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A PHENOMENOLOGICAL STUDY TO UNDERSTAND THE TRANSFORMATION OF THE EDUCATION SYSTEM IN A RURAL MISSOURI HIGH SCHOOL IN THE WAKE OF THE COVID-19 PANDEMIC

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By

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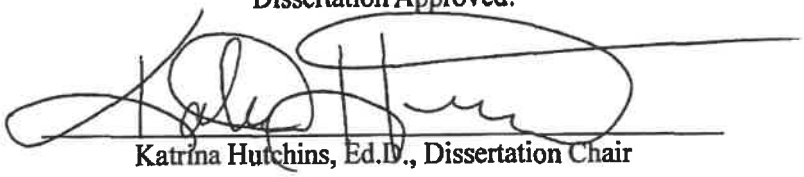

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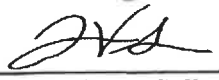

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DEDICATION

This dissertation is dedicated to my late daughter, Emmalyn Grace Burdick, who inspired me to pursue my Doctorate Degree. Without her being taken to her eternal resting place, I would never have started this journey. I also want to thank my husband, Jon Burdick, for standing by me, as I worked through my courses and used him as a sounding board, for standing behind me to catch me when the stress was overwhelming, and for leading the way and encouraging me to move forward when I was too nervous or scared to go any further. Thank you for always supporting me and encouraging me to achieve my dreams!

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Abstract

The purpose of this phenomenological study was to explore the transformation of the education system in a rural-distant Missouri high school in the wake of the COVID-19 pandemic. Seven content-area educators participated in the study. Data was collected through interviews and archival documents. The data analysis revealed three themes: transition to virtual learning, the new classroom experience, and emotional impact. Within those themes, participants described specific institutional and curricular changes that were made, and the emotional impact that the COVID-19 teaching experience had on them. Results of the study indicated that teachers felt very alone navigating through all of the educational changes. As schools develop and revise emergency plans, they should consider including a teacher support system and open communication amongst teachers, staff, and administrators. As the COVID-19 pandemic continued, this study may serve as a foundation to compare changes that occurred in schools across the United States (U.S.), as well as any possible trends in the emotional impact on educators.

Keywords: COVID-19, pandemic, rural, high school, institutional change, curricular change, virtual learning, emotional impact

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I. INTRODUCTION

In 2019, a novel coronavirus was identified in humans in Wuhan, China (Centers for Disease Control and Prevention [CDC], 2020c). This novel coronavirus was officially named Coronavirus Disease 2019 (COVID-19) by the World Health Organization (WHO) on February 11, 2020. According to the Centers for Disease Control and Prevention (CDC), COVID-19 had been seen in animals, such as camels, cattle, cats, and bats, but never in humans. Researchers speculated that COVID-19 was transferred to humans by one of these animals; however, the virus's official source is unknown (CDC, 2020b). Researchers at the CDC concluded that COVID-19 was spread by droplets that become airborne when a person sneezes or coughs, and the symptoms of COVID-19 include flu-like symptoms and respiratory distress (CDC, 2020c).

By the end of May 2020, the WHO (2020a) reported that the number of COVID-19 cases worldwide reached almost six million, and the number of COVID-19 deaths worldwide reached more than 367,000. By the end of May 2020, nearly 1.8 million people in the U.S. tested positive for COVID-19, and just over 100,000 people died. COVID-19 spread quickly, because people interacted in public places, such as gas stations, grocery stores, schools, hospitals, and other work environments (CDC, 2020c). To reduce exposure to COVID-19, the U.S. government issued social distancing guidelines, individual states issued stay-at-home orders, many schools were closed indefinitely, and people exposed to the virus were held in quarantine (CDC, 2020c).

The COVID-19 pandemic had a negative impact on the lives of the American people. Haleem et al. (2020) reported disruption in the supply chain, loss of businesses, inability to provide services to the community, low cash flow in the market, and undue stress on the American people. The COVID-19 pandemic also brought change to the United States' education system. School districts were mandated to shut down face-to-face instruction, educators were left to make individual changes with minimal state or federal guidance, limited funding was available to provide quality education to students, sports and celebrations were postponed or canceled, and students were required to socially distance from their peers (Haleem et al., 2020).

This phenomenological study aimed to explore the transformation of the education system in a rural Missouri high school in the wake of the COVID-19 pandemic. The rural high school in this study suspended face-to-face contact indefinitely on March 22, 2020. Many teachers were already utilizing Google Classroom, an online learning platform, with students and began posting assignments and learning materials online for students to use. Teachers who had been teaching in traditional ways were required to create Google Classrooms for their classes and digitalize their curriculum. Students identified as not having access to internet and Chromebooks were delivered paper copies of the instructional materials.

Teachers and school staff volunteered to box breakfasts and lunches by household, then rode the bus to deliver the meals on Mondays, Wednesdays, and Fridays along the scheduled bus routes. Paper copies of assignments, as well as supplies, instruments, and locker contents, were prepared by teachers and delivered to student homes with the meals. Students returned completed assignments to a volunteer when meals were delivered. Once collected, the assignments were kept quarantined in the entryway of the school for 3 days before being distributed to teachers' mailboxes. Teachers worked from home, unless they were volunteering with food service. If

teachers did not have reliable internet at home to communicate with students, they were allowed to work from their classrooms, as long as social distancing and mask guidelines were being followed.

The COVID-19 pandemic brought many unknowns to the students, staff, and educators in schools across the United States. The way schools reacted in the face of the pandemic varied, based on the needs of the students, teachers, and the communities in which they were located. The procedures followed by the rural school in this study were different even from the other schools in the county.

Background of the Study

According to the Condition of Education 2019 report, 29% of United States public schools are in rural areas (McFarland et al., 2019). To determine the classification of schools, the National Center of Education Statistics ([NCES], 2019a) assigned all school districts a locale code based on location and the area's population. The four major locale codes are city, suburban, town, and rural (Geverdt, 2015). Each of the four major locales is then subdivided into three areas, resulting in 12 specific locales: city-large, city-midsize, city-small, suburban-large, suburban-midsize, suburban-small, town-fringe, town-distant, town-remote, rural-fringe, rural-distant, and rural-remote (see Table 1). In 2012, the NCES analyzed data from the Public Elementary/Secondary School Universe Survey and determined that 26.5% of Missouri school districts were classified as rural (NCES, 2019a). Showalter et al. (2017, 2019) analyzed the U.S. rural statistics and noted that the number of Missouri school districts classified as rural had been steadily increasing over the past decade, despite the overall number of U.S. rural schools holding steady.

Table 1

NCES Locale Characteristics

Locales	Relation to Urbanized Areas	Relation to Cities or Urban Clusters	Population Constraints
City – Large	Inside an urbanized area	Inside a principal city	≥ 250,000 residents
City – Midsize	Inside an urbanized area	Inside a principal city	100,000 - 250,000 residents
City – Small	Inside an urbanized area	Inside a principal city	< 100,000 residents
Suburb – Large	Inside an urbanized area	Outside a principal city	≥ 250,000 residents
Suburb – Midsize	Inside an urbanized area	Outside a principal city	100,000 - 250,000 residents
Suburb – Small	Inside an urbanized area	Outside a principal city	< 100,000 residents
Town – Fringe	≤ 10 miles from an urbanized area	Inside an urban cluster	
Town – Distant	10 - 35 miles from an urbanized area	Inside an urban cluster	
Town – Remote	> 35 miles from an urbanized area	Inside an urban cluster	
Rural – Fringe	≤ 5 miles from an urbanized area	≤ 2.5 miles from an urban cluster	Census-defined rural territory
Rural – Distant	5- 25 miles from an urbanized area	2.5 - 10 miles from an urban cluster	Census-defined rural territory
Rural – Remote	> 25 miles from an urbanized area	> 10 miles from an urban cluster	Census-defined rural territory

Greenough and Nelson (2015) investigated the differences between the classifications of rural schools laid out by the NCES locale codes. Greenough and Nelson noted that the U.S. Census Bureau categorized schools as either urban or not urban, so the rural school data collected by the U.S. Census Bureau contained a wide variety of data from schools with an enrollment of a few hundred students to schools with an enrollment of a few thousand students. Greenough and Nelson concluded that schools classified as rural can differ greatly and that researchers must define rural schools in their studies. The term *rural school* in this study referred

to a high school in Missouri school district classified as rural-distant by the NCES. The rural school in this study consisted of grades 7-12 in one building. The Department of Elementary and Secondary Education ([DESE], n.d.) reported enrollment for the 2019-2020 school year as 281 students.

Schafft (2016) found that, although rural places can be quite different from one another, they tend to share one common feature: the school functions as the center of the community. Schafft studied the well-being of rural communities and noted that the communities and schools were close-knit, and parents were very participative in school events and volunteering. The rural school in this study was the center of the community in which it was located. The community was small, with only 570 residents, a small restaurant, carwash, post office, bank, a handful of small businesses, two churches, a school, a park, and a feed mill. Parents, grandparents, and alumni filled the stands for all sporting events to support the students, children hung out at the park and the carwash on Friday nights, and "everybody knows everybody."

Despite a large number of rural schools in the United States, most of the educational research focused on schools in urban and metropolitan areas. According to the 2013-2014 data collected by the NCES and the 2010 U.S. census data, student characteristics in rural areas were quite different from the characteristics of students who reside in urban or metropolitan areas (NCES, 2019a). Blair et al. (2013) analyzed the 2010 census data for the rural Great Plains region and conducted a case study of rural Nebraska to determine the critical demographic factors influencing the rural education system. The Nebraska case study results contradicted the national statistics, finding that the minority population was higher in rural areas, and the poverty rates of school-aged children in rural areas exceeded those of metropolitan areas (Blair et al., 2013). Of the 537 students enrolled in the rural Missouri school district in this study, 94.6% were

White, and 41.3% qualified for the Free/Reduced Lunch program ([DESE], n.d.a). These statistics align with the national data collected in the 2010 U.S. census and reported by the NCES (2019a).

Blair et al. (2013) concluded from their study that rural schools face many hurdles that urban and metropolitan schools do not face, including a shortage in funding, decreasing student enrollment, increased student poverty, competition for limited public resources, teacher recruitment, school consolidation, and difficulty meeting special education needs. Schools in other rural areas also faced the hurdles identified by Blair et al. in the rural Great Plains schools. The rural school in this study has met many challenges, including decreasing student enrollment, teacher recruitment, teacher retention, and a shortage of funding.

