meaning (Saldaña, 2016, p. 102). In other words, Descriptive Coding method identified the topics that were recorded in oral and written forms in the dataset.

Since the purpose of this case study was to explore how a rural elementary school experienced the COVID-19-induced school closure, In Vivo Coding was particularly implemented to code interview transcripts to honor rural school stakeholders' perspectives on the researched issue. With a code that used the actual language of the participants, In Vivo Coding method underscored the existence of the rural school community's cultural categories. This technique captured the salience in the data records via "impacting nouns, action-oriented verbs, evocative vocabulary, clever or ironic phrases, similes and metaphor," as well as repeatedly used words and phrases (Saldaña, 2016, p. 107).

Emotion Coding was employed to name participants' emotions or feelings that participants experienced. This coding technique allowed me to examine school stakeholders' inter- and intra-personal thoughts and actions during the challenging COVID-19 school closure period and the 2020-2021 school year, especially their "social relationships, reasoning, decision-making, judgement, and risk-taking" (Saldaña, 2016, p. 125). As noted by Saldaña (2016), scrutinizing one's emotions disclosed not only the "inner workings" of that individual but also the "underlying tone of a society" or "its ethos" (p. 125). Participants' non-verbal languages and voices were also noted while assigning Emotion Codes. Saldaña (2016) suggested emphasizing

not only participants' actions but also their "emotional *re*actions and *inter*actions" to particular situations because "[l]ife is 20 percent what happens to you, and 80 percent how you react to it" (p. 130).

Simultaneous Coding was applied to a data segment that embedded more than one node. A separate datum coded with this coding technique had parallel meanings such as descriptive and inferential connotations, which justified using "multiple coding" for the datum (Saldaña, 2016, p. 94).

First-to-Second Cycle Coding

After the first cycle, Eclectic Coding was employed as the first-to-second-cycle coding method for various types of data recordings. For example, Descriptive Coding were used to code documents and artifacts while In Vivo Coding was exclusively employed to highlight participants' voices and actions. The employment of Eclectic Coding at the end of the first cycle compiled multiple coding methods, specifically Attribute Coding, Descriptive Coding, In Vivo Coding, and Emotion Coding methods, to compose the "first draft" of the corpus (Saldaña, 2016, p. 218). Below is an example of Eclectic Coding used in an interview transcript excerpt:

Pseudonym: **Caroline** [Attribute Code]

Age: **37** [Attribute Code]

Gender: **female** [Attribute Code]

Ethnicity: **Caucasian** [Attribute Code]

Role in the school community: **principal** [Attribute Code]

Social class: **middle class** [Attribute Code]

School name: **Sunshine Elementary** (pseudonym) [Attribute Code]

Data format (collected): **interview transcript, documents/artifacts** [Attribute Code]

Site: **WebEx** [Attribute Code]

Time frames: **April – July 2021** [Attribute Code]

Additional information: **Awarded "District Administrator of the Year" in 2016** [Attribute Code]

[**I:** when it [Sunshine Elementary] closed last year in March, what was your top three concerns for your students?] **Caroline:** Top three would be: We had a, we had [1]a lot of students to pass that weren't ready, um, you know, [2]we, we didn't know what to do, so basically if you, if you completed your packet that we gave out for the rest of the year, you got 100 for it. And it, it allowed a few students who really needed another year in third or in fourth to pass on, but, um, [3]we were hoping that this year we could just, everybody just work really hard to fill in those gaps. That would be my first concern. My second concern, I was worried about [4]the mental health of our students, and being out of school, I know school is a wonderful place for them, and I know they missed it, um, I think that was really my two concerns.	[1]"students to pass that weren't ready" [In Vivo Code] [2]the unknown [Provisional Code] [3]hopeful [Emotion Code] [4]students' mental health [Descriptive Code]

Second Coding Cycle

In the second cycle, Pattern Coding was used to categorize the coded data portions that shared a commonality of meaning into smaller units of analysis, a category, a set, or a theme. A theme was defined as "an *extended phrase* or *sentence* that identifies what a unit of data is *about* and/or what it *means*" (Saldaña, 2016, p. 199). Themes could be identified in repetitive ideas, participants' terms, analogies, similes, metaphors, topical transitions, connectors (e.g., "since,"

"because," "then"), similarities and differences voiced by participants, and theoretical matters documented in the collected data (e.g., social tensions and control, human interrelationships). Major themes provided explanations, rationales, rules that explored interpersonal relations, which might subsequently develop theoretical concepts and processes. To illustrate, "challenging virtual learning experience" was a pattern code for the codes "unconducive learning environment," "shortage of support immediacy," "lack of accountability," and "diminishing interpersonal skills."

During the second cycle of coding, I used code mapping technique to prepare for preliminary analysis. As an auditing process, this technique increased the credibility and trustworthiness of the observation and data analysis of the study (Saldaña, 2016). A set of initial codes progressed through multiple analytical "iterations," which grouped nodes under specific categories and then consolidated them to develop themes or concepts (Saldaña, 2016, p. 218). I started with a simple list of 102 nodes extracted from NVivo in the first analytical iteration. In the second iteration, I compared and subsequently sorted the initial 102 nodes into five categories. In the third iteration, the five categories as well as their related codes and subcodes were recategorized into three new major categories and subcategories. In the final iteration, the three categories were condensed and developed into three central themes of the study.

Coding Strategies

Saldaña (2016) advised "[c]ode smart, not hard" (p. 18) to avoid one of the most common problems in coding – "code proliferation" (p. 78). This coding error happened when the qualitative researcher completed the data collection stage before starting the data analysis stage. Without the support of a computerized program, piles and piles of cumulative paper might stack on the desk. If each sheet was equal to a discrete code from the corpus, there might be up to

thousands of them, which made it too overwhelming to begin the analytic coding process once all data were gathered. To make coding more feasible, I adopted NVivo 12 (QSR International, 2018) together with the following five recommendations from Saldaña (2016): being a "lumper," using selected codes repetitively, "cleaning up" codes, coding the most essential data parts, and leveraging commentaries.

First, I coded my dataset as a "lumper" rather than a "splitter" (Saldaña, 2016, p. 79). In other words, I captured the essence or the "cream" on the top of the chunks of data rather than scrutinized all social activities displayed in the data corpus (Saldaña, 2016, p. 24). When working with interview transcripts that were from 50 to 100 single-spaced pages in length, the "lumping" approach made the coding task considerably less arduous and mundane (Saldaña, 2016, p. 24). However, when viewing the "cream" rising to the top of the data piece, I applied the "splitting" approach or the "code line-by-line" to better understand the phenomenon (Saldaña, 2016, p. 79). For example, when encountering the term "COVID Chronicles" in an interview with Clara, a third-grade teacher, I deliberately coded every line in the pertinent datum to examine how teachers at Sunshine Elementary worked together during the 2020 school closure.

Second, one of the purposes of data coding was to reveal the patterns submerging in the dataset. Consequently, selected codes were used repeatedly so as to detect commonalities throughout categories. It was argued that not every datum needed a unique code because human social lives were repetitive, and a code used for a participant might be applicable for others.

Third, codes were "cleaned up" or subsumed to more general codes or categories while data were being collected and analyzed. Saldaña (2016) compared the code "cleaning up" with a housekeeping rule while cooking in the kitchen – cleaning up while cooking to avoid the tedious

chore of cleaning everything after finishing the meal. These initial codes were tentative in nature and thus being revised as I continued to analyze and classify codes. Owing to this recommendation, I "cleaned up" codes and had some preliminary findings generated (e.g., virtual learning was especially challenging for young children) while the data were being collated.

Fourth, because not everything in the collected data was pertinent to the research question, Saldaña (2016) advised coding only the most essential parts of the data. Although nuances in the coded data might yield a more detailed picture of the case study, my effort was focused on the thorough coding of the relevant portion of the corpus.

Fifth, Saldaña (2016) recommended using continued analytic memoing to record thoughts, opinions, and insights while collecting data. During the data collection phase, I kept a weekly reflective commentary journal to "dump [my] brain" about what happened during the data gathering, participants, Sunshine Elementary, and my personal commentaries (Saldaña, 2016, p. 44). Additionally, I composed a reflective commentary after every interview session to document the key ideas while they were "fresh" in mind. Analytic memoing cumulated distinct moments and gradually shaped the whole picture of the case study as the data were collated.

Addressing Ethical Issues

Ethical issues did not only appear in the data collection stage, but also in different stages of the research procedure. Following Creswell's (2013) *Ethical Issues in Qualitative Research* (p. 58-59), I addressed various types of ethical issues with proper solutions.

Prior to the study being conducted, I made an application to the institutional research board for the university approval of the data collection of the research project. After gaining access from the gatekeeper (i.e., the school principal), I sought to obtain consent from the teachers, students, and family members to collect data.

At the beginning of the research project, the participants were provided with the project information such as the purpose of the project, the research procedures, the participants' predicted harm and risks, benefits, confidentiality, their voluntary participation, and my contact information in the consent form. Minor participants were given the assent forms, and the parental consent forms were sent to their family members. I was willing to provide detailed information about the nature of the research project honestly if being requested by the participants.

During the data collection phase, I caused as few disruptions as possible to the research school. With concerns to the interview process, there might be "hierarchical relationship" between the interviewer and the interviewee as Creswell (2013) anticipated (p. 60). Accordingly, to achieve a balanced relationship with the participants, I avoided asking leading questions; instead, I showed respect, openness, and built trust with participants by "let[ting] the voices of participants speak and carry the story through dialogue" (Creswell, 2013, p. 55). Besides the research needs, I also took participants' needs into consideration to create reciprocity between both parties (Anderson & Lonsdale, 2014; Lanas & Rautio, 2014). Sensitive information provided by participants was kept confidential in my locked computer.

When analyzing the data, I represented multiple views based on participants' responses, rather than taking a side with participants and analyzing the issue in one particular direction. Not only positive, but also contrary findings, was analyzed and reported. Participants' personal identified information was protected by the employment of fictitious names. Additionally, their stories and interview responses were woven into composite profiles, not single or individual ones.

With regards to the final report of the research project, I adhered to the guidelines about authorship and disclosure of information about the research project from *Publication manual of*

the American Psychological Association: The official guide to APA style (2020). The final report presented exactly the gathered data, the research findings, together with the evidence, the discussion, and the conclusions. Research works by researchers in the literature were properly cited and/or quoted. The disclosed information about participants did not present harm or risks for them. The language used in the report was clear, understandable, and appropriate for the target audience.

Concerning the publication of the research project, I shared the preliminary research findings with participants including the school administrator, teachers, and family members. The shared information was in the form of practical implications for administering, teaching, and learning during an extended school closure, written in a language that was comprehensible to the readers. To reach a wider audience, the research results were also shared with researchers, scholars, other stakeholders at professional conference meetings, and/or published on peer-review journals.

Validation and Reliability

Attempts were made to ensure the validation of a study by measuring what was intended to be measured, as guided by Guba (1981), Johnson (1997), and Shenton (2004). Several strategies were employed to assure participant's frankness and honesty, including voluntary participation, rapport establishment, openness encouragement, and giving participants the withdrawal right at any time without penalty. Regarding interview protocol, probing questions (e.g., "Tell me more about that," "Can you think of another example of this?" "Give me more detail about what you did, please") were included to elicit data in depth from the participants. My background including working experiences, qualifications, history, cultural experiences was openly provided to the audience. This information was intended to inform the readers of the

reason why I chose to explore the researched problem, how I interpreted collected data, and what I gained from the research project.

In addition, five out of the eight validation procedures suggested by Creswell (2013) were employed to validate the precision of the account. First, different appropriate qualitative data collection instruments including documentation and artifacts, interview, observation, and reflection were adopted to triangulate the collected data for corroborating evidence. This strategy was undertaken to enhance the study confirmability or objectivity by decreasing the researcher's prejudices. Second, I clarified my research biases by commenting on the relevant past experiences, biases, prejudices, as well as the orientations that might shape my data interpretation and the selected research approach to the current project in my weekly "reflective commentary" journal entries (Shenton, 2004, p. 68). These entries were also used to discuss thoughts, feelings, reflections, interpretations, and especially any prejudices. These "reflective commentary" entries also worked as an "audit trail" to chronicle thoughts and beliefs regarding the research topic, the literature gaps, conceptual frameworks, rationales behind the methods, the research procedures, as well as informed decisions made (Shenton, 2004, p. 72). Third, peer debriefing sessions were conducted on a weekly basis with a "devil's advocate" (Creswell, 2013, p. 251). During these sessions, the peer asked difficult questions about the employed methods, the meaning, and my interpretations of the collated data. To illustrate, I was asked why White Water Consolidated School District added a position of K-12 instructional technology coach in the 2020-2021 school year. This question prompted me to check back with my participant, Krasava, a third-grade teacher, about the "multiple hats" that she wore at that time. Fourth, I provided participants with preliminary analyses so that participants could judge the themes or findings for accuracy and credibility. This strategy allowed participants to view how their

responses were crafted in the report and check if what was missing, what needed to be added, what needed to be deleted, and what needed to be corrected. Fifth, on the final report of the project, I provided a comprehensive description of the participants and the settings of the research project with interconnecting details. The purpose of this rich and thick description was to make the current research project become transferable to the audience. This assisted the audience to make a decision on whether the research findings were applicable to their contexts or not. The following information was conveyed about the research study:

- the number of participating organizations and locations

- the inclusive and exclusive criteria of research participants

- the number of participants

- the methods used to collect data

- the point of time when the data were gathered

- the number and length of the qualitative data collection sessions

Findings from the current project were compared with previous research in the field to evaluate the convergence or divergence. Moreover, information about the research design, the research implementation, precise and minute details of the research data, and the project effectiveness evaluation was provided. Presumably, this research information might help the audience to gain a deep understanding of the project, efficiently replicating the project to confirm the research findings.

Following Creswell's (2013) recommendations about reliability, I used high-quality recording devices such as a smart phone with a recording application, or a laptop with a recorder for the interview sessions. Furthermore, NVivo 12 was used to assist me in analyzing and interpreting the collected data.

Chapter 3 presented how the research project was designed and implemented. First, qualitative research design was described and justified for the project, and then the setting of the research project was introduced. Next, the chapter portraited different types of participants with their inclusive characteristics. After this, the data collection with three sources of data was discussed. In the next section, data analysis using Saldaña's (2016) Codes-to-Theory Model for Qualitative Inquiry and a qualitative computer program (i.e., NVivo 12) was presented. Ethical issues were then described and tackled during each stage of the study. Finally, the chapter mentioned various techniques employed for data validation and reliability.

CHAPTER IV

FINDINGS

This chapter presents the findings from the analysis of the data corpus using Saldaña's (2016) Codes-to-Theory Model for Qualitative Inquiry. The first section demonstrates the four analytic iterations using code mapping technique. Subsequently, the study's three central themes are presented with supporting data.

Four Iterations of Analysis

The simple list of nodes included 102 codes in alphabetical order, as exported from NVivo. These codes were generated from individual interview transcripts, classroom observation field notes, email correspondence, documents, and artifacts. Nodes used In Vivo Coding technique were in quotation marks (See Appendix F for the first iteration of analysis).

In the second iteration of code mapping, these 102 initial codes were reorganized into five categories. These categories emerged as the result of comparing and sorting the 102 codes to decide which might be more compatible. Since the researched issue was the 2020 school closure, the emerging categories included the learning mode during the closure period (i.e., distance learning), parent involvement, the impact of the closure, how Sunshine Elementary dealt with the closure period, and takeaways (See Appendix G for the second iteration of analysis).

In the third iteration of code mapping, the categories in the second iteration were categorized and condensed from five to three. The first category included subcategories about the lack of learning ("vacation") for some students and the struggling distance learning for others

during the school closure, the involvement of families in a child's learning, the quality of

distance teaching and learning, and the accountability issue. The second category entailed the

mental health of children and adults under the impact of the 2020 school closure. The last

category described how the school community realized and defeated the challenges caused by

the closure. The third iteration of analysis is as follow:

Third Iteration of Coding:

Recategorizing the Five Initial Categories

Category 1: The learning disruption

Subcategories:

- "Vacation"

- Struggle

- Parental involvement

- Education quality

- Accountability

Category 2: Mental health

Subcategories:

- Home confinement

- Peer interaction

Category 3: Accepting the challenges

Subcategories:

- A sense of community

- K-gray attitude/Lifelong learning (flexibility, adaptation, resilience)

In the fourth iteration of code mapping, the three categories were transformed into three central themes. Taken together, the initial 102 codes generated from the dataset progressed through four iterations of analysis using code mapping approach. The following section discussed the three major themes that emerged: (1) school closure as a disruptor (disrupting traditional schooling), (2) the intersection of "COVID slide" and "summer slide" (learning loss, magnifying the learning gap between high- and low-income students, rural and non-rural students, "speeding," lethargy) and (3) school closure as a booster (enhancing technology skills, devices, broadband Internet access for virtual schooling, communal support, resilience, lifelong learners).

School Closure as a Disruptor

"So many students struggle trying to learn online. They NEED to be at school in a class room!" asserted Hannah, a parent, on a school district Facebook thread on September 1, 2020 about the 2020 extended school closure experience. Actually, the COVID-19-induced school facilities closure created a considerable disruption to elementary-aged students. It provoked not only a serious disturbance to their traditional schooling schedule, which subsequently terminated the face-to-face learning, but also a myriad of unanticipated issues such as emotions, social interaction, mental health, and child wellbeing.

Academic Disruption

The COVID-19 school closure abruptly halted traditional schooling, which resulted in distance learning or even "losing" from March 2020 to August 2020. A partial reason for this disconnection was that distance learning was particularly challenging in this rural community

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because Sunshine Elementary did not have technology and budget for virtual instruction. Krasava, a third-grade teacher who used to teach at two urban schools, revealed:

> … when I first came here, um, just having the five iPads [per classroom] was kind of overwhelming, and like "Oh my gosh!" from my, I think it was like my second year of teaching, so 10 years ago, having one-to-one device Chromebooks for my sixth graders to now, only having five iPads, I was just like "Okay, we're a little behind on times here."

When the school facilities closed, Sunshine Elementary could not provide devices to the students, so Caroline, the school principal, had to choose the "packet route" for her students:

> We did not pass out computers. I didn't have enough computers to give out to everyone, so we didn't give out computers to anyone. We only had probably 80 computers, and we had 400 students, so, um, that's why we chose to do the packet route.

In addition to the learning packets, Caroline encouraged her teachers to host Zoom sessions. However, most Sunshine students were not able to participate in those virtual lessons on account of the shortage of devices and Internet connectivity issues. Jade, a third-grade teacher, divulged:

> I didn't even have half of my kids logging. I didn't have 10 kids logging in, so I knew that had we gone on with testing, I don't know, I was feeling, uh, a whole lot like they weren't going to do well, so they were missing out on instruction, a lot of instruction.

Similarly, Clara, another third-grade teacher, experienced the same problem:

> … we did have a lot of kids who were not prepared with, um, technology at the time, or Internet, so I had about five or six students that never were able to get on a Zoom at the end of last year…, so I never saw their faces until this school year [2020-2021] when we walked in the door.

Some students at Sunshine Elementary were thrown into "vacation" mode for the entire last quarter of the 2019-2020 school year: They stayed at home, not having access to any type of distance learning, even the learning packets, due to the lack of devices, broadband Internet, and transportation issues. King, a school district administrator, admitted these challenges:

> … for those people that didn't have transportation, or they lived so far out, their children relied on the school district transportation… Internet challenges, the device challenges, the food service challenges, all of those were very real and very present! They were, they were a challenge for us for certain!

Jada, a parent, also voiced her concern about lack of transportation that caused academic "losing" to economically disadvantaged students on the school district Facebook webpage dated July 31, 2020:

> … apparently, since I live in the county and reliable internet access isn't available for me, I'm expected to drive my kindergartener and my 6th grader to town every day to a "hotspot" of the districts choice and teach my 5 & 11 year old while sitting in a car with a computer. I'm concerned about the less fortunate who may not have transportation to a "hotspot" (reason why a lot of children in the county ride the bus) or maybe those who do not have air conditioning in their vehicles. I mean I'll do what I have to do to make sure my children are educated (even though it's extremely inconvenient) because I'm fortunate enough to be able to. However this isn't the case for many children in our district. This is going to stunt the education of hundreds, maybe thousands of children. I feel we should have something else in place for those who aren't capable of virtually learning.

When the school shut down in March 2020, a panelist, Gracie, who was a third grader at that time, started to experience a period of "losing" at home. Both of her parents had to go to work, so Gracie stayed at home with her grandmother and her four siblings. During the school closure, Gracie watched a lot of TV, YouTube videos, and played online games all day long. Gracie's father, Dawson, had to set up a learning time, usually from 6 PM to 7 PM, for Gracie after going home from work. It was not easy for Gracie to transition learning from school to home because of her attention deficit hyperactivity disorder (ADHD). Due to Gracie's limited attention and hyperactivity, Dawson recalled that it was so difficult to draw Gracie's attention on a single task or sit still for long periods of time. Dawson said that she was frustrated sometimes when she was forced to sit still and finish her assignments. At that time, Gracie scribbled rather than working on the assignment, tore the assignment paper into pieces, and then burst into tears. Not only Gracie but also Dawson's other four children experienced "losing" during the closure:

> Last year [2020], [my five children] didn't learn after March 20, I guess March 20, they didn't do anything! I mean they're already just on iPad and they don't have any [assignments]! I guess because it's too new, and this, and, and school didn't prepare for anything, for any class, for out-of-school learning, so, so they don't, they didn't have any like package or something like that! And it just, I'm not misjudging, I feel like they didn't do it, they didn't learn anything, I mean on March, after March 20.

Dawson cast a personal doubt about Gracie, "I'm not sure, I'm not sure if she learned anything other than watching TVs and, and iPad!" Similarly, Clara also disclosed that a group of her students neither joined the Zoom meetings nor had access to the academic packets, "I also had another handful that never even picked up the pac [packet] [sic], the notebook." On a thread dated July 31, 2020 of the school district Facebook webpage, Madison, a parent, expressed her

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frustration about her son's distance learning in the last quarter of the 2019-2020 school year, "No internet in my area and distance learning was horrible!! My son is on an IEP and received absolutely none of his modifications last year [2020]."

According to Caroline, the school principal, approximately 95% of Sunshine students did have at least some semblance of learning during the 2020 extended school closure because their at-home academic packets were picked up and recorded by the school. Nonetheless, a few students experienced "losing" during the closure period, as divulged by Caroline:

> We, we had a handful of kids that never showed up, never Zoomed! It was like they were just missing! And we had to keep counting them absent. We called, we went, and visited. And some of them just withdrew. Some of them, we have one student who we hounded him, and hounded him about coming to school, and he never showed up! He finally withdrew from school, and said he was going to go to [Garvin]. [Garvin] has never seen him! We don't know what we, we've turned him over to the courts and everything…

Even for students who were fortunate to have the opportunity to maintain continuous learning when the school buildings shut down, distance learning was enormously challenging for these young learners. Multiple variables such as home environment, lacking immediacy, in-person connection, accountability issues came into play when "the dining room might be 'the new classroom.'"

Unconducive Learning Environment

The home environment was not viewed as conducive to effective learning due to students' young ages and myriad distractions. Jade, a teacher participant, said, "It doesn't take much to distract them [elementary students]," and then illustrated that even seeing an ant on the floor could divert children's attention from learning. Jade added, "They [virtual students] would

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get up, and maybe get a snack, or the dog might come in. And also some brother or sister might come in. Or somebody's in the kitchen behind them doing something." In some students' families, the learning background was described as "chaos", as observed by Caroline, Sunshine Elementary principal:

Um, some parents didn't realize that we could see and hear in the home. And there was bad language, misbehavior… Um, some, some parents not fully dressed! Um, it, it, some of, some of it was very funny, others, it was some of it, it was very sad! Um, we had children with, um, liquor bottles behind them! Um, it was not a very good environment to teach children in, but we were glad to see them anyway. Um, we had, you could, we would have to teach children how to mute while the teacher was teaching, and only unmute when the teacher asked them a question because you could hear people screaming in the background, you could hear the outside neighborhood, um, and you could tell that the children were embarrassed! So they, you know, um, we had, we had, we had children who would walk around with the computer, and so the background was just dizzying…

During a classroom observation, I also noticed that when a student turned on their microphone upon the teacher's request, the whole classroom was often filled with the background noise from that student's home. In one case, the level of the noise was so loud that it was hard to hear the student talking. There might be a couple of children playing and talking noisily in her house at that time. In another case, it might be the TV that was turned on at its full volume, which made it almost impossible to discern the noise from the TV and what the student was saying. In an observation, I also witnessed a male student babysat his little sister during the entire Zoom meeting. I wondered how these students could focus on learning during such an

unpropitious environment. To deal with home-induced distraction, Rhett, a student panelist, created a "designated place" that he could study and work on the assignments. Rhett turned his bedroom into the classroom:

> I tried to make my home as school-like as possible. I have, I have a little, I have a little triangle sign that's yellow, you know, like a road sign, and it says "T-Rex crossing" on it with a little picture of a T-Rex skeleton, and I, that was on my door to begin with. So I, so I, I made, uh, so I thought I made a bulletin board, but the bulletin board was actually just a piece of paper with "This is our class," then my name written on it, and then, and then, I wrote the word "school" on another piece of paper, and I wrote the word "home" above it, and then, I just put that above my door…

Despite Rhett's effort, distraction caused by the home environment still ranked number one on his list of "things that makes third grade even harder." Rhett self-confessed, "I'm pretty easily distracted… lots of things… like if my dog, like if my dog comes in, I'll like watch my dog." At the end of the interview, when being asked whether there was anything that he wanted to tell people about being a third grader learning during COVID time, Rhett repeated the challenge of being distracted easily when learning at home, "um, try not to, try to not get distracted when you're studying." Likewise, Frida, a parent participant, commented about the influence of the home learning environment onto young students:

> … a lot of kids didn't really want to do it, and again, like they're like, "I'm not in class! I gotta do this?" like "Why have I gotta do this? I ain't in school!" like they just the same, like "Hey, school's out!" like "I'm done!"

Additionally, the home-learning environment allowed the students to "conceal" the majority of their physical bodies on the online learning panel. Without having their whole bodies

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being closely monitored on virtual conferences, students were enticed to non-academic activities while learning. King expounded an argument for young students' limited motivation on account of the unconducive home learning environment:

> I think there was less motivation because there was nobody else in the room! The teacher wasn't standing there watching them, so they could be doodling, the teacher couldn't see them doing it. Or they could be playing a game on a device, and it wasn't visible in the camera. I'm not saying they did that, but I'm saying you could be preoccupied with something, and be sitting in front of a camera. You can't see my hands right now [we were in an interview via WebEx], you can't see my feet, you don't know what's in front of me, and the same thing holds true versus if I'm sitting in the classroom, the teacher knows what's on my desktop, the teacher knows what I'm doing.

Similarly, Jade had the same observation with her third-grade students who were easily distracted by what happened in their surrounding place, and some of these home distractors were not at the students' control. Jade affirmed:

> There were a lot of [distractions]. That's why I said that it was, it was difficult for me because I knew that, you know, you can tell when somebody's sitting in front of you, and looking over, they're looking at TV or something, they're preoccupied with something else! I would have students to turn their cameras off, and I'd have to ask them to turn the cameras back on. I feel like they're up to someone, they do that too! So, yeah, they were like, they're not supposed to eat when they're in class, some are eating, you're not supposed to have your little brother, your pets, or anything, sometimes they would do that. It was kind of difficult to, kind of keep control when they're at home in their own environment.

Caroline also noted that it was difficult to check whether distance students developed reading stamina when the teachers solely saw a part of their body. She explained:

I think with reading, it's, um, just being able to do it on their own, it's, it's been hard to gauge if they're doing it on their own. We can try to make them Zoom face to face while they're doing something, but it's hard to know if they have the stamina that some of our third grader, some of our traditional students have because they just haven't gotten quite as much exposure, and it's harder for the teacher to see the whole body of the student… You're only getting what they [students] present to you!

At the beginning of the 2020-2021 school year, all Sunshine teachers taught the students the rules of etiquette when participating in online sessions. Caroline said:

… so we started our year [2020-2021] with expectations and pictures we had on Zoom, we had pictures of our rules, and an example of what that looked like, we had funny pictures of kids sleeping in class that we would say "Don't do this! You can't do Zoom in your pajamas in the bed! You have to be sitting at a seat!" Um, so the distractions, we even had to call parents, I could hear parents in the background yelling at other children or fussing. I could even, um, like I said, inappropriate things in the background, so we had to teach them, "If you would not do that in a classroom, you can't do it on Zoom!" And the teachers learned how to use Zoom better. They learned how to close a child's camera or how to turn off their volume, even if the child left it on, the, the teacher learned how to quickly shut it down if it got bad.

Still, there were a number of students who did not follow the customary code of polite behavior on virtual meetings. During the virtual classroom observations at the end of the 2020-2021 school year, some students joined the Zoom sessions with "too-relaxed" postures. To illustrate,

one female student was sinking into a couch while learning, another was laying down on a bed in her bedroom during the entire Zoom conference. One student showed his/her forehead, though sometimes I just saw a part of his/her top hair. Another student did not show his/her face at all; what could be seen on the panel was his/her bedroom window. Another student kept turning his camera on and off repeatedly. I wondered if he encountered Internet connectivity issue, but Meghan, his teacher, said that he just wanted to "play" with the switch.

Learning-"Losing" Switch

When learning became distance, young children were easily allured by "losing." The chat box button on the virtual learning platform was enticing, so they might chat with their friends and paid little or no attention to the lessons. During an online conference, students might carelessly click the "X" function on the top right and closed the videoconferencing session, so learning and "losing" were just a click away. In fact, there were multiple "X" on a virtual conference, which might cause some confusion when the teacher asked the students to close the chat box or leave a breakout room. During an online classroom observation, I witnessed a few students being "kicked out" of the Zoom meeting, and it took a while for the screen teacher to realize this and readmitted the students to the class.

Lacking Immediacy

Student participants felt that the online instruction did not offer the "immediacy" of in-person learning mode. In online learning, the mute microphone meant that students could not ask questions immediately. When asked if frustration ever happened during the 2020 school closure, Margaret revealed:

Yeah, um, it happened a lot because it was frustrating not being in the classroom, and not

having the teachers tell you how to do this! All we could do… it was nonsense! So if you

have questions about something, and you, and you don't have the teacher standing right

next to you, but the teacher is on Zoom and show you how to do things…

The lack of the physical teacher made learning more difficult for some young students. Margaret

said, "For me, I have to see a person [the teacher] in person, so it's not as confusing for me."

Comparing the face-to-face and online learning, Margaret concluded:

… having to learn by a screen is way harder than it [face-to-face learning] [because]…

face-to-face learning, it's easier because the teacher can explain it better, and not have to

worry about, like flipping cameras and stuff, but with virtual, the teachers have to flip

cameras and show you everything they're doing and for you to understand.

Likewise, given the two options: in person and distance learning, Colton selected the in-person

learning mode because "she [the teacher] can, uh, like go over it more!" Bob also articulated that

he preferred face-to-face learning to other learning modes because of the immediate support and

assistance from the teacher. Bob said:

I just feel like if you're face to face, then the teacher can help you more! Like instead of

just telling you, she can go over to your desk, and just show you how to work the

problem, or tell you, tell it, but tell you what to do.

This was an "eye-opener" for Clara because she realized that her distance students did not know

how to do "borrow and carry from the number before" when solving a two- or three-digit

subtraction problem although they had learned that skill virtually. She explained, "We [teachers]

weren't actually there to guide them [distance students] with their pencil and pen and show them

how to do it." Another third-grade teacher, Krasava, discussed the convenience to conduct interventions for face-to-face students instead of virtual ones:

> … it's just so much easier when you can just be hands on, and sit there, and explain it to a child by sitting next to them or pulling them over for centers, or things, like that interventions *[sic]* that we couldn't...

Lacking In-Person Connection

Elementary-aged children needed some forms of physical connection and "intimacy" for learning to take place. They had to see the teacher's lip movement in close proximity to learn basic reading skills (e.g., identifying, blending phonemes, distinguishing digraphs). They needed to feel the teacher's energy to imitate during a read-aloud session. Krasava said:

> Well, and it, I mean it depends on the age group that we're talking about, but for the majority, um, like the littles they need when they're learning reading. They need to be able to see your mouth moving. Um, they need to be able see [the teacher] just walk around, feel your energy… but even those kids who just physical touch, they just want to pat on the back, say "You're doing a great job!" like we can't give them that! Those kids that just need that! And I think that, that probably those kids probably are emotionally suffering maybe even in silence. Um, just because they want to pat on the back by their teacher, or a high five, or a fist bump, you know, no, matter if they're in high school or a kindergartner, we need the encouragement from the teacher.