To help rural school districts meet the federal policy guidelines and alleviate the financial burden, two federal programs, the Rural Low-Income School initiative (RLIS) and the Small Rural Schools Achievement Program (SRSA), were implemented (U.S. Department of Education [USDOE], 2020a, 2020b). RLIS and SRSA funds could only be used to improve student achievement. Schools tend to allocate these funds to after-school programs, parent involvement activities, English Language Learners (ELL) programs, and curricula. With the recent decrease in funding to rural school districts, these districts relied on the RLIS and SRSA programs to supplement their budgets (Showalter et al., 2017, 2019). With an enrollment of 537 students, the school district in this study was not considered a "small" rural school district, which must have less than 494 students (Showalter et al., 2017). Thus, the rural school district in this study is only eligible to receive extra funding through the RLIS program. Unlike planned educational policy changes, the COVID-19 pandemic forced an abrupt change in the United States education system. The rural Missouri high school in this study had less than one week to make changes to

the curriculum, find and provide technology resources and internet access for students, ensure the safety of staff and students while adhering to the state-mandated guidelines, and distribute learning materials to all students. With uncertain guidance from the state and federal level and no extra funding, this process was arduous, and teachers struggled to provide quality education to students under less-than-ideal circumstances. This study explored the transformation of the education system in this rural Missouri high school in the wake of the COVID-19 pandemic.

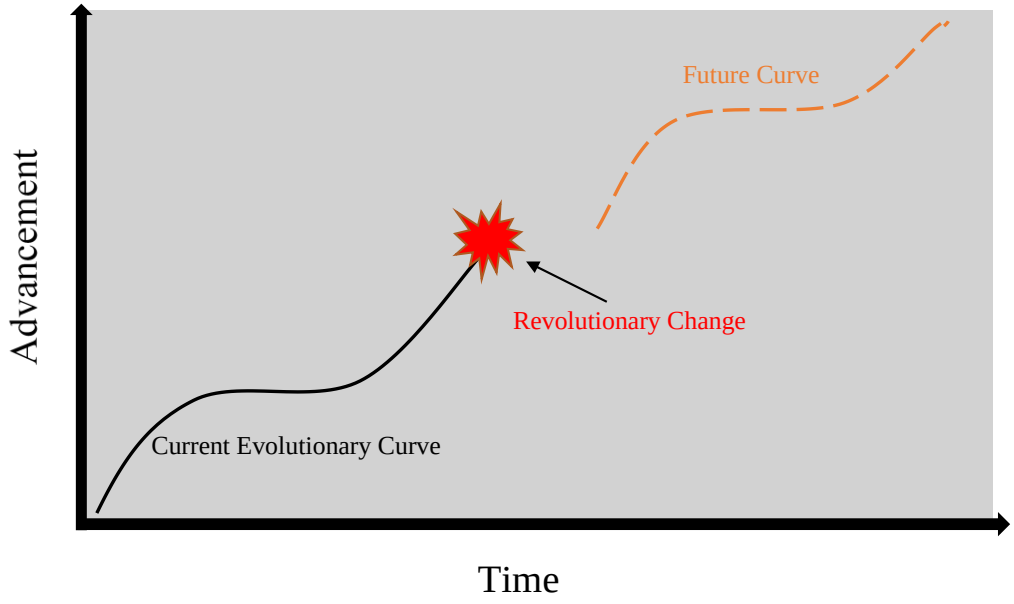
Theoretical Framework

Wyatt Warner Burke (2018) is a renowned psychologist who has contributed vital works to the field of organizational change and development. Burke's Revolutionary Change Theory was the most appropriate to frame this study. Burke described a model where organizations fluctuate between periods of evolutionary and revolutionary change. Burke explained that organizations spend more than 95% of their time in the evolutionary change period. Burke also referred to the evolutionary change period as the *equilibrium period*. While in the equilibrium period, the organization has a solid structure and makes small adjustments to improve the efficiency of that structure. In the education field, schools may make changes in leadership and staffing, add or delete educational programs, change course offerings, make curriculum changes, or make building expansions during the equilibrium period.

Revolutionary change occurs when there is an immediate disruption or change in an organization's environment (Burke, 2018). When revolutionary change occurs, there is a "jolt" in the organization's structure, and radical changes occur that are often irreversible. Once changes have been made within the organization to adapt to the new structure, the organization returns to the evolutionary period to grow until the next disruption occurs (see Figure 1).

Figure 1

Evolutionary and Revolutionary Change Model



Note. Adapted from "The Constituent Elements of the Paradigm for Electric Power Transmission and its Emergence from the Perspective of Nikola Tesla," by J.M.Cols Matheus, 2016. ResearchGate. https://www.researchgate.net/profile/Juan_Cols/publication/307208726_The_Constituent_Elements_of_the_Paradigm_for_Electric_Power_Transmission_and_its_Emergence_from_the_perspective_of_Nikola_Tesla/links/57c4649508aee50192e89da1/The-Constituent-Elements-of-the-Paradigm-for-Electric-Power-Transmission-and-its-Emergence-from-the-perspective-of-Nikola-Tesla.pdf

The COVID-19 pandemic brought revolutionary change to the education system. The forced shift to online learning experienced by the school in this study represented the "jolt" described by Burke (2018). The school in this study made radical changes to accommodate and facilitate learning under the unforeseen circumstances. Once the 2020 school year concluded, the school in this study began planning for the 2020-2021 school year, thus returning to the evolutionary period described by Burke.

Prior to the start of the 2020-2021 school year, a COVID-19 Taskforce was established. The taskforce was made up of teachers and staff members throughout the district who volunteered to participate. Members of the taskforce met several times throughout the summer to establish re-opening plans for the district. The taskforce ultimately designed three models: Distance Learning Model, Partial-Campus Learning Model, and Full-Campus Learning Model. The taskforce presented recommendations to the School Board that the school would open using the Full-Campus Learning Model and would shift to the other models if/when the need arose. As the school year progressed, the district evolved and adapted as necessary to continue educating students.

Problem Statement

The COVID-19 pandemic abruptly shifted the education system from a face-to-face institution, where teachers spent the majority of the day with students, to a homeschooling and online style of education, where students spent the day learning alone or in the presence of their primary caregivers. The shift in education was a challenging process for educators, parents, students, and communities. Educators had to convert their curriculum to a format that could be delivered both online and in paper format. Many educators were also parents of school-age children, so it was a challenge to continue teaching from home while also supervising their own

children. The resources and reliability of internet services in a rural area also proved to be an obstacle for teachers, as well as students.

Since rural school districts face various challenges that are different from urban and metropolitan schools (Blair et al., 2013), researchers can conclude that a revolutionary change would bring about different transformations in these schools. Educators who worked through the COVID-19 pandemic would be the ideal candidates to reflect on the how this revolutionary change transformed the education system.

Purpose Statement

The purpose of this phenomenological study was to explore the transformation of the education system in a rural-distant Missouri high school in the wake of the COVID-19 pandemic. At this stage in the research, the transformation of the education system was defined as any change in education experienced by high school content-area educators.

Significance of the Study

The results of this phenomenological study filled a gap in the literature pertaining to the transformation of the education system in rural high schools in the wake of the COVID-19 pandemic. The last major pandemic experienced was the H1N1 Pandemic of 2009, but there were no studies that followed up on the effects of the pandemic on education. The COVID-19 pandemic provided the opportunity for researchers to document the changes in the education system and effects of the pandemic.

During this study, high school content-area educators from the specified rural-distant Missouri school district shared their experiences in educating students; communicating with students, parents, peers, and administration; modifying curriculum, and working remotely with minimal time to prepare. Additionally, this study provided direct insight into changes that

remained permanent in the upcoming school year or transformed how education moved forward in the high school.

Overview of Methodology

Research Design

A qualitative phenomenological approach was selected for this study. More specifically, a transcendental phenomenological approach was used to gather a "fresh perspective" (Creswell, 2013, p. 80) of the phenomenon under study. As a teacher in the specified rural-distant Missouri school district, the researcher used bracketing to set her experiences aside and focus on the experiences of the participants. Participants included high school content-area educators who worked in the specified rural-distant Missouri school district.

Research Question

From the perspectives of high school content area teachers, what institutional and curricular changes have occurred due to COVID-19?

Data Collection

The researcher first identified the high school content-area educators in the specified rural-distant school district and invited them to participate in the study. Consent was obtained from each participant before conducting interviews (see Appendix A). Pseudonyms were used in all print materials to protect the identity of the participants. Semi-structured interviews with open-ended questions were conducted using a researcher-created interview guide, which was recorded (see Appendix B). The interviews were transcribed by the researcher and returned to the participant for validation. The transcripts were then analyzed and coded to find any emerging themes. Archived documents were also used to validate the results of this study.

Procedures

After approval by the IRB, the researcher selected high school content-area educators who worked in the specified rural-distant school district during the COVID-19 pandemic. Roberts and Hyatt (2019) recommended a small sample size, restricted to single- or double-digit numbers, for a qualitative study. Criterion sampling was used to ensure the selected educators had experienced the phenomenon under study (Creswell, 2013). All high school content-area educators in the district who met these criteria were invited to participate in the study.

Limitations

The researcher identified the following limitations for this study:

1. Data collection was limited to high school content-area educators in one rural-distant Missouri high school.
2. The sample size was limited by the number of educators who agreed to participate in the study.
3. Since this study was conducted in the midst of the COVID-19 pandemic, the researcher could not continue to report new information as it became available.
4. The study focused on the educators' experience in the school district and did not intend to scrutinize the school district or administration.

Definition of Key Terms

The following terms are relevant to the phenomenon being discussed:

- **COVID-19**: COVID-19 refers to the novel coronavirus first reported by officials in Wuhan, China in 2019 and named by the World Health Organization in February 2020 (CDC, 2020c).

- **education system**: Education system refers to the partnership of students, parents, teachers, administrators, and community working along with curricula and the school buildings to provide education to students (Great Schools Partnership, 2013).
- **phenomenological study**: A phenomenological study describes commonalities for individuals who share lived experiences of a phenomenon (Creswell, 2013).
- **rural school**: Rural school refers to a school district designated as rural-distant by the NCES locale codes (Geverdt, 2015).
- **transformation**: Transformation refers to any change in the education system that has occurred since the onset of the COVID-19 pandemic because of the COVID-19 pandemic (*Definition of TRANSFORMATION,* n.d.).

Summary

Rural school districts face a variety of challenges that are different from urban and metropolitan schools (Blair et al., 2013). Based on this assumption, researchers can conclude that the education system in rural school districts had also transformed differently than urban and metropolitan schools during the COVID-19 pandemic. Changes in education due to the COVID-19 pandemic began in March 2020, when schools across the country began closing indefinitely. At that juncture, researchers had speculated about the effects of the COVID-19 pandemic on education. Schools across the nation were in the process of determining how the 2020-2021 school year would reopen while adhering to the CDC guidelines (CDC, 2020b).

The purpose of this dissertation was to explore the changes in the education system in the wake of the COVID-19 pandemic. More specifically, this study focused on the transformations that occurred in one rural-distant Missouri high school. By examining the experiences of educators who lived through the pandemic and taught in the 2020-2021 school year, valuable

information was gained and used to identify the transformations that the education system had undergone.

II. REVIEW OF LITERATURE

The COVID-19 pandemic abruptly shifted the United States education system from a face-to-face institution, where teachers spent most of the day with students, to a homeschooling and online education style, where students spent the day learning alone or in the presence of their primary caregivers. This shift in education was a new and challenging process for educators, parents, students, and communities. Since rural schools face unique challenges (Blair et al., 2013), researchers can conclude that the education system in rural high schools had also transformed in a unique way during the COVID-19 pandemic.

This phenomenological study aimed to explore the transformation of the education system in a rural Missouri high school in the wake of the COVID-19 pandemic. In this research study, the education system's transformation was defined as any change in education experienced by high school content-area educators. The goal of Chapter II is to provide an inclusive review of the literature on the following topics: (a) the different facets of rural areas and education, (b) rural school barriers and challenges, (c) rural school education policy, (d) the three major pandemics of the 20th and 21st century, (e) the COVID-19 pandemic, and (f) the effects of pandemics on education. Each of these topics is explored from both a country and a state perspective.

According to the *Condition of Education 2019* report, 29% of United States public schools were rural (McFarland et al., 2019, p. 69). Despite a large number of rural schools in the

United States, very little educational research is focused on schools in rural areas. Rural schools tend to be comprised of different demographics, face different challenges, and have different applications of educational policy than their urban and metropolitan counterparts (NCES, 2019a). Schafft (2016) acknowledged that even rural places could be quite different from one another. When trying to understand the educational transformation that a rural school undergoes, it is essential to consider how the rural school is classified, the population that makes up the rural school, the challenges that the school faces, the different education policies, and the financial assistance that is available to aid in the transformation.

The rural Missouri high school in this study had less than one week to make changes to the curriculum, find adequate technology resources, acquire internet access for all students, ensure staff and students' safety while adhering to the state-mandated guidelines, and distribute learning materials to all students. With minimal guidance from the state and federal level, including no extra funding, teachers struggled to provide quality education to students under less than ideal circumstances. During this study, high school content-area educators from the specified rural Missouri school district shared their experiences in educating students; communicating with students, parents, peers, and administration; modifying curriculum; and working remotely with minimal time to prepare. Additionally, the research provided direct insight into changes that remained permanent during the 2020-2021 school year or transformed how education moved forward in the high school.

The past century brought about three major pandemics that were comparable to the COVID-19 pandemic. The three pandemics included the Spanish Flu of 1918, the SARS outbreak of 2003, and the H1N1 pandemic of 2009. The Spanish Flu and H1N1 pandemics were caused by a new Influenza A virus (CDC, 2019a), while the SARS outbreak of 2003 was caused

by a new coronavirus, similar to the COVID-19 coronavirus (CDC, 2019b). Through newspaper articles and digital archiving, the responses from countries, states, and communities were well-documented, but there was no follow-up on how each of these pandemics impacted education. The results of this study filled this gap in the literature by exploring the transformation of the education system in a rural high school in the wake of the COVID-19 pandemic.

Rural Areas and Education

The *Condition of Education 2019* report stated that 29% of United States public schools are in rural areas (McFarland et al., 2019). Rural schools are classified differently by different government agencies, making data collection on rural schools a challenge. Rural schools have also been found to have different demographics and face different challenges than schools located in more populated areas (Bergeron, 2018; Blair et al., 2013; Rosenberg, 2014). Due to rural schools' unique challenges, new educational policies were created and implemented specifically to help rural schools provide the same educational opportunities as schools in urban and metropolitan areas.

Rural School Classification

As defined in Chapter 1 (see Table 1), U.S. schools are classified according to 12 specific locales. The National Center of Education Statistics (NCES) assigns all school districts with a locale code based on their location and the population of the area. While investigating the different rural school locales, Greenough and Nelson (2015) found that many of the schools classified as rural-fringe had large enrollments and were located close to larger cities. The demographics and features of rural-fringe schools modeled those seen in towns or cities, as opposed to the higher poverty levels seen in rural-remote or rural-distant schools (Greenough & Nelson, 2015).

Schafft (2016) examined rural communities' well-being and reported many of rural schools' and communities' unique features. Schafft reported that, although rural places could be quite different from one another, communities and schools remained close-knit, parents were very participative in school events, including volunteering, and the school functioned as the center of the community.

The U.S. Census Bureau also offers a classification for rural schools; however, the classification is not as specific as that offered by the NCES. The U.S. Census Bureau classifies schools as "urban" or "not urban". This broad categorization leads to rural school data that includes data from schools with an enrollment of a few hundred to schools with an enrollment of a few thousand (Greenough & Nelson, 2015).

Rural School Demographics

According to the 2013-2014 data collected by the NCES and the 2010 U.S. census data, student characteristics in rural areas are quite different from the characteristics of students who reside in urban or metropolitan areas (NCES, 2019a). The national data collected by the NCES showed that, in rural areas, 73.1% of the student population was White, 25.6% of students had an IEP, and approximately 17.3% of students were living in poverty (2019b, 2019c, 2019d). The 2014 American Community Survey results estimated that 18.7% of rural-Missouri, school-aged children lived in poverty, which was higher than the U.S. rural estimate (NCES, 2019d). The national free/reduced lunch enrollment was reported at 52.3%, while Missouri free/reduced lunch enrollment was reported at 50.2% (NCES, 2019e). State-level census data separated by locale was minimal; thus, the researcher could not provide a full comparison of country and state statistics.

Blair et al. (2013) analyzed the 2010 census data for the rural Great Plains region to determine the critical demographic factors influencing the rural education system. The analysis results contradicted the national statistics, finding that the minority population was higher in rural areas, and the poverty rates of school-aged children in rural areas exceeded those of metropolitan areas. From their study, Blair et al. concluded that rural schools face many hurdles, such as a shortage in funding, decreasing student enrollment, increased student poverty, limited public resources, teacher recruitment, school consolidation, and difficulty meeting special education needs. Research indicates that urban and metropolitan schools do not face these same challenges, while schools in other rural areas do.

Rural Educational Barriers and Challenges

Bergeron et al. (2018) conducted a multi-case study of three rural schools in Alabama. Bergeron et al.'s focus was to determine what barriers students face in high-poverty, high-minority rural schools. Throughout the 29 interviews conducted, Bergeron et al. found three themes that emerged: student-centered issues, school-level challenges, and limited community support. Each theme was broken into sub-themes identified as important by at least 40% of the participants. As defined by Bergeron et al.'s study, the most important barrier identified was "negative pressure on students" (p. 5). Seventy-five percent of participants believed that the high-poverty environment in which the students were being raised discouraged students from putting forth their best effort, and the students had the mindset that there was no way to better their circumstances. Fifty-seven percent of the participants felt there was a lack of adequate resources to meet their students' needs and fulfill educational policy expectations. Fifty-seven percent of the participants reported that they were unable to provide personalized education to meet their students' specific needs due to policy requirements, and 54% of participants identified motivation

as a major challenge. Community support was identified as a barrier because none of the mayors agreed to be interviewed during the study.

Rosenberg et al. (2014) took a focused look at nine rural schools from four different states, which received funds from the School Improvement Grants (SIG) program from 2010 to 2013. Rosenberg et al. selected these nine schools to illustrate the challenges encountered by rural schools while improving their education systems. Rosenberg et al. analyzed the teacher survey results and identified specific issues that teachers felt were most challenging: insufficient parent involvement, low student motivation, low and/or erratic student attendance, low staff morale, and poor student discipline. Data collected from site visit interviews provided a more specific set of challenges that related to parent involvement: parents' work schedules, parents not valuing education, lack of access to transportation, parental beliefs that education is the school's responsibility, and distance between home and school. Although these cases showed a trend in similar challenges, the data collected were not robust enough to make a national assumption.

In 2012, the NCES analyzed data from the Public Elementary/Secondary School Universe Survey and determined that 26.5% of Missouri school districts were classified as rural (NCES, 2019a). In 2017, Showalter et al. analyzed the U.S. rural statistics and found that 42.7% of Missouri school districts were classified as rural. In 2019, rural statistics had increased to 43.4% (Showalter et al., 2019). Despite the number of U.S. rural schools holding steady at 28.5% over the past decade, the number of rural school districts in Missouri was steadily growing (Showalter et al., 2017, 2019). Acknowledging that all rural schools are not created equal, Showalter et al. (2019) narrowed the data even further to discern that 63.4% of Missouri's rural school districts were classified as small, rural school districts with less than 494 students.

Rural Educational Policy

At the time of this research, federal education policy is the Every Student Succeeds Act (ESSA), which dictates specific requirements that each state must meet to receive federal funding (USDOE, n.d.). The ESSA required "increased access to high-quality preschool" and "accountability and action" (USDOE, n.d., "ESSA Highlights" section) to produce a change in underachieving schools. These first two ESSA requirements caused a great financial burden for districts that did not have a preschool and/or had been classified as underachieving schools. The ESSA also required annual statewide assessments and that all students be taught to high academic standards (USDOE, n.d.).

To help rural school districts meet the federal policy guidelines and alleviate the financial burden, two federal programs, the Rural Low-Income School initiative (USDOE, 2020a) and the Small Rural Schools Achievement program (USDOE, 2020b), were implemented. RLIS and SRSA funds could only be used to improve student achievement, such as through after-school programs, parent involvement activities, ELL programs, and curricula for the students. With the decrease in funding to rural school districts, at the time of this research, rural districts relied on the RLIS and SRSA programs to supplement their budgets (Showalter et al., 2017, 2019).

To satisfy ESSA requirements and provide quality instruction, the rural-Missouri instructional expenditures per student had increased from $5,170 to $5,608, and the average teacher salary increased from $44,117 to $58,160 between 2017 and 2019, as reported in *Why Rural Matters* (Showalter et al., 2017, 2019). Since the implementation of ESSA, the changes in Missouri education had been adverse. Four of the five educational gauges now lie at or below the national median: importance, diversity, educational policy, and educational outcomes (Showalter et al., 2019). The condition of education in rural-Missouri schools was now considered the 18th

most critical of all 50 U.S. states, which is worse than the 2017 ranking of 23rd (Showalter et al., 2017, 2019). Amidst the negativity, two positive results stood out: rural-Missouri schools were ranked among the top 10 most prepared states in terms of college readiness, and the overall graduation rate in rural districts was 92.8% (Showalter et al., 2019).