Regarding "intimacy," physical contact such as fist bumps, high fives, elbows, touches, hugs, etc. was a language of compassion because it displayed warmth and caring from an individual to others. Krasava emphasized the role of physical touch in addition to verbal encouragement in the

development of intimate relationship with young students. Krasava's viewpoint was confirmed by King, a school district administrator:

> Yes, feeling their energy, and like I said, discerning their attitudes, and discerning their, uh, their disposition, it's hard to do that virtually. That energy you're talking about is a part of their disposition. That energy is a part of their attitude. That energy is a part of their body language, and their level of engagement, and participation, and it's hard to pick that up, and to know that accurately, get a full accurate picture of that when you're in this kind [virtual] of environment.

On a WCBI show titled "Midmorning with Aundrea" that aired on May 8, 2020, Jessica, a Sunshine student, stated that the worst part of having to be away from school was the lack of face-to-face "checking-in" with friends and teachers. Jessica voiced, "Like you can't wait to see our teachers, or like your friends, they can't ask you about your day going, or stuff like that!" Likewise, teachers found it more difficult to teach students when in-person connection was absent. Helena, a Sunshine Elementary teacher, articulated the difficulty of not having the physical connection with her students during the school closure period:

> Um, I really miss hugging them! And like when [Jessica] just said that about, you know, asking how is your day, that's so important! I mean I call them my babies, I know they're not babies, but, you know, I called my babies, they're, they're my children! We see them just as much as we do family throughout the day, you know.

Ida, another Sunshine Elementary teacher, also said, "It has definitely been challenging not being able to have the physical contact with them [students]!"

Accountability Issues

The distance learning efforts lacked high-standard accountability. A critical issue underlying the closure of the school buildings was the waiver of the accountability for the statewide standardized third grade reading test during the 2020 school closure and the 2020-2021 school year. In March 2020, the state superintendent of education recommended that all state and federal assessment and accountability requirements be suspended for the 2019-2020 school year. After that, White Water Consolidated School District, the school district where Sunshine Elementary was situated, received "a whole host of waivers" for the 2019-2020 school year. King said:

> … they waived everything, not just the state assessments! We didn't do any dyslexia
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> screening. We didn't do end-of-year universal screening with our K-3 students. We did
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> not do a cursive writing test that's required by law. Uh, there were a lot of things that just
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> kind of took the back burner because of the pandemic!

Clara, a third-grade teacher participant, elaborated on how the final grade was determined at the end of the 2019-2020 school year. If the students completed and submitted the first learning packets, they received 100% for the whole fourth quarter of the 2019-2020 school year. If the students did not work on the packets or did not receive the packets, they received "no grade" for the last quarter of the 2019-2020 school year, so their end-of-year grades were averaged from the first three quarter grades. Clara articulated:

> So our district decided that if students, so we made the two packets for the students, if
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> they submitted both packets completed, they got a hundred for fourth nine weeks, just a
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> daily grade of a hundred, and, so we would just average that in with their yearly grades. If

the students chose to not turn in the packets, um, then they just received "no grade," so we only, so they literally just had "no grade" for fourth nine weeks.

Again, on January 6, 2021, the state superintendent of education said, "I understand that COVID-19 has disrupted teaching and learning this school year, and we want to make sure we support teachers, administrators and students as much as possible," hence she recommended waiving the passing requirements for the third grade reading assessments and retaining the students' letter grade from the 2018-2019 school year for the 2020-2021 school year. Jasmine, a mother of two students attending White Water Consolidated School District, supported the waiver, "I'm glad they waived it [testing accountability] because they [the students] were not prepared!" Likewise, all of the teacher participants tolerated the waiver of the third grade reading test and all third graders were promoted to fourth grade. Jade, a third-grade teacher participant, said:

> Oh, I was fine with that [the waiver of the statewide third grade reading test]. I felt like they [third graders] were cheated out of a year. So yes, it wouldn't, it wouldn't have been fair to have a test at the end of the year when we got cut like what a good nine weeks of school, so, yeah, I was, I was totally for that!

Clara also divulged her consensus and empathy for third graders not taking the standardized third grade reading test on account of the "turmoil" induced by the world health emergency:

> It [the waiver of the statewide third grade reading test] didn't bother me as much last year [2019-2020], um, because things were so crazy, and we, the last thing we wanted was to stress a kid out by saying "Oh! The world is shutting down! By the way, you need to repeat fourth, I mean repeat third grade!" And, so me personally, it didn't bother me that they were sent on. Now I know a lot of the fourth grade teachers are like "Why did y'all send these kids on?" but at that time we were just, we were in survival mode, and kids

were hearing things and seeing things that, and they were, they were dealing with more

things than what they should have, so as far as like the policy of letting the students, you

know, be promoted, it didn't bother me!

Similarly, Krasava agreed on the waiver of the reading assessment because the students did not

receive in-person instruction during the fourth quarter of the academic year:

Um, well, because they didn't get that last quarter of learning. So if we would have been

here, of course, go right ahead and test them, but they weren't here, um, and so if they

would have tried and test and when they hadn't been in school for six weeks, that's not

fair!

Nevertheless, Krasava also made concessions to the administration of the third grade reading test

to propel lesson planning and instruction:

Um, it's really, it's just hard! I mean if I were a [in-person] teacher, I would still want

them to take it to see where they're at, not necessarily to hold them back or anything, but

we, we got us, we got to have some data to move forward with, so, so it's just so hard

because some parents kept their kids away all year [distance students], and then some

parents sent their kids back, um, so it's just, it's not an even playing field!

Unfortunately, these accountability waivers caused several adverse effects on the rural

school community. Caroline, Sunshine Elementary principal, stated, "so now fourth grade, a lot

of those kids made it to fourth grade who probably would not have made it because they would

have not passed the state test!" As a result, when being asked the hypothetical question about the

chance to change something in the 2020 school closure period, Caroline wished that she had

asked her teachers to grade the packets instead of solely offering 100% credit for students'

assignment completion. Caroline regretted:

Wow, I think if I could go back, instead of giving everybody a hundred for doing the

packet, I would have given them credit for doing the packet. But I would have averaged

that hundred or graded everything for a real, for a real grade. Yeah, but we couldn't grade

it because the parents were helping them like you know. Everybody would have had a

good grade anyway! But I would have averaged that hundred with what they had when

they left. So if you had a, a 78 average with 100, you might have ended up with a B

instead of a perfect hundred because a few several people made it to the next grade who

shouldn't have! And it hurt them! So I probably would go back, and not just magically let

everybody pass because it's, it's hurt us this year [2020-2021]! We've had kids in fourth

grade who really needed all the third-grade skills, and now they're failing fourth grade!

They should have failed last year and had a third-grade year!

From a school district administrator's standpoint, King had "mixed feelings" of

"fortunate" and "unfortunate" about the waiver of assessments. Positively speaking, the school

district did not have to deal with the situation of administering examinations while the school

facilities were closed. Yet the disadvantage of missing test results outweighed the advantage. It

was complicated for the school district to plan for the 2020-2021 school year without the 2019-

2020 end-of-year assessment data because they could not calculate the students' learning growth.

King voiced:

As a district administrator and as a school official, I really hated it because we needed the

data to give us a well-informed picture of where the student was, and where they would

be when they started the school year. At the same time, the compassionate side of me

thinks there were so many things going on, there was so much upheaval, and, so much

turmoil, and there were so much unknown, and there was a lot of fear. If we had tried to

administer that test last year without the waiver, probably half or more of our parents would not have brought their students to the building to test, and the state department of education would not let us test these students at home even if we had had cameras, and secure logins, and put, uh, devices in a kiosk mode so they couldn't toggle between websites during testing, and you know, kind of clamp down on security. They still would not have made their children test, they wouldn't have brought them to us to test. And because the state department wouldn't let us test them at home, it really would have been a moot point because we wouldn't have enough data to really, um, make a quality decision anyway!

And this issue of lacking assessment data to compute students' growth did not take place only at White Water Consolidated School District, but on a statewide level, as disclosed by King:

We did not test all of our students, and that's something that the state department has made a concession about. They don't have enough data statewide to run the accountability model like it is because of the lack of participation all over the state, they can't run the model, the accountability model, and the same thing is kind of holding for us. We, we can take the data that we have, and look at it but, um, you didn't have data from the year before! I don't know how they're going to calculate growth. You can't calculate growth because you don't have data from the previous school year, so I don't know what they're going to do… I don't know that we'll ever be able to get a true picture and be able to calculate growth! There were kids didn't test this year, so even if they came back this year, they're two, that two years of no data on those children! So I don't know how do you run an accountability model on that…

The waiver of testing accountability that started in spring 2020 and continued throughout the 2020-2021 school year caused a "snowball" effect. The "snowball" kept rolling and rolling, preventing the school community from obtaining an accurate representation of the students' academic progress, which in turn impacted the strategic planning for the upcoming school years.

In the 2020-2021 school year, the accountability requirements were waived, so the students took the assessments and received "passing" scores regardless of their answers to the test questions. In other words, there was no repercussion to the students because their promotion and retention decision was not based on the test results. King uttered:

> … for our demographics, for the kinds of students that we have, we have a, we have a lot of poverty, high poverty, low income, a lot of the, for a lot of those students, that [the waiver of accountability] was music to their ears! And when they, when their media announced, when the state department Dr. [Wracey], and the state department of education announced that they were going to be held harmless, a lot of those students did not put forth their best effort on the test! …They came to participate, and if they just answered one question, and submitted it, they, they're done! And they're off the hook for that test for graduation! And the students knew that, and so did the parents. So from that perspective, it's very unfortunate!

The removal of assessment accountability also reduced the sense of "urgency" that teachers and even administrators felt at the school district. King clarified:

> … they were supposed to take that third grade reading summative assessment last year that determines promotion, and retention in Mississippi, and that did not happen! And so, I will tell you because it was nine weeks of school left, and because the waiver came for that assessment, there was not as much urgency to make sure that the content was drilled,

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and covered, and that wasn't just her fault or the school's fault, that's just the way it was! I think that was statewide. We lost our sense of urgency, um, to a degree, I'm not saying we became passive, but I really feel like we lost our sense of urgency when that waiver was announced, and the test went away!

King compared the lack of a sense of "urgency" with the lack of integrity. When an academic skill was not assessed and evaluated to check whether the students achieved an acceptable standard, the school stakeholders might not be "proactive" in carrying out their duties. King observed:

… you take the accountability away, and it's kind of like this. I heard somebody define integrity, integrity is doing what is right when nobody's looking. Well, there was nobody looking because accountability went away, and so rather than being proactive, and staying on top of the game, and actively pursuing, uh, reviewing the data and, and reaching out to help those kids, I'm not saying they didn't help the kids, I'm not saying that they weren't interested, that they didn't work, there just wasn't this urgency! There wasn't as much urgency, and as much concern to do it in the manner that they would have done it if they were being inspected, if accountability was in place because there was no inspection of what was expected, the expectation kind of diminished!

The news of an accountability waiver was received with "a sigh of relief" amongst the teachers because their students would not be penalized for failing the examinations. Accordingly, King witnessed that some teachers in his school district did not "[stick] with the stringent pace of covering those skills, and [remediate] where they saw weaknesses, and really [hone] in on the data." Without the third-grade test "looming on the horizon," teachers "became less focused on being driven toward that test and driven toward those specific skills that students needed help

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with prior to being assessed." Even with some school district administrators, King noted the same "sigh of relief," "it was like the burden was removed about student promotion and retention" because all third-grade students did not have to take the third grade reading summative assessment and were promoted to fourth grade.

The waiver of testing accountability was repeatedly given in the 2020-2021 school year. Consequently, some teachers in the school district became "passive," working in "survival mode," they did not "aggressively" equip their students with necessary skills to pass the test. King noticed, "They were just doing just enough to just get through, get the children through, get themselves through, um, just to say, 'I came to work today, and I did what I needed to do just to get by.'" The teachers' passivity and lack of "urgency" might have grave repercussions for third graders because the students would not be fully prepared for higher grade levels. King perceived:

> … instead of actively in their PLCs, in their departments, meeting regularly to look at the data, look at progress, monitoring, looking at coursework, looking at student progress together, and having those discussions around the data, there was less of that! So that's what I meant by being more passive! Instead of actively pursuing, and going after, uh, putting in place safety nets, and supports and, and strategies to help those students, they became more passive in that they weren't aggressively, uh, pursuing ways to focus on those skills to help those kids pass the test, and not just pass the test, but, but to be fluent in the skills. Um, it's kind of almost like this, I've heard the statement before, "If you don't inspect what you expect, that you can't expect to get what you expected!" There was a le [sic], there was, there was less fervency and activity about meeting those, go moving toward meeting the goals, and getting the students prepared as they would have. They didn't do it to the extent that they would have had the test counted.

King illustrated that a few "mediocre" teachers in his school district "went into survival mode." During the first three weeks of the 2020-2021 school year, all students at White Water Consolidated School District learned virtually. Accordingly, every teacher "had the added responsibilities of, um, doing the Zoom every day, and setting up assignments in Canvas, in addition to doing lesson plans." These "mediocre" teachers became "half-hearted" with their professional practices and "didn't want to do anything!"

Another accountability issue was that all teacher participants and the principal observed a "slippery slope" when assessing virtual students. These students scored 100% on homework assignments but received an "F" on the in-person exams. It was assumed by the teacher participants that family members (e.g., parents, older siblings) were so involved in virtual learning that they "did" the homework for the students. Krasava said, "I think parents are wanting to do the best, um, but we can't do it [homework] for them [students], that's not the right way." Some people might argue that it was fair for children to cheat in online tests during the pandemic school closure because the materials were so hard. Others might accept this situational cheating because teachers did not really "teach." Laquita, another third-grade teacher, to some extent, tolerated with "too much" involvement from families during the 2020 school closure and the 2020-2021 distance learning, but she showed grave concerns for these students in their next grade level:

> … it's okay, your kid is at home with you this year for third grade, but fourth grade, they have to come to class, like there's no virtual for fourth grade! So if you're doing your child's work at home for third grade, that means, that's a whole third grade year that your kid missed out on because you were doing their work! What do you think is going to happen in fourth grade? I mean that's just not helping your child, and we have a student

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like that. He's not in my class, but he's a virtual student, so I teach him. He has all As, but he cannot tell you three times two! Many, very obvious in him that somebody is doing his homework, so he's one I worry about next year… He really struggled!

Taken together, the pandemic-driven school closure caused some students to experience "losing" and others to experience an alternative instruction mode – distance learning. Yet these distance students experienced a myriad of challenges on account of unconducive home learning environment, technology distractions, lack of immediate support and physical connection from teachers and peers, and issues with testing accountability. To conclude, Clara asserted:

> … learning online was not ideal for third graders. And at that time, I mean more so because by third grade, they have the distractions of, they have their TV shows, they, most of them have a cell phone, um, we had a lot of cases that all of their siblings were home, so they probably had 10 to 12 people, and the background, you know, that it was really hard to focus on, you know, your teacher telling you things on a computer. Um, so we found that our virtual learning was not, it didn't get our kids to where we wanted them to be!

Non-Academic Disruption

To contain the spread of the coronavirus, students were restrained from leaving their homes during the entire last quarter of the 2019-2020 school year, which severely disrupted their existing daily routines. The cancellation of the traditional schooling schedule led to a range of non-academic disruptions in terms of students' emotions, psychology, social interaction, mental health, and child wellbeing.

Home Confinement

After the 2020 spring break (March 9 to March 13, 2020), Sunshine Elementary students stayed at home for another week because White Water Consolidated School District Board of Trustees voted to extend the spring break on March 14, 2020. On March 19, 2020, the state governor mandated all public schools to be closed until April 17, 2020. Sunshine Elementary was forced to close their school facilities, which abruptly interrupted students' routines. Krasava expressed her enormous concern regarding the disruption to her students' relationships due to the home confinement:

> … living in a small town down here, the kids are used to being close to everyone, and seeing lots of people, and just that I think was *[sic]* the hardest part is taking them away from with their [sic], you know, used to.

Margaret, a third grader at the time of the 2020 school closure, confessed her emotions over the lockdown period:

> The worst thing I have to say [about learning at home] is being separated and quarantined… Um, it's the worst thing because what you would normally do with your friends and stuff, hang out, everything, like you couldn't do that! You had to stay at home 24 7…I hated it!

Frida, Margaret's mother, divulged the severe distress the home confinement caused her daughter, which even she as an adult found hard to comprehend. Yet Frida needed to figure out a way to explain the circumstance of home confinement to her daughter. Frida divulged:

> All I heard was like, "I want to see my friends. I just, I want to, I want to play with someone. I want to go and do something. I don't I just want to be, I want everything to go back to normal." I'm just like, and then, she would just get really sad, like she was just

really, really upset! Um, there were days where it just it was almost like everything made her cry! Um, nothing made her happy! It didn't matter what we did, or what we talked about that day! Like it was just, it was very, very upsetting for her, and for her to be a junior, she is like. As an adult, you know, we couldn't understand, like we couldn't wrap our minds around and understand, like why we can't be around other people. And then, like I'm sitting here, like I can't understand, like why this is all happening, and what's going on. And then I'm supposed to explain this to my nine-year-old, like how am I supposed to explain that to her because I don't even understand it!

The home "prison sentence" also caused Frida to experience a nervous breakdown. At first, Frida was frustrated with the lengthy and monotonous home life partly because she could not socialize with any adult. She realized that interpersonal socialization played a significant role for her wellbeing. As a result, she sought to get out of this emotional jail by "climbing the walls." Then, she figured out a coping mechanism: returning to work in person. Frida was "so excited" to get back to her workplace, which she also considered "insane" because others might hesitate to come back to work. Frida's coworkers even "looked at [her] [as if she were] nuts" when she was so ready for work. Finally, Frida was "happy" again because she could communicate with other adults at her workplace:

I, I did not realize how big socialization was until we did not have it. And I was with her, I'm, I, kid, you not like, I was with her for two months, seven days a week, 24 hours a day! Like I was, I was climbing the walls, I was ready to get out! Like the, you should have seen me the day I went back to work, like I was so excited to go back to work, like it was insane, insane! My co-workers looked at me nuts when I was ready to come back

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to work. I was like, "No, you do not understand!" Like there's adults here! They're adults! Like I will happily wear my mouth, like I'm out fine.

The circumstance of home confinement also triggered Bob's "meltdown" one evening. King, Bob's father, said, "He just cried and said, 'I don't understand why God has allowed this to happen! I miss my friends! I miss my teacher! I miss being able to leave the neighborhood! I miss being able to leave my house!'" Likewise, Clara, a teacher participant, showed considerable concern for her "social butterfly" students' shortage of peer interaction:

> I was concerned just, you know, the mama side of me, and the teacher side of me, just for their safety, for their sanity, for, you know, my for my little social butterflies, I knew that they needed human interaction, and, so there were just, so many different, different reasons to be concerned for kids and, you know, I, I tried to use, like I said, the two daily Zooms or, you know, I had a couple kids that would facetime me if, you know, they just they needed to talk to somebody.

Clara expressed distress for some of her students who "struggled in a lot of different ways" due to the home confinement induced by the worldwide COVID-19 pandemic. Some of her students had to live in a crowded house. Some stayed at home alone. Some had to take care of their younger siblings while they themselves needed to be babysat. Clara revealed:

> I had kids who, like I said, had no technology whatsoever! Um, you know, then I had some kids who were at home with everybody got put in the same house! You know, and then on the other scheme of things, I had some kids whose parents didn't have the option! You know, they had to work, and so I had a lot of kids that were stuck at home, figuring it out by themselves or staying by themselves! Um, so that was I mean there were many nights I didn't sleep because I knew that I wasn't sure that my kids were getting a meal, or

you know, I didn't know if, if my third grader was at home taking care of their

kindergarten brother or sister.

Jasmine, a mother of two sons, also described her children's feelings during the school closure

period because of the lack of peer interaction, "maybe being bored sometimes, not seeing your

peers as often as they were used to." Similarly, Kennedy, another mother, voiced her most

serious concern for her son's lack of peer socialization during the home confinement period.

Being unable to attend afterschool activities, beside sports sessions, community events, religious

activities, frustrated her son (Halpern, 2002). Kennedy articulated her concern about the absence

of "exercise" time for her son:

> … he missed it [the "exercise" time at school] a lot! That was his favorite part of the
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> school day because that was his chance to get to play with his friends. You know, he got
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> to be outside, so he was getting way more exercise he got to! You know, I think that's
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> where he met more kids. You know, he knew kids from other grades um because when
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> they were all together after school, it didn't matter if you were in first grade or fifth grade.
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> You know, you could all play together if you had the same interests. And, um, so he
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> missed the afterschool program a lot when it shut down. They did help him with
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> homework and stuff, that wasn't a problem for him. He didn't need homework help, but
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> that socializing was really important, and that went completely away!

However, Kennedy claimed that she and her son derived certain benefits from the home

confinement. In pre-pandemic school closure, Kennedy worked full time and her son had a face-

to-face school schedule, so they did not spend much time together until the weekends. The home

confinement actually offered precious time for family bonding. Kennedy elaborated:

I think, back at the beginning, it was really nice that we got I got to spend so much time with him because in the regular, you know, regular times where you're apart from each other all day long because you're at work and your kids are at school. And so in the spring, at least we spent a lot of time together, and I sat with him while he was doing his schoolwork, and you know, we, we played games together, so I think what helped him the most was that he and I got a lot of time together that we wouldn't have gotten otherwise. So that probably helped him the most because I could make sure that he didn't feel worried or scared or too lonely because you know, and he had his sisters at home, so I think all of us being home together helped him!

"Deer Caught in Headlights"

Adults reported that virtual instruction weakened the students' interpersonal skills. Most child participants found it challenging to make friends in an online classroom in the school year 2020-2021. When being asked if she had friends in the online fourth grade, Cora, a fourth grader, disclosed, "No, because we can't really talk to each other." Cora's response echoed another comment from Kennedy, a mother panelist, about children's socialization needs: "They're so young that for them, only seeing them on the video screen didn't really feel real, and they had to actually see each other in person, in real life, to make it feel real." Another third grader, Rhett, questioned, "Well, we, um, well, we talked a little because it, it was different, and, and you can't really do table talk when there's no tables, can you?" Weakened interpersonal skills among virtual students was confirmed by Laquita, a teacher who taught third graders virtually in the 2020-2021 school year:

In those first couple of times when they had to come in for maybe a Star test, um, they had to come in to take accomplishment assessments which are just like nine weeks tests,

they had a hard time just being comfortable enough to talk to on somebody that's sitting beside them or sitting across from them! So the socialization part is definitely true! That's, that's a hard thing because they go from socializing with their classmates every day in class to only seeing half of their class over Zoom for 45 minutes to an hour, and that's it, so we did see that. Now toward the end, once we got into second semester, and they started to come to school to do various things, they start to open up a little better, but that is a big one, the socialization!

Laquita continued to elaborate the issue of declining socialization skills even for "chatty" students:

Yeah, and I'm sure I can tell from, um, the children that are in my online class, my homeroom, you know, you can tell which ones are very, um, talkative, and yeah, and that was shocking that they struggled with that… Yep, yes, yeah, and I never thought that would be an issue going into virtual, it didn't dawn on me that was going to be a problem until maybe the end of the first nine weeks when they came in, and had the test, and they were afraid to talk to each other… Their body language, you could tell by the body language, the facial expressions, they just didn't know what to do, it's like they couldn't relate to anyone.

Accordingly, Laquita utilized the breakout rooms on Zoom platform to give her distance students more time and space to improve their interpersonal skills.

Yeah, they would have a different topic to discuss with their whoever is in their Zoom breakout room, and then we'll come back together, and have a whole class discussion, but even that was a struggle! I got to go to the different breakout rooms to make sure they understood the directions, and I'll stay for a couple minutes, and they were like deer

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caught in headlights! No one knew what to do, or what to say! Like I had to rehearse the, the conversation out of them, and it took a while too, so yeah, that was something we tried to work on in class with the breakout rooms.

Another third-grade teacher, Clara, observed the same issue with her students' interpersonal skills:

> … the lack of human interaction definitely played a very large role, um, I know we're seeing this year [2020-2021] that a lot of our kids are lacking in social skills because they've gone so long without being around other people, um, so I know it affected my students in that way.

Academic Boredom

The outbreak of the worldwide health pandemic disrupted students' regular routines. In lieu of participating in face-to-face schooling scheduled from 8 AM to 2 PM during weekdays, Sunshine Elementary students stayed at home, working on a daily two-sided worksheet (i.e., one page of math assignments and the other page of language assignment) in the at-home academic packets. As a result, completing the home-learning packet was not an enjoyable experience for students with a low boredom threshold. King said about his two sons:

> … they just got bored with sitting down and turning page [of the learning packets] after page, after page, and working through all that, trying to work through that independently. They got bored with it because there wasn't much differentiation, so that was a real challenge.

The absence of instructional differentiation in the learning packets and online conferences was another reason that caused boredom. All third-grade students received the same "cookie-cutter" packets, except that special education students received supplemental materials depending on

their needs. More advanced students were not provided with extra enrichment learning materials in the sent-home packets nor in online learning sessions, which made distance learning a "mundane," even "frustrated" experience to them. King discussed the learning experience of his younger son, Bob:

> [Bob] got frustrated! [Bob] is a gifted student, and he doesn't mind being pushed. He welcomes a challenge, but I think part of what they did virtually became mundane to him. It was like just going through the motions, "Okay, I've got another assignment to do. The teacher has posted something, so this is on my checklist. I'm going to check this off," just for saying, "Yeah, I did this!" I think he got frustrated because he got bored, and he, he didn't perhaps remember that every day or with every lesson, but I think there were times he felt like, um, there was no point!

The lack of differentiated instruction, the repetition of basic skill practice, monotonous reviews and remediation collectively made distance learning "mundane" to Bob, which in turn caused frustration, as explained by King:

> I think he got frustrated because there was some boredom there. And there were times he just felt like he was going through the motions, "Okay, I got to get logged in, I've got to be accounted for today, I got to be present, I have to listen to this, I have to watch the teacher work these problems again that I already know how to do."

> Likewise, Krasava said about her students, "… honestly the packets, like the kids wanted to do work, they were bored!" On top of that, the lockdown period causing the shutdown of almost all businesses, organizations, playgrounds, etc. intensified the students' boredom. King elaborated:

… um, they stayed busy doing some other activities, but boredom soon set in because they weren't going to the grocery store, they were not going to the parks, they were not hanging out with friends, they weren't doing sleepovers. Um, we were not even going to church! Our church was closed! So both of us, children are involved, my youngest one, [Bob], was involved in the children's group, my oldest was involved in the youth group, and all of those activities ceased because everything was closed down there! There was no going to a restaurant!

From the teachers' perspective, Clara found the same issue with her distance students at the end of the last quarter of the 2019-2020 school year:

Um, I will say towards the end of May, they were starting to get really bored with the Zoom meetings, just I would, I would look, and I could tell that they were watching TV, or they were playing a video game, like um, so I mean, we ran into, you know, just keeping their interest, and keeping them on task.

As the school shutdown extended, King's two sons gradually became "tired" and "passive" to distance learning. The sheer duration of the closure caused their "level of engagement decreas[e], interest decreas[e], motivation decreas[e], connectivity decreas[e]." Accordingly, highly involved families made every effort to combat the boredom of packet-learning and home confinement. King said:

… the biggest challenge for me, as a parent, during that was fighting the boredom, and sometimes having to crack the whip with my children, just get them to stay focused and keep them motivated about working on the packet because they got bored with it.

Parents leveraged different strategies to encourage and motivate their children with at-home learning during the COVID time. One of the simplest tactics was to utilize verbal

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persuasion. Jasmine, a mother of two sons, said that she constantly told her sons, "Come on, let's get this done because once you get it done, then you're done for the rest of the day, if you do all your activities at one time!" She promoted a mindset for her children to think that "Once I get this done, I'm done for the day! And I can enjoy the day!" Another approach to motivate children to learning during the lockdown period was "the carrot and the stick" or "the grass and the stick." Samuel, a community member in the panel of experts, drew an analogy between using carrots to encourage the donkey (or the grass with the water buffalo) to move in the desired directions and using credits to motivate students to learn at home:

> … we use donkeys, donkeys love carrots, so you just hang a carrot in front of the donkey,… kind of like giving the students some kind of credit, some kind of rewards, if they do, give them a reward until they get "addicted" to the education, and not the carrot before we get addicted to the education and not the grass or the ice cream in which the water buffalo finally learns that just walking is maybe more important than eating grass!

Frida rewarded Margaret, her daughter, with homemade treats (e.g., candies, cookies) and technology (e.g., screen time, Nintendo Switch) "if she [Margaret] did what she was supposed to do." Every day, Jasmine had to use different approaches to encourage her sons to work on their assignments. She gave out rewards such as fun science projects for the kids, family game nights, and stick reward cup (see Figure 2). Jasmine had the idea about the stick reward system from Pinterest. A wide variety of rewards such as Roblox cards, ice cream, etc. were written on sticks, and then placed in the reward cup for the children to withdraw.

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Figure 2

The Reward Cup

Similar to other parents, King said that the school closure elevated he and his wife to become the "instructional coaches" of their children. They spent more time for supporting their children educationally, making sure they were doing what they were supposed to do. His wife facilitated their children's learning at home, establishing a learning routine together with a reward system that he named "voucher system." For example, if Bob received an A on the assignment, he received a reward voucher for 15 minutes playing video games.

The Intersection of "COVID Slide" and "Summer Slide"

The adverse intersection of "COVID slide" and "summer slide" generated a calamitous aftermath for elementary-aged students. The most disastrous consequence was the loss of academic skills as well as knowledge that the students could have gained if they had attended school in person in the last quarter of the 2019-2020 school year as well as other summer

enrichment programs. Besides learning loss, the unfortunate combination of "COVID slide" and "summer slide" also generated some "byproducts" such as "speeding" and lethargy.

Learning Loss

Learning loss was more pronounced, especially for disadvantaged rural children, on account of the academic and non-academic disruption during the pandemic-driven school closure as well as the "summer slide." Simultaneously, the academic gap between students from high- and low-income families, between rural and non-rural schools was magnified. Caroline, the school principal, articulated when the school closure was extended for months, "I felt like things were kept getting worse, and worse, and worse!" Disadvantaged rural students might have parents as essential workers who were expected to perform their job duties regardless of the closure of local businesses. Due to limited funding, Sunshine Elementary was not capable of providing these students with web-enabled devices and/or broadband Internet. Accordingly, whether the children had the devices and Internet connection for virtual learning or not depended on the affordability of their families. They might use their parents' smart phones, or their parents might purchase iPads or laptops for them to participate in online learning sessions. Those families who lived further in the country and had transportation issues did not have access to even at-home learning packets. Caroline elaborated:

> … whenever you would try to do an online Zoom, the only kids who would get on would be the kids whose mother was there to make them, and whose mother, a child who had a device, so usually the children with, um, working parents and involved parents, those were the kids who were doing the work, whereas the kids who probably needed it the most, we couldn't, we didn't, they were just at home doing nothing!

The extended school closure was followed by the summer break, which intensified the magnitude of the learning loss. Caroline observed, "over the summer, kids will lose information, and you have to review all the first nine weeks, I felt like what we would need to review was getting more, and more, and more…" Consequently, many fourth-grade students at Sunshine Elementary were in the "wrong seats" in the 2020-2021 school year, as explained by Caroline:

> … so now fourth grade, a lot of those kids made it to fourth grade who probably would not have made it because they would have not passed the state test, so fourth grade this year has learned a lot about teaching phonics and fluency, and, um, they've really had to lower their back up, and lower their standards. And now we're building them back up, and most of the year, only having two days a week has been very difficult, so my fourth-grade teachers have probably seen the biggest change because we had a lot of third graders who were not prepared for fourth!

Jade, a third-grade teacher, had similar observation of her students in the 2020-2021 school year. Her students' competency levels in the 2020-2021 did not live up to her expectation, which she suspected was caused in the intersection between "COVID slide" and "summer slide." Jade expressed her frustration openly:

> Just sometimes because it's, it's sometimes frustrating when I think that they should know or be on a different level than what they are. Again, now, it's just like whatever! Yeah, it's just like I, I maybe, I don't know when we ever get back on track, so that's sad. Yeah, this is like each year, you expect them to know this, to know that, but you've been cut off for like a year, and year, and some months, so you can't just expect that. You have to go in, and assess where they are to know where to pick up, and start teaching, and that's a big concern for me for next year because we'll be moving to a new building, and it's like I

don't know what their expectations could be because, you know, given you've been

dealing with COVID for over a year, so really and truly, there hasn't been any growth for

that amount of time [from March 2020 and the end of the 2020-2021 school year]!

Clara, another third-grade teacher, was not surprised at her students' below-grade-level

proficiency in the 2020-2021 school year because she knew that a few Sunshine students in the

2019-2020 did not have access either to Zoom sessions or the packets. They were not provided

with a single chance to grow academically during the extended school closure and summer 2020.

Hence, Clara claimed:

… as a third-grade teacher, I knew that a lot of the second graders that I was going to get

in my class for the 2020-2021 were going to be a bit behind. I mean I had already

accepted that! I knew that there's so much that goes on in fourth nine weeks, and those

children didn't get that…. I do know that my, my students from last year are lacking a lot

of, like, um, some of their basic skills because when you, I mean, those that didn't

practice a single skill during the shutdown, I mean, they walked into fourth grade with a,

a, like a lower third grade level of education, um, so I mean those students are lacking in

just a lot of basic skills!