Historical Pandemics and Educational Outcomes

In the past century, only a few major pandemics compare to the COVID-19 pandemic. The comparable major pandemics included the Spanish Flu of 1918, the SARS outbreak of 2003, and the H1N1 pandemic of 2009, also known as the Swine Flu. According to the CDC, an outbreak of a new Influenza A virus brought about the Spanish Flu and the Swine Flu pandemics (2019a). The SARS outbreak of 2003 was an outbreak of a new coronavirus, similar to the COVID-19 coronavirus (CDC, 2019b). Although these pandemics, and how society responded to them, were well-documented, no research followed up on the impact of these pandemics on the education system.

Spanish Flu

According to the CDC, the 1918 influenza pandemic, also known as the Spanish Flu, was the most severe pandemic of the 20th century (2019c). The pandemic began in the fall of 1918, and the CDC estimated that there were 40-50 million deaths worldwide. At that point in time, the death count was equivalent to 1-3% of the world population. The high mortality rates were attributed to not having any flu vaccines or antibiotics available. Mortality rates were high for children under 5, young adults aged 20-40, and seniors aged 65+. The unique feature of this pandemic was the high mortality for healthy people (CDC, 2019c). City officials across the country made individual decisions about the best way to slow the virus's spread and protect its residents. School closures were a common precaution taken across the country.

In Kansas City, Missouri, schools closed on October 8, 1918. After six weeks, schools reopened on December 30, 1918 (50 U.S. Cities, n.d.). To make up the lost time, the school board extended the school year three weeks into June, and all scheduled holidays for the remainder of the school year were removed from the academic calendar. Teachers spent time condensing the curriculum to include only the most important concepts that could be taught in the remaining time (50 U.S. Cities, n.d.).

In St. Louis, Missouri, city officials ordered all businesses shut down on October 8, 1918, but allowed schools to close on October 9th to give one day of preparation to teachers and families (50 U.S. Cities, n.d.). In all the chaos, some schools were confused by the decision and closed on the 8th with all other businesses. This confusion resulted in some students showing up at closed schools, and other students were stopped by the police and told to return to their homes. All St. Louis schools reopened on January 2, 1919, and nurses were hired to work in schools and evaluate students for flu symptoms. This precaution sparked the hiring of school nurses as an essential part of education.

Stern et al. (2010) reported that three cities chose not to close schools during the pandemic: New York City, Chicago, and New Haven. These cities instead chose to improve the school facilities and hire full-time nurses. Students reported directly to their classrooms, where their teachers thoroughly inspected them for any flu symptoms. Students with symptoms were isolated, and the school nurse provided a professional evaluation. A health department employee then took students home or to the hospital if they were deemed infected. The procedures that these three cities followed during the pandemic were successful in combatting the spread of infection while continuing to educate students. Although there was an abundance of information

about how schools reacted during the Spanish Flu pandemic, there was no information regarding the effects of the school closures on education or any changes in the pandemic aftermath.

Severe Acute Respiratory Syndrome

In November 2002, a coronavirus outbreak began in China. The virus was later named Severe Acute Respiratory Syndrome (SARS) and spread to 29 countries on four continents before it was contained (CDC, 2019b). The CDC reported a total of 8,098 cases and 774 deaths. Most of the reported SARS cases, 7,429, were in China, followed by 251 cases in Canada, and 238 cases in Singapore (WHO, 2003). In the United States, 29 cases were reported with no deaths. There have been no known cases of SARS since 2004 (CDC, 2019b).

In March 2003, the Singapore Ministry of Health closed all schools due to the SARS outbreak (Bertram & Gilliland, 2003). The Hong Kong government quarantined entire apartment buildings, and the Hewlett-Packard and Motorola manufacturing plants shut down, sending home more than 300 workers when one person became infected. According to Bertram and Gilliland (2003), technologically advanced areas, such as Hong Kong and Singapore, already had education continuity plans for students to access their curriculum remotely. In emerging countries, such as China and Vietnam, students had to choose: go to school and risk being infected or stay safe at home but fall behind on their education. The SARS outbreak revealed how vulnerable school systems are to a crisis that requires extended leave.

As a result of the SARS outbreak, Bertram and Gilliland (2003) suggested that all countries implement an e-learning backup plan in case of another event. Bertram and Gilliland presented guidelines to help schools accomplish the task: Students need access to computers, the internet, and collaborative tools, such as email; the curriculum must be flexible to allow for group and solo work; schools should have laptops available for rent or lease when possible. In

response to the SARS outbreak, Bertram and Gilliland also made the following recommendations to schools: Create a crisis plan, arrange for all mediums of access to the curriculum (even paper copies, though not ideal), make a basic investment in information technology (I.T.) capital, prep teachers immediately, and establish the basis for more advanced e-learning in the future.

Bertram and Gilliland (2003) pointed out how one international school in Singapore had already implemented a similar crisis plan and reacted quickly when schools closed. Teachers in the school were notified within minutes, and a meeting was organized. The process moving forward was defined, and teachers began developing and publishing content to an online platform. Students with no computers or internet received hard copies of the curriculum, and teachers were available for help via phone and email. The in-person to virtual transition took only two days to implement when schools closed. This situation illustrates how effectively the e-learning backup plan can be implemented in the event of a crisis.

H1N1 Swine Flu

The H1N1 virus was first detected in the U.S. in the spring of 2009 (WHO, 2009). Due to its origin, the H1N1 was coined as the Swine Flu. The H1N1 virus was the same variation of the flu virus that caused the Spanish Flu of 1918, and the WHO reported that approximately 60% of the known cases were reported in children under the age of 18. The WHO officially declared H1N1 a pandemic on June 11th, 2009 (CDC, 2019f). A report on June 17th showed that the pandemic had spread to 85 countries, with 39,620 reported cases and 167 deaths. By April 2010, when the pandemic ended, there were 60.8 million reported cases, 12,469 deaths in the United States, and an estimated 151,700-575,400 deaths worldwide (CDC, 2019e).

Cauchemez et al. (2009) conducted a holistic and multidisciplinary review of school closures during the H1N1 pandemic. Since 60% of cases were identified in children under 18 years old, there were strong arguments for closing schools. Klaiman et al. (2011) identified and examined media reports relating to school closures due to the 2009 H1N1 pandemic and found that more than 700 schools closed during the pandemic. Klaiman et al. noted that there was extensive variation across the country on whether to close or not. The variation in the decision to close was likely due to the many pros and cons of closing schools identified by Cauchemez et al. (2009). One of the most prominent cons identified was that approximately 16% of the workforce population had school-aged children, and 60% of those were educators and healthcare personnel. This finding alludes to the possibility of a shortage of healthcare workers if schools closed.

Schools cited many different reasons for closing, including high absenteeism. Many schools disagreed with guidance from their local health officials (Klaiman et al., 2011). Most U.S. school closings lasted 14 days or less, which did not impact educational outcomes any more than typical closings due to inclement weather.

2020 COVID-19 Pandemic

The first cases of COVID-19 in the United States were reported by the WHO (2020b) on January 21st, 2020. The COVID-19 pandemic became prevalent in the United States in the spring of 2020. By the start of November 2020, there were 46,403,652 cases of COVID-19 worldwide and 1,198,569 deaths; 9,182,628 cases and 230,383 deaths in the United States; and 188,186 cases and 3,031 deaths in Missouri (WHO, 2020b; CDC, 2020a; Covid 19 in Missouri, n.d.). The county that housed the school in this study reported 1,837 cases of COVID-19 and 24 deaths (Covid 19 in Missouri, n.d.).

Schools Transition to Virtual Learning

Since this study was conducted while the COVID-19 pandemic was happening, scholarly work was still being developed. In the absence of scholarly works, interviews and webinars relating to the pandemic were used to provide context in this study. Mineo (2020) interviewed Paul Reville, Professor of Educational Policy and Administration at Harvard University, about how schools and the education system may change in the wake of the COVID-19 pandemic. Reville commented that some schools transitioned relatively quickly to virtual learning, because they already had a plan in place. Most U.S. schools that made an easy transition already had a virtual learning plan due to harsh winters or other frequent natural disasters. The majority of U.S. schools did not have an online learning plan in place when COVID-19 arrived. These schools had to develop a temporary system to get through the end of the 2020 school year. Due to the pandemic's ongoing nature, these schools then developed a permanent, long-term system. Burgess and Sievertsen (2020), Professor and Economists at the University of Bristol, said that "Teaching is moving online on an untested and unprecedented scale" and that there will be much "trial and error and uncertainty for everyone" (para. 1).

Challenges and Changes

Pandemics and disasters have brought to light many disparities in the U.S. education system. The lack of child supervision outside of school, shortage of food for students, and the lack of access to devices and the internet were evident in light of the COVID-19 pandemic. Burgess and Sievertsen (2020) noted that there would be substantial disparities in how families could teach their children from home. Burgess, Sievertsen, and Reville agreed that the most economically challenged students would suffer the greatest during virtual learning because of the amount of knowledge their parents can provide, the amount of time parents can devote to

teaching their children, and that students would have a lack of access to the same high-quality learning resources as their counterparts. Teachers have always known that these problems have existed, but the school closures had made that realization more prominent to parents and communities. Reville said, "[It] is like a giant tidal wave that came and sucked all the water off the ocean floor, revealing all these uncomfortable realities" (Mineo, 2020, para. 20). Reville insisted that the pandemic had created the perfect opportunity to end a "one size fits all" model of education and meet the students where they were to help them be successful.

In a Newsday webinar conducted on November 10, 2020, three school-workers shared their experiences on the challenges of COVID-19 in schools. Nicole Brown, a 5th-grade teacher and CTA President at Hempstead School, stated, that in mid-November, students in her school were still without devices and high-speed internet (Filler, 2020). When asked to describe teaching in her district, Brown described it as "treading water to keep your head above the water" (Filler, 2020, 2:51). Lauren O'Rourke, a district social worker at Syosset Central School District, had first-hand insights into teachers' and students' feelings. O'Rourke said that teachers in her district had expressed concerns that there was no downtime. Teachers felt that they were always working, even at home, answering parent and student emails, updating and grading in online learning platforms like Canvas and Google Classroom, and looking for new strategies to use in the classroom to maintain rigor (Filler, 2020, 5:10). Richard Haase, the Half Hollow Hills Teachers Association president, described the current teaching situation as "unsustainable" (Filler, 2020, 7:41). Haase commented that teachers in his school felt that there were no work and personal life boundaries anymore and that every aspect of teaching was twice as hard as it was pre-COVID (Filler, 2020).

Harris (2020) released an article commenting on the possible changes that the COVID-19 pandemic would bring to schools. Harris said that COVID-19 had forced parents to be teachers and had forced many people to adapt to new situations. Harris also acknowledged some positive changes, such as teachers being coerced to try new technology tools that may have continued to be used in the classroom as students return to school. Brown noted that, with social distancing practices, much of the small-group work that took place in the classroom had become non-existent (Filler, 2020). Teachers were spending countless hours searching for new strategies to accomplish the same educational and social goals that the small-group activities once did. The pandemic also led to many students acquiring devices and the internet, which could be used as a complement to in-person instruction. In November 2020, O'Rourke commented that teachers felt overwhelmed by the change in teaching dynamic in multiple ways. Teachers were expected to teach in-person, hybrid, and remote simultaneously, all while trying to maintain the pre-COVID rigor (Filler, 2020, 6:00).

The editors of *Teach For America* spoke with Dr. Richard Shadick, a clinical psychologist, about the mental health issues that teachers were facing during the COVID-19 pandemic (TFA Editorial Team, 2020). Dr. Shadick explained that teachers were feeling fearful, exhausted, stressed, and anxious, and that the psychological effects that were seen in frontline healthcare workers were now becoming prevalent in teachers. Dr. Shadick also noted that the stress on teachers was "unrelenting" and that the ongoing nature of the pandemic was causing an "overwhelming sense of loss of control" that would result in a "more insidious form of burnout" (TFA Editorial Team, 2020, para. 4). Dr. Shadick also expressed concern that the stress and anxiety felt by teachers could be picked up by students in the classroom, causing student anxiety and behavioral problems.

Haase noted that students at Half Hollow Hills seemed to enjoy being at school much more the following year, although the energy levels were lower, and classrooms were quieter (Filler, 2020). Haase and O'Rourke had noticed that high school students struggled more with attendance and being school avoidant. Schools were counseling students and contacting parents regularly to get students in school, whether virtually or in person. Brown noted that attendance and participation had not been much different at the elementary school level. With the continually changing dynamics during the COVID-19 pandemic, challenges and changes in schools occured daily. The indirect effects of the pandemic could prove to be transformative to education in the long run.

Summary

For this phenomenological study, literature was reviewed exploring topics related to rural areas and education, rural school barriers and educational policy, major pandemics of the century, the COVID-19 pandemic, and the effects of pandemics on education. The research showed that rural schools were different from urban and metropolitan schools in many aspects and that they faced many challenges when implementing change that urban and metropolitan schools did not. Literature discussing prior pandemics brought to light the absence of data regarding the impact of pandemics on the education system. Information was presented regarding the ongoing COVID-19 pandemic and the impact on education. Revolutionary change theory was defined as the theoretical framework for this study. Chapter 3 presents the research methodology used to conduct this study.

III. METHODOLOGY

This study explored the feelings and actions of rural-distant high school content-area educators as they experienced the onset of the COVID-19 pandemic and continued to teach throughout the 2020-2021 school year. The lived experiences of the participants in this study provided insight to the changes in the education system of a rural Missouri high school in the wake of the COVID-19 pandemic

Description of Research Design

A qualitative phenomenological approach was selected for this study. More specifically, a transcendental phenomenological approach was used to gather a "fresh perspective" (Creswell, 2013, p. 80) of the phenomenon under study. Moustakas (1994) defined the transcendental phenomenological approach as the study of "the appearance of…phenomena just as we see them" (p. 49). Based on Moustakas' definition, transcendental phenomenology was an obvious choice for this study, in order to gather true insight to the changes educators experienced during the onset of the COVID-19 pandemic, as well as the challenges that educators faced when beginning a new school year in the midst of the pandemic.

Participants

Seven content-area educators from the rural-distant high school in this study agreed to participate. All participants experienced the phenomenon of transitioning to virtual education in the spring of 2020 due to the COVID-19 pandemic and returned to the classroom in the fall of

2020. Participants were referred to by pseudonyms throughout the study to protect their anonymity. The participants brought a variety to this study in terms of highest degree held, years of teaching experience, and average class size (see Table 2).

Table 2

Participants' Demographics

Name	Jane	Clarisse	Grace	Stella	Dani	Sam	Ian
Highest Degree Held	Master of Arts	Master of Arts	Bachelor of Science	Bachelor of Science	Bachelor of Science	Master of Arts	Master of Arts
Years of Teaching Experience	7	18	9.5	10	4	16	10
Average Class Size	6-17	15-20	10-15	6-25	15-18	8-24	18

Role of the Researcher

The researcher had 9 years of experience as a math educator in rural Missouri schools and had been employed by the rural-distant high school in this study for the past three years. Being an educator in the specified rural Missouri high school, bracketing (Moustakas, 1994) was used to eliminate bias from the personal and professional relationships held with each of the participants in this study. Bracketing allowed the focus of the study to remain on the participants' experiences while excluding the personal experiences of the researcher, even though she also experienced the phenomenon being studied.

All instruments used in the data collection process were created by the researcher. All participant interviews were conducted, recorded, transcribed, and validated by the researcher. The quantitative data was then coded and analyzed using the techniques of Moustakas and Creswell (2013). Themes emerged from the coding process, and those results are reported in Chapter 4 of this study.

Measures for Ethical Protection

This study was approved by Southeastern University's Institutional Review Board (see Appendix D). Additionally, the superintendent of the rural-distant school district in this study approved the research and granted permission to contact high school employees as potential participants. All participants were invited to take part in the study using the email invitation (see Appendix C). After informally agreeing to take part in the study, the researcher presented each participant with the consent form (see Appendix A), outlining the purpose of the study and reassuring participants that their involvement was voluntary and that they could refuse participation at any time during the study. No potential risk to participants was identified in this study.

Participants were referred to by pseudonyms throughout the study to protect their anonymity. All audio recordings, transcripts, and notes were stored on a password-protected computer and backed up to an external hard drive stored in a locked safe. Participants were assured that only the researcher, principal investigator, and the dissertation committee's methodologist would have access to the raw material. All data will be permanently destroyed five years after the study's completion.

Research Question

From the perspectives of high school content area teachers, what institutional and curricular changes have occurred due to COVID-19?

Data Collection

The researcher first identified the high school content-area educators in the specified school district and invited them to participate in the study. Consent was obtained from each participant before conducting interviews (see Appendix A). Pseudonyms were used in all print

materials to protect the identity of the participants. Semi-structured interviews with open-ended questions were conducted using a researcher-created interview guide and recorded (see Appendix B). The interviews were transcribed and returned to the participant for validation. The transcripts were then analyzed and coded to find any emerging themes. Archived documents were also used to validate the results of this study.

Instruments Used in Data Collection

A semi-structured interview guide consisting of 11 open-ended questions with possible sub-questions was used in this study. According to Mills and Gay (2015), audio or video recording provides the most accurate account of an interview session. Each interview was audio recorded, and the researcher took notes throughout the interviews about body language, gestures, and emotions that were not picked up by the audio recording. Archival data from the school district's website was also used to verify institutional changes that were reported by participants.

Validity

Noble and Smith (2015) noted various ways that a researcher can ensure validity in a qualitative study, including outlining personal experiences that could cause bias and validating all interviews with the participants. The researcher acknowledged her relationships with the participants in this study and used bracketing to exclude her personal experience with the phenomenon from the study (Moustakas, 1994). Bracketing is a technique in which the opinions and experiences of the researcher are set aside to ensure that they do not cause bias in the study and that the focus remains on the lived experiences of the participants. As suggested by Noble and Smith (2015) and Creswell (2013), all interview transcripts were reviewed for accuracy and validated by the participants to ensure the validity of this research.

Reliability

According to Mills and Gay (2015), reliability in a qualitative study refers specifically to the techniques used by the researcher in the data collection process. Mills and Gay suggested that researchers consider whether data would be collected consistently if the same techniques were used over time. To maintain reliability, the same semi-structured interview guide was used to interview all seven participants in the study.

Procedures

After approval by the IRB, high school content-area educators who worked in the specified rural-distant school district during the COVID-19 pandemic were selected as prospective participants in the study. Roberts and Hyatt (2019) recommended a small sample size, restricted to single- or double-digit numbers, for a qualitative study. Criterion sampling was used to ensure the selected educators had experienced the phenomenon under study (Creswell, 2013). The seven high school content-area educators in the rural-distant district who met these criteria were invited to participate in the study. All seven participants agreed to participate in the study.

Data Analysis

After the interview transcripts were validated by the participants, significant phrases and quotes were isolated from the transcripts, as suggested by Creswell (2013). Each transcript was assigned a colored text and all key phrases were printed. Following the procedure suggested by Moustakas (1994), the key phrases were grouped by similarity and checked against the interview transcripts to ensure compatibility. Twelve codes were created in the "lean coding" stage (Creswell, 2013, p. 184). Following Creswell's suggestion, the 12 codes were then combined until less than seven themes emerged. The 12 initial codes were compared with the research

question, literature review, and theoretical framework to narrow to 10 codes that were pertinent to this study. These 10 codes were then synthesized into two themes with subthemes: initial COVID-19 changes and the new classroom experience. Condensing the data into two themes ensured that each theme was amply supported.

Summary

The methodology used in this study was discussed in Chapter 3, as well as precautions taken to ensure the anonymity of participants and protection of data, measures used to ensure validity and reliability, procedures, and data analysis methods. The protocol set forth by Moustakas (1994) and Creswell (2013) was used in this study to collect and synthesize the data to express how the participants experienced the educational changes prompted by the COVID-19 pandemic. In Chapter 4, the analysis of the data will be discussed in detail, as the codes used to analyze the data and the emerging themes are discussed.

IV. RESULTS

The purpose of this phenomenological study was to explore the transformation of the education system in a rural-distant Missouri high school in the wake of the COVID-19 pandemic. This study examined the institutional and curricular changes experienced by the participants as they taught through the initial stage of the COVID-19 pandemic and returned to the classroom in the fall.

Seven high school content-area educators from the specified rural Missouri school district agreed to participate in the study. The participants brought diversity to this study in terms of subject taught, gender, highest degree held, years of teaching experience, and average class size. Approval from the superintendent of the specified school district and Southeastern University's Institutional Review Board was granted in October 2020. The participants were contacted and interviewed in January 2021.

Research Question

From the perspectives of high school content area teachers, what institutional and curricular changes have occurred due to COVID-19?

Methods of Data Collection

As discussed in Chapter 3, consent was obtained from each participant before conducting interviews (see Appendix A). Pseudonyms were used in all print materials to protect the identity of the participants. Semi-structured interviews with open-ended questions were conducted using

a researcher-created interview guide and recorded (see Appendix B). The interviews were transcribed and returned to the participant for validation. The transcripts were then analyzed and coded to find any emerging themes. The archived district re-opening plan was also used to validate the changes reported in this study.

After the participants validated the interview transcripts, significant phrases and quotes were isolated from the transcripts, as suggested by Creswell (2013). Each participant's transcript was assigned a colored text, and all key phrases were printed. Following the procedure suggested by Moustakas (1994), the key phrases were grouped by similarity and checked against the interview transcripts to ensure compatibility. Twelve codes were created in the "lean coding" stage (Creswell, 2013, p. 184). Following Creswell's suggestion, the 12 codes were then collapsed until less than seven themes emerged. The 12 initial codes were compared with the research question, literature review, and theoretical framework to narrow to 10 codes pertinent to this study. These ten codes were then synthesized into two themes with subthemes (see Table 3): transition to virtual learning and the new classroom experience. Condensing the data into two themes ensured that each theme was amply supported.