Another Sunshine teacher, Meghan, beheld the same observation with her fourth-grade students

in the 2020-2021 school year. The students' below-grade-level proficiency compelled Meghan to

modify her instruction, lowering the standards to assist the students where they were because of

the hierarchical relationship among mathematical skills. In the following excerpt, Meghan gave

an example of basic multiplication calculation that her fourth-grade students were supposed to

master before they were promoted to the fourth grade:

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Um, it was a lot of that ["reteaching" third-grade skills], a lot, what happened a lot of times, and I feel like this happened for everybody, is I would start trying to teach something, and they would absolutely have no idea what I was talking about! So we would go back to the basics, um, of like there was one time we were trying to do long division, and they didn't even know their multiplication facts, so we had to pause and go back and talk about multiplication before we could go into the division because it all builds on one another, and when you lose one of your foundational building pieces, you can't keep building on that.

As a direct result from the combination of "COVID slide" and "summer slide" in 2020, at the end of the 2020-2021 school year, the number of Sunshine Elementary students being retained was 60 students whilst there were approximately 10 students on average who retook a grade in previous years. Caroline revealed, "This year [2020-2021], um, I'm gonna have 17 third graders retained, which is not many, and 43 fourth graders!" For Krasava, a teacher with 12-year teaching experience, the learning loss might accumulate into a "big learning curve" in the upcoming years:

I mean we lost an entire quarter basically, so that, of course, that is a challenge, and I think a challenge within itself is just being out of school for, for that amount of time… I think that's going to take years and years if they ever do get caught back up… I think there's going to be a learning, big learning curve in a couple years! It's really going to show!

Likewise, Clara estimated that it would take years for the students to be "back on track." She held realistic expectations that her students might demand a great deal of academic remediations, modifications, and accommodations to tackle the learning loss that the students experienced.

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Discussing the academic gap between the expected grade level proficiency and the students' actual proficiency, Clara asserted:

> Um, well, I mean there is obviously a gap! Um, there, and there, and we we've kind of just understood that as teachers that for the next couple years, we are just going to see a slight gap in, um, in many areas of education. Just it's just kind of what's been thrown at us right now, um, and, so I'm, I'm looking like it, like I kind of, I can visualize my kids in the class, I'm trying to like kind of see, um, what some of their basic needs were. But overall, overall, we've kind of, we've learned that we're, it's going to take us a few years to come back from, from all that has happened.

"Speeding"

Parent participants reported that they noticed their children did not learn much during the 2020 extended school closure, which accumulated in their learning loss process. Without constant adult supervision (e.g., a face-to-face teacher), elementary students took the "least resistance" path, "speeding" or "rush[ing] through" what they were assigned to do so that they could spend more time on non-academic activities. King gave an example in the following excerpt:

> … if what was expected, if there was no follow-through with that, or there wasn't somebody standing over them to give them guidance, they might have heard their teacher say, "You need to complete this," or "Today we're going to talk about nouns," or "Today we're going to divide fractions," or "Today we're going to learn whatever," by not having somebody right there with them, a lot of times, they did just race through because they were like, "As soon as I can get off of this, then I can go do something that I want to do! I'm at home anyway! And if I can just sign in, and be accounted for, for attendance, be

marked "present," participate in the Zoom, then I can get this work done. As soon as I get

my work done, I can go play!" or "I can," you know, "go outside," or "I can play on my

video game," or whatever… And so without there being some consequences, or without

an adult being there to supervise them, a lot of the children did just rush through, and

didn't take the assignment seriously, and many of them didn't care!

The act of "speeding" induced the issue of academic retainment. When young students tried to

complete their assignments in a "speeding" manner, they did not obtain nor retain the knowledge

and skills in their long-term memory. In a conversation with the teacher, an African American

father confessed about the following regarding his third-grade son's lack of retention. His son

was learning virtually at that time:

… he's just not keeping the information in, like he'll do it, and he'll do it good enough so

he can pass it, and then so he can get done with it, and then, you know... Last time,

"Okay, Dad, can I go outside and jump on the trampoline? I did my math work," but

then, we come back over it again, like two or three days later, and now he's sitting here,

like pausing for a little bit, and now he's trying to go back over with him, all over again in

his head, I'm not like, you know, I'm like "Come on, man! You have to be able to

remember this information because you're going to be doing the same thing in the fourth

grade, fifth grade, and then the sixth grade."

During the 2020 extended school closure, Margaret's teacher did not host any online

meetings because of her limited technology skills. Instead, Margaret's teacher created

instructional videos that she then sent to her students in the expectation that the students would

listen to the lectures, learn the lessons, and complete the assignments. However, this was what

Frida, Margaret's mother, discovered regarding her daughter's learning:

I feel like [Margaret] would skim through some of the videos, she wouldn't really watch all of the videos, so she wasn't really getting the full information that she would normally get, had she sat in class because she was wanting to speed through it, because she was wanting to play all these others, she won't do all this other stuff!

Frida discussed the issue of her daughter's "rush[ing] through all of her work and get[ting] to the fun stuff" in both of our conversations. Frida even made an analogy between "virtual learning situation" and "game situation" because Margaret "just Zoom[ed] through everything to go and do the fun stuff." Frida assumed that her daughter would be able to acquire comprehensive knowledge and skills if she learned with a face-to-face teacher during the 2020 school closure:

The thing is that because she know that she has this and this on her list for the work of today, for the learning today, and then she just skimmed through very quickly, trying to get out the answer so that she had more time for, for fun things, like playing around outside, or traveling, more things rather than really learning, just like it it's different from, the thing is that if she have a teacher standing next to her, and make sure that she's doing those things, and learning, and retaining.

When this "speeding" issue was cross-checked with teacher participants, Clara attributed this matter to "human nature" and admitted she did the same thing when she was in college. Nevertheless, Clara was able to grasp what she skipped in the lecture videos due to her cognitive maturity whereas elementary-aged students might not. Hence, these students did not gain the complete knowledge because they omitted some parts of the lesson videos. Clara remarked:

… kids were just being kids! I mean just like adults do. I mean I know when I was working on my Master's, if I had a two-hour video, I didn't sit there through a two-hour, you know, we skipped through the, that's just, that's part of human nature. Now, luckily,

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you know, as a, I mean I guess I was 22 at the time, I was a little older, and so some of

the information that I missed out on, I was able to pick up, but that's not the same for a

third grader when we gave them videos, it was because it had information, and if they

skipped through it then, yeah, they definitely missed part of the information, and same

thing as far as assignments.

With some basic Internet skills, young students were able to easily find out the answers to the

questions in their math and language assignments, which reinforced their "speeding" approach of

learning at home. Clara gave an example of students using Google search engine to "help" them

with homework:

Kids nowadays are smart, and they know how to Google answers, they know how to use

process of elimination, I mean they had the Internet at their fingertips, so why wouldn't

they use it? …Yeah, they, they hit the hot spots, and did what they had to do, and that's

about as much as they did!

Even above-grade-level students "race[d] through" their assignments. King divulged

about his two children whose reading and math proficiency were ranked at proficient and/or

advanced (according to the Nation's Report Card), "they were just in a hurry, and got sloppy

with it, didn't check it, didn't really read it, didn't really think about it!" Similarly, another parent

participant, Jasmine, affirmed that her two sons did not really gain any new knowledge or skills

during the closure because they just went "through the motion" of "busy work:"

Um, just, just the environment, you're missing so much from being in that classroom!

You know, you're stuck in this one location, and you're being bombarded with

assignment after assignment, and it's like you not sure if you're understanding, you're just

doing it to get it done! You're not mastering any skills! You know, it was just kind of,

sort of busy work, just to say you were doing it or going through the motion! But it's just

like not sure, I don't really think they learned or mastered any skills, um, that they didn't

already know!

After the 2020 school closure, the issue of "speeding" continued to exist at Sunshine Elementary

in the 2020-2021 school year. Clara expected this issue would be addressed in a few years:

Um, so we did, we did find that kids rush through everything! And I know that this next

school year [2021-2022] when we, you know, get back into full swing, we're really going

to see that with the kids who, you know, were virtual all year. Er, um, it's going to take us

a couple years to recover from all of this!

Lethargy

The tragic convergence of "COVID slide" and "summer slide" also brought out "the

beast in this curriculum" in the 2020-2021 school year: lethargy. During the extended school

closure from March to May 2020, the only mandatory assignment for Sunshine Elementary

students was the first academic packet that was distributed starting on March 24, 2020. If

students completed the first packet, which included 20 sheets (i.e., one sheet of math and

language per day for four weeks) and returned it to the school, they would receive 100% for the

entire last quarter of the 2019-2020 school year. All the other assignments such as the second

packet distributed in late April 2020, joining Zoom learning sessions with the homeroom

teachers, online assignments on Moby Max and Reflex Math were optional. As a result, Jade, a

third-grade teacher participant, did not put "so much" expectation on her students doing

assignments during the closure period, "I mean I'm just gonna be honest. I didn't think that half

of them would, and half of them didn't!" The 2020 extended school closure somehow turned into

"an extended vacation" for the students, as expounded by Jade:

The numbers that I was getting, that was showing up [on Zoom sessions], those few that were there. I don't know, I guess they were there because they had to be there. And then I would look at the like the online programs that they're supposed to be doing, and over half of the kids weren't even doing them! So I, I think they looked at that as an extended vacation like from spring break, and they really didn't take it serious at all!

After experiencing the spring break 2020, the "extended vacation," and then summer 2020, students "have gotten spoiled to the lazy life," becoming used to a "modest" amount of schoolwork and refused to work diligently in the 2020-2021 school year, as observed by Caroline:

… um, we just have a few that they're not used to working real hard! I think they've kind of gotten a little lazy! A few of them, they've gotten used to being at home. We've had three students to really be upset that they can't just sit home and play video games... A few of them have gotten spoiled to the lazy life, I guess, so that worries me about some of their mindsets…

Jade also affirmed the effect of the school closure on the students' lethargy in the 2020-2021 school year. Both the students and their families did not seem "serious" about doing schoolwork. Therefore, the teachers had to "chas[e]" after the students, "pushing" them to finish their assignments. Jade articulated her thought:

I think the school closure, honestly, I think it made them a little bit lazy because I felt like when the kids came to school, they were so used to not having to do and work, not counting until it was almost like they didn't really take it serious! It was like nobody, even the parents, I felt like some of the parents didn't even take serious! …And I think it [the school closure] made them [the students] when they just finally came back to school,

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they were so used to things not counting until it made them a little bit lazy because we

had to do a lot of pushing at the beginning of the school year [2020-2021] when they

came into the classroom! There was a lot of pushing! And then even with the assignments

that were online, it was constantly, uh, reaching out to the parents, letting them know that

"Your child has a missing assignment!"

Jade heard other teachers at Sunshine Elementary discuss the same lethargy issue – the students

did not work studiously:

I think my main thing not just mine! I've heard other teachers say the same thing! The

kids just didn't want to do the work! I think they had been at home so long and not having

to do a whole lot. They didn't want to do the work anymore! There's been a pull this year

[2020-2021] trying to get students to work!

King also asserted that the fact that some people became "lazier" was "a direct result of 2019

[COVID-19 pandemic]." He had the same observation about students who did not return to

school in person in the 2020-2021 school year, "Yeah, they're still sitting at home on the couch,

they're still sitting at home on the couch, eating Cheetos and drinking Coca-Cola instead of

coming to school!" Transitioning to new learning modes (e.g., from traditional learning to

hybrid/virtual learning), both students and families were provided with in-person and online

training sessions, along with tutorial videos, Tipsheet, eTips about Canvas and other educational

resources on the school district webpage. Nevertheless, some students still resisted completing

their assignments, which might contribute to their failure and not being promoted to the next

grade. Caroline admitted:

… we had kids, they were supposed to do their Zoom, and then go on Canvas, and

complete their assignments, we would have kids to get on Zoom, and then never do their

work! So we had a lot of kids who were failing in the Fall [2020] because they just wouldn't do it! And it wasn't that they didn't know how because we made sure to teach them on Zoom, how to do it, and they would do one assignment, so we knew they knew how, and then they just wouldn't do this one! So the teachers were very tired of chasing students down, trying to get them to do their work!

Due to the effect of the waiver of all testing accountability in the 2019-2020, some families assumed their children would be promoted to the next grade level regardless of their examination results thanks to the prolonged rampant pandemic in the 2020-2021. However, Caroline proclaimed that Sunshine students would not receive 100% for solely completing one learning packet. If the students' knowledge and skills were not at grade level, they would be retained for another year. Caroline ascribed the failure of her students to their lethargy:

A lot of the students who are failing right now for this school year, are failing because COVID brought out the worst behavior in their family, um, being lazy! Um, just I think a lot of people think that they're going to pass no matter what because that's what happened last year. And they're about to see that, that's not the case! Some, some of these kids need a do-over, and that's what they're gonna get! Unless, if I have a student who I know is very intelligent, and I, they're still children, it's not all their fault if their parents aren't making them come to school, and they're keeping them online, but not making them do their work, if those children are intelligent, and I know that it's because they're choosing to be lazy, they can come to summer school for a month, and prove that they have mastered their skills, they might get to go on to the next grade. But they, they will have an F on their end-of-the-year report card and will have to come to summer school. But if

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you're, if you're failing, and you have a 30 in reading because you can't read, summer school is not going to help you, you're staying! They need another year!

Another factor that may have contributed to students' lethargy was the shortened schooling schedule that Sunshine adopted for the majority of the 2020-2021 school year. Due to limited building facilities in a small rural town while following social distancing guidelines, Sunshine Elementary could not permit all students to attend classes in person at the same time. Therefore, the school admitted half of the students each weekday to contain the spread of the coronavirus. From September 21, 2020 to April 2, 2021, hybrid students at Sunshine Elementary had two in-person days and three virtual days each week. Monday was exclusively reserved for virtual learning and teachers' instructional planning. Caroline thought aloud, placing herself in her students' shoes:

> … children think if they're at home on Tuesday, Monday, Tuesday, and Thursday, if they only come to school on Wednesday, and Friday, I think human nature is "Well, I'm off today," so there's three days that they were off, and they would just "Oh, I'm not doing my work, I'll do it when I get to school."

Not only children but also some parents became "lazier" under the impact of the worldwide pandemic. They used "COVID as a crutch" for not sending their children back to face-to-face school. Instead, they chose the virtual learning mode for their children for the whole 2020-2021 school year. Caroline remarked, "I think COVID, for some people, has brought out the worst behavior in some of our parents. Um, using COVID as a crutch or as an excuse has trickled over to this whole school year!" Caroline expounded her comment regarding the parents not allowing their children to attend school in person:

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… when I say COVID has brought out the worst behavior in some parents, we've had

parents just to say "Well, there's a pandemic going on, my child can't come to school,"

but then I see that family out at Walmart, and Sunflower, and… at church. They're

everywhere else but school!

Likewise, Clara noticed the same issue with her virtual students. They used the "pandemic as a

crutch" to avoid going to school in person whilst they participated in non-academic activities in

other places of the local community such as church, playgrounds. The pandemic was also used as

an excuse to not "having to get up early," not "having to be somewhere," not "having to… take

care of their learning." Clara commented:

So we gave students the option of staying virtual, and their opinion of staying virtual was

because they, um, didn't want to get out, you know, they want to set, which we

understood that, we were very kind of that. But those same kids were, you know, going to

church activities, or they were, you know, out playing with their friends, so they used the

pandemic as a crutch!

Since this was a small rural school community, people know people, so the principal and

teachers easily recognized their students and families in the local community. During the 2020

school closure, Caroline and Clara disclosed they also delivered the learning packets to several

students in person because they knew where the students lived in the community. Seeing the

students doing activities in various places in the community except Sunshine Elementary,

Caroline and Clara blamed their parents for their lethargy that these parents did not bring the

students back to face-to-face learning.

Some students chose the virtual learning option because either the students or their family

members had underlying health risks. King expressed more pressing concern regarding virtual

students and their truancy, "Oh yeah, we have some students that they, the parents said, 'I'm going virtual.' They never have logged in! They have never submitted an assignment! They have never checked in for attendance! They have done nothing this year [2020-2021]!" King charged that this absenteeism was a "very irresponsible" and "very selfish" action and that "it's really a tragedy." King went on with a sarcastic comment:

You would think that, but you know, I don't know if they think, "I'm gonna sneeze on the camera, and you don't catch a cold or catch the virus," or I don't know, it's just some of it is just irresponsibility! They just don't, they don't care! They don't take responsibility! And they just don't care! It's their child but they don't care!

Meghan, a fourth-grade virtual teacher, claimed that elementary-aged students were too young to be accountable for their absences in virtual conferences because they were not in control of their attendance sometimes. She asserted that young students' attendance was under their parents' control. For example, they might not be able to join Zoom sessions because their parents sent them to their grandparents' that day. They might not be able to log in Zoom due to some technological issue. Meghan elaborated:

It's hard to really hold these students accountable for that, plus when there's so much, there's so much out of their control, um, like they can't get on Zoom because they're not home, like I can't necessarily control that. And it's just, it goes along with that, comes right from the parents like when the parents don't care! They don't care if their kid gets on Zoom or not! …as far as the students, mine are too young to care if their grade gets affected by attendance, and really too young, …, just because so much of elementary school is their control by their parents, and if their parents get them here, their grades shouldn't reflect, or if their parents can't get them here, their grades shouldn't reflect that.

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In contrast, another virtual teacher, Krasava claimed that her students missed the online classes at the beginning of the 2020-2021 school year on account of "some misconceptions." Zoom meetings were not mandatory for students during the spring 2020, so students and families assumed that was also the case for the 2020-2021 school year. Krasava observed:

… back thinking about just my class, yes, it [attendance/absenteeism] was a problem because at the beginning, they, they were very unclear, like they didn't think they had to get on Zoom because last year, you know, the two months that we did it, I don't really think any school in the district, like really enforced it, you know, real hard. Um, but then this year [2020-2021] starting out, it was very much enforced, and they had to get on Zoom, so I think there was just some misconceptions about it.

Jasmine, a parent of two sons, emphasized that the students' attendance issue took place at all grade levels during the whole 2020-2021 school year, and that the issue occurred because of the lack of adult supervision over their children's academics. Jasmine remarked:

… this is still an issue now with attendance, so schoolwide, I mean, it was because you have to take into consideration, some parents work shifts, where they're not there with their kids. And the children may be at home with the older sibling, or they may be with a grandparent. Grandparent just assuming they're doing their work, not knowing, you know, what actually is going on. Or if they're at day care, they're just assuming they're doing their work independently, is nobody standing over there making sure the work is getting done. So attendance has been a problem last the end of school year, and this entire school year all grade levels!

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Students were not only absent from classes during normal schedule, but also remained absent from examinations. King recalled that family members did not bring their children to school for assessment purposes:

 We still had some parents that never brought students, and even after we opened up, we have students that have no test scores for the whole school year! I don't know, well, in fact, during this break today [5/21/2021], I got a call from one of my test coordinators, I'm the district test coordinator, and one of my school test coordinators called me, and told me there were 24 students in her building that never came in to test their virtual students! And they did not show up for state testing! They haven't been all year!

From spring 2020 until the end of the 2020-2021 school year, these 24 students did not take any examinations. The school district did not have any assessment data to gauge their academic progress, except some of their coursework assignments. Clara also noted that some students showed their "full laziness," choosing the virtual learning option, "a lot of the kids started choosing virtual because they were like, 'Oh, well, my teacher doesn't assign as much work for the virtual, you know, so they picked up on it.'" Clara recounted that virtual learning might be challenging for young students initially; however, it became easier as they progressed, "it was harder on the virtual kids, but then the virtual kids figured out 'Hey, I can Google my answers! I can finish this assignment in five minutes and then I'm done with school for the day!'"

Lethargy also existed for students who went to school in person. The 2020-2021 school year was an academic year in which the school district attendance officer was "swamped" with a great deal of absenteeism and attendance issues. Caroline claimed:

I think the main thing is not everybody, but I think a lot of people have kind of gotten lazy! Um, or they just, um, expect to be passed on, or they expect… We have a lot of

absences even on when we were two days a week. We had a lot of kids who or their parents who just said, "Well, we just won't go to school today! They can, they can just get on their computer," and I would say, "No! You, you can't just get on your computer and do the, do the assignment! You didn't get your instruction. You're not going to do well on it!"

From the school principal to the teachers, and other school personnel, everyone was "tired" and "frustrated" because "parents w[ouldn't] make their kids come to school!" Caroline stated:

If you only come two days a week, back when we were two days a week, and you missed one of those days, then you only came to school one out of seven days! You know, at least come the two days you're supposed to…

When asked about the percentage of students' absenteeism, Caroline responded, "Uh, I would say every teacher has five or six kids that are giving them a headache in that area, so, okay, probably 75 kids out of 415, um, nearly a quarter!"

After Easter 2021, Sunshine hybrid students came back to school four days a week (they went to school two days a week before Easter 2021). It was observed that students were "exhausted" because the number of school days was doubled. Their minds were not in the best mood for learning on Tuesday after having a three-day weekend. Clara projected that it would take a few years for this lethargy problem to subside:

I feel like for the next few years to come, it's gonna take our society a while to get back to, you know, it kind of goes back to the lazy. You know, kids only had to come to school two days a week. All of a sudden, they had to come four days a week. And they were, you know, exhausted, and, you know, by Friday, they just wanted to sleep because they weren't going to bed, or, you know, the day out because our virtual day was on a Monday

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which I didn't like that. I wish it had been a different day of the week. But the kids roughly had Friday, Saturday, Sunday, Monday, I mean Saturday, Sunday, Monday, so they had a three-day weekend every single weekend. So when they came in on Tuesday morning, they were all, like they were tired because they had stayed up for three nights in a row! Um, and so in a way, we almost lost part of Tuesday's instruction because half of the kids were falling asleep, because they were kind of off, off their schedule! Um, so that's why we did the four day a week.

School Closure as a Booster

Besides hardships, the school closure in 2020 did bring about several positive changes to the rural school community. In the face of adversities, the rural school district and the local community collaborated more closely, which boosted and bolstered their existing connections and interrelationships. Experiencing distance learning, most students were well equipped with technology skills. They also demonstrated remarkable strength and resilience to the COVID-19-induced school closure and developed lifelong learning attitudes.

Rural School-Community Partnership

The community where Sunshine Elementary was located had close-knit interrelationships among families, local businesses, and organizations. Krasava, a third-grade teacher who used to teach in two urban school districts before relocating to Sunshine Elementary, appreciated "the bond and the relationships" within this rural community. Rural dwellers cared about other members in their small community, so they made effort to "make events and bring things in." Krasava compared the non-rural and rural lifestyles:

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I've grown up my entire life being in such a fast-paced society "Go! Go! Go!" where it's

just your job, your job, your job! And then you come here, and it's like you can take a

breath, and you realize "Okay, they're very family-oriented, community-centered." And

it's almost just like you have to experience it. It's hard to like to say in words. You just

got to come and feel it. And, you know, once you've been here, and you just feel like

once you're inside the community, and you see all the people who care and, um, all the,

all the small-town events that happen, like the [South Arts Festivals], like all the

downtown they bring, like the little trains in, and like they have all the vendors set up in

their downtown area, the farmers' market. So just I think there's some great opportunities

still, and people really do care, and they try to make events and bring things in.

To illustrate, Frida, a parent participant, said that the rural community created a "distance"

scavenger hunt for the children during the Easter 2020. Parents drove their children around the

town, together with the children, they tried to find different items (e.g., teddy bears, hearts, eggs)

hanging on the windows. Frida recalled:

… when you drove down different streets, you would have to find the bears or find the

stuffed animals, and stuff like that. Or some of them drew hearts, and they would put,

tape them up in their windows, and say, "How many hearts can you find?" Um, Easter

was different eggs, like people would do different eggs, and they would see, "How many

Easter eggs you could find?" …You can't, but you couldn't get out of your car, but you

could drive down like different streets and stuff, and just look at the eggs, and be like,

"Oh, I found this egg!" or "Hey mom, did you see that egg in the, in the tree, or in the

window, or on the top floor, or on the porch?" or just wherever you laced up one, but

sometimes they would paint them, sometimes they would just be paper eggs, just never
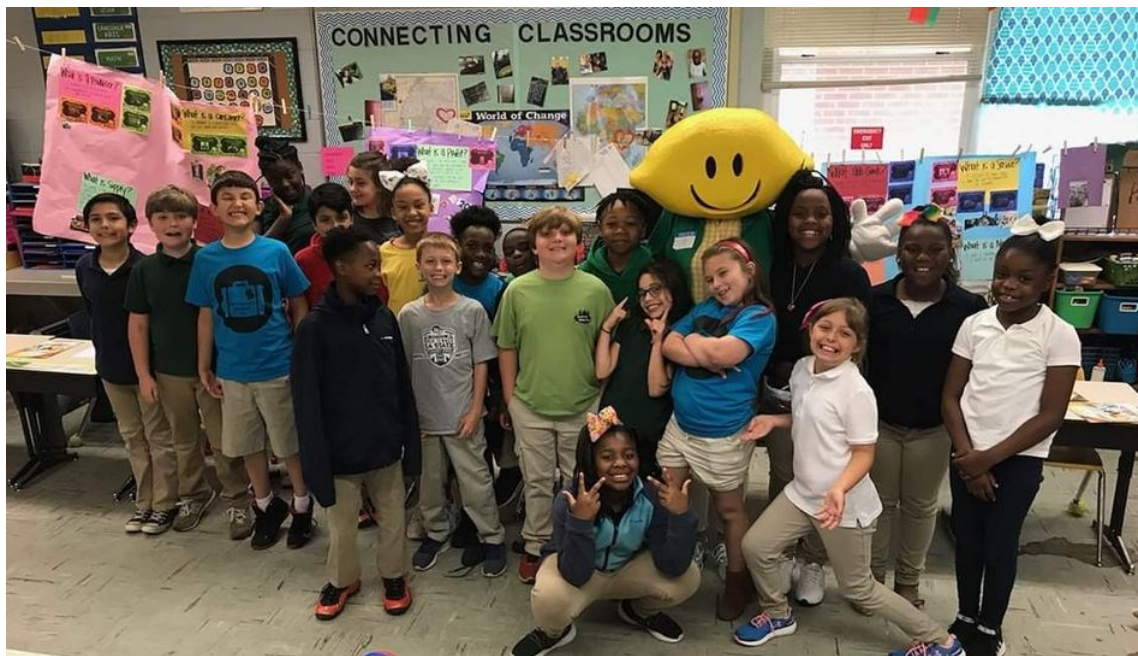
really knew!

Krasava's classroom usually welcomed guest speakers from the local community.

… in third grade, we've, uh, we studied various topics, and I remember there was one

thing. It was at the beginning of my first year, we were doing a lesson. It was a, it was

about hygiene, and we had a local dentist came in and talked about hygiene. Another time

we were studying weather, and so the local weatherman came and actually did a whole

group lesson with the entire third grade, which is really cool.

Besides hygiene and weather, local guest speakers also discussed other educational topics. For

instance, Lemmy, a mascot of Lemonade Day Garvin Creek, paid a visit to Sunshine third

graders to talk about economics, entrepreneurship, and philanthropy (see Figure 3).

Figure 3

Lemmy's Visit to Sunshine Elementary

The 2020 school closure boosted and strengthened the school-family relationship. During the lockdown period, White Water Consolidated School District harnessed communal resources as well as institutional support to tackle myriad challenges. The term "community" had a count of 407 in a word frequency query performed within the node "challenges." A word cloud was created as a data visualization of the text frequency query result (See Figure 4). As seen from the word cloud, highly frequent words with large sizes and distinct visual characteristics were located in the place of prominence. These predominant words included action verbs such as "change" (with a count of 578), "make" (with a count of 373), "organize" (with a count of 311), "work" (with a count of 266), "give" (with a count of 245), "get" (with a count of 244), "think" (with a count of 227), "take" (with a count of 189), and "use" (with a count of 155). These verbs described how the whole community including students, parents, teachers, school administrators, businesses, and government worked together in partnership to meet the needs of the students.

Figure 4

A Word Cloud of the 100 Most Frequent Words in the Node "Challenges"

One of the "very real and very present" challenges was food security for the students. All of the students at White Water Consolidated School District were eligible for free lunch from the National School Lunch Program. At Sunshine Elementary in the 2019-2020 school year (NCES, 2021), 256 out of 424 students were eligible for the National School Lunch Program through direct certification (e.g., students living in households that received Supplemental Nutrition Assistance Program (SNAP) or other financial assistances). When the school buildings were closed, White Water Consolidated School District had to figure out how to provide meals to the children. Transportation was an issue for many families who lived further across the county line. An additional challenge was the recruitment of a new food service manager. The superintendent, the assistant superintendent, the food service coordinator, and other school district administrators worked collaboratively and reached a consensus on providing meals onsite and offsite. Families could queue up in a drive-through line for breakfasts and lunches if they had the vehicles. For those who had no transportation, the bus drivers delivered meal packages to their homes. White Water Consolidated School District posted this information about drive-through grab-and-go meals on their Facebook webpage on March 16, 2020 and received 308 shares by followers. King, a school district administrator, voiced:

> Yeah, we, the school district went into to gear, got into gear really quickly! We, we had the challenge of having a brand-new food service director last year. She was brand new.… So we had, we had the challenge of knowing that we had some students that really needed those meals, so how are we going to get them? So our food service coordinator, and our assistant superintendent, our superintendent, and other district leadership team members went into gear! And we, uh, we worked, so that we could deliver meals on the school buses. The meals were packed up in coolers so that they're

kept temperature. And, and we put meals on the bus routes where students were going to the most remote parts of the county, they couldn't come to the school, and do a pickup for breakfast and lunch. We had school pick up. They could come and do a drive-through. They didn't even have to get out of their vehicles! Uh, but for those people that didn't have transportation, or they lived so far out, their children relied on the school district transportation, we loaded those meals, and those meals were delivered to the actual homes. So that was a real challenge! But we rose to the challenge, and we, we were able to take care of that.

Clara, a third-grade teacher at Sunshine Elementary, also articulated:

> … we did deliver meals to students. So we had, you know, different bus drivers and coaches, and, and some of the like assistant teachers, those who, um, weren't having to like do a Zoom lesson or create things, um, they got out on the buses, and they delivered meals to students because I mean we, we had students, or we do have students who their meals come from the school, let's just be honest! And so as a school, we were able to deliver a breakfast and lunch for many of the days during the shutdown. And that was only done by, you know, people in the community offering to help, you know, different staff members of the school trying to help and working together, so the school bus driver, uh, drove around the community.

Caroline, Sunshine Elementary principal, also divulged, "we did have some teachers to tell us if there was a need, and some of the local churches, or the teachers themselves would bring food baskets, the churches really helped with that!" Additionally, a local group, the Boys and Girls Clubs, also provided free "grab and go" meals for all children from Monday through Friday from 10:30 AM to 12:30 PM at all club locations during the state-mandated school closure.

Another serious challenge was the shortage of devices and broadband Internet, which impeded Sunshine students' continuity of learning during the 2020 school closure period. Krasava, a third-grade teacher who used to teach at two urban school districts before relocating to White Water Consolidated School District, disclosed:

> We had five iPads in each classroom, uh, starting out which is way less than I was used to in Oregon and Missouri! We were all one-to-one. So we were behind down here for sure, but COVID really helped to boost that! And now [2020-2021 school year] we're, we have all the devices we need!

Clara, another third-grade teacher revealed about the circumstances of students in her classroom when the school facilities shut down in March 2020:

> … our kids don't necessarily all have technology! I mean we had multiple students who didn't have Internet, or if they did have Internet, it was off their parents' hot spot on their phone, so we knew that distance learning was going to be a very different experience for every kid. Um, I mean we had some kids who were lucky enough that they had their own laptop or iPad, um, and their parents had Internet if they lived, you know, in town. But then, we also had kids who live, you know, on the outskirts of town, and were not able to have Internet!

A number of White Water students still faced this broadband Internet challenge in the 2020-2021 school year. Kathy, a parent, articulated the tragedy of Internet shortage for distance learning on the school district Facebook webpage on August 27, 2020:

> That [online learning] is just crazy all other schools r going they really need to stop with this and alot of kids that live in the country dont have no internet that they can use and

most parents have to work and cant be on it when they say they have to be this has really gotten ridiculous

Another parent, Jada, commented on the Internet disparity between economically advantaged and disadvantaged students. In her comment on the Facebook webpage thread dated August 27, 2020, Jada asserted how the limited connectivity issue impacted her two children's learning during the 2020 school closure:

My problem is those of us who have two kids who are expected to virtually learn with extremely limited internet access. I could very easily pull enough internet for just one kid but both of them is unrealistic. So now my only choice is to limit both of the kids access to their live lessons to save enough data for them to both make it through the month. It's not fair. I literally have to limit their learning access, that's just not a choice a parent should have to make. It breaks my heart. It's not fair.

On another school district Facebook thread dated September 1, 2020, Jennifer expressed her frustration with the Internet unreliability for her children:

my kids are absolutely struggling! I'm doing my best but I laid in bed and cried my eyes out last night. We don't even have access to the live lesson plans because we have no reliable internet options where we live. So it's all on me, I have to teach them. I am doing my absolute best but I feel like a failure, we worked hard yesterday but I feel like I'm just telling them what to do and not actually teaching them. 🥺 idk what to do.

The issue of broadband Internet connectivity did not "discriminate" people of different socioeconomic statuses. Krasava also experienced "spotty" Internet at her home:

> … wi-fi was a big one because even me, I live out what we call, like in the country out here, and my wi-fi was so spotty! I couldn't hardly even Zoom with my kids. I can only do it once a week, and if too many got on, it just broke up. It was spotty…

Even the person with the assuming highest income at Sunshine Elementary, Caroline, experienced the difficulties of not having access to high-speed Internet during the school closure. Clara divulged:

> … our principal [Caroline], you know, she didn't have Internet, so I can remember there was a time that she, she rode down the road, and like was on her cell phone, and was just doing the best that she could, you know, to try to meet with her teachers, you know, when we were discussing what we needed to do.

However, White Water Consolidated School District administrators collaborated with local organizations to deal with this technology issue. Churches and community centers in the remote part of the county allowed the school district to install hot spots for distance learning, as recalled by King, a school district administrator:

> Internet connectivity, what we wound up doing is we were able to purchase hot spots, and our district leadership team worked with some area pastors, and community leaders. We put hot spots in churches, and in some of the community centers, the voting precincts, some of the rural community centers, so that if nothing else, students and parents could either walk or drive within their smaller communities out in their most rural parts to their churches, or to these, these community centers, and pick up, use those hot spots to get online to receive assignments, to download assignments, to upload assignments, and they could do that as often as they as, as, as was needed.

Likewise, many local businesses opened their Wi-Fi 24/7 for public use. Many family members drove their children to these business parking lots for Internet connection. Krasava, a third-grade teacher, recalled:

> … a lot of businesses put out like on their, our city of [White Water] Facebook page that they were opening their wi-fi up to public, and so like I know some, uh, teacher, or not teachers, by parents, I know some students, older students would go sit in a certain parking lot and literally just do their work there…

Thanks to the effort of the school district administrators, White Water was the first school district in the state to provide devices for all students. Also, broadband Internet services were expanded in the rural parts of the town by the end of 2020 to respond to the challenges of Internet access. Krasava hailed:

> … we had the initiative, so we were the first school district in the state to receive our Chromebooks, and so I think equipping them with that was the number one thing that we could do. And then we had our fiber Internet that was being installed out in the rural areas as fast as they could. They, they got it in pretty quickly!

> Additionally, the 2020 school facilities closure improved and fostered the relationships

that exists between White Water Consolidated School District and the local town via other initiatives. King provided examples of Delta Kappa Gamma, a local sorority group, providing mentorship and supports for newly recruited teachers in the school districts:

> Delta Kappa Gamma has a lot of current teachers that are veteran teachers, well-experienced teachers as well as retired teachers, so these are people who are really well-seasoned in education. And so they help with things like classroom management, they help with things like strategies and skills for teaching a particular concept, and just offer

little things to our teachers, little survival kits books, um, articles, that kind of thing so that the teachers have some additional resources.

King gave another example of other community partners who donated money to the school district athletic program. Some businesses expressed their grateful thanks for teachers by generously sending gift certificates that could be redeemed at local restaurants and grocery stores. King unveiled:

We had, um, another business in town, a business owner that contributed some money to athletic program so that they could do some things in the field house, and in the locker rooms, or protective personal, protective equipment for some of our players when they were coming to do workouts as far as any other kind of contributions. We had some businesses that gave teachers, um, some gift cards, bought them lunch, bought them a meal, a gift certificate to a local restaurant, or to a restaurant here in the [Garvin Heights], [Stockton], [Canton], um, just as a token of thanks for their hard work. We had several businesses who did that.

In an attempt to showcase Sunshine Elementary students' and teachers' distance education effort, WCBI-TV, a CBS/MyNetworkTV/CW+-affiliated television station serving northeastern Mississippi and northwestern Alabama, broadcast a Zoom learning session on May 8, 2020 during the Teacher Appreciation Week 2020. Aundrea, the host from WCBI, joined the virtual class, asking the Sunshine students to share how they were handling distance learning (e.g., What has been the worst part of having to be away from school? What's the best part about being at home every day?). Being on the TV and having their voices heard became a fun and enjoyable experience for these Sunshine students.

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On May 21, 2020, the last day of the 2019-2020 school year, the O'Ferral Management Group – McDonalds awarded Happy Meal Certificates to all Sunshine Elementary students who mastered their multiplication and division facts. Ronald McDonald, the primary mascot of the McDonald's fast-food restaurant, also stopped by the school for a few hours and surprised Sunshine students with goodies (See Figure 5).

Figure 5

Ronald McDonald Visiting Sunshine Elementary on May 21, 2020

Additionally, on the last day of spring 2020, Sunshine Elementary teachers received lunch from the local Dollar General store. A local medical center distributed free face masks to all community members who were six years old or older during weekdays at their Wellness

Center. This initiative was to support the town in their effort to contain the spread of COVID-19. Moreover, the local Walgreens store created WE TEACH Award in May 2020 to recognize teachers in this rural school community. This award could be used to purchase classroom supplies and other educational needs.

King also disclosed that the school-community liaison at White Water Consolidated School District worked closely with the local government, banks, hospital, private business corporations, developing relationships and partnerships between the school district and the local community. This school-community partnership allowed the school districts to "keep the communication lines open" so that White Water Consolidated School District could communicate their arising needs. King affirmed that his school district had all these fruitful collaborations "going on as a result of the pandemic." After the 2020 school closure, White Water Consolidated School District continued to work in close partnership with the local community. On September 2, 2020, a local organization, Dream Center of Canton, donated backpacks, sanitizing supplies, and school supplies to all schools in the district. On February 26, 2021, Sunshine Elementary partnered with Bright Horizons and Delta Sigma Theta to provide a virtual tour of the Mississippi Civil Rights Museum for the students. During this tour, Sunshine students also met and listened to Dr. Leslie McLemore, a veteran of the Civil Rights Movement, sharing about his love for literacy, education, as well as his involvement that helped change Mississippi during the Civil Rights Movement (See Figure 6).

Figure 6

A Virtual Tour of the Mississippi Civil Rights Museum

Lifelong Learning Attitudes

Experiencing the school closure induced by the public health emergency, Sunshine Elementary students developed lifelong learning attitudes throughout the acquisition of two remarkable capacities that assisted them to persevere, adapt, and overcome "uncharted waters:" technology skills and resilience. It was apparent that the unfamiliarity of the 2020 extended school closure engendered numerous difficulties. All participants perceived the school shutdown as "new" experiences challenged by "the unknowns." Colton, a third grader at the time of the school closure, was beset by "catching COVID." Colton explained that the novelty of the virus

caused his anxiety and uncertainty, "at that point [the 2020 school closure], it was kind of scary because [he] didn't know what it was!" A word frequency query performed in NVivo 12 revealed that the word "new" had a count of 277 across the ten participants' interview transcripts. Charles, a superintendent of a neighboring rural school district, also attributed the school closure challenges to its newness:

> … it was a new experience, ma'am, that we haven't planned for, okay? No one planned for a pandemic, uh, a lot of the things that occurred were new to everyone! This was my first year, so, uh, a lot of the things, it was just tough, ma'am, so communication was probably the toughest thing to do because no one knew what to say! Communication was probably hard because we couldn't communicate! We couldn't tell them when school would start back, okay? Um, you know, and parents, a lot of parents wanted the kids back in school, but we couldn't do it because, you know, a lot of parents depend up, depend upon them eating, you know, they, the school will feed them breakfast and lunch every day. Well, now, who, who, who gonna do that for, for three months from April and May and, and half of March? So, um, it was tough, and of course, being a hundred percent Black didn't really impact anything, it just said, ma'am, we were just, it was just difficult, okay? It was difficult!

Margaret, a third grader at the time of the school closure, said she was required to switch to a "new" learning mode: screen learning. She found this alternative instruction posed considerable difficulty because she had not had experience with it before. Accordingly, she had a hard time learning how to navigate this new learning mode "because something new is not easy!" Margaret claimed:

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… um, it was different because if you think about it, everyone's just been going to school normally, but when COVID hit, and we had to learn differently. I think that just messed everyone up on how to learn, so, um, so it's different because having face to face is what everyone was used to, but having to learn by a screen is way harder than it. Well, it's different because if you know, if you know going face to face in school for a while, it's something new, and it's different!

Even for Jade, a third-grade teacher, it was not easy to cope with the school shutdown experience. Jade divulged, "Most of us didn't even know which way we're going to go with that [school closure]!"

Technology Skills

A salient skill that student participants improved significantly throughout the 2020 school closure was technology. When the school facilities were mandated to shut down, Sunshine students had to move their learning from the classroom to their homes. Those who were fortunate had access to devices and high-speed Internet, which tremendously boosted their technology capability. They learned how to do research on various websites, how to participate in a Zoom conference, how to mute and unmute themselves, how to turn on or off the camera. Clara asserted:

It [The school closure] definitely taught some of our kids to be very tech savvy! I mean a lot of, I mean, you think a third grader had to figure out how to click on a Zoom link, and how to make sure their microphone was muted, or their video was on. Um, so it was definitely a different learning experience, you know, for the kids just in general. Like they, they learned a lot of tech savvy things, like they learned how to click on a URL, and find a website. Um, they learned how to do a web quest.

Caroline, Sunshine Elementary principal, confirmed that the school shutdown enhanced technology skills as well as network infrastructure for the whole rural school community. The central office together with the Information Technology Department of the school district promptly applied for federal and state funding. As a result, White Water became the first school district in the state to receive Chromebooks and iPads for their students. The awarded grants were also used to purchase equipment such as hot spots, access points, switches, and fiber optic cable to improve and expand the Internet system of the school campus. In addition, White Water Consolidated School District started to adopt Canvas as their learning management system in the 2020-2021 school year.

In the face of the rampant COVID-19 pandemic as a "moving target," the whole school district began the 2020-2021 academic year virtually using Canvas and Zoom as the main delivery mediums in the first three weeks. After that, the district offered two learning options for its students: hybrid (i.e., two in-person days and three virtual learning days) and distance learning for the majority of the school year. Thanks to the existing network facilities, Sunshine Elementary students did not lose their lessons during weather-driven school closure days (e.g., inclement weather, snow days) in the 2020-2021 school year. They participated in Zoom meetings with their teachers and classmates, and then completed assignments on Canvas. Caroline hailed:

> … we are all better with technology! We are, even in January and February [2021] when we had to shut school down for snow, we did not have to miss school because… we were already set up to do a Zoom lesson, and we can put some assignments on Canvas, so the future looks pretty good for if anything ever happens, you know, zombies or something, we'll be ready to go online school!

After the 2020 school closure, Clara continued to strengthen her students' technology literary in the 2020-2021 school year by integrating this lifelong skill into daily lessons. To illustrate, Clara designed a unit on whales for her third graders. The students were asked to choose their favorite type of whale and subsequently conducted research on the whale characteristics and facts. They also enjoyed drawing their own version of the selected type of whale as a wrap-up activity of the research project (See Figure 7).

Figure 7

Clara's Third-Grade Class Completing a "Whale Research Project" while Listening to Whales Using Echolocation
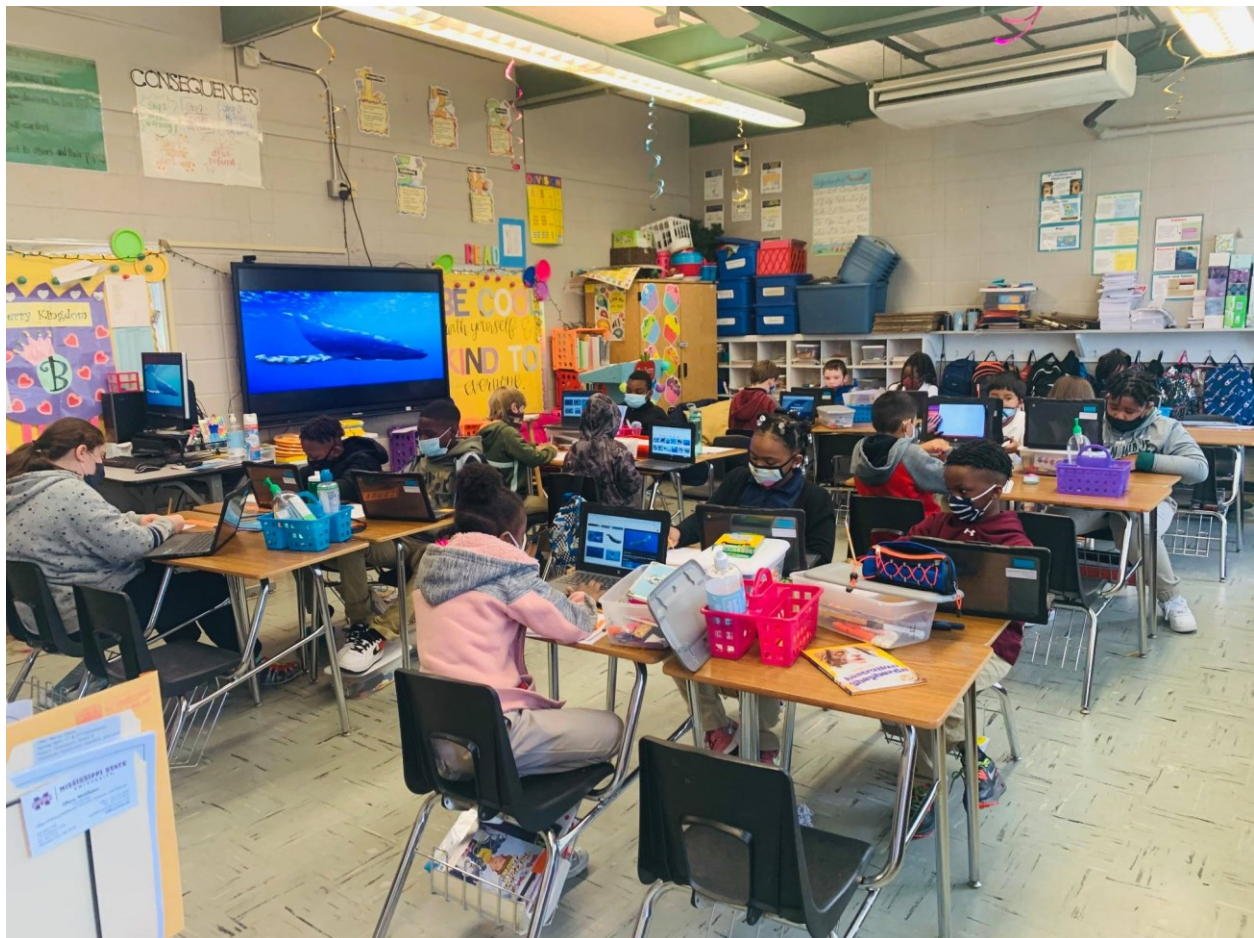
Caroline remarked on her students' harness of technology skills for future college classes:

> I, um, I think, of course, children have gotten much better with technology! Um, we, we, Canvas, the teachers really like Canvas. Um, I think it's, it forced us to train our students to be better with technology. They're already good with a phone, and an iPad, but [also] learning how to type an answer online, and submit it. Um, I think they're ready for that, for their, they'll be great college online students, um, one day!

Krasava also confirmed that to cope with the "new" challenges of the school closure, her students learned to become more "tech savvy." Yet, Krasava also argued that technology capability was one of the competences that an individual needed to build up throughout life in pursuit of ongoing advanced knowledge for personal development. Krasava reasoned, "regardless of this COVID pandemic or not, it's [the need to develop technology skills] not going away. It's only increasing, so they [students] need to know that for to be successful when they grow up." Krasava emphasized that the advancement of technology skillset would improve one's competitive employment in the job market:

> … the online learning, which I don't, it's, it's just never gonna go away! Um, even in the workforce, there's gonna be this push toward hybrid workplaces, where you can work remote, or you could work in person if you want. So I think they have, they have been taught a lifelong skill of the technology portion of it, so I think that is very important because we all know that's just not going away…. in the workforce, you're probably going to have a lot of virtual time where you're collaborating, you're all hopping on Zoom, and talking about something, so I think it's a good skill to learn.

Resilience

The unforeseen school shutdown started swiftly after the spring break 2020, which compelled the rural school community to shift abruptly from face-to-face to distance learning. Even veteran teachers at Sunshine did not expect such an extended school closure. Clara assumed that her students would return to school within one or two weeks of break:

> … we all had no idea that when we went home for spring break, that we would not come back, you know. I know it never even crossed my mind, and even when they said "Hey, we're gonna, you know, be virtual," we all really thought it'd be one to two weeks, we had no, no idea that this was something that was going to last over a year kind of thing.

Similarly, Krasava thought that Sunshine Elementary would shut its doors for just a week. She never believed that the closure of the school facilities would last for over five months.

> … we didn't know how long this was going to be! And honestly, we thought that it was a joke! Like that we didn't come back from spring break, we're like "Okay, you know, just another week, and then we'll be back!" And then it just kept going, and it was like, "Oh my gosh!" like "This is real!"

Realizing her school would be closed for months, Caroline knew that "it was just unknown territory" because of the escalating pressure and tension induced by the deadly coronavirus. Caroline alleged that "it was mainly the unknown that was stressful!" There were times when King and other school district administrators were "grabbing at straws" because COVID-19 had been labeled as a "moving target." King disclosed the following about the "confusing" safety guidelines for educators caused by numerous discrepancies:

> At first, the quarantine was like 14 days, then it was 10 days, then, you know, maybe you don't need so much time! Well, you need your mask here, but you don't need your mask

here! Or if you keep six feet, if you're outdoors, it's one thing, if it's indoors, it's

something else! If it's school, it's one thing, if you're in the grocery store!

As a rural school district with limited building facilities, King, Caroline, and other administrators

paid much attention to the requirement of gathering. King expressed his frustration regarding the

inconsistencies in the number of people being in a certain building at one time:

… at first, it was no more than 10 people… Here you have that many, you've got more

teachers and staff than, than that! Even in an office like a central office, a central office

may have 15 or 20 people minimal.

Sunshine Elementary students perceived distance learning during the last quarter of the

2019-2020 school year was "different" and "not the same" compared with the traditional face-to-

face learning. Therefore, they had to "[feel] their way through with such new territory!" The

brand "new" distance learning mode presented an enormous challenge for Sunshine students who

were used to learning traditionally. Margaret, a third grader at the time of the school closure,

divulged her difficulty with learning at home:

Well, um, I know mom said that it was a challenge learning how to do it, so I definitely

would say that it was a challenge having to get used to it because it was just different for

everyone, for us, the teachers. It was just a crazy whole new experience!

In addition to the challenge of the instantaneous transition from in person to distance learning

mode, elementary-aged students sought to self-navigate how to learn from a distance. Without

technical support from the school, students relied on themselves (and maybe family members) to

maintain continuous learning during the entire last quarter of the 2019-2020 academic year.

Students who had devices and Internet connectivity had to learn some basic technology skills to

be able to join Zoom meetings, to turn on the Zoom video, to keyboard answers or replies in a

chat box, to move in and out of a breakout room, etc. Students also had to learn time management skills, designing a reasonable learning schedule to work on the daily math and language assignments in the at-home academic packets distributed by Sunshine Elementary. Besides the aforementioned significant challenges, negativity about the increasing number of COVID-19 infected cases on the media as well as the "emotionally taxing" home confinement "added fuel to the fire." Frida disclosed her sociable daughter was victimized by the home "prison sentence" and the depressing daily news that aired on the mass media:

> … it was just she was definitely very emotional and very, um, upset, like it took, it took a lot! Like she just, and then, like there were days where we would sit and eat, and she was just like, you know, "Well, what's the numbers [of COVID-19 infected cases] of the day?" I mean, at least, she would look at, like the death, the death rate and stuff, and she's just like, "Oh, if PawPaw gets sicker! Oh, with GiGi get sicker! Oh, if Micah gets sicker!" You know, she was just always worried about everybody! And then, like for her to take that on as a child, like I just can't even begin to understand, like because again, like I'm worried about these people, and I'm an adult. And then it's like for her, like to worry about that, and then for her to be a child and have no control over the situation, like she was just, I mean, like it really messed her up! Like just really mess her up!

Bob also admitted that the home confinement made him cry because he could not see his teacher and friends:

> I, I cried because I, I was, I was really sad that, that I didn't get to see all of my friends and my teachers! And I, I was just sad that COVID 19 had just cut the year short!

Krasava argued that students' mental health, rather than their academic advancement, mattered the most during the COVID-19 school closure because they could "relearn" and subsequently

achieved the grade level proficiency. Krasava revealed, "I had a student who lost their mother last year, so yeah, I was, um, academics, it's like that, that can be taught, we can catch up eventually." Likewise, King described the school closure caused by the world health emergency as an "emotional rollercoaster." "[S]ome of them [school staff] got to sick themselves, and they had family members who got sick. And some of them had this, we had several staff members who had deaths in their family because of COVID!"

Persevering in the adverse circumstance, the three student participants adjusted to the changes of the learning mode, and eventually overcame the obstacles to advance to the next grade level. One of the strategies that Margaret and Bob used to persist the 2020 school closure was goal orientation. Margaret harbored the mindset that she had to prioritize her assigned workload before anything else. After learning time, she took up non-academic activities to deal with boredom. Margaret claimed, "Um, what helped me really pass the third grade was, um, me getting all my classes doing, everything I needed to do! And to keep me occupied, I just read, played with my toys, and watched TV." Using the same strategy, Bob disclosed that "studying and practicing" helped him progress to the fourth grade, "Um, I, I studied a lot, and, and practiced a lot of the skills, so I, I knew a lot of things. Um, and I think, and I think that studying and practicing." Similarly, when being asked how he progressed through the school closure and passed the third grade, Colton divulged, "Um, doing my work."

Sustaining positive emotion was a strategy Bob used during his experience with the 2020 school closure. At the start of the school facilities shutdown, Bob was frantic with worry and fright:

I was [worried], but then when I realized that we were gonna come back, I wasn't as

worried… I'm just worried that at first when it started, I worried that we wouldn't come

back, and I was just scared because I wasn't learning as much but I wanted to learn!

However, Bob overcame these negative feelings thanks to his parents' continuous verbal

persuasion. Bob adhered to the firm belief that "everything was gonna be okay" and that "[he]

would go back to school eventually!"

Similarly, Clara provided access and nurtured positivity among her students during her

distance classes at the end of the 2019-2020 school year. She integrated "nature" into the Zoom

meetings in an attempt to foster students' wellbeing:

We, we used fresh air. We used the sunshine. Um, I know as a teacher, I could tell if my

Zoom meeting was not gonna work that day, I would tell the kids, "Okay, go outside, go

find…," you know, I'll give them a scavenger hunt, um, and so we just tried to, I don't

even know what the words I'm necessarily looking for. Um, we just tried to keep the

positive on things, and that was kind of how we coped with it. We looked for the good

and things we looked for the positive, um, you know, I would tell the[m] go, the kids, you

know, "Go pick a flower, take it to your mom." You know, just that's kind of how we

coped with it. I really, I'm not sure if that answered your question, but, um, yeah, we use

nature as a lot of coping.

Clara did not always have her students sit and listen to her stories; sometimes she asked her

students to be "up" and "moving" with physical activities:

I would start the Zoom, and I would say, "Okay, go find something blue in your house!"

and so my kids were running around, and they would come back, and show us something

blue, they would explain it to the class, and then, you know, I'd throw in a little bit of

education in there. And then when I could tell that they were starting to get drowsy again, I'd be like "Okay, go find something round in your house!" You know, that was always their best, their favorite because they could go find a ball, and, um, you know, there were always those boys that were like "Here's my basketball! I played basketball yesterday," and they would just, you know, go from there.

After the Zoom lessons, Clara might assign her students to "have a sit-down dinner with your parents" or asked, "Everybody go for an afternoon walk!"

In the same vein, to cope with the multifarious challenges of the 2020 school closure, Krasava adopted a practical standpoint that "I wasn't going through this alone!" and that "we were all in this together!" She uttered:

I think just the main thing, remembering that the entire country is going through the exact same thing, so that took a lot of pressure off! And I, that's why I told the parents too. It's like we are, we're all, there's going to be a learning delay in like every child! We're all going to be in the same, same exact boat! So, um, that really helped and that's what I just keep reminding myself of even now, is we're all still going through this. This has been a rough year for every, everyone in education, so just having that realization, and just kind of centering yourself around that, and not taking on the whole world on your shoulders, knowing that everyone is, is there, that really helps!

Despite the difficulties, Krasava alleged that the school closure experience made her students "a lot more resilient." She added the closure put the students under intense pressure to "learn something new:" virtual learning. Krasava also claimed it was the teachers' resilience and the students' resilience that supported their endurance throughout the school closure period and the post-closure in the 2020-2021 school year. Krasava remarked:

… it's a success whenever fourth graders are able to go through an entire year virtually successfully, and getting As and Bs, and understanding the content! I think that's a huge success in any third graders, and I know we had a lot that were successful with virtual learning, so that is a huge plus! But just the teachers' resilience and the students' resilience, and I think the kids just appreciated school a whole lot more and their teachers!

Looking back at the 2020 school closure experience, Colton remarked, "At first, um, it [the school closure] was kind of hard, but then it got easier!" Margaret drew a lesson from the unfortunate school closure experience, "Um, I learned that, I learned that change can be hard at first, but once you get used to it, it's easier!" Bob also shared his perseverance lesson from the closure, "Um, I, I learned that, um, even though, uh, tough times can come, you, you just have to push through, and, and things will get better! And that's what I did! And now I'm in fourth grade!" Correspondingly, Rhett voiced, "virtual things get easier… once we got the hang of it!" These student participants developed a lifelong learning attitude: resilience. Responding to the question about what the 2020-2021 school year was like, Bob beamed:

Um, it's going good! Now that I don't think COVID is as a big deal as it was in third grade. Um, so it's doing, it's doing pretty good, and, uh, I have, I have straight As. And now that it's almost the end of the school year [2020-2021]. Um, I'm not too, too worried about fourth grade, and it's been fun!

At the end of the 2020-2021 school year, Caroline, Sunshine Elementary principal, remarked, "we have not had a 'doom and gloom' year that we thought it was going to be!" Caroline also made an astute observation about the higher level of resilience in the hybrid students, as compared to their 100% virtual peers, "Most of the ones who come to school do their work

[hybrid students who learned two in-person days and three virtual days], and, um, so we see a lot better persistence when they're here!" Elaborating on Sunshine students' resilience capacities, Caroline noticed:

> … most kids, you know, kids are resilient, most of them, and they like being at school and being happy. I think it a lot of them do appreciate being able to come to school now… Um, yeah, um, I mean that, um, they're resilient in, they're not gonna, they might have been sad over the spring and summer. They might have really been struggling, and even in the Fall when we didn't get back. But I think a lot of them are over that now. I think they, they're back to complaining about having to come to school, or I think most of them really would be upset to have to go back to online learning, so I think they appreciate, you know, school's not so bad, and, so I mean they're resilient, and I think a lot of them, if they were sad, they're probably over it by now, they're back to normal in a lot of ways.

To draw a conclusion about how Sunshine Elementary proceeded through the school shutdown, Caroline asserted that her rural school community showed great strength and resilience to challenges and tensions induced by the COVID-19 school closure. Their persistence was eventually rewarded, and Sunshine maintained its school ranking in the statewide accountability system. Caroline acclaimed:

> School people are resilient! I think we could, I don't think there's anything they can't do! And when you, when you have a job where you're doing something for children, you know, you have to do it! And you, you have to make it work! And our, that goes for all schools *[sic]* teachers, just got it done!

Alongside with difficulties, Clara found that the extended school closure brought about positivity for some students with special education needs. Clara illustrated that ADHD students might benefit from learning at home and attain more educational achievements because they would not have to handle peer pressure. Clara elaborated:

> … a student with ADHD or like a student with a learning disability who would get either embarrassed at school or got in trouble at school, those kids having the online have actually helped them because they don't have the distractions of other students, you know, they're not trying to play off, not being able to do this, that, or the other, um, because they are at home in their room by themselves with little distraction.

Clara continued with another example about the positive side of the pandemic school closure. A student in Clara's third-grade class had certain struggles with peer socialization because she "got her way on things." The month-long school closure actually opened her eyes to appreciate friendship and modified acceptable behaviors to others. Clara recollected:

> I do have one student who she struggled, um, socially. She was kind of, I don't like to say the class bully, because I don't, I don't think that she was a bully, but she was one that kind of got her way on things, and the shutdown really taught her about how much she needed social interaction. And this year, she has done amazing in fourth grade, like has not had any fights, has not gotten in any trouble! And so in a way being stuck at home kind of taught her like "Oh! I need my friends. I need to behave!" like "I need to pay attention and get good grades." And she, she is flourished in fourth grade this year. So it kind of, the shutdown kind of humbled her a little bit, and it taught her the importance of, you know, going to school and paying attention.

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To summarize, the chapter presented three central themes aggregated from the collected data: school closure as a disruptor, the intersection between "COVID slide" and "summer slide," and school closure as a booster. The 2020 school facilities closure posed academic as well as non-academic disruption to elementary-aged students. The intersection between "COVID slide" and "summer slide" resulted in dramatic learning loss for disadvantaged rural students, which intensified the existing gap between students of different socioeconomic statuses (e.g., high- and low-socioeconomic statuses) and students living in rural and non-rural locales. Nevertheless, the 2020 school closure also boosted dramatic changes in the rural school community in terms of network infrastructure for distance learning, improvement of rural school-community partnership, students' development of lifelong learning capacities (e.g., technology skills and resilience).

CHAPTER V

DISCUSSION

This chapter starts by reiterating the research problem and the major findings. Next, these major findings are interpreted and discussed in light of previous literature, followed by a model of rural elementary learners' self and identity development. Lessons learned from the 2020 school closure are shared in the next section. The chapter ends with limitations and suggestions for further research.

This research study explored how third-grade students at a rural Southeastern school experienced the 2020 extended school facilities closure. While a few of the students shifted to an "losing" period until August 2020, approximately 95% were transitioned to distance learning with at-home academic packets. Yet only half of these distance students had access to web-enabled devices and broadband Internet to participate in virtual learning sessions, as claimed by teacher participants. Notwithstanding, the distance learning schooling schedule was especially challenging for young learners on account of academic and non-academic disruptors, which exacerbated the learning gap in terms of locale (e.g., rural versus non-rural students) and socioeconomic status (e.g., students from high-income versus low-income families). The unfortunate intersection between the "COVID slide" and "summer slide" resulted in learning loss. Nevertheless, the pandemic-induced school closure strengthened the interrelationships between the school and the local community via myriad supporting activities to meet the needs of the students (e.g., nutrition support, hot spots, free Wi-fi, masks, sanitized, teacher

mentorship, etc.). Furthermore, the school closure boosted third graders' technology skills (e.g., keyboarding, Internet research, manipulating a learning management system) as well as their resilience in the face of adversity.

This study was especially important and timely as (a) it viewed rural education within its own context – the rural context – with its own strengths and challenges instead of approaching rural schooling from a "deficit" perspective (Donehower et al., 2007; Kruse, 1995, p. 1), (b) it addressed the literature gap concerning how rural education confronted the world health emergency school closure by investigating the impact of an extended school closure on a rural community through its perception and responses to such an event (Blad, 2020; Sawchuk, 2020; Toquero, 2020), (c) it prioritized rural students' voices by examining the COVID-19 school closure experiences (e.g., self-challenges, regression, adaptation) of the rural school students who have been continuously "unheard, unseen, and under-represented" in the literature (Cormack, 2013; Donehower et al., 2007, p. 25; Schultz, 1999) through the lens of instrumental case study (Cachón-Zagalaz et al., 2020).

The Rural Context

Based on the definition provided by the National Center for Education Statistics (2006), White Water Consolidated School District was classified as "Town: Remote." Nonetheless, White Water crossed the geographic border and developed its own identity as a rural school community, as discussed by Azano et al. (2019) and Eckert and Alsup (2015). Krasava, a third-grade teacher, who used to work at two urban school districts, distinguished the rural and non-rural communities using the two characteristics: "family-oriented" and "community-centered." She elaborated on people's attempts to "make events and bring things in" and concluded that "you just got to come and feel it [the sense of rural community]." This point of view was

reminiscent of Iris's perspective about the school community where her family were living. Iris, a parent panelist, divulged that the school where her two daughters enrolled was of such small size that everyone knew one another, and altogether they formed a close-knit relationship. For example, on the first day of school when their family just moved there, the bus driver missed the two girls, Iris called the school, and then a few minutes later, the school principal came and pick up her two daughters for school. Besides, Iris added Cora's teacher and Savannah's teacher as friends on Facebook. The teachers usually gave comments on Iris's children. During the 2020 school closure, Iris showed sympathy with Cora's math teacher because her husband was usually deployed away from home, and the teacher had to handle her toddler and an online class of 10 or 15 students. Iris also demonstrated understanding for Cora's homeroom teacher (who taught Cora ELA, science, and social studies in the 2020-2021 school year), who could not hold online conferences for a whole week (April 19 – April 23, 2021) because of her mother's surgery.