Table 3

Themes and Subthemes

Theme/Subtheme	Description
Theme 1: Transition to Virtual Learning	The experiences of the participants during the transition to virtual learning during the spring 2020 school shutdown.
Subtheme 1: Institutional Changes	The institutional changes that the participants experienced during the spring 2020 school shutdown.
Subtheme 2: Curricular Changes	The curricular changes that the participants experienced during the spring 2020 school shutdown.
Theme 2: The New Classroom Experience	The participants' experiences as the 2020-2021 school year began in person during the COVID-19 pandemic.
Subtheme 1: Institutional Changes	The institutional changes that the participants experienced during the 2020-2021 school year.
Subtheme 2: Curricular Changes	The curricular changes that the participants experienced during the 2020-2021 school year

Themes

Prior to the COVID-19 pandemic, the participants had varying teaching styles and used various curricular resources. Sam reported that his students did all classroom work entirely on paper. Sam had designed his curriculum so that students would "create a binder over the course of a unit and turn it in." Two participants, Dani and Jane, reported regularly using Google Classroom and Canvas in their classrooms. The other participants used digital components to supplement their curriculum as they saw fit; Grace would videotape her lessons and post them in Google Classroom for absent students. The participants regarded school as "normal." When the COVID-19 pandemic reached rural Missouri, schools responded quickly, using guidelines set forth by local and national health departments, using the available resources.

Theme 1: Transition to Virtual Learning

As the COVID-19 pandemic reached Missouri, schools were faced with the challenging decision: remain in session, transition to virtual learning, or shut down for the remainder of the school year. The school in this study transitioned to virtual learning when the school shut down for the last two months of the 2019-2020 school year. This theme encompassed the institutional and curricular changes that educators experienced during the transition. Sam recalled that everyone was "sent home, and everything was disrupted." Dani and Jane described the transition to virtual learning as "very quick and sudden," stating that teachers "only had a couple of days of preparation to put everything online." The participants recalled unclear expectations and very little structure or guidance during the transition. Grace mentioned that the administration just told her to "keep teaching." Stella shared that she struggled with the transition and "dropped the ball for quite a long time."

Institutional Changes

Specific institutional changes were mentioned, as the participants reflected on the transition to virtual learning during the school shutdown. The largest institutional change was transitioning from teaching in the classroom to teaching from a virtual learning platform. When the transition began, the administration suggested that teachers use Google Classroom to post, collect, and grade student work, with Zoom being suggested to host virtual class meetings with students. Although Google Classroom and Zoom were suggested, some teachers chose to use other available free resources that they were already familiar with, such as Screencastify, Duo, or email. Other teachers chose not to utilize any online resources and sent home a large packet of paper assignments to last the remainder of the year. All of the participants in this study used a

virtual learning platform during the school shutdown, and several of them struggled to transition their classes.

Grace described having to "create Classrooms for all classes to post videos and homework" and that she did not know how to grade math homework virtually. Grace exclaimed that "grading math online is awful!" Sam also struggled with the transition and commented, "I had to learn how to use Classroom itself. I didn't even know what Classroom looked like; I hadn't used it at all." Ian, Jane, and Stella were familiar with Google Classroom, but they had to learn how to use Zoom to hold class meetings on their own. The school district did not provide any training on the use of Google Classroom or Zoom. The participants shared that many of their students were unfamiliar with the learning platforms. It was challenging for the teachers to help students navigate the platforms remotely without sufficient training and knowledge.

At the beginning of the 2019-2020 school year, each teacher was assigned an advisory class of approximately 12 students. In advisory class, teachers did grade checks, tutored students, and helped students with goal setting. After classes transitioned to virtual learning, teachers checked in weekly with their advisory students to answer any questions or help them acquire any necessary resources. Dani and Stella shared that many students lived in remote areas with no internet or cell phone service. Students without internet access were assigned paper copies of their work. Students who required paper copies received their work on Monday, Wednesday, and Friday from teachers and staff who volunteered to deliver breakfasts, lunches, and homework. Completed homework was also collected at this time and returned to the school to be distributed to the appropriate teachers.

Curricular Changes

The transition to virtual learning brought about specific curricular changes. Due to the variety of teaching styles and individual curricula, the curricular changes looked different in every classroom. The participants agreed that the directions from the administration were to cut the standards to the ones deemed most important, keep teaching, and be lenient on due dates. The elimination of specific standards was left to each teacher to determine. Following this expectation, Grace reluctantly cut the course materials to only the standards she deemed most important and "went from assigning homework 4-5 days a week to only 1-2 days a week." Even with this reduction of work, Grace recalled, "The administration was constantly telling me that I was stressing kids out." This feedback from the administration caused Grace more stress, because she felt like she was doing exactly what was asked of her.

Clarisse recollected that she was able to keep most of her curriculum the same but "not without difficulty." Clarisse remembered spending countless hours searching for digital resources, redoing her lesson plans, and scanning and uploading copies of worksheets and short stories that she would typically pull from her textbook. As a result, Clarisse's students missed out on research writing and "did not get the exposure to the MLA (a citation style used in research papers) format that, typically, the freshmen English class does" because it was a difficult concept to teach online.

Ian shared that he did not make any changes to his curriculum, only how it was delivered. Ian built his curriculum so that students would complete assignments on paper, but then each student was required to verbally assess on the objectives to ensure that they had learned the material. After the transition to virtual learning, students in his sophomore classes completed their worksheets and assignments in Google Classroom but could not assess orally. Students in Ian's dual-credit courses still completed the same projects they would complete in class;

however, Ian uploaded video lectures for students to watch. Ian found online workouts for his Physical Education students but acknowledged that he "didn't know if they actually did it." He provided students with the usual notes in health class but assigned more work in place of the typical in-class discussion.

Stella reflected that she had to "figure out how I was going to transition and change things." Stella commented that her science classes involved a considerable amount of math and remembered the experience of using a whiteboard and marker alongside the Zoom platform to solve problems with struggling students. The students were quick to point out that everything they saw was reversed, and Stella never figured out how to fix it. Stella made several changes to deliver her curriculum in a virtual format:

> I don't use any books; it's all material I bought from Teachers Pay Teachers. The material comes all as one packet with answer keys, so I had to learn how to separate each worksheet and upload them each individually. I changed the typical worksheet so that the worksheet questions were embedded in the Google Slides, so they would go through the notes, answer the questions, then turn in the whole PowerPoint.

Dani's purchase of a science curriculum from Teachers Pay Teachers was digital and included PowerPoint notes and hands-on activities, so she just had to upload everything into Google Classroom. Dani remarked that she did not have access to a virtual science lab platform for students to "do the labs that they needed to go along with virtual learning." Dani said that "in order to learn DNA replications and genetics and all that, it's very hands-on learning" and that "the district did not really provide additional resources to help make that transition easier." Due to the kinesthetic nature of Dani's courses, students missed out on essential parts of the education experience.

Sam described the transition to virtual learning as “an incredible amount of work” and reflected that he was “incredibly busy trying to figure out how to do my job in that new format.” After putting in the time initially to transfer his curriculum to a virtual format, Sam shared:

> I don't believe I have changed my curriculum at all. I have taken the approach of adapting the curriculum I was teaching to the new platform. I am 100% paperless now. It's a massive change, but only in the sense of the way the work is getting to them and the way it is being collected.

Jane recalled that the transition was easy for her dual credit classes, since it was already delivered in an online format. However, Jane’s sophomore English classes, who were reading *Julius Caesar*, required much more preparation:

> I made a recap for each act where I videotaped myself and put that up and said, “Here's what's going on here." And I sent a lot more resources. They already had some of the resources; there's an online text and things like that, but I sent some more just to try to get them to at least understand what happened in the rest of the play. Then I assigned a question, like critical thinking questions or something at the end. Unfortunately, the kids weren't as engaged. I was not prepared for that.

Following the lead of area schools and suggestions from DESE, the administration implemented a "hold-harmless" grading policy for grades 9-12 and a pass/fail grading policy for grades 7 and 8. The hold-harmless grading policy stated that students' second-semester grades could not be lower than their 3rd quarter grades. As a result of this grading policy change, Jane said some students “were like ghosts,” and Dani mentioned that some students “didn't keep up with their assignments and weren't turning stuff in.” Stella expressed frustration over the grading policy:

> As a teacher, it made it very frustrating because knowing for a fact that kids that weren't doing anything were still getting credit for passing, no matter if they did nothing. I had a kid who had an A when we went on quarantine, did nothing, and I mean nothing, during quarantine, and I still had to give them an A because we were told that their grade could not drop from what they had at third quarter. So, they deserved an F or a D averaging, but they got an A because their third-quarter grade couldn't drop.

All the participants agreed there was a lack of student participation during virtual learning and expressed concern that students were not held accountable. Jane also held several Zoom meetings where only a few students would show up. In addition, Jane emailed many students who never responded.

Theme 2: The New Classroom Experience

As the 2020-2021 school year approached, the district convened a COVID-19 task force, consisting of teachers, staff, and administrators. The task force frequently met over the summer to develop a re-opening plan with three options: in-person, hybrid, and virtual. The in-person reopening plan required that all students and staff wear masks and practice 6-foot physical distancing, sanitation procedures were enhanced, and students were separated into smaller groups for lunch. These requirements allowed for students to return to school on a typical weekly schedule.

The hybrid re-opening plan was very similar to the in-person plan; however, students would be split into two groups that would attend school every other day. The hybrid plan would allow fewer students in the building at one time so that students would be more than 6 feet apart. Following the virtual re-opening plan, teachers would attend school each day and prepare for

virtual class meetings while students remained at home, participating in class, and submitting assignments via Google Classroom.

In preparation for all the possible re-opening situations, teachers were required to modify their curriculum to transition to and from any of the three plans with minimal interruption. Based on the guidelines from the local health department, the task force proposed to start the 2020-2021 school year in person. Once the decision was made to start the school year in person, teachers began to prepare their classrooms to comply with the physical distancing requirements of the in-person reopening plan.

Institutional Changes

Specific safety measures were put in place at the start of the 2020-2021 school year to limit the spread of COVID-19. The district's reopening plan, created by the COVID-19 task force, outlined the specific changes that would take place. Physical distancing was expected in common areas, as well as in the classroom. Three-to-6 feet was the physical distancing recommendation where space was available. Most classrooms in the district could not manage 6-foot distancing with the current class sizes, so Clarisse reported that three-foot distancing was used in most classrooms. Stella said, "In my class of 25, there's no doing 6 feet apart, so they just have to wear their masks the whole time." Jane recalled that students were not assigned lockers, and Ian noted that physical education students were not allowed to utilize the locker rooms that year to prevent students from congregating within 6 feet of each other.