From the standpoint of a school district administrator, King also associated his rural school community with "small-sized" traits. For example, King said that his school district was located in a small town with a small population; thus, the student enrollment was small. With a modest number of industries, small businesses, and approximately half of adults who finished high school or earned a lower education level, the majority of households lived under the country poverty line, which was in line with the low percentage of rural dwellers receiving a college degree reported by U.S. Department of Agriculture (2017) and Lavalley (2018). In fact, more than half of Sunshine students (256 out of 424) received Supplemental Nutrition Assistance or other governmental assistance in the 2019-2020 school year. King expounded that the "rurality" of his school district resulted from the low local tax revenue and limited financial resources of White Water. King also added that his school district was the largest employer in the town.

Accordingly, White Water Consolidated School District relied heavily on federal support to fund teaching positions, equipment, technology, and other necessary resources.

In an attempt to examine the rural setting of the researched elementary school, I created a new node "rural," which was generated from the term "rural" found in the word frequency count of the entire data corpus. This node "rural" had 83 references from 20 data files. A cluster analysis was carried out to explore the patterns as well as interrelationships of several nodes related to the three central themes. The selected nodes included "boredom," "lacking immediacy," "speeding," "distractions," "parental involvement," "assessment," "cheating," "no accountability," "promotion and retainment," "challenges," "multiple hats," "multitasking," "learning loss," "persevered," "the unknowns," "teacher-family communication," and "resources." A Pearson correlation test performed in NVivo 12 demonstrated the challenges that Sunshine Elementary encountered during the 2020 school facilities closure outweighed its advantageous resources due to its rural locale. The Pearson correlation coefficient between the node "rural" and the node "resources" was .002 while that between the node "rural" and the node "challenges" was .028 (See Figure 8).

Figure 8

3D Cluster Map of Selected Nodes Clustered by Word Similarity
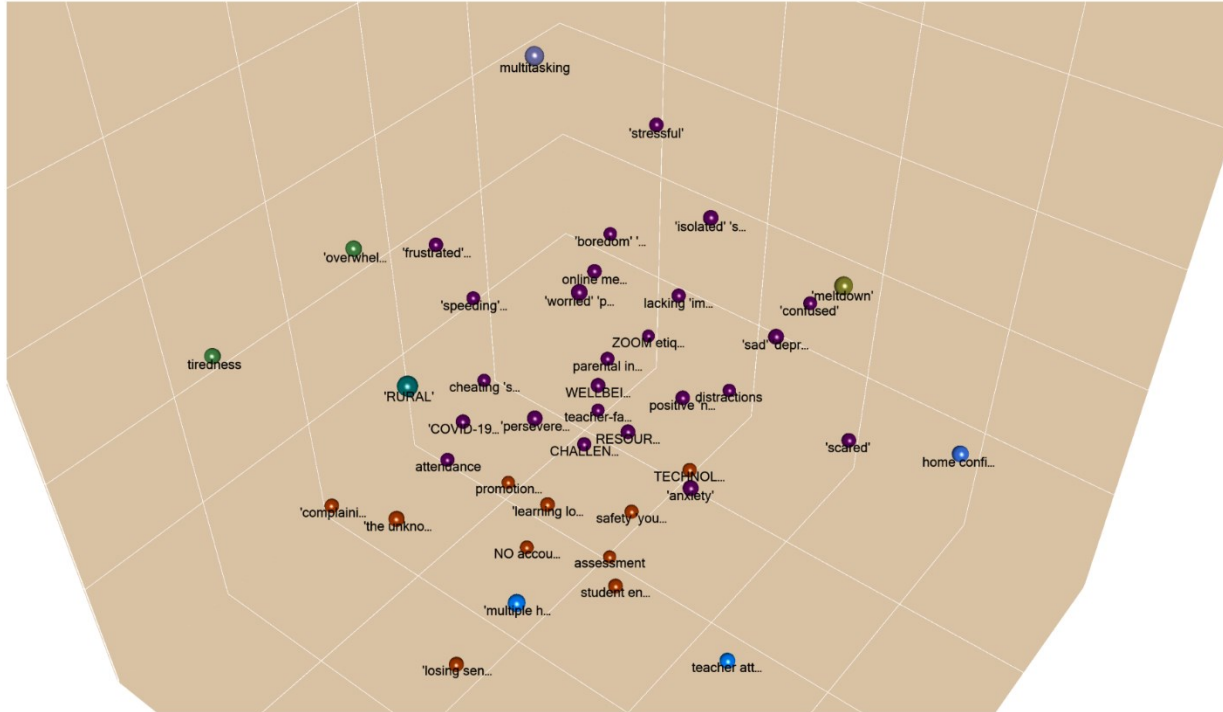
It was alleged that instead of associating "rurality" with "deficit," we should view this as a part of rural life. Rural education and its community had ongoing challenges, besides its own strengths such as small-sized classes, students with less discipline issues, rural funds of knowledge, teachers having more authority on school policies, strong ties with families, local businesses, and agencies (Azano et al., 2019; Barley & Brigham, 2008; Donehower et al., 2007; Moll et al., 1992). In line with Rush (Eckert & Alsup, 2015), "rurality" did have challenges and even failures, but these should be viewed as opportunities to learn and grow, to become flexible and creative in problem-solving, to engage and closely collaborate with the community.

The Rural Challenges

Aligned with the prior literature, intense and persistent poverty was the backdrop of various issues that challenge Sunshine Elementary (Lavalley, 2018; Monk, 2007; National Kids Count, 2020; NCES, 2015b, 2018b; Schaefer et al., 2016; The Nation's Report Card, 2020). Due to the "small-sized" student population, White Water School District and the school district of the county was consolidated into the current White Water Consolidated School District on July 1, 2015. Being the largest employer of the entire county, White Water Consolidated School District primarily depended on funding from the federal and state government rather than local tax contribution. Almost three quarters of White Water's funding sources in the 2017-2018 school year came from the federal and state contributions (See Table 4). The local taxes accounted for only 28% of the school district revenue. With a high number of low-SES students, the school district allocated over one quarter of its "shoestring" budget for food service and operations.

Table 4

White Water Consolidated School District Fiscal Data from 2017-2018

	Amount	Amount per Student	Percent
Total Revenue	$30,611,000	$10,013	
Revenue by Source			
Federal	$6,046,000	$1,978	20%
Local	$8,623,000	$2,821	28%
State	$15,942,000	$5,215	52%
Total Expenditures	$30,835,000	$10,087	
Total Current Expenditures	$30,066,000	$9,835	
Instructional Expenditures	$15,822,000	$5,176	53%
Student and Staff Support	$2,621,000	$857	9%
Administration	$3,539,000	$1,158	12%
Operations, Food Service, other	$8,084,000	$2,644	27%
Total Capital Outlay[1]	$619,000	$202	
Construction	$0	$0	
Total Non El-Sec Education & Other[2]	$7,000	$2	
Interest on Debt	$143,000	$47	

Note.
[1]Total Capital Outlay (District Expenditure): Expenditures for fixed assets, construction, and equipment.
[2]Total Non-El-Sec Education & Other (District Expenditure): Current expenditures for community services, adult education, and community colleges (if run by the school district). Also includes payments to other school districts, and payments to state and local government agencies.

From a national level, per student expenditure at Sunshine Elementary was reported to be at the bottom of the country. According to the Institute of Education Sciences (2020), the national level per student current expenditures for public elementary and secondary education in the fiscal year 2018 was recorded at $12,654. "Current expenditures" was described by the Institute of Education Sciences (2020) to consist of "instruction, instruction-related, support services, and other elementary/secondary current expenditures, but exclude expenditures on capital outlay, other programs, and interest on long-term debt" (p. 3). Mississippi was reported in the five lowest states of the United States with current expenditures per pupil of $8,909 ($7,576 in Utah; $7,846 in Idaho; $8,174 in Oklahoma; $8,373 in Arizona; See Figure 9).

Figure 9

Current Expenditures per Student for Public Elementary and Secondary Education, by State:

Fiscal Year 2018
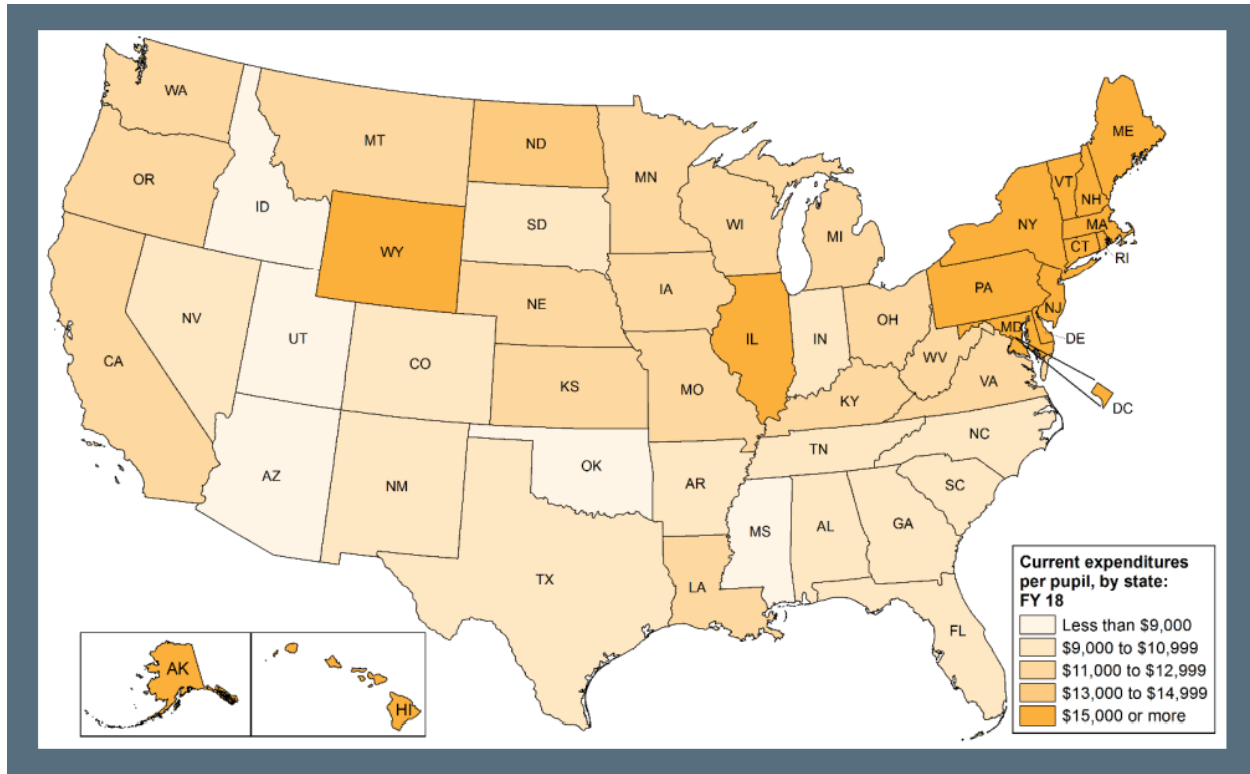
At school level, per pupil expenditure of Sunshine students was reported to be $7,790.94

in the 2019-2020 school year (MDE, 2021a). Accordingly, educational achievements suffered

from this limited funding. This was in alignment with Spatig-Amerikaner's (2012) findings

about unequal funding between schools with predominantly Caucasian students and those with

mainly African American students. After being consolidated in July 2015, White Water

Consolidated School District received a waiver of assessment accountability for the subsequent

two years. Two years after testing accountability was waived, White Water Consolidated School

District still ranked in the bottom half of the state based on the 2018-2019 test score results

(MDE, 2019b).

The Collective Power of the Rural School Community

When the 2020 extended school closure was imposed, first and foremost, it was argued that school-aged children's nutritional needs had to be taken into serious consideration prior to cognitive development. All of students at White Water Consolidated School District were eligible for the National School Lunch program. More than half of Sunshine students received SNAP or other governmental food programs. Many families depended on the school meals for their children to grow up strong and healthy (Christenson & Sheridan, 2001). The closure of the school facilities prompted the school district administrators to reallocate human resources to properly operate the food services. Similar to Stanfield Elementary School District (Hernandez, 2021), bus drivers, coaches, assistant teachers, and other school staff at White Water Consolidated School District teamed with the department of child nutrition to drive the school buses, delivering breakfasts and lunches to all students during the state-imposed shelter-in-place period. In alignment with the "magic flying carpet" metaphor that Smart and Russell (2018) utilized when referring to a rural community, White Water Consolidated School District cooperatively worked with the community to "sustain mutually beneficial conditions" (para. 3). Every community member contributed one or more threads to the carpet. During major upheavals such as COVID-19 health crisis, the passengers or the community were "especially vigilant" because the flying carpet might "unravel" (Smart & Russell, 2018, para. 3). For the sustainability of the rural community, all members kept reweaving with more fibers to "keep it [the flying carpet] from crashing to the ground" (Smart & Russell, 2018, para. 3). Local churches offered to bring food baskets to fight food insecurity for students. The meals were packed in coolers to keep temperature and then loaded onto buses so that they would be delivered to students who lived in the remote area of the county. The school district also set up drive-through

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lanes so that families were able to pick up the meal packages at school sites. This strong tie with the local community empowered White Water Consolidated School District during the worldwide health emergency (Dahill-Brown & Jochim, 2018).

Another "very real and very present" challenge posed to White Water Consolidated School District was the digital chasm, as discussed in prior literature (Cameron, 2020a; Griswold, 2020; NCES, 2018a; Valley & Rodriguez, 2020). Being a part of White Water Consolidated School District, Sunshine Elementary was caught in the poverty trap. Each classroom at Sunshine Elementary possessed only five learning devices before March 2020. Due to limited funding, Sunshine Elementary could not afford to provide web-enabled devices and broadband Internet services to all students, which resulted in the "packet route" for Sunshine students when the school facilities closure began. This was in line with what 41% of school administrators revealed in a nationwide survey about the shortage of devices at the onset of the school shutdown (Sawchuk, 2020). Some economically advantaged students had access to Zoom conferences with teachers, besides the packets. Others had access to neither the virtual sessions nor the packets because of the digital chasm and transportation issues. Similar to Valley and Rodriguez's (2020) remark on rural Nevada, Sunshine Elementary community also encountered the issue of high-speed Internet access, and this seemed to impact African-American students more than Caucasians.

In line with what was found by Azano et al. (2019), Barley and Brigham (2008) and Monk (2007), White Water Consolidated School District established strong relationships with the families, local businesses, churches, and authorities. Holding a fervent belief that "it takes a village to raise a child," the school stakeholders together with the rural community rose to the challenges of devices and reliable Internet access (Cameron, 2020a; Valley & Rodriguez, 2020).

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During the lockdown period, all White Water schools provided open Wi-Fi 24 7. Local businesses and organizations (e.g., Grayson Roofing, SkyFi Learning Laboratory by a local airport) also supported their efforts by expanding free Wi-Fi to parking lots. White Water Consolidated School District successfully collaborated with area pastors and community leaders to install hot spots in churches, rural community centers, and voting precincts for students' greater Internet accessibility.

Even parents in this rural community offered childcare and Internet assistance for economically disadvantaged students. Julia, a mother, commented on the school district Facebook webpage on July 24, 2020 that she offered babysitting and broadband Internet at her home for any students in the community so that they did not have to sit in "a hot car" doing assignments. Julia also called out to White Water community to "wor[k] together" so as to mitigate the enormous challenges of distance learning facing students and families. Similarly, another mother, Teresa offered Internet support for students with connectivity needs on the school district Facebook page dated September 1, 2020. Teresa's eleventh-grade son was also willing to do free tutoring for elementary students. Thanks to the school district endeavor and the wholehearted support from the local community, all White Water students were supplied with learning devices (e.g., iPad, Chromebooks) and Internet access to maintain their continuous learning in a blended environment of face-to-face and virtual learning for college and career readiness during the 2020-2021 school year. This successful story of the researched rural school community contradicted the biased, deficit stereotypes about "rurality" and rural education (Dahill-Brown & Jochim, 2018; Donehower, 2014).

The 2020 Extended School Closure Context

Different from previous school closures caused by climate-related natural disasters or student safety concerns (Cano, 2018, 2019; Children's Health Fund & The National Center for Disaster Preparedness, 2010; Grier, 2005), the extended school closure in 2020 was state-imposed by the crisis of the coronavirus, engendering myriad difficulties for White Water Consolidated School District, which emulated the findings by Institute for Nonprofit News (2020). It was alleged that young students thrived in an ecological system where clear-cut expectations, boundaries, norms, structures, routines, and procedures were established. The outbreak of the 2020 health crisis introduced drastic changes in Sunshine students' ecological system due to the "pandemonium" (Cameron, 2020b, para. 35). For the first time, Sunshine students experienced a brand new learning mode: distance learning. The swift change from the school microsystem to the home microsystem, together with the removal of the social element in the mesosystem, resulted in self-challenges, and subsequently generated both negative changes (e.g., regression) and positive changes (e.g., adaptation).

Self-Challenges

The challenges that students faced in the COVID-19 epidemic might be comparable with the consequences that New Orleans students suffered after the 2005 Hurricane Katrina and Hurricane Rita. According to Rangel (2010), many New Orleans students could not attend school during the 2005-2006 academic year due to the teacher shortage. In addition, they experienced mental distress as well as enormous disruption generated by the yearlong uncertainty. Five years after the hurricanes, up to 34% of students in New Orleans middle and high schools were at least one year below the grade level proficiency (Children's Health Fund and The National Center for Disaster Preparedness, 2010).

In the context of the state-mandated school closure, young learners were fraught with considerable self-challenges in their learning and social lives, which corroborated the disastrous impacts of the closure reported by UNESCO (2020b). They had to figure out how to toggle spatial and temporal changes in acquiring knowledge and skills because remote learning was "virtual" and "not reality." The learning did not take place "here and now" but virtually "from a distance" and/or in an (a)synchronous manner. "The dining room might be 'the new classroom,'" as claimed by Caroline, Sunshine Elementary principal, which substantiated Cameron's (2020b) observation. Unfortunately, it was the young children themselves who had to cope with these dramatic changes in learning mode because the closure was abruptly enforced by the exponential rate of COVID-19 infected cases. Jade expounded that elementary-aged students were "at a greater loss" than teachers because they had to deal with "a difficult new way of learning!"

Besides transitioning to distance learning, students had to handle a number of academic and non-academic disruptors (Jimenez-Rivero, 2020). Their home environment might not be conducive for learning because of myriad distraction such as background noise, technological distractors, family needs (e.g., babysitting) that they were not capable of dealing with due to their young age (Retter, 2020c). In addition, their mental immaturity might have shortened their concentration because their entire body was not under constant vigilance of the teacher. Moreover, students switched from learning to "losing" within a fraction of second because it was just a click away (Iwai, 2020).

Another significant challenge that Sunshine students dealt with was the lack of immediacy and intimacy with the teachers and peers (Iwai, 2020; Kim, 2020). Young students usually bombarded their teachers with questions because they did not have long-term memory for inquiries. Consequently, it was difficult, even "frustrating," for some students to tackle the

absence of the in-person teacher during the learning time (Jimenez-Rivero, 2020). The students might turn to seek assistance from family members such as grandparents, parents, etc. However, these family members might not be able to help because they did not learn math and ELA following the Common Core State Standards (Sawchuk, 2020). Frida, a mother participant, confessed that she had to "relearn" to help with her daughter's third-grade assignments. It was a "struggle" for Frida because "nine times out of ten," she gave her daughter the wrong information and her daughter looked at her as if she had "three heads." Frida even admitted, "I don't know what I'm doing!" This parent participant's lack of content expertise to help with her daughter's assignments resounded Marisol Chavez's (a parent living in Fort Hancock, Texas) incapability of assisting with her children's tasks (Jimenez-Rivero, 2020). In order for cognitive development to occur, young children also needed intimate connections with their teachers and peers. For example, some children wanted a hug from their teacher as a morning greeting. Others preferred a pat on the back from the teacher as a compliment for a certain attainment. They also desired a fist bump or a high five with teachers as a social greeting or agreement.

Nevertheless, young students did not receive those forms of in-person connections with teachers and peers because of the state-mandated public-school shutdown. The spatial context exercised certain influence on human relationship. Without physical or social connection, it was challenging to foster a strong relationship. People were prone to feel disconnected during a conversation over the phone or Internet, as opposed to a face-to-face conversation. King shared his thought about the adversities of the 2020 home confinement, "humans were made for humans!" He claimed that there were more opportunities for a disconnection between teachers and students when the students did not receive "a personal touch" and "a personal feel."

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The sheer duration of the 2020 extended school closure engendered physical, psychological, and emotional problems. Frida recalled that during the home confinement period, she and her daughter stayed at home 24 7, which resembled being "closed off from the world!" Frida also found it sophisticated to explain the circumstance of the month-long home confinement to her eight-year-old daughter because her daughter was too young to experience such "emotionally taxing" situation that even Frida could not comprehend herself.

Another challenge that students were confronted with was academic boredom. During the 2020 school closure, third graders received two "one-size-fits-all" learning packets, each packet including 20 two-sided pages of math and ELA assignments. Each weekday, Sunshine students were asked to complete a double-sided sheet with math assignments on one side and ELA on the other. The monotonous repetition of the assignments made distance learning "mundane." Additionally, teachers just primarily reviewed foundational skills and checked for answers to the packet sheets during Zoom meetings. There was differentiation in neither instruction nor assignments. Moreover, the lack of peer interaction aggravated the tedium. These findings resounded the results from a national survey at the end of the 2019-2020 school year by EdTech Evidence Exchange (2020). Up to 82% of teachers believed that their students needed differentiated instructions, yet 81% of teachers taught "less" or supplied their students without new learning materials in spring 2020.

Similar to Cuba Independent School District, New Mexico (Griswold, 2020), besides self-challenges posed for students, White Water Consolidated School District was confronted with a rural school problem that influenced how students overcame trauma to some extent: teacher attrition (Lavalley, 2018). Unable to provide incentives or financial compensation for "pocket of excellence," the school district could not retain high-quality teachers, especially when

the health emergency was factored into the equation. This was in alignment with Ingersoll's

projection about the spike in teacher resignment or retirement in COVID time (Will et al., 2020).

King disclosed that over 30 teachers left his school district at the end of the 2020-2021 school

year. Some retired, some relocated, and the remainder "w[ould] never teach again!" due to

burnout. He gave an example of a chemistry high school teacher who left for Stockton, a

neighboring school district whose student population was nearly double that of White Water

because Stockton offered incentives for signing a contract with them. King additionally

illustrated that a teacher friend who earned a graduate degree in education left the profession

after one-year teaching to become a national chain restaurant manager. Receiving low income

and low recognition, teachers easily felt physically and emotionally exhausted when shouldering

extra responsibilities induced by the school closure (e.g., learning to manipulate a new learning

management system – Canvas, preparing materials to deliver in-person and distance instructions,

teaching/ assigning/ grading coursework on Canvas, delivering lessons via Zoom). These

increased responsibilities became "more burdened" for veteran teachers who did not receive

preparation regarding virtual instruction during their pre-service teacher training programs. Also,

it was "a big learning curve" for these teachers to become technology literate on account of their

ages. On top of those were the negative stress and anxiety caused by the rampant COVID-19

pandemic with which they or their family members might be infected because they were front-

line workers (Flannery, 2020b). King made an analogy between dealing with the COVID-19

teaching and riding "an emotional rollercoaster." Accordingly, he lamented the "all-time high"

teacher burnout at his school district. In fact, King's discussion of the teacher attrition problem at

his rural school district in the COVID-19 time reverberated the task of "building the highway

while driving 80 miles per hour" that Ashley Fredo, the principal of Morningside Elementary

School in New Braunfels, Texas verbalized about the staffing challenges at her school (Justin, 2020, para. 9; Retter, 2020b, 2020d).

Regression

The 2020 school closure together with distance education induced personal regression. An unanticipated by-product was students' "speeding" through their given assignments. On account of the dullness of the repetitive double-sided sheet of math and ELA, young learners were frequently observed to "rush" through their work to spend time on non-academic activities. For instance, Margaret did not watch her teacher's videorecorded lessons entirely, she skipped halfheartedly through the videos.

Another unique phenomenon was the weakening interpersonal skills after the month-long home confinement. Elementary students, even sociable ones, acted like "deer caught in headlights" when they were seated with one another at school.

The pandemic brought out "the beast in this curriculum:" lethargy. Using COVID-19 as a "crutch," several students opted to distance learning during the whole 2020-2021 school year. Yet these students were recognized in different places in town by Sunshine Elementary principal and teachers. Caroline exclaimed, "They're everywhere else but school!" Another explanation for students' absenteeism was that they might have to shoulder their share of the family financial distress (Retter, 2020c). Linda Pfeilsticker, Winona Education Association president, explained that rural students prioritized the need to secure their family income, not schooling, during the pandemic.

According to Clara, some virtual students chose remote learning because they did not want to study hard. Online learning was challenging at the beginning; however, as their technology skills improved, students with "full laziness" used the shortcut to complete

assignments, which created the "slippery slope." Lacking delayed gratification, students would search for answers on Google and completed the assignment quickly. Alternatively, virtual students were able to ask family members to complete the homework for them.

Furthermore, students returned to in-person school with an "end-of-May" attitude, as remarked by Kevin Genisot, the superintendent of the Hurley School District, a rural school district in Wisconsin (Cameron, 2020c, para. 38). Clara also observed that some Sunshine students showed their tiredness on Tuesday morning because "they had stayed up for three nights in a row!" Accordingly, teachers almost lost a part of their instruction on Tuesday because "half of the kids were falling asleep."

In contrast to Sunshine principal and other teachers, a teacher participant, Krasava expressed a different perspective on students' lethargy. According to Krasava, in lieu of causing idleness, the COVID-19 pandemic impelled school stakeholders to become "very hyperactive, and nervous, and anxious, and trying to learn as much new stuff as [they] could!" Krasava confessed that some students might have shown indolence in the first quarter of the 2020-2021 school year, but then they realized "Hey! This is a grade, and this is real!" and "worked harder" for the rest of the school year.

Taken together, the COVID-19 school closure led to certain regression in young learners' self-development. They lost the in-person instruction of a complete quarter of the 2019-2020 school year. Third graders did not have a chance to practice, review, revise foundational skills that were essential for the fourth grade. The closure was then followed by the summer vacation. The mishap intersection of "COVID slide" and "summer slide" resulted in tremendous learning loss, especially for economically disadvantaged students (Alexander et al., 2007, 2014; Jimenez-Rivero, 2020; Jones, 2021; McNulty & Baird, 2020; Naughton, 2021; Sawchuk, 2020; The

Associated Press, 2021; WLOX Staff, 2021). It was claimed that third-grade students whose reading proficiency was not achieved were four times less capable to graduate from twelfth grade on time and that the chance that these students dropped out of school increases (Loewenberg, 2015; Pryor et al., 2021; Workman, 2014). In addition, students who lived in welfare families for at least one year were six and a half times less likely to finish high school on time. The circumstance became even worse if the welfare students lived in a rural area due to many "hurdles" such as low investment in the rural school infrastructure, less innovative academic programs, limited student services (Schaefer et al., 2016).

During the coronavirus state-mandated shutdown, economically disadvantaged students could not afford a device nor high-speed Internet to participate in virtual conferences with their teachers and peers. Due to the rural locale, students with web-enabled devices were not capable of joining the learning session because they lived in the remote area of the county where there was no Internet service. Even Caroline, Sunshine Elementary principal, had to drive to town to join Zoom meetings with her teachers using the Wi-Fi on her cell phone. For students without transportation, they did not have access to even the learning packets, so these students experienced the "losing" during the extended school closure period. Consequently, an academic regression appeared with just 13.9% and 19.4% of students proficient in math and ELA in the 2020-2021 school year respectively (MDE, 2021b) (See Table 5). The findings echoed the statewide K-3 literacy decline in Iowa (Naughton, 2021) and substantiated the McNulty and Baird's (2020) projection about the achievement gap for low-SES students.

Table 5

White Water Consolidated School District Achievement Gap

Subject	2018-2019	2020-2021	Change
Mathematics Proficiency	41.5%	13.9%	-27.60%
ELA Proficiency	32.2%	19.4%	-12.80%

In the circumstance of multitudinous challenges that young students faced, the state department of education decided to offer "a whole host of waivers" of assessment accountability for the 2019-2020 school year. As a consequence, third-grade students did not take the statewide standardized reading test, and their promotion to the next grade level was not based on this state test scores. This accountability waiver had a two-fold impact: positive and negative.

On the positive side, the waiver demonstrated the compassionate understanding and sympathy of educational administrators towards the students' immense hardship caused by the school closure. On the negative side, the lack of accountability in the 2019-2020 school year resulted in unexpected repercussions (Gonzales, 2020; Herold, 2016; Iwai, 2020; Jargon, 2020).

In reality, the assessment accountability waiver triggered a "snowball" effect that made White Water Consolidated School District unable to plan strategically for the 2020-2021 school year because of the missing assessment data. In the 2020-2021 school year, many fourth graders at Sunshine Elementary were in the "wrong seats" because they did not acquire necessary skills and knowledge to be prepared for fourth grade. As a result, the number of students retained at Sunshine Elementary in the 2020-2021 school year was six times higher than that of previous academic years. This resonated what Deanne Sczepanski, a retired teacher in Whitehall, Wisconsin complained about the "absolutely ridiculous" accountability waiver and all students being promoted (Sczepanski, 2021). Sczepanski argued, "You cannot tell me that a child is

learning with no teacher in the room, no setting conducive to studying in the home, and a great lack of parental discipline" (p. 5b).

Adaptation

Being "thrown" into a circumstance of much "upheaval," "turmoil," and "unknown" triggered by the world health emergency, elementary-aged students were compelled to learn to adapt to the new context, which promoted their lifelong learning mindsets. Two noticeable capacities that they learned included technology skills and resilience.

During the fourth quarter of the 2019-2020 school year, the traditional schooling schedule was halted. School administrators wearily "chased after" educational guideline updates from the federal and state government about safe teaching and learning operations because it was a "moving target" (Superville, 2020). Along with the hasty switch from traditional to distance education was the substantial change in lesson delivery. Teachers utilized a cloud-based software platform such as Zoom to host teleconferencing sessions with students. Given the new learning context, young learners had to adjust their learning strategy accordingly. At first, technology illiteracy posed difficulties for students in the process of "self-actualization" to tackle remote learning (Pryor et al., 2021). Yet virtual learning became easier "once we got the hang of it," vocalized Rhett. Virtual learning environment became an opportunity for students to develop and enhance their technology skills such as keyboarding, Internet research, digital content evaluation, which partially contributed to their college and career readiness.

In the face of adversities engendered by the COVID-19 health crisis, young students experienced multiple academic setbacks and mental health challenges. Margaret demonstrated her preference for face-to-face learning over distance learning mode because learning from a distance confus[ed] her. Margaret had to see the teacher "in person" to acquire and retain

information. Jasmine, a mother of two students enrolling at White Water Consolidated School District, condemned distance learning on its inferior quality compared with traditional learning. Jasmine elaborated that her children did not have sufficient time to spend on the learning material, and that they were not able to raise immediate questions to gain understanding. During the school closure, Margaret was caught by her mother to first time use the "exotic" vocabulary "isolated" to discuss her feeling about the home confinement. Being too overwhelmed to deal with the "emotionally taxing" school closure, Bob had a meltdown one evening when he bewailed the occurrence of the COVID-19 pandemic school closure, the lack of peer socialization, the lack of teacher interaction, and the tragic circumstance of the home confinement.

"School people are resilient!" hailed by Caroline, Sunshine Elementary principal, and then continued, "kids are resilient." Caroline observed that her students experienced academic, psychological, and social struggles in Fall 2020 when Sunshine reopened to hybrid and virtual learning options; nonetheless, the majority recovered and bounced back to their normal school life in spring 2021 mentally and not so much academically. In alignment with Retter (2021b), after the extended closure period, Sunshine students returned to the traditional school with a higher appreciation for school, for teachers, and for friends. Clara gave an example of her socially struggling student who always "got her way on things" before the pandemic. After the lengthy home confinement, this fourth-grade student realized that she had to adjust her behaviors at school, and thus became more cordial and amiable to her peers. In the 2020-2021 school year, she "has not had any fights" and "has not gotten in any trouble!" With hindsight, Krasava also asserted that Sunshine students, together with other school stakeholders, rose to the challenges

and tackled obstacles positively during tough times because they shared the firm belief that "this will end eventually! And we're going to be better off because of it!"

The Model of Personal Self and Identity Development

A model of personal self and identity development was constructed to visually represent the experience of rural elementary-aged students throughout the COVID-19 pandemic school closure. This model comprised of four reciprocal components that contributed to the development of the personal self and identity (i.e., learner): context, community, regression, and adaptation (See Figure 10).

Figure 10

The Development of Personal Self and Identity of Rural Elementary-Aged Leaners
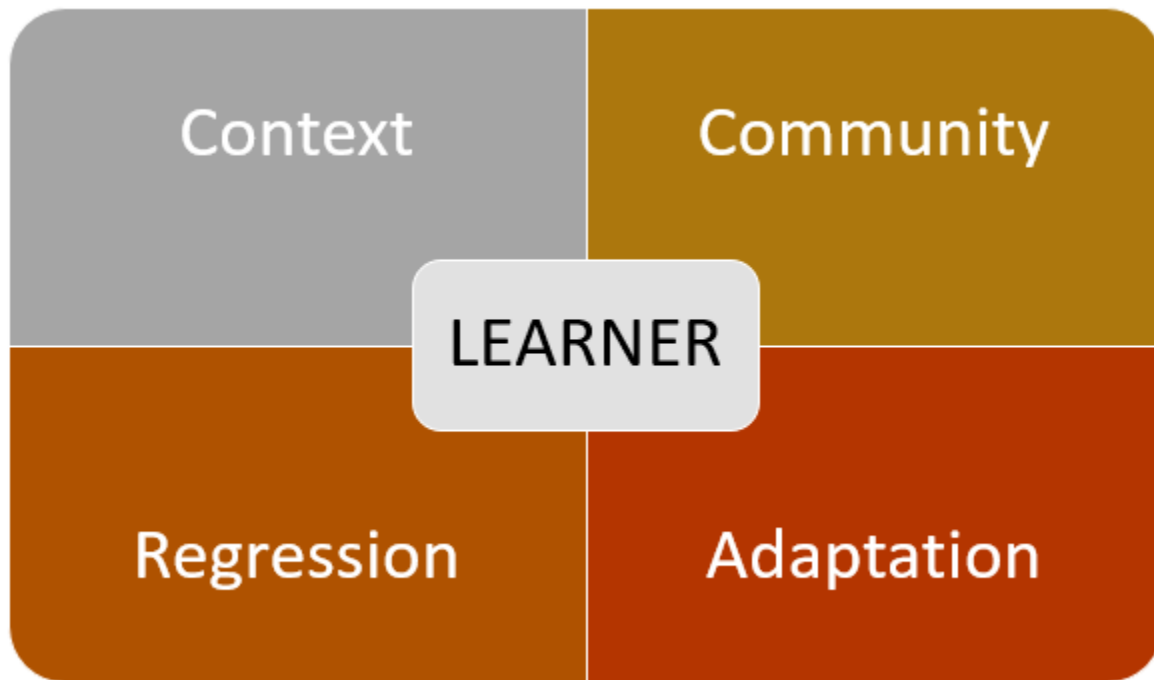
The Context

The novelty of a context pushed the learner into a new setting where they experienced and fathomed the "unknowns" and "uncharted waters." Within the context of the pandemic-induced school closure, young learners had to switch abruptly from the traditional schooling to distance learning. Having little to no experience with distance learning, elementary-aged learners sought to combat a myriad of problems relating to academic attainment, psychological wellbeing, social needs. Handling both a new learning mode and the home confinement circumstance was tremendously difficult for young learners. Consequently, it took a great deal of time, effort, supports, and even "tears" as they perceived and subsequently acknowledged the presence of various entities in the unaccustomed context.

The Community

The second component of the development model was the community. Since this research study was situated in a rural school locale, the community referred to the rural community as a whole. Due to their immaturity, an elementary-aged learner might react to the changes in the new context with a negative rather than a positive attitude. Nevertheless, as a mother articulated in her comment on the school district Facebook webpage, "it takes a village to raise a child," school administrators, teachers, families, local businesses, area leaders, and organizations engaged in a collaborative effort to support the young learners through their severe hardship. No Sunshine Elementary student was left to starve despite the school facilities being closed. Prior to the school closure, there were only five devices in each Sunshine classroom, and the Internet services were "spotty" and even did not exist in the remote part of the county, and this was more like an access rather than an affordability problem in rural schools (Valley & Rodriguez, 2020). By the end of 2020, every Sunshine student was provided with a web-enabled

learning device, and fiber Internet was installed in half of the town. The percentage of households with broadband Internet increased from 66.7% to 71.9%, according to a report by Education Demographic and Geographic Estimates (2021). On social media, families offered economically disadvantaged students assistance with child management and high-speed Internet connectivity.

The last two components of the model were the learner's interactive experiences with the new context: regression and adaptation. Despite being paradoxical, regression and adaptation were normal steps in child growth and development because no child could maintain a continued ascending development (Brazelton & Sparrow, 2016). From motor development, cognitive development, to emotional development, the development line resembled a "jagged line" with "valleys," "plateaus," and "peaks."

Regression

Being thrown in an unfamiliar context, a child initially underwent and assessed the substances of the new context, and then formulated responses accordingly. In the context of the COVID-19 pandemic school closure, some young students experienced "valleys" in their developmental line.

In this research study, learning loss, "speeding," and lethargy happened to many elementary students as a result of the convergence of the "COVID slide" and "summer slide." Feeling bored with the monotonous daily reading and math worksheets, students "sp[ed]" through the assignments rather than spending time on learning, reviewing, checking, and retaining the information. In the face of adversity, young students did not have the courage to confront and tackle the unpleasant situation. They stumbled on the bumpy road and made regression to the less developed state. Academic boredom, exacerbated by home confinement,

made Noah, a student panelist, "angry," "stressed," and severely "depressed" that Mia, his mother, made a tough decision that Noah returned to in-person learning in March 2021, regardless of the widespread COVID-19 pandemic circumstance, after having been on virtual learning for 11 months (i.e., March – June 2020, and August 2020 – February 2021). Mia elaborated she was afraid that her only son would "go mad" if he continued with online learning. She also admitted her incorrect assumption about her son's needs during the 2020 school closure. As a distance employee, Mia worked from home, thus was confident that she was able to "reteach" math and literacy to her son after virtual lessons as well as allocate outdoors time for his bike-riding at local parks. During the 11-month virtual learning, Noah increasingly showed signs of anger, depression, and anxiety, which made Mia realize that she had "underestimated" her son's socio-emotional needs. Mia uttered that she should have sent Noah back to traditional learning at least five months earlier (i.e., October 2020).

Another example of regression was the weakening social interpersonal skills caused by the state-mandated shelter-in-place order. Findings from this study demonstrated that nearly all students revealed that the school closure made it more difficult to start a friendship because of the lack of "tables" for "table talk." Bob had a meltdown one evening when he could not process all the frustration engendered by the lack of peer interaction. Regarding the hypothetical question, the only wish that Noah had was to use the magical wand to "change the teacher's mind" so that his teacher would "let [him] and [his] friends chat!" during the virtual conferences.

Yet one student panelist, Hunter, asserted that the distance learning enabled him to make friends with less effort. Hunter said that virtual platform made it more comfortably to "say something to someone" than in traditional schooling. He elaborated that the face-to-face constraint inhibited him from "go[ing] up to someone, and say[ing] "want to be friends.""

Hunter's background differences (e.g., age, grade level, ethnicity, socioeconomic status) might account for this friend-making discrepancy. Being an Asian student from a low-SES family, Hunter did not participate in extra-curriculum activities (e.g., sports teams, dance classes, music classes, theatre group, crafting, arts) after school as his high- or middle-SES counterparts did. Therefore, school became the mere place where Hunter could practice friendship skills (e.g., improving self-confidence, joining, sharing, taking turns, showing empathy, being a good listener) to find and make friends. During the 2020 extended school closure, Hunter was in middle school (i.e., sixth grade) whilst other student panelists and student participants of this study were in elementary grades. At the onset of puberty, Hunter became highly susceptible to peer pressure, and suffered from natural anxiety. Middle schoolers varied markedly in physical development from height to weight as well as emotional maturity. Additionally, it was likely that Hunter was first time exposed to social diversity (e.g., ethnicity, cultures, economic statuses, values, customs) in middle school. Consequently, Hunter found it more challenging to navigate amongst these diversities and start a friendship in person, as compared to making friends virtual.

Adaptation

In response to the hypothetical scenario that a participant was given Harry Potter's wand to make a change during the 2020 school closure, Samuel, a community member panelist, did not want to make a wish with the wand. Instead, he asked for Potter's glasses and utilized them as the magical instrument (the glasses needed to be in excellent condition, which meant it was clean, free of fingerprints, and full of new battery) to see "visions" and "opportunities that are not normally viewed in an everyday circumstance." With these Harry Potter's magical glasses, the extended school shutdown was viewed as a window of opportunities for students to develop lifelong capacities such as technical skills and resilience. Besides "valleys" or regression, a child

also experienced "peaks" on the growth line thanks to the fruitful partnership between the school and the rural community.

Technology Skills

To adapt to the new context of distance learning, young learners learned and improved their computer skills by trial and errors with adults' aid from the home and school microsystems. The context of distance learning gave students a plethora of chances to enhance their technical skills.

Children were applauded to better acquire computer-related skills than adults because of their enthusiasm for doing "experiments" with computers and online programs (MM, 2000). Likewise, Muftau (2014) expounds that children possessed facilities which assisted them to acquire new information more quickly than adults in some cases. Adults encountered "functional fixedness" because of their developed prefrontal cortex, whereas children showed considerable flexibility and creativity. For instance, with an established working memory, an adult might perceive the crescent moon as the earth's satellite at a stage between the new moon and the first quarter or a stage between the last quarter and the upcoming new moon. Yet a child, who had less developed prefrontal cortex, might look at the crescent moon and see a banana in the sky. Muftau (2014) also notes that children's minds were tailored for effective learning and adults' minds were susceptible of performing.

Accordingly, with the wholehearted support from parents and teachers, young students familiarized themselves with keyboards, mouse, file and folder management (e.g., saving, naming, renaming, moving, copying, pasting, deleting), and word processor software applications such as Microsoft Word. Besides basic computer operations, students acquired fundamental Internet skills such as connecting, browsing, and accessing websites (e.g., YouTube

videos), joining a teleconference (e.g., Zoom), navigating learning platforms (e.g., Canvas, Google Classroom), participating virtual activities (e.g., Google Slide, Google Forms, Google Earth trips). Clara sometimes did online "walkthrough[s]" with her students to various places such as zoos, national museums, and Disney World. Frida recalled that she teamed up with her daughter's teacher so that Margaret was able to virtually tour the zoo, the White House, and museums in Washington, D.C. Krasava shared that she and her students completed a virtual class yearbook that included their pictures as well as "about me" information. Taken together, elementary-aged learners had prevailing factors such as having premature prefrontal cortex, being bold experimenters, and opportunities to practice technology skills, which enormously aided them to adapt to distance learning in the COVID-19 school closure context and later successful online learning at college level.

Resilience

In addition to solidifying technical skills, the extended school closure also opened the window of opportunity for students to build up resilience manifested through the development of the following four attributes: structure, curiosity, patience, and perseverance. Drawing massive assistance and support derived from the home and school microsystems (i.e., creating age-appropriate structure, arousing intellectual curiosity for academics, promoting patience and perseverance), young students acclimatized themselves to the COVID-19 school closure context and surmounted emotional, social, and psychological obstacles.

Structure. Young students grew and thrived in an environment where structure, norms, guidance, routines, and boundaries were set up. They wanted to know what were expected throughout their day (CDC, 2019). Consequently, the absence of these "stability" elements took away their sense of security. According, all parent participants disclosed that creating structure

was one of the first things that they did to support their children's at-home learning. Initially, a "designated place" (e.g., a room in the house, a student desk) and "space" were identified for distance learning. For example, Rhett "moved" his classroom from school to his home by making his room resemble his school as much as possible. For example, Rhett designed a little yellow triangle decorated with the words "T-Rex crossing" and a little picture of a T-Rex skeleton on, and then hung the sign over his bedroom door. Rhett also made a bulletin board saying "This is our class" with his name on. Another sign that Rhett made saying "Home School" was also hung on his door.

Next, a "consistent routine" including regular academic and non-academic activities was created by both family members and the children. The established routine started from the time when the children woke up in the morning until their bedtime (CDC, 2019). Besides literacy and math, the schedule might cover other core subjects of science, social studies, and specials such as arts, music, and physical education (PE). Non-academic activities such as mealtime, learning breaks, snack time, bathroom breaks, playtime were also incorporated for children to settle in a balance routine. Kai, a parent panelist, shared that establishing a balanced routine helped Chloe persist through the last quarter of her third grade, "the routine is really helpful, making sure she has the sleep, and the food, and exercise. That's [sic] makes a big difference!"

With a proactive attitude, at the beginning of the school closure, Iris sat down with her daughter, asking about Cora's learning schedule at school before the pandemic hit, and then built up a home learning schedule that was similar to what Cora had at school prior to the school closure. Iris used the timer on her smart phone to set time for different subjects. During PE time, Iris arranged some activities for her kids following YouTube Kids workout videos, Just Dance video game (e.g., push-up challenges). Having a degree in arts, Iris created arts projects for her

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children such as making a fairy garden in the backyard, fuzzy spider web, Forky (Toy Story 4), piñata.

Similarly, Jasmine organized and managed appropriate time for her work, alongside with her time to support the two sons' learning at home. She chose for Colton to have Zoom conferences in the morning (Colton's teacher offered families with two distance learning options: morning conferences and afternoon conferences) so that later during the day, Colton would work on assignments and get help from her whenever he needed to. Besides the Zoom meetings, at-home learning packets, Jasmine had Colton work on additional reading and math assignments on Moby Max and Reflex Math. Besides, Jasmine purchased chapter book series and graphic novel series from Amazon, printed out materials from https://www.readworks.org/ for her sons' extra language work. Jasmine also used science experiments from Pinterest for her sons. Regarding PE, she encouraged her sons to do outdoor activities such as riding a bike, playing basketball, jumping on trampoline, etc.

During the implementation of the day-by-day routine, family members frequently "followed through" and "checked behind" the children to ensure that they spent sufficient time on subject areas and that academic assignments were completed and submitted on time. The school closure elevated King and his wife to become the "instructional coach" of their children. They spent more time on "follow[ing] through" to assure that their children were doing the school assignments. In addition, King had regular communication (e.g., sending messages, emails) with his sons' teachers through School Status.

Furthermore, family members communicated their expectations for the children. During the learning time, Iris tried to get her children focus on schoolwork by not allowing them to use technology such as TVs, smart phones, iPod. Iris and her children even "signed" a "contract"

which stated that they could not use their phone until they finished the assigned schoolwork and at least one house chore. In the same vein, Frida made an effort to structure the best learning environment that she could for Margaret. For example, she turned off TV and other electronic devices when it was Margaret's learning time. If a friend sent Margaret a message, Frida "would tell [Margaret] [she] can't read the messages or anything until all [her] homework's gone."

Curiosity. Albert Einstein was quoted as saying, "Curiosity is more important than knowledge" (Einstein, n.d.). It was argued that intellectual curiosity played a significant role during the 2020 school closure when students switched from traditional to distance learning (Mario, 2020). Expounding on the content of virtual lessons, Clara underscored the importance of designing Zoom conferences filled with engagement and interaction, which aroused her students' curiosity. To illustrate, Clara normally employed scavenger hunts and "show and tell" as a way to integrate other core subjects (e.g., history, social studies). In a scavenger hunt, Clara said, "All right, go find something that's red!" Her students left their computers to roam around the houses and fetched red items. When the students returned, Clara asked them to tell her and the classmates about the items, which Clara subsequently used the items as "input" and created "little mini lessons off of the items that they found." In this way, students' curiosity for new information was triggered, and thus "ignite[d] [their] desire[s]" to acquire new knowledge. Being exposed frequently to such lessons naturally stimulated students' inner drive for new information. Steadily, students became autonomous learners at the "self-actualization" stage when they learned for the sake of learning. Moreover, Clara captured her students' curiosity by encouraging them to ask questions and then allocated time and space to address their queries. During the school shutdown period, Clara exclusively saved Friday as a "question day" when her students could "hop on and ask [her] questions."

Samuel also highlighted the role of curiosity as a vital characteristic to support students'

success throughout the 2020 school closure. He illustrated by narrating an anecdote between him

and his third-grade granddaughter, Cora.

Cora: Oh da, I could not find my book!

Samuel: [Cora]! Go find your book! Don't waste my time!

Cora: I can't find it!

Samuel: [Cora], if you cannot find every time you lose your book, a baby unicorn will

die!

When Cora said that she did not find the book, Samuel was certain that she "had purposely lost"

the book. Cora refused to join the reading time with Samuel until Samuel piqued her curiosity by

associating the lost book with the death of a baby unicorn. After that, Cora found the book

herself and read four or five pages with Samuel. As adults, we pressed the "pause" button on our

"child remote control" and forgot what being a child was like. Samuel chose the image of a baby

unicorn to awaken his granddaughter's curiosity based on certain indicators. He observed that

Cora wore a t-shirt with a unicorn on, so he used that as a predictor about her interests and

pushed off the "pause" button on his "child remote control" to seek a way to engage Cora into

reading by arousing her intellectual curiosity.

Patience. The length of the month-long school closure in 2020 was enough to tax the

patience of a saint. During the interviews with parent participants, parents kept discussing a new

parenting skill that they learned from the global health emergency pandemic: patience (Jimenez-

Rivero, 2020). Iris, a mother panelist of four young children with ages ranged from one to nine

(Cora was the eldest and in third grade in the 2019-2020 school year), divulged, "being at home

all day and getting to have all that time with your children, and it's great until they're home for a

whole 13 months!" The pandemic school shutdown "really tested [Iris's] patience" with her children and vice versa. Iris disclosed that the pandemic caused her patience to dwindle "from here [with her right hand at the same height with her forehead] down to here! [moving her right hand downward to the same height with her chest]" yet her children's patience was described to become "bigger" and "better." Her children were able to endure difficult situations of distance learning (e.g., unconducive learning environment, lacking immediacy and intimacy, home confinement) with less annoyance and anxiety. They accepted and tolerated one another as well as their mother.

According to Philip Zelazo, a University of Minnesota professor of child development, human patience was a combination of three executive functioning skills: working memory, inhibition control, and cognitive flexibility (Calechman, 2019). The virtue of patience appeared as early as an individual was six months old and continued to grow until one reached the age of 25. Therefore, during elementary years, children were on the way to improve their immature skills. Likewise, Jill Trumbell, a University of New Hampshire professor of human development and family studies, encouraged parents to support children's capacity to wait because patience comprised of two real-world skills – self-control and delayed gratification (Calechman, 2019). "Every day all day" during the school closure, Frida always attempted to "find stuff to do," "find something to, um, entertain her [daughter]" until Frida realized that it was time to teach her daughter to be patient, "I am a person. You are a person. Get out of my face! I love you, but get out of my face!" It was developmentally appropriate for children to be self-centered, and when they started school, they tended to be less self-centered and thus showed less anger. At the age of third graders, children began the process of criticizing and self-criticizing, so they learned to self-regulate and adjusted their expectations (Calechman, 2019).

Self-control and delayed gratification were reflected in the reward system (e.g., reward cup, voucher) utilized by all parent participants to praise the children's good academic behaviors during the COVID-19 school closure (CDC, 2019). The two-fold purpose of this system included aiding their children in the fight against academic boredom induced by distance learning as well as boosting their academic motivation. "The carrot and the stick" approach was employed to impel the children in scholastic directions which they would be rewarded with "the carrot." Academic motivation was steadily conditioned by the reward system and became sustained. In case the children did not perform the desired behavior, they would receive "the stick" punishment, which meant they could not receive any treatments (e.g., cookies, ice-cream, 15-minute video games, watching TV). Also, the reward system cultivated patience in the children because they waited for the rewards while doing the educational tasks. Eventually, students reached the "self-actualization" stage when they were able to self-regulate their learning habits without recourse to "the carrot" reward. In other words, students developed a high level of interest for academic subjects, which enabled them to approach "unknown," challenging situations and persisted during the quest of intellectual and experimental unfamiliarity.

In this study, Jasmine articulated that she had to encourage her sons to work on their assignments every single day during the COVID-19 school closure by offering rewards such as fun science projects from Pinterest, a family night game, and stick reward system. Similarly, Frida and King also used "the carrot and the stick" method to motivate their children to study from a distance. Margaret, Frida's daughter, was rewarded with sweet treats such as candies, ice cream, cookies, cupcakes and "screen time" after completing assignments. King paired his sons' at-home learning with the "voucher" reward system, which the children had to postpone their

immediate desires, regulating themselves to finish academic work prior to playtime or receiving reward "vouchers".

Perseverance. Perseverance was one of the coping mechanisms that helped young students overcome the pandemic school closure. This trait was taught by more capable and mature adults (e.g., teachers, parents). Sunshine teachers shared with the students how they persevered the COVID-19 pandemic. Clara employed a number of coping strategies such as being positive and enjoying nature. She made lemonade out of lemon, which was resounded in Samuel's approaches toward the emotional and social challenges caused by the global health crisis, "if you have lemons, if you have negatives in your life, lemons sour, then take those lemons and turn them around and make lemonade. All you need to do is cut them, squeeze them, add some sugar and drink." During online meetings, Clara relayed these positive attitudes to her students. For example, she usually had students do a scavenger hunt for things in the house or their garden (e.g., "Go pick a flower, take it to your mom"). Similarly, Krasava disseminated the unshakeable faith to other school stakeholders that the pandemic would terminate and that everyone would become "better off" in a more advantageous state. In this respect, Krasava was practicing the Japanese wabi-sabi world view of which the core value stated that "misery is optional." Instead of being obsessed and wretched by the negativity of the inauspicious COVID-19 school closure circumstance, she accepted the challenges or the imperfection of the existing adversity and appreciated the "beauty" or the positive changes in its "imperfect, impermanent, and incomplete" nature because these hurdles would eventually support students' growth (Sakura News, 2019).

According to Boonen, Damme, and Onghena (2014), teachers with their characteristics such as background, qualifications, teaching beliefs/philosophies, attitudes, and pedagogical

practices exerted a modest-to-strong impact on student achievement. Likewise, Hattie (2009) corroborated that teacher effects had a moderate effect on student success with a small-to-medium effect size of 0.32 while that of teacher-student relationships was 0.72. Wielding such dominant influence on elementary students, Sunshine Elementary teachers enabled to transfer their COVID-19 coping strategies (e.g., nurturing optimism, resorting to nature) to the students. Clara repetitively voiced in the first and follow-up interviews that she committed to "openness" to her students during the school closure by "mak[ing] [her]self an open book" an sending the message that "[her] life was just as crazy as theirs." In this way, Clara constructed a role model who underwent COVID-19 "upheaval" and "turmoil" similar to what the students experienced and showed them how to persevere the circumstance of great disruption. Being provided with such a model, students increasingly shaped and developed positive attitudes, values, and behaviors to sustain the arduous COVID-19 school closure journey (Barile, n.d.).

In addition to teachers, parents also made every effort to support their children's perseverance throughout the 2020 school closure. For instance, Frida frequently "g[a]ve her [daughter] something to look forward to" such as "go[ing] outside," "hang[ing] out with [their] neighbors," "hanging out with [Frida's] sister's dog," "feed[ing] Swayze [a dog pet]," walking a dog, "having movie nights and game nights." Chloe received advice and guidance from her mother whenever she was fraught with frustration.

From a student standpoint, Colton uttered that everything seemed to cause difficulties at first, but gradually he became used to distance learning. By "doing [his] work," Colton persevered the extended school closure and was promoted to the fourth grade.

Likewise, to overcome the extended school closure, Bob employed some self-regulation skills. Bob motivated his learning at home by thinking that "the more I worked, the quicker it

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would get done." Another example for his self-regulating home learning was his ability to manage distractions and restore the learning environment, which met his parents' expectations for academic work. For example, he would tell his friends that he would call or talk to them later when they contacted him while he was doing assignments. In case his brother did something funny and/or interrupted his learning, Bob would go fetch his mother to stop his brother from disrupting his learning. When he found difficulties in assignment completion such as a multiplication problem, Bob would ask his mother for help. A lesson that Bob learned after the COVID-19 school closure was that "even tough time can come, you just have to push through, and things will get better." During the school closure, Bob kept that positive attitude toward home learning. He persevered the school closure by "study[ing] a lot and practice[ing] a lot of skills."

In addition to avoiding distractions and focusing on academic work, Rhett added another critical skill that he employed to persevere the school closure: "reality-check." Rhett elaborated that after completing assignments, he had to figure out how to "pass the time because it c[ould] be quite boring!" during the home confinement circumstance. Rhett felt tedious with "only Legos, or fidget spinners, or stuff like that for company." After the learning time, to keep himself occupied, Rhett decided to make his own "fake school newspaper" and named it "The Homeschool News." Rhett became the editor and tried to get articles from his friends. That was also the time when Rhett decided to write comics because that was one of his hobbies. Rhett created a comic book titled "The Adventure of Matty" during the third-grade school closure period, which offered Rhett the position of the comic artist for the school newspaper in his fourth grade. The aforementioned practical skills eventually became "tools" in the students' "toolkit"

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for future college and career because their brains were unceasingly reshaping through ongoing practice and reinforcement (Calechman, 2019).

Besides academic challenges, all child participants in this study bore the dreadful hardship of lacking peer interaction. Chloe verbalized her real feeling, "if you can't see your friends, then what's the point of being in school? Like what's the point of having fun? because seeing your friends is the most fun part of being in school." She also missed afterschool activities such as tennis, soccer, and piano lessons. Young children adopted various approaches to tackle the lack of peer socialization and persevere the course of the 2020 school closure. Chloe's mother often asked her to "calm down," "take a break," "go outside" for some fresh air and sunshine, or "go do some art." Hunter embraced the desire of "wanting to see [his] friends again" as the primary objective to "keep going," not "stay fall behind," and be promoted to the next grade level. Using another way to handle the social-emotional missing piece, Nina, a child panelist, named all her stuffed animals and talked to them as friends. She even created a classroom where all her stuffed animals became her students. Treating these stuffed animals as "friends," Nina read books to them, playing with them, talking to them when feeling angry or frustrated.

Reflecting on the impact of the 2020 school closure upon her children, Thea, a parent panelist, did not express much concern for their academic development, but for their socio-emotional development. Noticing that peer socialization played a significant role in children's mental health, Thea registered her two children for the summer school program (summer 2021) at their elementary school, and at the time of the interview (April 2021), Harrison and Dora were counting down the days until the summer program to be with friends. Thea also pointed out the

having a sibling for interaction was one of the most useful resources to help Harrison and Dora overcome the school closure period.

It was noted that not all children persevered and became resilient in the face of the adverse school closure. In the present study, Gracie, a child panelist, was victimized by the 2019-2020 extended school closure. When the school shut down in March 2020, Gracie started to experience a period of "losing" at home. She did not participate in virtual conferences nor received at-home learning packets. In order for Gracie to make progress, in the 2020-2021 school year, Gracie's parents withdrew her from the public elementary school that she attended the third grade and enrolled her in a private elementary school. Dawson said that Gracie needed more attention from her teacher so that she could learn better, given the ADHD.

The Development of Personal Self and Identity of Rural Elementary-Aged Leaners (See Figure 10) extended Bronfenbrenner's Ecological Systems Theory (Paquette & Ryan, 2007) in two important ways. First, it situated child development in a rural context which prioritized the voices of the rural community (e.g., the rural school stakeholders, the local community) who has continuously been "blind spots" in education research (Cormack, 2013; Donehower et al., 2007; Lavalley, 2018; Schultz, 1999). Second, the proposed model captured the cognitive, social, and emotional growth during an unpropitious circumstance (i.e., COVID-19 extended school closure). The model highlighted the child adaptation to adversity through their acquisition of lifelong learning capacities (e.g., technical skills, resilience), besides regression, under the mesosystem layer among the structures of the home microsystem, the structures of the school microsystem, and the structures of the local community microsystem (e.g., local businesses, industries, churches, governmental bodies). In the present study, children's regression during the "unknown" context of the COVID-19 pandemic school closure was predictable and natural.

Instead of leaving the students stuck in the appalling hardship, school stakeholders (e.g., school administrators, teachers, and family members) offered young students solid support to facilitate adaptation and reach their full potential. The process of adaptation during childhood once were practiced and nurtured would aid individuals thrive in adulthood.

Pedagogical Implications

Salutary lessons were drawn from the unfortunate 2020 extended school closure experience of Sunshine Elementary students and other school stakeholders extend previous literature in some important ways. These lessons confirm the pivotal role of in-person learning for young learners (Cameron, 2020c), promoting the "expecting-the-unexpected" standpoint to address educational inequity (e.g., nonacademic services and support, academic issues such as devices and access required for distance learning) for economically disadvantaged students (Hoffman & Miller, 2020; Valley & Rodriguez, 2020) and pertinent issues beyond the digital chasm (Cameron, 2020a; Griswold, 2020; NCES, 2018a; Valley & Rodriguez, 2020), "open[ing] up the communication line" for rural sustainability (Smart & Russell, 2018), school operations using a hybrid shortened schooling schedule (Long, 2016; Pratt et al., 2020; Thompson et al., 2021), and year-round schooling structure (de Melker & Weber, 2014; Gold, 2018; Pedersen, 2012; Wagner, 2021).

In-Person Learning

One of the first lessons for some parents was that distance learning did not seem equivalent to "learning." They perceived that actual "learning" only took place at the face-to-face school. Posting a comment on the school district Facebook webpage on July 24, 2020, May, a mother whose children attended White Water School District, urged the school district to reopen

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the schools to in-person learning because students need traditional schooling where "structure and schedules," "discipline and rules" helped them "grow and mature." May also added that peer interaction played the "most [important]" role in child wellness. At the end of the post, May bombarded the audience with pointed questions: "How many cases of suicide, depression, anxiety and etc *[sic]* do we have now or have on the rise? What about all the children who look forward to school Lunches *[sic]*, warm/cool places to be during the day, and kind words from teachers.. *[sic]*"

In another Facebook post of the school district dated July 24, 2020, Julia, a parent, also revealed that her daughter "cried her eyes out" when in-person learning was not an option at the beginning of the 2020-2021 school year because she missed their teachers and friends. In the same vein, Kevin Genisot, the superintendent of the Hurley School District, claimed that no learning mode was able to "[beat]" in-person learning (Cameron, 2020c, para. 40). Genisot elaborated that traditional schooling did not only prepare students with academics, but also social behaviors, norms, and resilience (Cameron, 2020c). A parent named Matt Millar also voiced that students received 80% of the benefits from in-person instruction and 80% of safety from virtual instruction.

"Expecting the Unexpected"

Although the collated data also suggested that a nontraditional learning model such as distance learning, either operated synchronously or asynchronously, was especially challenging for elementary-aged learners and that these learners preferred and benefited from face-to-face learning model, a high level of preparedness for distance learning, in lieu of procrastination, in the event of catastrophes such as wildfires, floods, health crises needed to be continuously maintained. As King remarked, all school stakeholders had to instill a mindset of "expecting the

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unexpected" and "planning for the unexpected" along with strategic planning. The 2020 extended school closure accidentally intensified the learning gap in terms of geographic locale (e.g., rural versus nonrural school locales) and socioeconomic status (e.g., economically advantaged versus disadvantaged students). Consequently, Jasmine argued, "Preparedness, preparedness for fairness!" which resounded the educational inequity for vulnerable students that superintendent Dave Jensen of the Humboldt County School District stated (Valley & Rodriguez, 2020).

Learning valuable lessons from the harsh school closure, Caroline, together with her school staff, wrote plans regarding how students would return safely in the 2020-2021 school year (e.g., how class sizes were reduced, how frequently touched surfaces were sanitized on a daily basis) to "hit the ground running." School administrators cooperated with the custodial crew and our maintenance staff to put up shields and guards, hand sanitizing stations, and touchless water fountains. The plans also addressed how learning loss was steadily recovered. These reopening plans were reviewed and approved by the school district leadership team and the Board of Trustees for the White Water Consolidated School District prior to be implemented. In this study, White Water Consolidated School District implemented the following long-term planning so that other emergencies would not "catch [them] off guard:"

- upgrading all technology infrastructure (e.g., one-on-one device and hot spot program, bandwidth increase)
- completing textbook adoption
- purchasing preK-12 digital platforms for digital content and textbooks (renewing Canvas and Zoom subscriptions)
- adhering to latest CDC and state department guidelines

- soliciting feedback from the community on the school district reopening plan and the continuity of services in the event of another mass school closure for a long period of time

- promoting ongoing professional development

- opening in-person K-12 summer school to recover learning loss

- having extended 2021-2022 academic year in all campuses (i.e., two-hour afterschool tutoring in three days a week for those who demonstrate below grade level reading/math proficiency)

- signing a three-year contract with a consulting firm for leadership training, co-instructional coaching, and in-depth data review

It is proposed that the preparedness does not cease at leveraging available resources and installing the school infrastructure for nontraditional education (e.g., providing and maintaining the one-on-one device initiative and hotspots for all rural students, expanding the broadband Internet coverage to remote rural areas, purchasing virtual learning management systems and other educational programs). School stakeholders such as students, teachers, and students' parents/ primary care providers have to receive professional development sessions relating to virtual teaching and management such as how to navigate the provided devices and programs, how to utilize the virtual learning system to the full.