Due to a county mandate, masks were required to be worn by all staff and students. Student restrooms were converted to touchless amenities, and water fountains were open for bottle filling only. Custodians and teachers were assigned cleaning schedules and provided with ample cleaning supplies by the district. Teachers were required to remain in their classrooms

during passing periods to clean and sanitize surfaces between student groups. Dani remembered taking extra precautions in sanitizing her lab supplies and goggles. Dani shared:

> I am in the high-risk category- type 1 diabetic- so I am always cleaning, all the time for my own protection. The janitors aren't keeping up… It's not their fault, there's just not enough of them, so I spend a lot of my own time cleaning.

Before the 2020-2021 school year began, the district's COVID-19 task force decided that all non-permanent fabric items would be removed from the building due to the inability to keep them sanitized. Ian reminisced about how he had been doing flexible seating in his classroom for several years. "I had a couch, big chair, multiple tables; I wasn't able to do any of that stuff anymore." The task force also determined that students should remain in groups as much as possible to limit contact and the possible spread of COVID-19. In high school, this guideline manifested as "Lunch Bunch" groups. Students were placed in groups of 10-15 for lunch and assigned to a teacher's room to eat. Small groups allowed students to spread out while eating, and the teacher recorded a seating chart so that contact tracing could be done, if necessary.

In order to be able to transition to virtual learning instantaneously, all students needed to have access to devices, including the internet. The district used emergency funding to purchase hundreds of Chromebooks, several internet hotspots, and update the internet at the school to support all students and staff using a device. Sam said, "Institutionally, technology has met the challenge." All students were issued a Chromebook at the beginning of the school year to use daily, which had allowed teachers to integrate educational apps into classroom instruction.

Results of Institutional Changes

As a result of the institutional changes, Clarisse shared that there was a lack of interaction between staff members that year, compared to previous years. As a result of teachers having

Lunch Bunch groups every day, teachers lost their lunch breaks. Several participants expressed disappointment as they described the lunch procedures. Stella said, “Teachers don't get a lunch break anymore; we're eating with the kids.” Grace and Dani agreed, saying, “We don’t get time to talk to other teachers.” Ian shared,

> I don't like having all the different students in my class eating lunch. In the past, I've had students eating in my room, but it was always students who wanted to be in here and students I wanted to be in here. It kind of sucks to have kids thrown in here every week who may not want to be here with me or who are not the most enjoyable people.

Several participants spoke of changes in the way they interacted with their students. After speaking with some of her students, Jane found that they felt very overwhelmed but did not complain. Jane shared, “I sit up at the front of the room, and students come to me instead of me walking around.” Jane admitted that she had fewer “close-close interactions with students” due to the institutional changes, but overall, it had been a “good behavior year.”

Dani shared through her tears,

> I don't walk around the classroom as much. Normally, I would be out in the classroom, sitting next to students. Because that's the teacher I am. I spend a lot of time at my desk to make sure I am distanced enough. I don't have that connection like I used to. I am not doing my job effectively, because I am sitting at my desk. I am not looking over their shoulders at every moment, and laughing, and talking, and being all up in their business because of fear.

As a result of students receiving Chromebooks and utilizing technology daily, the participants reported that students were becoming much more proficient in communicating with their teachers. Ian said, “I see students being more proficient with using email, Google

Classroom, asking me questions through that," and he receives more email correspondence from students than in prior years. Jane expressed her excitement that she no longer had to take her classes to the computer lab and reported that "students like that they have their own devices and can leave their tabs up and continue working whenever they want."

Curricular Changes

As the 2020-2021 school year began in person, the reopening plan designated that Google Classroom would be the "primary digital platform" to be used across the district. Teachers were expected to incorporate Google Classroom into daily instruction so that students were familiar with it. Grace approached her curriculum in the fall the same as any year; however, she felt like she was behind where she should be; "I'm having to reteach things that should've been learned last year." Sam reflected,

> I don't believe I have changed my curriculum at all. I have taken the approach of adapting the curriculum I was teaching to the new platform. It's a massive change, but only in the sense of the way the work is getting to them and the way it is being collected.

Stella and Ian approached the year as they had any other year and used the virtual curriculum set up from the spring shutdown. Clarisse said, "I'm trying really hard to stick to the curriculum I usually teach." Jane also tried to stick to the same curriculum but missed the way things were pre-COVID-19:

> I'm still teaching the same stuff, just in a different way. I don't think I want to always be paperless. I'm going to try giving some packets in the spring semester. There's just a different feel when I grade stuff on paper; when I physically mark student papers, they have to go in find the mistakes and fix them. When its digital, they can just accept all the changes and don't really see what is going on.

Six of the participants noted that they were not using textbooks anymore. Without the availability of lockers, the administrators discouraged teachers from issuing textbooks to students. Grace stated that her students had access to a math e-textbook, while Stella and Dani had purchased a complete curriculum from Teachers Pay Teachers and did not utilize a text. All of the participants had to modify their curriculum to be available to students through Google Classroom.

Procedures in individual classrooms varied, but they all followed the basic guidelines set forth by the district's reopening plan. Dani created dividers for each table and could space her students two per table instead of three, while Stella could not socially distance students due to space limitations in her classroom. Dani and Stella recalled purchasing more lab supplies and cleaning supplies so that students could participate in science labs. Labs took place in smaller groups that were more spaced out. Dani recalled spending "an extra 15 minutes cleaning, so there is less time for labs." Clarisse still used cooperative learning frequently in the classroom but made sure that students were wearing their masks. Jane conducted only a few group activities and made sure to sanitize and enforce masking procedures. Ian recalled being unable to conduct whole-class activities in his health class, "When we did CPR with the nurse, I had to break students down into groups."

Sam summed up the 2020-2021 school year expectations, saying

> We haven't received any guidance from the State, necessarily, on how to do this. So, some schools are completely out and haven't been in session since March. Some schools are partial, and there's all kinds of different formats for partial. And, of course, we're in session 100%. Teachers [at our school] are expected to be able to deliver content both in-person and remotely with minimal interruption.

Stella and Jane still felt unprepared as the school year began. Jane remembered thinking, "We knew this was coming, why do I not feel more prepared?", while Stella "still felt like there was not enough guidance. Everybody was just going week-by-week."

Results of Curricular Changes

Reflecting on their preparation for the school year, Dani and Stella commented that there was "definitely more work to be done now than prior to COVID," and the administration "puts more on us." Clarisse also felt as though she was "doing 2 or 3 times the work as normal." Clarisse found it very time-consuming "to make lesson plans and find digital versions of the materials I need" and "transferring all the material to a virtual format." Clarisse recalled that the most challenging part was "getting everything together that the kids needed to continue teaching and making sure they could understand and grasp new concepts in an online format." Sam commented, "I have done more prep work, and continue to do more prep work, this year than any year since my first-year teaching. Most of that time is spent adapting my curriculum to the new format." Six of the participants felt an increase in work related to planning and teaching the students, while Ian felt that the changes were extra but "not a huge burden to do."

Clarisse summed up her COVID-19 experience saying:

> In all the years I've taught, I've sat with fourth-graders through a lockdown when we thought we had an explosive device in the building; I've sat with fourth-graders in the basement for like three hours during a tornado. Just the things that I've gone through—this takes the cake! This is so much harder than anything else.

Sam's COVID-19 experience was quite the opposite:

> My experience, overall, with the students, I would call very positive. One of my strengths as a teacher is I have pretty good relationships with students. And I have primarily

upperclassmen… they're pretty adaptable. If I graded myself, I would say this is my best year ever. I feel more connected to students and communicate with parents on a higher level than ever before.

Evidence of Quality

This phenomenological study was investigated using the processes set forth by Moustakas (1994). The researcher acknowledged her relationships with the participants in this study and used bracketing to exclude her personal experience with the phenomenon from the study (Moustakas, 1994). As suggested by Noble and Smith (2015) and Creswell (2013), all interview transcripts were reviewed for accuracy and validated by the participants to ensure the validity of this research. Once validated by the participants, significant phrases and quotes were isolated from the transcripts, as suggested by Creswell (2013). Each transcript was assigned a colored text, and all key phrases were printed. Following Moustakas' procedure, the key phrases were grouped by similarity and checked against the interview transcripts to ensure compatibility. Twelve codes were created in the "lean coding" stage (Creswell, 2013, p. 184). Following Creswell's suggestion, the 12 codes were then collapsed until less than seven themes emerged. The 12 initial codes were compared with the research question, literature review, and theoretical framework to narrow to 10 codes pertinent to this study. These 10 codes were then synthesized into two themes with subthemes: initial COVID-19 changes and the new classroom experience.

Summary

The results presented in this chapter provided evidence related to the changes experienced by content-area educators in a rural Missouri high school. The data gathered during the interview process, including the archival documents, provided insight into the institutional and curricular changes that occurred, as well as the participants' experiences as they navigated

through the COVID-19 pandemic. The participants shared their experiences transitioning to virtual learning with minimal notice, preparing to teach both virtually and in-person, and teaching in-person during the COVID-19 pandemic. Chapter 5 will discuss the results of this phenomenological study, as well as an ancillary theme that emerged during the coding process, including the limitations of the study.

V. DISCUSSION

The purpose of this phenomenological study was to explore the transformation of the education system in a rural-distant Missouri high school in the wake of the COVID-19 pandemic. Transformations in the education system were defined as any change in education experienced by high school content-area educators. As noted by Creswell (2013), a phenomenological study focuses on the participants' lived experiences. The participants in this study taught through the onset of the pandemic and returned to the classroom for the 2020-2021 school year under unique circumstances. The participants shared the circumstances under which they returned to the classroom, as well as the institutional and curricular changes they experienced within the school during the COVID-19 pandemic.

Historically, pandemics were documented using the time period's preferred news outlets; however, the news reports focused on the medical aspects of the pandemic rather than the educational impact of the pandemics. Newspaper articles during the Spanish Flu of 1918 (50 U.S. Cities, n.d.) did document school shutdowns, but no further information about the state of the education system post-pandemic could be found. The school closures nationwide during the COVID-19 pandemic mirrored the school responses documented by newspapers during the Spanish Flu of 1918. The SARS outbreak in 2002 was most like the COVID-19 pandemic, because it was also a strain of coronavirus; however, it was able to be contained within 29 countries, with only 29 cases in the U.S., and did not reach pandemic status (CDC, 2019b).