In the current post-pandemic time, it is argued that the digital chasm mentioned in the prior literature (e.g., Cameron, 2020a; Griswold, 2020; NCES, 2018a; Valley & Rodriguez, 2020) has been less a major issue when learning is delivered from a distance. As noted by Samuel, it was the students' appropriate and effective usage of technology that needed to receive more attention. The digital divide in terms of devices and connection issues could be solved with

funding. However, whether the children were using the school-provided devices properly for online learning or not was questionable. Parents might raise concerns regarding their children using iPads and/or Chromebooks for playing online games (not educational games), social media, or even shoe shopping. Excessive screen time (i.e., children aged two or older have more than two hours of screen time a day) might be linked to a series of problems such as eye strain, obesity, irregular sleep, behavior problems, impaired academic performance, violence, and reduced playtime (Christensen, 2021; Jimenez-Rivero, 2020). Samuel drew the analogy of too much technology use and a "leech" to demonstrate how children were becoming "addicted" to gadgets such as smart phones, iPads, Chromebooks, laptops, and the like. Without parental supervision, these devices would gradually "suck" up the students' energy and interest. Another issue related to technology usage is online safety. Students need to be taught how to be safe when they are using the Internet because of various issues such as inappropriate content, cyberbullying, child abuse, trafficking, and so forth.

In the wake of the 2020 school facilities closure, besides providing nutritious diets with low-fat and low-sugar for low-income students, extending school lunch time, recruiting more health and psychological professionals (Hoffman & Miller, 2020), and updating technology skills with proper usage and cyber security, educators need to equip elementary-aged students with other distance learning-related skills such as social-emotional skills, resilience, self-regulation, delayed gratification, and time management. Social-emotional skills and resilience may help alleviate the negative impacts as well as emotional stressors induced by the home confinement circumstance so that students are able to bounce back to their pre-crisis self. A considerable challenge for distance learning is distraction of which causes come from both internal and external sources. Learning at home for young students can be distracted by their own

attitudes toward academics, wellness (e.g., hunger, sickness), feelings/ emotions (e.g., boredom, anxiety, exhaustion), and psychological status (e.g., daydreaming). External sources include the home environment (e.g., background noise – running tap water, kettle whistling; pets; people – parents, siblings, friends; learning postures – studying in bed) and technology distractors (e.g., television, telephone, electronic gadgets, video games, social media, websites, YouTube, Netflix). Building up self-regulation assists young students to cope with these distractors, managing their thoughts, behaviors, and actions to reach the established goal. Delayed gratification and time management are suggested to handle "speeding" issue that may occur during the distance learning period. Time management helps young learners create a daily schedule that contains a balanced weight between schooling and non-academic activities, which gives them adequate time to stay on task instead of "speeding." It is recommended that students be taught how to manage their learning schedule using a calendar (e.g., built-in calendar in Canvas, Google Calendar). Delayed gratification guides students to "delay" their short-term desires (e.g., entertainment, video games) in order to attain long-term rewards which are academic progresses for college and career readiness (e.g., finishing an exercise prior to watching TV). Being prepared creates more equitable learning experiences for all students regardless of locales, races, gender, socioeconomic statuses, as well as empowers education opportunities for future generations. Regarding pre-service teacher education, it is proposed that virtual instruction (e.g., technology literacy, virtual classroom management, school-family communication, differentiated instructions, quality of assignments) be included in the pre-service teacher preparation programs and in-service teacher professional development sessions so as to meet the students' diverse needs.

"Open[ing] up the Communication Line"

As George Bernard Shaw was quoted as saying, "The single biggest problem in communication is the illusion that it has taken place" (Shaw, n.d., para. 1), another important lesson was to "make sure that every available communication line [is] open." Brann-Barrett's (2014) Reflexive Inquiry also highlighted the significance of communication with the rural community while establishing a good rapport with them because meaning was constructed throughout communication. The lack of communication led to negativity such as confusion, misunderstanding, conflicts, failure, stress, and even depression. The omission of necessary information might also cause adverse effects on social relationships via gossips and backbiting. As revealed by King, when communication at his school district "fell through the cracks," problems instead of solutions arose. With that being said, it is advised that every available communication medium such as text messaging, phone calls, face time, smart phone applications, email be utilized. Every "communication line" (e.g., communication between school and the rural community, between school and families, between parents and children) must be open so that everyone is "all on the same page."

During the 2020 school closure, King and his wife paid more attention to their two sons and frequently checked in with them to provide support if they had frustration or challenges. They would sit down and listen to their children, helping them work out the problems. King also formed a "sharing" culture within his own family during or after dinner time after the children completed their homework. He and his wife would ask their children about their "highs"/ "likes"/ "highlight" as well as their "lows"/ "upset"/ "frustra[tion]"/ "challenges" / "disappointment" of the day. King also revealed that the "sharing" conversation came from both directions. After King and his wife asked their children about their challenges of the day, their sons asked them

about the "highs" and "lows" of their day, and then listened to their parents' sharing. The two-way "sharing" fostered communication within King's family, which partially helped the whole family overcome the hardships during the COVID-19 school closure. Samuel admonished adults (e.g., parents, teachers, school administrators) to turn off the "pause" button on the "child remote control" when communicating with a child because we "pushed the 'pause' button off" when we became adults. Overall, efficient communication functioned as a crucial channel to nurture the collaboration culture and developed a futuristic well-rounded generation for the sustainability of the rural community (Smart & Russell, 2018).

Likewise, Kai, a parent panelist, highlighted the importance of unceasing, open, and direct communication during the pandemic school closure by giving an example of his wife's group chat. In March 2020, when the global health lockdown was enforced, Kai's wife set up a group chat on Facebook to connect all parents in their daughter's online learning class. This group chat was helpful in a way that parents could keep one another updated with the latest news about the online class meetings, assignments, and so on.

School Operations

"Had COVID not happened, we probably would have never done it that way," admitted Caroline. After the 2020 extended school closure and the 2020-2021 school year, Caroline drew some useful lessons regarding the operations at her Sunshine Elementary. Instead of having the same recess time for all students at her school, Caroline had two classes at a time because this led to "less injuries," "less arguments," and "less fighting over a swing." In the hallway queuing line, Caroline provided more "spacing" for her students by putting duct tape every six feet. This social distancing practice resulted in less "pushing," "less people poking each other and talking ugly." Caroline also shared that the smaller-sized classroom during the 2020-2021 school year

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benefited both the teachers and the students. Due to the lack of building facilities, Sunshine students who chose to return to school in person had two face-to-face days and three virtual days a week. This shortened schooling schedule decreased the number of students in a class to half, as compared with that of the previous school years, which was contrary to the reasons that lead rural school administrators to switch shortened schooling schedule in the prior literature (e.g., funding, attendance issues, teacher recruitment and retainment, student engagement) (Long, 2016; Pratt et al., 2020; Thompson et al., 2021). Teachers found their lesson delivery more effective to a smaller number of students. Students received more attention from teachers and more one-on-one instruction as needed. As a consequence, Caroline said that she would try her best to maintain the aforementioned practices for Sunshine Elementary in the 2021-2022 school year.

Another recommendation for the operation of distance learning in the event of emergency school closure came from a parent panelist, Mia. After having her son learn remotely for 11 months, Mia proposed some suggestions based on her son's lack of socialization. While Noah was on the online learning model, he received a great deal of assignments to complete. Mia estimated that her son might have worked about six hours every day to finish schoolwork. Consequently, Mia suggested reducing the number of assignments while increasing the amount of social time for the students. Teachers may consider creating a space for "online recess" where children meet, make friends, chat, play, and grow together. With respect to socio-emotional learning, Noah had mindfulness lessons before, during, and after the school closure, yet these lessons were one of his least favorite subjects because he had to watch videos, close his eyes, listen to the wave, and try to be calm, whilst all he would love to do was to talk and play with

friends. It is proposed that mindfulness educators contemplate on the following questions to design more engaging lessons for young students:

- What are the goals of mindfulness lessons/activities?

- How can these lessons/activities/practices engage the young students?

- How can these mindfulness lessons/activities/practices be helpful to young children, especially those who learn from a distance?

Year-Round Schooling Structure

The mishap convergence of the "COVID slide" and summer 2020 slide engendered considerable "losing" of knowledge and skills for elementary-aged students, especially rural ones from low socioeconomic families. It was the month-long school closure that disrupted students' physical and mental development, and all adult participants in this study projected that it would take years for recovery. According, it is suggested that year-round school calendars be employed to address the aforementioned "losing." The increasing amount of schooling in a twelfth-month schooling structure can attenuate the inauspicious effect of "summer slide" for low-SES students (Alexander et al., 2014; Burkam et al., 2004; Downey et al., 2004; Entwisle et al., 2018; Heyns, 1987; O'Brien, 1999; Phillips, 2000). Continuous learning is maintained throughout the whole calendar year so that elementary students, especially at-risk ones, are able to make academic progresses, which in turn assists them to meet the grade-level reading and math proficiency expectation.

The mentioned suggestion for twelve-month schedule raises a question about the legitimacy as well as legacy of the three-month summer holiday. The current nine-month school schedule is often associated with agrarian roots. In the past, rural children did not attend school during summer months in order to assist their families with farming work. Nonetheless, the

busiest time of the year for farmers were in the spring when crops were planted, and in the fall when crops were harvested. Hence, there was less labor needed in the summer compared with spring and fall.

In fact, the establishment of this nine-month schedule resulted from more sophisticated reasons: standardization, fiscal issues, truancy problems, and community demands (de Melker & Weber, 2014; Gold, 2018; Pedersen, 2012; Roush, 2021; Wagner, 2021). Depending on the financial state of the community, the length of the school year varied from region to region. Gold (2018) illustrated that in 1842, New York endorsed 49 weeks of learning while Baltimore advocated 11 months, and 251.5 schooling days in Philadelphia. The number of schooling days was even different from ward to ward in one city. For instance, this number ranged from 231 to 244 schooling days in New York in 1844. The reported schooling time included the summer months when the enrollment was comparable to other terms. Yet schools in rural locales reported more absenteeism in the summer terms because of the agrarian needs and the lack of mandatory education. Another contributing factor that kept students from school during the summer term was the weather conditions and the shortage of climate-control facilities. The summer heat was insufferable in school buildings without proper ventilation system. Students in affluent families often vacated to tourist resorts to get away from the "long, hot, and dusty days" (Roush, 2021, para. 11). Until the late nineteenth century, pushing toward a uniform school year length, both rural and urban public school officials reconfigured the school patterns and adopted the current standard 180-day school year with three-month summer vacation. Besides the climate reason and lax enrollment, the cut of the summer term was also based on financial limitations because year-round education was financially burdened. The summer holiday was often acclaimed as mental and physical rejuvenation as well as teacher development opportunities.

Demystifying the roots of the summer vacation allows us to consider the value of three-month summer break, and subsequently rethink how students should spend their summer for their college and career readiness, which fortifies the ground for twelve-month school year (de Melker & Weber, 2014; Gold, 2018; Pedersen, 2012; Wagner, 2021). The longer school year might provoke serious dispute with the "summer industries" such as tourism, amusement park consortium, athletics, and family vacations (Pedersen, 2012, p. 60). Additionally, policymakers might hesitate to support this school calendar reform because it required investment in the public sector (Gold, 2018).

Nevertheless, these societal obstacles have to be surmounted to pave the pathway to well-rounded child development, especially in the post-COVID-19 pandemic school closure. In fact, 3,700 out of 90,000 public schools had students attending a year-round calendar cycle in the 2011-2012 school year (NCES, 2014). It is suggested that summer learning opportunities do not need to resemble traditional schooling. Pedersen (2012) gave examples of educational field trips, museum visits, drama rehearsal.

Year-round school calendars were corroborated to benefit elementary-aged students academically (Pedersen, 2012). A community member, Samuel, also supported using the three summer months to compensate the learning loss. Samuel described elementary students' minds as "dry sponge[s] in a bucket of water and they soak everything." If students did not have the chance to learn while schools shut down and/or during the summertime, in other words, if there was no water in the bucket, the dry sponge would not absorb anything, which was a "waste of the human mind." Consequently, academic assignments should be provided to the student so that their minds were exercised because "the human spirit ha[d] to be nurtured and watered." In fact, during the 2020 school closure, virtual conferences and academic assignments did not only help

the students with continued education, but also aided students' parents to "dust off their minds" and "become the student again" while performing their additional "co-teaching" role. Taken altogether, in the face of the aforementioned "losing" that elementary students experienced during and after the COVID-19 pandemic school closure, employing a year-round schooling structure may alleviate the negative impact of "summer slide" for students from welfare households, accelerate students' academic achievement, compensate for the aforementioned academic "losing," increase standardized test scores, and improve graduation rates.

Limitations

One of the limitations of this research project is that it investigated a retrospective case. The data collection took place from spring 2021 to summer 2021 whilst the extended school facilities closure ended in August 2020. Since the case was not in progress at the time of gathering data, some information might be lost due to participants' short-term memories. Nevertheless, it is argued that the missing information might be minor and insignificant.

Another matter of concern is the data sources. The data for the project came from several sources: interviews, virtual classroom observations, documents and artifacts, and reflective commentary journal. There was no in-person observation at the research site during the data collection phase. The lack of face-to-face field trips resulted from the fact that the COVID-19 pandemic was rampant when the study was conducted, so no physical contact with participants was allowed by the university Institutional Research Board.

The interviews and classroom observations were conducted virtually using WebEx and Zoom, which saved time and transportation cost. Yet this gain might be at the expense of several drawbacks such as lower engagement level, distractions, lacking in-person interaction. The participants might feel uncomfortable while participating in the virtual interview. In addition,

with low technical skills, a participant might not be able to solve some issues during the virtual meetings such as limited Internet and bandwidth connectivity, video processing problems. Consequently, prior to the interview sessions, I emailed my participants the date, the time, the meeting link, together with simple instruction on how to join the interviews because some of them were not familiar with WebEx conferencing application. I answered all their questions relating to using WebEx (e.g., Do I need to download WebEx on the phone? Do I need to create an account to join the meeting?) During the meeting via WebEx, I turned on my camera, using verbal and non-verbal language when talking to participants. I tried to make my participants feel comfortable by using a conversational tone (e.g., using simple words, second-person voice), tolerating with participants' interruptions during the interviews (e.g., Jade had to pause to move her car for lawn moving service, Clara had to pause to ask her older daughter to take care of her younger son). Similar issues occurred in virtual classroom observations. I experienced the Internet disconnection more than once during the twelve class observations. After being disconnected, I had to wait for the teacher to recognize that I was not on her panel and then readmitted me into her class.

Another limitation of the present study is the lack of economically disadvantaged students' and their families' voices. These vulnerable children might not demonstrate resiliency during and after the COVID-19 pandemic school closure like the three student participants recruited for this research study. Nonetheless, it was not easy to reach out to these "absent" families. During the participant recruitment stage, the school principal and the teacher participants made every effort to seek potential student participants who met the established criteria. After nearly two months, they connected me with three student participants and their family members who were interested in being a part of the research study. On account of time

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constraints, I decided to move forward with these three student participants and their families.

All these three students had access to learning devices as well as Internet during the 2020 school

facilities closure. Recognizing this limitation, during the data collection stage, I gathered these

"absent" family voices in every possible public source (e.g., the school district website, the local

newspaper, communal group webpages, the school district Facebook webpage) to incorporate

them in the data corpus of the study.

Suggestions for Further Research

This case study explored the experience of elementary-aged students during the 2020

school closure, as perceived by themselves and other rural school stakeholders.

Methodologically speaking, the researcher should have paid multiple trips to the research site to

establish "prolonged engagement" and rapport with the participants. Besides, observation

sessions of in-person classrooms should have been conducted in addition to virtual ones. Future

research attempts may replicate this study with the consideration of the two aforementioned

suggestions.

Concerning participant characteristics, the present study examined mainstream third-

grade students at a small rural Title I school with over 75% African American students. In future

studies, the school closure experience of students with different demographic variables such as

grade level, races, special education needs may be explored.

This study's findings show that adult participants made future projections such as the

"big learning curve," "a slight gap in, um, in many areas of education," the "snowball effect" of

testing accountability waiver, and "a few years to come back from, from all that has happened."

Additionally, it was found that elementary students had certain regression (e.g., weakening social

skills, academic boredom, learning loss, "speeding," lethargy, "survival mode") within the

context of the nontraditional learning mode. This regression raised a fundamental question about the nature and duration of regression as well as "how" young learners specifically addressed their regression. Accordingly, it is proposed that a longitudinal study be undertaken to confirm or disconfirm the long-term effects of the 2020 extended school closure.

Another suggestion for further inquiries is to study the rural school-community partnership to meet the needs of teachers and students in the events of crises such as natural disasters, and health emergencies. The key takeaways from these case studies are beneficial for rural school administrators, teachers, students, families, and other stakeholders.

In the time of post-school closure, it is intriguing to do research on rural elementary students' wellbeing. A research idea might be to carry out follow-up research with these students as they complete additional levels of the K-12 education. How have their experiences affected their personal efficacy beliefs? How has the month-long home confinement impacted their wellness? Are there any mental health issues that they are dealing with? What are their coping strategies? Also, this study found that young students persisted throughout the COVID-19 school shutdown with lifelong learning attitudes (e.g., computer skills, resilience). After the school closure, how have rural schools encouraged and nurtured these lifelong learning attitudes for young learners? Moreover, further research and practice may investigate the technology (il)literacy experiences of students and teachers in the progress to address technology capabilities, shortcomings, support, preparedness, disparities while- and post-pandemic school shutdown. The findings unveil educational technology challenges that teachers and students grappled with during the "new normal" teaching and learning context.

The findings from this study were condensed in a graphical representation: *The Development of Personal Self and Identity of Rural Elementary-Aged Leaners*. Further research

agendas may help to refine and/or extend this model to students of more advanced grade level (e.g., middle school, high school students). Additionally, the researched community self-identified as a "rural" community, but being categorized as a "remote town" by the National Center for Education Statistics (2006). Due to time constraint, the current study did not thoroughly examine this discrepancy. The "rural" identity marker was provided through the perspectives of a school district administrator and a third-grade teacher who used to teach in urban school districts. Future studies may explore this interesting identity marker as well as the divergence in the "rural" school definition.

In summary, this chapter briefly presented the research issue and significant findings. After that, these findings were discussed and related to the prior literature. Next, a visual representation was created to encapsulate key research findings about the experience of rural elementary students during the 2020 school shutdown period. In the next section, main takeaways were shared with the audience. The last section of this chapter discussed limitations and proposed suggestions for futuristic research directions.

CHAPTER VI

CONCLUSION

This case study examined how elementary-aged students at a small rural school experienced the 2020 extended school facilities closure, as perceived by themselves and other school stakeholders such as the school principal, general education classroom teachers, and family members. It was found that the school closure caused academic and non-academic disruptions to the students. The mishap intersection between the spring 2020 "COVID slide" and the 2020 "summer slide" magnified the existing academic gap between students living in different geographic locales and between those from households with different income levels. Nevertheless, the COVID-19 school closure boosted the school-community partnership and promoted lifelong learning attitudes among young learners.

This research study underscores that in the rural school context, school-community partnership played a pivotal role in how rural students experienced the health emergency school closure. Thanks to the strong and consistent support from the local businesses, communal groups, and agencies, Sunshine students made adaptations to the abrupt transition to distance learning by enhancing their technology skills. They also developed resilience throughout the school facilities closure period and nurtured this capacity throughout the 2020-2021 school year.

Salient lessons drawn from this case study school highlight the significance of in-person learning, communication, preparedness, school operations, and a year-round school schedule. After experiencing the COVID-19 school closure with myriad academic and non-academic

disruptors, Sunshine students cultivated a genuine appreciation of face-to-face learning mode. Nevertheless, there is a strong likelihood for rural students to experience future school closures due to the locale (Cano, 2019). Accordingly, preparedness for such an event is undebatable. School administrators need to negotiate for a budget for closure preparation. The preparedness does not only include establishing one-on-one device and supplying hotspots for rural students, but also purchasing online programs, virtual learning systems, new curriculum with technology integration, and giving training sessions for school stakeholders to utilize distance learning facilities effectively. Elementary-aged students are specifically recommended to be taught and given opportunity to practice essential skills (e.g., social-emotional skills, resilience, time management, delayed gratification, self-regulation) to persevere the distance learning period in the event of a school closure. During the closure period, it is advisable that all school stakeholders (e.g., school administrators, teachers, school personnel, students, families) and the community (e.g., local government, companies, businesses, institutions) be on the "same page" in terms of communication so that every individual can collaboratively weave and reweave the "magic flying carpet" (Smart & Russell, 2018, para. 3) to sustain mutual benefits. With respect to school operations, "spacing" out students during line queuing and recess decreases discipline issues while reducing class sizes by employing a shortened traditional schooling schedule increases one-on-one instruction time. Lastly by importantly, policymakers, school administrators, and educators may adopt a year-round school structure to extend the instruction time throughout the calendar year with four terms so that students, especially rural ones from low-SES families, are provided with continuous learning, which partially addresses the aforementioned "losing" engendered by the unfortunate intersection of "COVID slide" and "summer slide."

One of the quotes that has kept lingering in my mind during and after the implementation of this research study came from a parent panelist, Kai, when he associated the quality of education with the zip code of the school district: "unfortunately, in this country [the United States], a lot of your [children's] future is determined on your zip code: the resources and how good the school district is. It's all based on the tax dollars." Bearing this belief, in lieu of purchasing a house in a more affordable location, Kai and his wife signed a rental lease for an apartment in a place where the "desired" elementary school for their two daughters was located. Another parent panelist, Mia, was on the "house hunt" for over a year because she and her husband wanted to purchase a house situated in a "preferred" school district for their elementary-aged son. This research study showcased how Sunshine students, alongside with other school stakeholders, "rose to the challenges" induced by the 2020 COVID-19 pandemic school closure and were on the pathway to their "normal" schooling thanks to the collective power of the rural school-community partnership (Azano et al., 2019; Barley & Brigham, 2008; Moll et al., 1992; Monk, 2007). Yet "[q]uality is the journey, not a fixed point!" as exclaimed by Samuel, how Sunshine Elementary, and other rural schools that overcame the COVID-19 challenges, continues to maintain, leverage, and foster its sustainability as well as development in the post-COVID-19 pandemic school closure era to become "desired" schools for families is a vexed question that requires further research investigation.

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APPENDIX A

PERCENTAGE OF PUBLIC STUDENTS IN RURAL SCHOOLS BY STATE IN ACADEMIC

YEAR 2014-2015

Figure A1

Percentage of Public Students in Rural Schools by State in Academic Year 2014-2015

State	Percentage
Alabama	39.7%
Alaska	30.2%
Arizona	9.8%
Arkansas	33.6%
California	5.8%
Colorado	13.5%
Connecticut	12%
Delaware	17.3%
Florida	11.5%
Georgia	27.3%
Hawaii	9.1%
Idaho	24.8%
Illinois	10.8%
Indiana	27.9%
Iowa	34.2%
Kansas	28.1%
Kentucky	36.5%
Louisiana	27.3%
Maine	53.6%
Maryland	13.8%
Massachusetts	8.8%
Michigan	21.1%
Minnesota	21.7%
Mississippi	46.9%
Missouri	26.6%
Montana	36.1%
Nebraska	25.4%
Nevada	6.1%
New Hampshire	34.2%
New Jersey	7.8%
New Mexico	24.7%
New York	11.4%
North Carolina	37%
North Dakota	39.2%
Ohio	22.3%
Oklahoma	30.5%
Oregon	14.5%
Pennsylvania	18.8%
Rhode Island	10.1%
South Carolina	33.6%
South Dakota	41.3%
Tennessee	30.3%
Texas	16.4%
Utah	10.3%
Vermont	55.7%
Virginia	24.5%
Washington	12.1%
West Virginia	42.4%
Wisconsin	23%
Wyoming	28.9%

295

APPENDIX B

RURAL STUDENTS' SAMPLE FAMILY FUNDS OF KNOWLEDGE

Table B1

A Sample of Family Funds of Knowledge that Rural Students May Possess

Agriculture and Mining	Ranching and farming	Horse riding skills
		Animal management
		Soil and irrigation systems
		Crop planting
		Hunting, tracking, (seed) dressing
	Mining	Timbering
		Minerals
		Blasting
		Equipment operation and maintenance
Economics	Business	Market values
		Appraising
		Renting and selling
		Loans
		Labor laws
		Building codes
		Consumer knowledge
		Accounting
		Sales
	Household management	Budgets
		Childcare
		Cooking
		Appliance repairs
Material and Scientific Knowledge	Construction	Carpentry
		Roofing
		Masonry

Table B1 (continued)

		Painting
		Design and architecture
	Repair	Airplane
		Automobile
		Tractor
		House maintenance
Medicine	Contemporary medicine	Drugs
		First aid procedures
		Anatomy
		Midwifery
	Folk medicine	Herbal knowledge
		Folk cures
		Folk veterinary cures
Religions		Catechism
		Baptisms
		Bible studies
		Moral knowledge and ethics

APPENDIX C

INTERVIEW PROTOCOLS

Interview Protocol for the School Administrator

Time of interview: _____

Date: _____

Place: _____

Device/ Platform: _____

Interviewer: Ha Nguyen

Interviewee: _____

Hello, my name is Ha. I'm a graduate student from Mississippi State University. Thank you so much for participating in this audio-recorded individual interview. I know that your time is precious, so thanks a lot for sparing your time for this interview. How are you doing today?

In this interview, we will talk about South Side students' experiences related to the extended school closure caused by COVID-19 pandemic from March 2020 to August 2020. Your participation today is voluntary. There are about 20 questions in this interview. You can skip any question at any time and your individual answers during the interview will be secure and kept confidential.

*My first question is about **general information** about yourself as well as your South Side students after your school facility closed on March 12, 2020 and the end of the 2019-2020 school year.*

1. Can you tell me a little about your elementary education background?

2. How many third-grade students were attending South Side when the facilities closed?

3. Do you know how many of those third graders were African American, Caucasian, Asian, or Hispanic?

4. Do you know if any of them were English language learners, in the "gifted and talented" program, or being served by an IEP?

5. What were your top three concerns for your students when the school closure started in March 2020?

6. Did South Side Elementary purchase anything or cover expenses for students during the extended facilities closure?

*In the next few questions, we will talk about **academics and instruction**.*

7. Tell me a bit about the academic expectations for third graders at the beginning of the school year, as well as how these expectations might have changed after March 2020 when instruction had to be offered at a distance?

8. Can you describe how your school was like during the closure? In other words, if I spent the whole school closure period at your school, what would I have seen?

9. How did third graders receive instruction during the school closure?

10. Was there a required amount of time that students needed to spend on learning each day, and if so, how did you monitor that?

11. Did the instructional materials for third graders include content across all core subjects of reading, math, science and social studies? Did your specialists provide learning packets or materials as well?

12. Was there anything special you did to help teachers and students to move to this new learning model?

13. Can you tell me about some the issues or challenges that came up while South Side students were learning remotely?

*Now let's talk about **student assessment** during the school facilities closure.*
14. How were third-grade students held accountable for learning the instructional material provided?

15. Were there any groups of students you were especially concerned about during this time, and if so, what did your school do to help meet their needs?

16. How were report grades determined for the last quarter of the school year?

*Now let's move to talking about how your school maintained **relationships** with students and their families during that time.*
17. How do you feel the transition from in-person to remote distance learning impacted the relationships between your school and families?

18. How did your school communicate with families during the closure?

19. Did South Side provide any technology support for students and families during spring 2020?

20. This was a hard time for students. What did you find did—or did not help—South Side students and families persevere during this time?

21. Let me ask you a "changing-the-world" kind of question. If you had Harry Potter's wand and could go back to spring 2020, and could do one thing to meet the academic or social-emotional needs of your students, what would you use that wand for?

22. You're the principal of a rural school, and certainly rural communities have different strengths and needs than schools in more urban settings. Is there anything that we haven't talked about, that you think is important for considering the experiences of rural students during the pandemic closure?

That's the end of our interview. Thanks so much for taking your time to talk with me.

Interview Protocol for Teachers

Time of interview: _____
Date: _____
Place: _____
Device/ Platform: _____
Interviewer: Ha Nguyen
Interviewee: _____

Hello, my name is Ha. I'm a graduate student from Mississippi State University. Thank you so much for participating in this audio-recorded individual interview. I know that your time is precious, so thanks a lot for sparing your time for this interview. How are you doing today?

In this interview, we will talk about your students' experiences related to the extended school closure caused by COVID-19 pandemic from March 2020 to August 2020. Your participation today is voluntary. There are about 20 questions in this interview. You can skip any question at any time and your individual answers will be kept confidential.

*My first few questions are just for **general information** about you and your students.*

1. Can you tell me a little about your elementary education background?

2. How many students were in your class?

3. How many of your students were African American, Caucasian, Asian, or Hispanic?

4. Were any of your students English language learners?

5. Did any of your students have IEPs? (Individualized Education Programs to receive special education services)

6. Were any of your students in the "gifted and talented" program?

7. What were your top three concerns for your students when the school closure started in March 2020?

*Let's talk about **third grade instruction** between March 12, 2020 when your school facility closed, and the end of the 2019-2020 school year.*

8. Tell me a bit about your academic expectations for your students at the beginning of the school year, and how these expectations might have changed after March 2020 when instruction had to be offered at a distance.

9. How did you deliver instruction to your students during the school closure?

10. Did you integrate any technology (e.g., Zoom, Google Classroom, Moby Max, Reflex Math) for your students after the school building was closed?

11. (If YES to Q10) Did you hold any online sessions with your students, and if so how did you organize them in terms of routines, assigning student roles, collaborative learning or things like that?

12. Can you share a bit about the learning packets you developed for your students during the Spring closure? For example, how you decided what to include, where the resources came from, how many packets were there, and so forth?

13. Were there any big differences between what you were able to prepare for at-home learning in reading, math, science, or social studies versus the other subjects?

14. Can you tell me about some the student issues or challenges that came up while your students were learning remotely?

*Now let's talk about **assessment** while your students were learning from home.*
15. How did you hold your students accountable for learning the instructional material you were providing (grades, incentives/credits, etc.)?

16. Were you able to provide feedback to your students, and if so, how did that work?

17. Were there any groups of students you were concerned about during this time, and if so, what did you do to help meet their needs?

18. How were report card grades determined for the last quarter of the school year?

*Now let's move to talking about how you maintained **relationships** with your students during that time.*
19. How did you stay connected to and interact with your students?

20. Did your students have any opportunities to socialize with their classmates?

21. This was a hard time for students. What did you find did—or did not help—your students persevere during this time?

22. Let me ask you a "changing-the-world" kind of question. If you had Harry Potter's wand and could go back to Spring 2020 and do one thing to meet the academic or social-emotional needs of your students, what would you use that wand for?

23. You're teaching at a rural school, and certainly rural communities have different strengths and needs than schools in more urban settings. Is there anything that we haven't talked about,

that you think is important for considering the experiences of rural students during the pandemic closure?

That's the end of our interview. Thanks so much for taking your time to talk with me.

Interview Protocol for Students

Time of interview: _____

Date: _____

Place: _____

Device/ Platform: _____

Interviewer: Ha Nguyen

Interviewee: _____

Introduction:

Hello, my name is Ha. I'm a graduate student from Mississippi State University. How are you doing today?

I'd like to talk to you about the time when your school was closed last year in third grade. Would it be okay for me to ask you some questions about that?

1. Who was your third-grade teacher?

2. What was your favorite subject in school in third grade? Is it still your favorite subject in fourth grade?

3. Why do you think kids go to school?

4. When your school closed last year in third grade, what kinds of things did you worry about?

5. What were the best things about learning at home when the school was closed? Tell me more about that.

6. How about the worst things about learning at home? Tell me more about that.

7. Where at home did you study?

8. Did you have any online classes or meetings with <teacher's name> before third grade was over?

9. (If YES to Q8) What kind of online meetings did you have? Tell me about them.

10. (If YES to Q8) Did students get to talk online? Did you talk a lot?

11. (If YES to Q8) What did you do if you didn't understand what was going on?

12. What did you do when you felt stuck with an assignment?

13. Did you use a tablet or computer to complete any schoolwork at home? Tell me about it.

14. (If YES to Q13) How was your Internet connection?

15. (If YES to Q13) Do you think that using a tablet/ computer helps you learn better? What makes you say that?

16. (If YES to Q13) Did you use any online games or fun websites that helped you with learning at home? What learning websites or games that you like? Are there some that you don't like?

17. (If YES to Q13) You probably heard your teacher say that Internet safety is important. What kinds of things did you do to be safe on the Internet?

18. (If YES to Q13) How many hours a day did you think you spent on technology doing schoolwork for <teacher's name>?

19. Tell me the learning packets that <teacher's name> sent home for you. What kinds of things were in there?

20. Did you have choices about what you got to work on for learning at home in third grade?

21. Do you remember anything your teacher sent home that you REALLY like? What did you not like?

22. Was it hard to focus on your learning? How come? What about the background noise?

23. How about <teacher's name>? Did she give you any help with your learning packets?

24. Who did you ask for help if you needed any?

25. How did you return your learning packets to your teacher?

26. Did you ever forget to do a task? Tell me what happened?

27. How did you feel about not finishing third grade in person?

28. How did you feel about staying at home and not seeing your friends? Did you get to chat with them or anything? What did you do instead?

29. Did you ever get to talk to <teacher's name> while you were learning from home? Tell me about it.

30. COVID has been a hard time for everyone. What did you find helped you pass the third grade? How about things that made third grade even harder?

31. That's the end of our interview. Is there anything else that you would want to tell people about being a third grader learning during COVID time?

Thanks so much for taking your time to talk with me.

Interview Protocol for Family Members

Time of interview: _____

Date: _____

Place: _____

Device/ Platform: _____

Interviewer: Ha Nguyen

Interviewee: _____

Hello, my name is Ha. I'm a graduate student from Mississippi State University. Thank you so much for participating in this audio-recorded individual interview. I know that your time is precious, so thanks a lot for sparing your time for this interview. How are you doing today?

In this interview, we will talk about your child's experiences related to the extended school closure caused by COVID-19 pandemic from March 2020 to August 2020. Your participation today is voluntary. You can skip any question at any time and your individual answers during the interview will be secure and kept confidential.

*My first few questions are just for **general information** about your child and his/her learning before the school closure.*

1. Tell me a little bit about <child's name>.

2. How was third grade going for your child before the pandemic?

3. What were your main concerns for your child when the school closure started in March 2020?

4. Was your family or any other families that you know affected by the school closure in terms of basic needs such as free lunches, clothing, childcare, devices, Internet connection? Can you share a bit about that?

*Now let's talk about having to **learn at home** when the school building closed last year due to the COVID-19 pandemic.*

5. Please describe your child's learning at home during the school closure, from what you saw. In other words, if I spent the whole school closure period with your family, what would I have seen your child doing for school? How else did your child keep busy during the day?

6. What else besides the learning packets from the school did your child have access to for learning during the school closure?

7. Was your child given any choices or options for completing their work? Could you share an example?

8. Did your child have any online classes or meetings with their teacher last spring?

9. Did you or your child receive any technology devices or tech support for the third-grade closure? Tell me about it.

10. How many hours a day would you say your child spend on schoolwork during the school closure for third grade? What were your feelings about that?

11. Can you tell me about some issues or challenges that came up while your child was learning from home?

12. What subjects did they work on? Did they also have lessons to work on for specials like art, music, or PE?

13. How did <teacher's name>help your child keep learning while the school building was closed?

14. Did the closure change how much you needed to help your child with their assignments?

15. How did your child submit their completed assignments to their third-grade teacher?

16. How were your child's grade determined at the end of the third grade?

17. How did you feel about the third reading test being waived because of the pandemic and all third-grade students being promoted?

Now let's talk about **communication** *during the closure period in third grade.*
18. How did you stay connected to your child's teacher?

19. Did your child have any opportunities to socialize with his/her classmates?

20. The school shutdown took away the after-school programs. What are your thoughts about this?

21. This was a hard time for your child. What did you find did – or did not help – your child persevere during this time?

22. Let me ask you a "changing-the-world" kind of question. If you had a magic wand to go back to Spring 2020 and do one thing to meet the needs of your child while they were in third grade, what would you do?

23. Is there anything that we haven't talked about, that you think is important for considering the experiences of your child during the pandemic closure?

That's the end of our interview. Thanks so much for taking your time to talk with me.

APPENDIX D

INSTITUTIONAL RESEARCH BOARD APPROVAL LETTERS

Institutional Research Board Approval Letter dated March 31, 2021

MISSISSIPPI STATE UNIVERSITY

NOTICE OF DETERMINATION FROM THE HUMAN RESEARCH PROTECTION PROGRAM

DATE:	March 31, 2021
TO:	Dana Franz, PhD, Curriculum Instruction & Special Ed, Jianzhong Xu;Kristin Javorsky;Kathleen Alley
	Ha Thi Viet Nguyen, Curriculum Inst. & Special Ed, Jianzhong Xu, Counseling Ed Psyc & Foundations, Kristin Javorsky, Curriculum Instruction & Special Ed, Kathleen Alley, Curriculum Instruction & Special Ed
PROTOCOL TITLE:	Extended School Closure: The Perspectives from a Rural School Community
FUNDING SOURCE:	
PROTOCOL NUMBER:	IRB-21-079
APPROVAL PERIOD:	Approval Date: March 31, 2021 Expiration Date: March 30, 2026

Under an expedited review procedure, the research project identified above was approved on March 31, 2021 by the Mississippi State University Institutional Review Board (MSU IRB). The application qualified for expedited review under CFR 46.110, Category 7.

This memorandum is your record of the IRB approval of this study. Please maintain it with your study records.

Please note that the MSU HRPP accreditation for our human subjects protection program requires an approval stamp for consent forms. The approval stamp will assist in ensuring the HRPP approved version of the consent form is used in the actual conduct of research. If applicable, you must use the stamped consent form for obtaining consent from participants.

The MSU IRB approval for this project will expire on March 30, 2026. If you expect your project to continue beyond this date, you must submit an application for renewal of this HRPP approval. HRPP approval must be maintained for the entire term of your project.

If, during the course of your project, you intend to make changes to this study, you must obtain approval from the HRPP prior to implementing any changes. Upon becoming aware of an unanticipated problem that suggests participants or others are at greater risk of harm than was previously known or recognized, a problem report must be submitted to the HRPP as soon as possible, but always within 10 days. Serious problems must be reported verbally within one business day, in addition to the submission of the written Problem Report.

You are required to maintain complete records pertaining to the use of humans as participants in your research. This includes all information or materials conveyed to and received from participants as well as signed consent forms, data, analyses, and results. These records must be maintained for at least three years following project completion or termination, and they are subject to inspection and review by the HRPP and other authorized agencies.

Please notify this office when your project is complete. Upon notification, we will close our files pertaining to your project. Reactivation of the HRPP approval will require a new HRPP application.

If you have any questions relating to the protection of human research participants, please contact the HRPP by phone at 662.325.5220 or email irb@research.msstate.edu. We wish you the very best of luck in your research and look forward to working with you again.

Approval Period: March 31, 2021 through March 30, 2026

Review Type: EXPEDITED
IRB Number: IORG0000467

Institutional Research Board Approval Letter dated October 25, 2021

MISSISSIPPI STATE UNIVERSITY

NOTICE OF APPROVAL FOR HUMAN RESEARCH

DATE: October 25, 2021

TO: Dana Franz, PhD, Curriculum Instruction & Special Ed

Ha Thi Viet Nguyen, Curriculum Inst. & Special Ed, Jianzhong Xu, Counseling Ed Psyc & Foundations, Kristin Javorsky, Curriculum Instruction & Special Ed, Kathleen Alley, Curriculum Instruction & Special Ed

PROTOCOL TITLE: Extended School Closure: The Perspectives from a Rural School Community

PROTOCOL NUMBER: IRB-21-079

APPROVAL PERIOD: Approval Date: October 25, 2021   Expiration Date: March 30, 2026

Your amendment request for the protocol listed above has been approved. The proposed change(s), as described in the amendment, have been approved. You are approved to proceed with your research as modified. If necessary, a stamped copy has been uploaded in the Attachment section. Please use this letter and the stamped copy as verification of the approval.

This approval is issued under Mississippi State University's Federal Wide Assurance 00000203 with the Office for Human Research Protections (OHRP).

Please direct any questions about the actions on this project to the HRPP at 662.325.5220 or irb@research.msstate.edu.

Kari Reeves

APPENDIX E

RECRUITMENT LETTERS

Principal Recruitment Letter

February 23, 2021

Dear Principal:

This letter is to ask for your voluntary participation in a research project titled *Extended School Closure: The Perspectives from a Rural School Community*. This project is conducted by Ha Nguyen, a doctoral student at the Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. The information collected from this project will be used in Ms. Nguyen's doctoral dissertation.

This research project aims to examine the perception and responses of a rural community related to an extended school closure caused by the COVID-19 pandemic. If you participate in this study, you will be asked to share documents and artifacts related to the teaching and learning at your school during the 2020 extended school closure. Also, you will be invited for two audio-taped individual interview sessions via your preferred devices such as telephone or online platforms (Zoom, WebEx, Google Meet, etc.). The estimated length of the interview is an hour. After both interviews, you will receive the project preliminary analyses via email for you to check for the accuracy and credibility of the account. For your safety, there will be no in-person communication during the implementation of the project.

The findings from this research project will provide valuable information for educational stakeholders locally and nationally during the event of an extended school closure. The willingness to participate in this research project of people like you will help us understand more about how to better meet the academic needs of elementary-aged students.

If you have any questions about this research project, please feel free to contact Ha Nguyen at htn61@msstate.edu (cell phone: 662-648-9975) or Dr. Kristin Javorsky at kj911@msstate.edu (office phone: 662-325-3747), Assistant Professor at Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. We are grateful for your participation and want to ensure that you have a pleasant experience participating in this research project.

If you agree to participate in this research study, please read and sign the informed consent form attached, and then email the signed form to Ha Nguyen at htn61@msstate.edu.

Thank you for your participation!

Yours sincerely,

Ha Nguyen
Doctoral student
Department of Curriculum, Instruction, and Special Education
Mississippi State University

Teacher Recruitment Letter

February 23, 2021

Dear Teacher:

This letter is to ask for your voluntary participation in a research project titled *Extended School Closure: The Perspectives from a Rural School Community*. This project is conducted by Ha Nguyen, a doctoral student at the Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. The information collected from this project will be used in Ms. Nguyen's doctoral dissertation.

This research project aims to examine the perception and responses of a rural community related to an extended school closure caused by the COVID-19 pandemic. If you participate in this study, you will be asked to share documents and artifacts related to the teaching and learning at your school during the 2020 extended school closure. Also, you will be invited for two audio-taped individual interview sessions via your preferred devices such as telephone or online platforms (Zoom, WebEx, Google Meet, etc.). The estimated length of each interview is an hour. After both interviews, you will receive the project preliminary analyses via email for you to check for the accuracy and credibility of the account. For your safety, there will be no in-person communication during the implementation of the project.

The findings from this research project will provide valuable information for educational stakeholders locally and nationally during the event of an extended school closure. The willingness to participate in this research project of people like you will help us understand more about how to better meet the academic needs of elementary-aged students.

If you have any questions about this research project, please feel free to contact Ha Nguyen at htn61@msstate.edu (cell phone: 662-648-9975) or Dr. Kristin Javorsky at kj911@msstate.edu (office phone: 662-325-3747), Assistant Professor at Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. We are grateful for your participation and want to ensure that you have a pleasant experience participating in this research project.

If you agree to participate in this research study, please read and sign the informed consent form attached, and then email the signed form to Ha Nguyen at htn61@msstate.edu.

Thank you for your participation!

Yours sincerely,

Ha Nguyen
Doctoral student
Department of Curriculum, Instruction, and Special Education
Mississippi State University

Version: 09/18/2017

Family Member Recruitment Letter

February 23, 2021

Dear Parents/Guardians/Representatives of Elementary Student(s):

This letter is to ask for your voluntary participation as well as your permission for your child to voluntarily participate in a research project titled *Extended School Closure: The Perspectives from a Rural School Community.* This project is conducted by Ha Nguyen, a doctoral student at the Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. The information collected from this project will be used in Ms. Nguyen's doctoral dissertation.

If you and your child participate in this study, you and your child will be asked to share documents and artifacts related to your child's learning during the 2020 extended school closure. Also, you and your child will be invited for two audio-taped individual interview sessions via your preferred devices such as telephone or online platforms (Zoom, WebEx, Google Meet, etc.). The estimated length of the interview is an hour. After both interviews, you and your child will receive the project preliminary analyses via email for both of you to check for the accuracy and credibility of the account. For safety concerns, there will be no in-person communication during the implementation of the project. You and your child will not be penalized in any way if choosing not to participate in this study.

The findings from this research project will provide valuable information for educational stakeholders locally and nationally during the event of an extended school closure. The willingness to participate in this research project of people like you will help us understand more about how to better meet the academic needs of elementary-aged students. Your ideas matter!

If you have any questions about this research project, please feel free to contact Ha Nguyen at htn61@msstate.edu (cell phone: 662-648-9975) or Dr. Kristin Javorsky at kj911@msstate.edu (office phone: 662-325-3747), Assistant Professor at Department of Curriculum, Instruction, and Special Education, College of Education, Mississippi State University. We are grateful for your participation and want to ensure that you and your child have a pleasant experience participating in this research project.

If you agree to participate in this research study, please read and sign the informed consent form and informed parent consent form (for parents/guardians/representatives of elementary students) and informed assent form (for your child) attached, and then email all the signed forms to Ha Nguyen at htn61@msstate.edu.

Thank you for your participation!

Yours sincerely,

Ha Nguyen
Doctoral student
Department of Curriculum, Instruction, and Special Education
Mississippi State University

APPENDIX F

FIRST ITERATION OF CODING

First iteration of coding:

The simple list of the 102 codes

- afterschool programs

- "anxiety"

- assessment

- attendance

- "boredom," "mundane"

- "bubble students," "borderline kids"

- CHALLENGES - "you can't make something out of nothing!" "redo, reinvent teaching"

- cheating "slippery hole"

- "checked behind," "stay on top of submitting assignments"

- Classroom management

- Common Core "frustration" - "relearn," "nine times out of ten," "learning right along
  with them," "parents had to become the students like they were"

- "community of teachers," "band together," "COVID Chronicles," "even though the world
  was crazy, we still had a task to serve the children"

- "complaining"

- "confused"

- "COVID-19 as a crutch," "lazier," "brings out the beast in this curriculum"

- day care

- Delayed start - 20-21 "last minute"

- "different"

- Distance learning

  - "additional safety net"

  - "Designated place"

  - Distractions

  - home confinement

  - issues - "busy work," discipline

  - Lacking "immediate feedback," "teacher interaction"

  - Length of study time

  - "lost our sense of urgency"

  - "meltdown"

  - "Not the same" (f2f) - "feeling their way through with such new territory," not "authentic learning experience"

  - online meetings

  - packets - "viable plan," "hot mess"

  - "Routine was disrupted," "we are creatures of habit," "hit or miss" routine, "structure," "stability"

  - "staying busy"

- "double the workload"

- Expectation "School was a priority, and learning was a priority"

- f2f learning - "just done away with the laptops," "there's nothing like being one-on-one in person"

- "frustrated," "shut down"

- "gracious"

- "guilty"

- hopeful

- "horrible"

- hypothetical question - "I do not want a repeat of 2020!"

- immediacy

- instruction

- "isolated," "separated"

- leadership

- "learning loss," "close the learning gaps"

- learning schedule

- Lessons learned - "planning for the unexpected," "preparedness for fairness!"

- "losing sense of urgency," "went into survivor mode," "passivity"

- media

- "more compassionate"

- motivation

- "multiple hats"

- multitasking

- Needs and concerns

- negativity

- "nervous"

- "new normal"

- NO accountability - "music to their ears," "off the hook," "it's not an even playing field"

- "not much instruction," "touch and go"

- online learning

- online learning programs

- "opened up the communication line," "open up the floor for communication"

- "overwhelmed"

- parental involvement, parenting, "parents had to become the students like they were"

- parent-child communication

- "persevered," "resilient," "persistence"

- "pockets of excellence," "above and beyond," "go the extra mile"

- Positive, "not doom and gloom," "make it fun," "make the best of the situation," "being creative," "I wasn't going through this alone!" "we were all in this together!" "it blows my mind"

- promotion and retainment

- purposes of assignments

- "ready for a normal year"

- "redirect, and re-emphasize, and reiterate"

- "reinforce," "reteach," "teacher assistant"

- RESOURCES

- "Rose to the challenges"

- "sad," "depressed," "upset"

- Safety - "you don't know if they have COVID, they don't know if they have COVID!"

- "scared"

- School closure

- Screening for "baseline"

- "self-actualizing," "children are children"

- shortened school schedule (4 day a week)

- "speeding," "not retaining"

- starting time

- "stressful"

- "struggling" students

- student enrollment - "exodus"

- "students to pass that weren't ready"

- summer school

- Teacher attrition, teacher shortage

- teacher-family communication - "I've never contacted parents so much in my life!"

- "teachers are wonderful creatures"

- TECHNOLOGY

- "the carrot and the stick" - "horrible parents"

- "the unknowns," "moving target," "uncharted waters," "grabbing at straws"

- tiredness

- "video world"

- WELLBEING - "emotionally taxing," "emotional rollercoaster," "messed her up"

- "worried," "panicked"

- ZOOM etiquette

APPENDIX G

THE SECOND ITERATION OF CODING

The second iteration of coding:

Initial categorization of the 102 codes

Category 1: Distance learning

Related codes:

- "we are creatures of habit," "structure," "stability"

- "routine was disrupted"

- "hit or miss" learning routine

- reduced length of study time

- online learning

    o Zoom etiquette

    o little or no access to online meetings/learning programs

    o distractions

    o not "authentic learning experience"

    o discipline/ technical issues

- learning packets

    o "viable plan," "hot mess"

    o "busy work"

    o "staying busy"

    o "not much instruction," "touch and go"

    o lacking "immediate feedback" and "teacher interaction"

    o "speeding," "not retaining"

    o "boredom," "mundane"

    o "guilty"

- wellbeing

    - "emotional rollercoaster," "emotionally taxing"

    - "worried," "panicked," "horrible"

    - "confused," "nervous"

    - "anxiety"

    - "complaining"

    - "sad," "upset," "depressed"

    - "isolated," "separated," "scared"

    - "stressful," "overwhelmed"

    - tiredness

    - "frustrated," "shut down," "meltdown"

Category 2: Parental involvement

Related codes:

- "school was a priority, and learning was a priority!"

    - parent-child communication

    - learning schedule at home

- Common Core State Standards "frustration"

- "teacher assistant"

- "reinforce," "reteach"

- "redirect, and re-emphasize, and reiterate"

- "children are children"

- "checked behind," "stay on top of submitting assignments"

- "self-actualizing"

- "the carrot and the stick"

Category 3: The 2020 school closure impact

Subcategory: Negatives

Related codes:

- challenges

    o technology access

    o "redo, reinvent teaching"

    o child care management

    o cancelled afterschool programs

    o confusing COVID-19 safety news on mass media

    o student "exodus"

    o teacher attrition

- using "COVID-19 as a crutch"

    o "lazier"

    o attendance issues

    o "brings out the beast in this curriculum"

    o "losing sense of urgency," "went into survivor mode," "passivity"

- assessment, promotion, and retainment

    o "music to their [students'] ears," "off the hook," "it's not an even playing field"

    o "students to pass that weren't ready"

    o screening for "baseline"

    o "slippery hole"

    o "bubble students," "borderline kids"

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Subcategory: Positives

Related codes:

- "more compassionate"

- "it blows my mind"

Category 4: "Rose to the challenges"

Related codes:

- leadership

- "teachers are wonderful creatures"

    o "band[ed] together"

    o a "community of teachers," "COVID Chronicles"

    o "even though the world was crazy, we still had a task to serve the children"

    o "pockets of excellence," "go the extra mile," "above and beyond"

    o multiple resources

    o "additional safety net"

- hybrid schedule in 2020-2021

    o "you don't know if they have COVID, they don't know if they have COVID!"

    o "new normal" school year (2020-2021)

        ▪ delayed start (August 31, 2020)

        ▪ three-week virtual learning (August – September 2020)

        ▪ shortened in-person school schedule (2 days a week → Easter: 4 days a week)

    o "double the workload"

    o multitasking

- o "multiple hats"

- strengthening school-family relationship

  - o "I've never contacted parents so much in my life!"

  - o "gracious"

- overcoming difficulties

  - o "the unknowns," "uncharted waters"

  - o "moving target"

  - o "grabbing at straws"

  - o "different," "not the same"

  - o "feeling their [students'] way through with such new territory"

  - o "persistence," "persevered," "resilient"

  - o "not doom and gloom"

  - o "make it fun"

  - o "make the best of the situation"

  - o "being creative"

  - o "I wasn't going through this alone!" "we were all in this together!"

- "learning loss"

  - o summer school

  - o "close the learning gaps"

Category 5: Lessons learned

Related codes:

- technology and classroom management skills

- "open up the floor for communication," "opened up the communication line"

- "ready for a normal year"

- "just done away with the laptops," "there's nothing like being one-on-one in person"

- "planning for the unexpected"

- "preparedness for fairness!"

APPENDIX H

EXEMPLARY ASSIGNMENTS

An exemplary assignment during the 2020 extended school closure

- Read aloud the book titled "George Shrinks" by William Joyce
- Choose one assignment from "The Shrinking Menu" based on "One Inch Tall" by Shel Silverstein

One Inch Tall

By Shel Silverstein

If you were only one inch tall, you'd ride a worm to school.
The teardrop of a crying ant would be your swimming pool.
A crumb of cake would be a feast
And last you seven days at least,
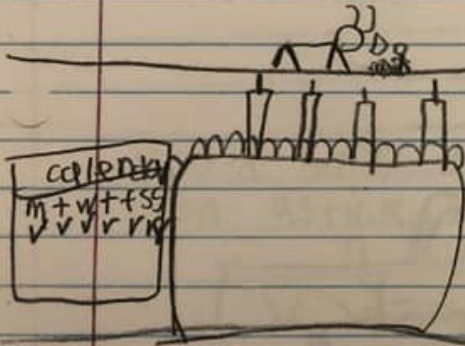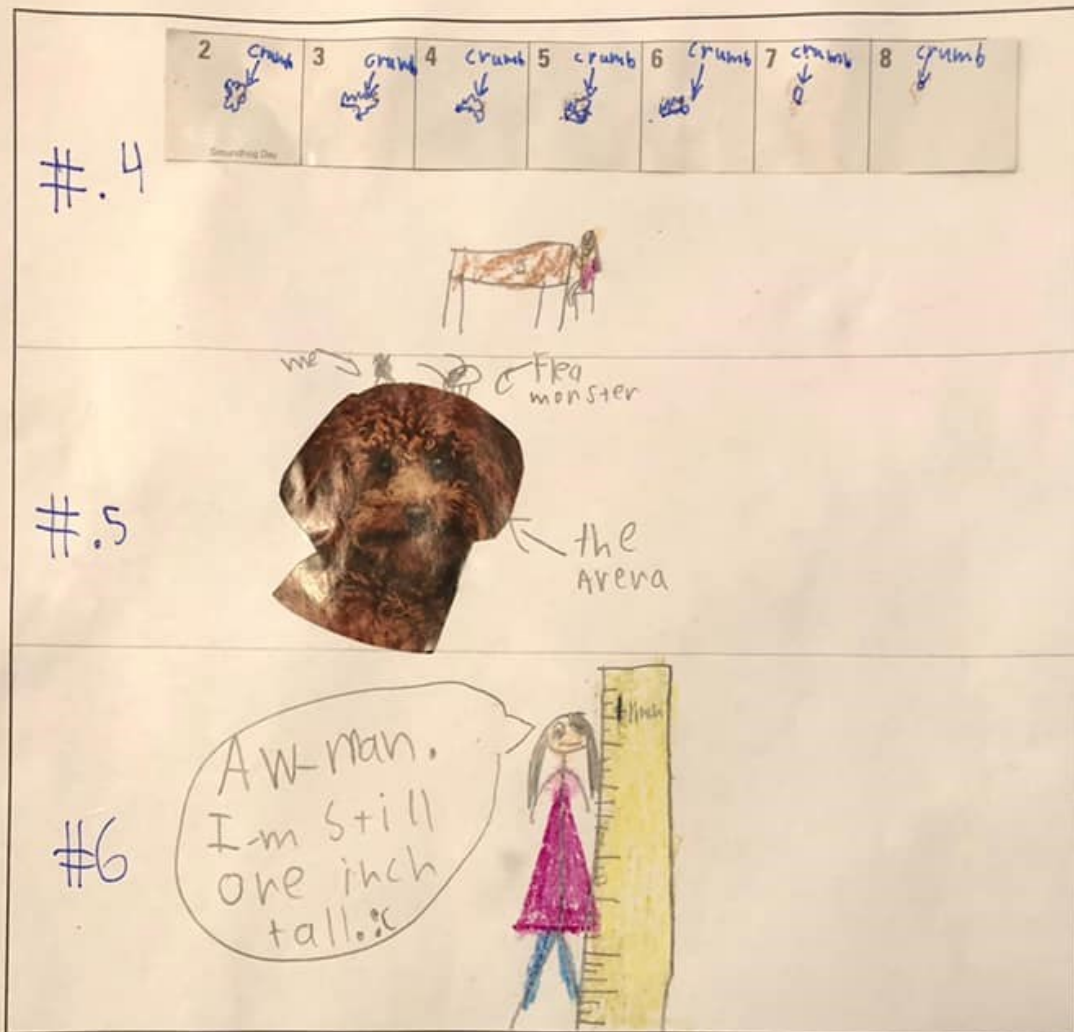A flea would be a frightening beast
If you were one inch tall.

If you were only one inch tall, you'd walk beneath the door,
And it would take about a month to get down to the store.
A bit of fluff would be your bed,
You'd swing upon a spider's thread,
And wear a thimble on your head
If you were one inch tall.

You'd surf across the kitchen sink upon a stick of gum.
You couldn't hug your mama, you'd just have to hug her thumb.
You'd run from people's feet in fright,
To move a pen would take all night,
(This poem took fourteen years to write--
'Cause I'm just one inch tall)

The Shrinking Menu

Choose one assignment to complete this week. Choose wisely!

Read *George Shrinks*. Create a character sketch of George in the form of a song, video, or artistic presentation (drawing, painting, paper cut-out, etc.)	Create a paper cut out of George and an object that is life-sized. Write an adventure about George and include the object. Make sure your story has a problem, and a solution as well as a beginning, middle, and end.	Write a story book about what your life would be like if you were the same size as George. Make sure your story has a problem, solution, as well as a beginning, middle, and an end. Illustrate your story.	Illustrate Shel Silverstein's poem. Include an illustration for each line of the poem. Make sure your write the line of the poem with your illustration. You may assemble these illustrations ANY way you wish.

Name _____ Date _____ Score _____

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Student sample responses

one inch Tall by Shell SilverStein

If you were one inch tall you'd
ride a worm to School
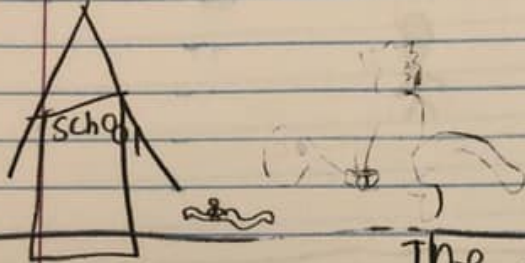
The teardrop of a crying
ant would be your swimming
pool

A crumble of cake
Would be a feast
And last you seven
days at least

A flea would be a frighte
frightening beast

oyikes

#.4

#.5

#6

#4. And last you seven days at least.

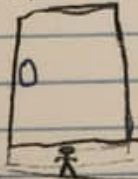#5. A flea would be a frightening beast.

#6. If you were one inch tall.

#7.

#8.

30 days later

#9.

Welcome

#:7. If you were only one inch tall, you'd walk beneath the door.

#:8. And it would take about a month to get down to the store.
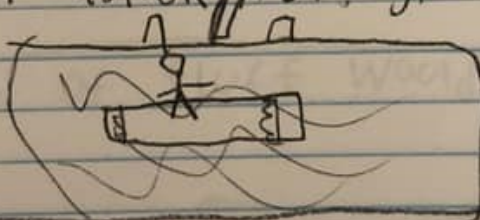
#:9. A bit of fluff would be your bed,

If you were one inch tall

If you were only one inch tall you'd
walk beneath the door

and it would take about a month
to get down to the store

Walmart
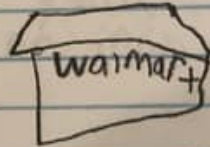
A bit of fluff would be your bed

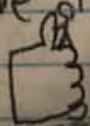You'd swing upon a spider's thre
g

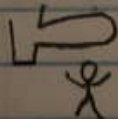And wear a thimble on your head

If you were one inch tall

you'd surf acrcrs the kitchen sink
upon astick of gum

you couldn't hug your mama you'd
Just have to hug her thumb

you'd run from people's feet in
fright

#13

#14   ♡ hug ♡

#15

#13. You'd surf across the kitchen sink upon a piece of gum.

#14. You couldn't hug your mother you'd just hug her thumb.

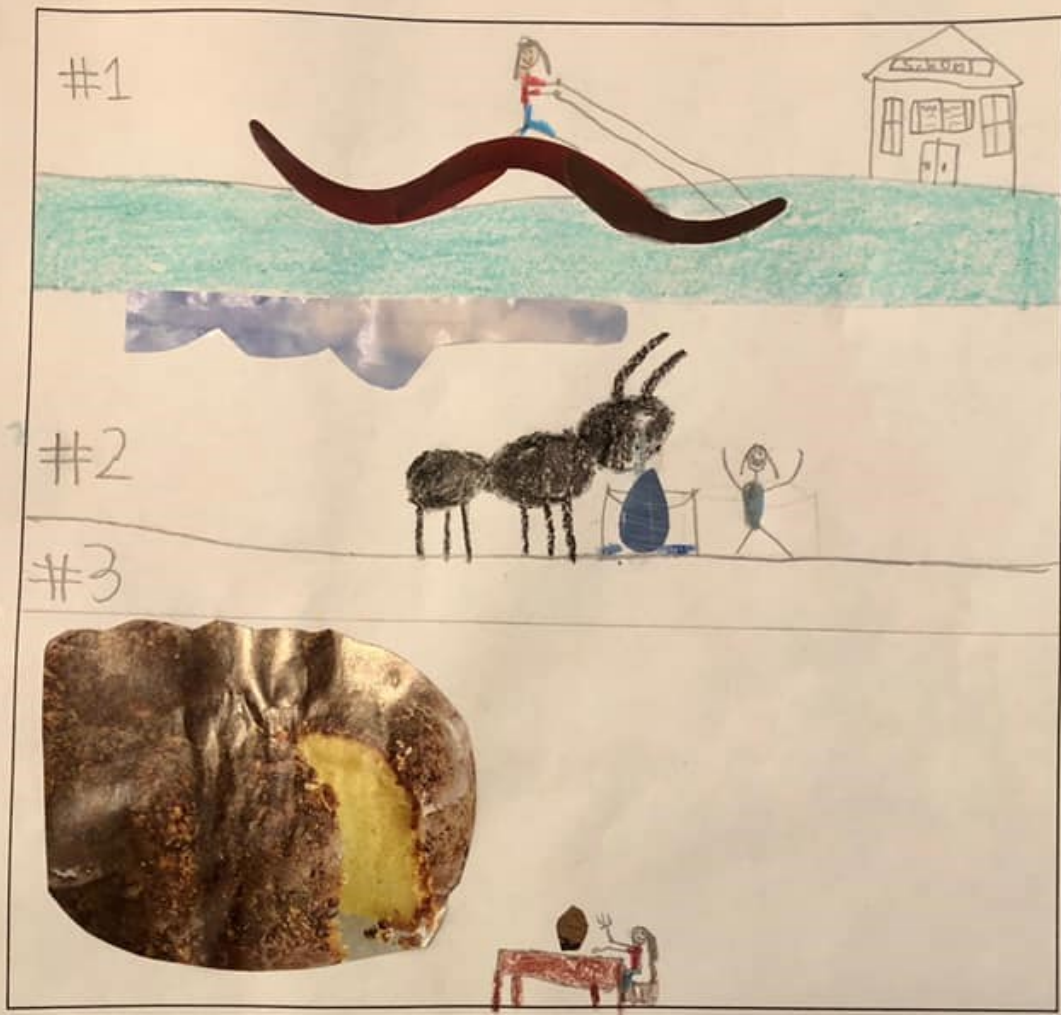#15. You'd run from people's feet in fright.

to move a pen would take all night

(This poem took fourteen years to
write -- cause I'm just one inch tall)

Collin

#1. If you were only one inch tall, you'd ride a worm to school.

#2. The teardrop of a crying ant would be your swimming pool.

#3. A crumb of cake would be a feast

#10. You'd swing upon a spider's thread,
#11. And wear a thimble on your head
#12. If you were one inch tall.

"A Think, Draw, Write!" activity for pre- K through third-grade students

Imagine you are going to the Mississippi Capitol.
What does it look like? What would you tell your
lawmaker about how to keep citizens healthy?

DELBERT HOSEMANN
LIEUTENANT GOVERNOR
STATE OF MISSISSIPPI

Written by:_____

Pre-K–3rd Grade