According to the literature, the reaction of schools in Hong Kong during the SARS outbreak closely resembled the reaction of the U.S. during the onset of the COVID-19 pandemic and the Spanish Flu of 1918. According to Bertram and Gilliland (2003), businesses were shut down and residents were quarantined in their homes when one person became infected with SARS. Unlike most schools in the U.S., Hong Kong and Singapore already had education continuity plans in place for students to access their curriculum remotely. As a result of the SARS outbreak, Bertram and Gilliland suggested that all countries implement a plan for transitioning to e-learning in case of a similar event.

Although previous pandemics were documented via newspaper articles and internet journals, minimal literature was found that explored how the education system changed in response to the historical pandemics. The literature did not provide any documentation on how the education system changed or adapted post-pandemic. This study provides a detailed account of the changes that occurred in the education system during the COVID-19 pandemic and serves to fill the gap left by previously recorded pandemics.

Methods of Data Collection

Seven content-area teachers from a rural-distant Missouri high school shared their lived experiences of teaching through the COVID-19 pandemic. The participant accounts provided insight into the institutional and curricular changes that resulted from the COVID-19 pandemic. The high school in this study granted permission to conduct the research study, and consent was obtained from each participant before conducting interviews (see Appendix A). The qualitative instrument used to collect the data was a semi-structured interview with open-ended questions (see Appendix B). The interview guide was used to attain data that answered the research question, “From the perspectives of high school content area teachers, what institutional and

curricular changes have occurred due to COVID-19?" The interviews were recorded, transcribed, and returned to each participant for validation. Pseudonyms were used in all print materials to protect the identity of the participants. Archived documents, such as district memos and announcements, were also used to validate the results of this study.

Interpretations of Findings

The high school in this study was classified as rural-distant by the NCES (2019a). Schafft (2016) examined many rural communities and reported that rural schools could be quite different from one another demographically. This difference was evident from the rural statistics presented on the school in this study. Contradictory to the national data collected by the NCES and Blair et al.'s (2013) findings, the rural school's student population in this study was predominantly White, with only 3.8% Hispanic and 1.7% Other. According to the 2019 NCES and DESE data, the student population from the school in this study who received free/reduced lunches in 2019 was 41.3%, as compared to the national average of 52.3% (2019e), and the local population of homeless students was 6.9% compared to the state average of 2.3% (n.d.c). The recently released 2020 state data showed that the free/reduced lunch rates for the school in this study had increased to 44.2%, and 8.1% of the student population was homeless compared to the state average of 2.5% (DESE, n.d.c). State data also revealed that student enrollment in the school in this study had steadily decreased since 2017 (DESE, n.d.c). The 2020 state data confirmed Blair et al.'s conclusion that rural schools face challenges, such as increasing student poverty and decreasing student enrollment.

When Schafft (2016) examined the well-being of rural communities, he found that the school functioned as the center of the community, parents were very participative in school events, and that the schools and communities were close-knit. The same was true for the rural-

distant high school in this study. Alongside the challenges presented by Blair et al. (2013), the COVID-19 pandemic brought about a striking number of changes to the education system in the rural high school in this study. The participants in this study described those changes and the emotions they experienced as they taught through the COVID-19 pandemic.

Theme 1: Transition to Virtual Learning

The onset of the COVID-19 pandemic in the rural high school in this study marked a revolutionary change in the local education system. Revolutionary change is defined as a "jolt" to the structure of an organization which results in radical and permanent change (Burke, 2018, p.77). For example, in the spring of 2020, the participants in this study transitioned to virtual learning with 1-week notice as schools across Missouri shut down. This revolutionary change happened quickly, with limited resources, and changed institutional and curricular structures within the high school. Several immediate educational changes remained in place as the 2020-2021 school year began, but many changes described by the participants were implemented during the return to school in August 2020.

As the participants reflected on their experiences, they described specific changes. The administration strongly suggested using Google Classroom and Zoom as tools for instruction; however, the participants were not adequately trained to use the resources comprehensively. Burgess and Sievertsen (2020) posited that there would be uncertainty and trial and error as schools transitioned to virtual learning. The uncertainty among the participants was evident. Sam remembered "trying to figure out how to do my job in that new format," while Stella admitted that she "dropped the ball for quite a long time." The participants agreed that their expectations were unclear, and they had little guidance through the transition.

When the pandemic reached Missouri, nine weeks of school remained in the 2019-2020 school year. Like the educators who taught through the Spanish Flu, the participants had to cut out some of their curricula for various reasons, including lack of time, inability to teach the concept virtually, or the kinesthetic nature of the course (50 U.S. Cities, n.d.). Due to the unknown nature of COVID-19, the participants in this study had to modify their curricula to teach from a virtual platform. Some participants had already integrated online teaching platforms, such as Google Classroom and Canvas, into their daily routines, while others solely used a paper-based curriculum. The variation in the use of technology in the classroom accounted for the participants' varying levels of work required to transition to virtual learning. Several participants recalled spending hours searching for digital assignments and activities that could replace the learning in the classroom. For example, Dani recalled not having access to a virtual science lab platform for students to participate in the science labs that would typically be done in the classroom. Dani explained that the genetics and DNA unit was kinesthetic in nature and that "the district did not really provide additional resources to help make that transition easier." Like the participants in this study, the lack of adequate resources to meet the needs of students and educational expectations was also experienced by the rural school educators in Bergeron et al.'s multi-case study (2018).

According to the literature, experts expressed concern that economically challenged students would be at a disadvantage in a virtual learning environment due to a lack of resources and parental availability (Burgess & Sievertsen, 2020; Filler, 2020; Mineo, 2020). During the transition, the participants recognized that many students lacked the necessary technological resources to participate in virtual learning. As a result, paper copies of work were created and delivered to homes to accommodate those students. Bergeron et al. (2018) also speculated that

disadvantaged students in rural schools experienced unique challenges, such as a lack of motivation.

Following the lead of area schools and suggestions from DESE, a "hold-harmless" grading policy for grades 9-12 and a pass/fail grading policy for grades 7 and 8 was implemented. The hold-harmless grading policy stated that students' second-semester grades could not be lower than their 3rd quarter grades. As a result of this grading policy change, students seemed to lose the motivation to complete their coursework. Jane recalled that some of her students “were like ghosts,” while Dani mentioned that several of her students “didn't keep up with their assignments and weren't turning stuff in.” Stella also expressed frustration over the grading policy, saying, “I had a kid who had an A when we went on quarantine, did nothing, and I mean nothing, during quarantine, and I still had to give them an A because we were told that their grade could not drop from what they had at third quarter.” All the participants agreed there was a lack of student participation during virtual learning and expressed concern that students were not held accountable. Bergeron et al. (2018) interviewed 29 teachers in three rural Alabama schools and found that 54% of the teachers agreed that students were lacking motivation. Rosenburg et al. (2014) surveyed teachers from nine rural schools, also finding that low student motivation was a challenge. The lack of student motivation expressed by the participants supported Bergeron et al.’s conclusion and results of the teacher survey conducted by Rosenburg et al.

Nicole Brown, president of the Hempstead Teacher Association, reported during a Newsday webinar that teachers in her school were spending countless hours searching for digital materials and preparing lessons that were suitable for online learning (Filler, 2020). The participants in this study echoed Brown as they shared their personal experiences preparing

lessons, searching for materials, meeting virtually, emailing, and calling students. Despite these challenges, the participants converted their curricula to a virtual format, delivered paper curricula to disadvantaged students, and continued teaching through the remainder of the 2019-2020 school year with minimal guidance, training, and resources. Clarisse concluded, “That's what we have to do, and it's what's best for the kids.”

Theme 2: The New Classroom Experience

Due to the ongoing nature of the COVID-19 pandemic, the school in this study formed a COVID-19 task force to develop a long-term plan, as predicted by Reville (Mineo, 2020). The task force members frequently convened over the summer of 2020 to develop reopening plans for the 2020-2021 school year. During the task force meetings, safety protocols, cleaning precautions, technology enhancements, and curricular changes were discussed. The reopening plan created by the COVID-19 task force resembled the “e-learning backup plan” suggested by Bertram and Gilliland (2003).

As the 2020 school year began, the rural high school in this study implemented the new protocols and procedures as recommended by the task force. Once the recommended changes were made within the high school, the high school returned to what Burke (2018) described as the evolutionary period. Burke asserted that schools could make changes in leadership and staffing, add or delete educational programs, change course offerings, make curriculum changes, or make building expansions during the evolutionary period. Minor changes, such as those suggested by Burke, allowed the school to improve efficiency and grow.

Institutionally, changes in the high school included enhanced cleaning schedules for the janitorial staff and teachers. The participants recalled spending more time cleaning their classrooms and using passing periods to sanitize desks and shared surfaces. Dani shared, “The

janitors aren't keeping up… It's not their fault, there's just not enough of them, so I spend a lot of my own time cleaning." Due to the increased cleaning regime, the science department had to devote class time to cleaning lab areas and supplies, thus decreasing instructional time. Many safety protocols were implemented, such as physical distancing of 6 feet when possible and wearing masks while in the school building. As Stella recalled, "In my class of 25, there's no doing 6 feet apart, so they just have to wear their masks the whole time."

To minimize close contact while unmasked, students were assigned to small groups to eat lunch in individual classrooms instead of eating in the cafeteria. The lunch groups allowed administrators to easily identify any students who may have been at risk if there was a COVID-positive student. While this procedure was beneficial for tracking who students sat by and allowing them to be more spread out, the participants did not hide their strong dislike about losing their lunch break and the extra supervision of students. Ian shared, "It kind of sucks to have kids thrown in here every week who may not want to be here with me or who are not the most enjoyable people." Another precaution was the removal of all fabric-covered furniture from the building due to the inability to sanitize it sufficiently. This change prevented many teachers from continuing to offer flexible seating options in their classrooms. Students were not issued lockers to prevent congregating in the halls, and students were not allowed to use the locker room nor dress out for physical education classes. These changes resulted in students carrying backpacks to their classes, and the physical education curriculum was modified to accommodate students in their street clothes.

As the 2020-2021 school year began in person, the reopening plan designated that Google Classroom would be the "primary digital platform" to be used across the district. Teachers incorporated Google Classroom into daily instruction so that students were familiar with it. The

administrators discouraged teachers from issuing textbooks to students, so teachers gave students access to e-textbooks or used digital curricula. Harris (2020) speculated that some positive changes might arise from the pandemic, such as teachers being forced to try new technology tools that may continue to be used in the classroom as students return to school. Confirming Harris' conjecture, the participants in this study each modified their curriculum to be available through Google Classroom and utilized digital activities and lessons that they planned to continue using in the future.

Individual classroom procedures varied, but the participants all followed the guidelines set forth by the district's reopening plan. Some participants had enough space to physically distance students in the classroom, while others did not. The participants still used cooperative learning and group work in their classrooms; however, the groups were smaller than usual and were more spaced out. Dani and Stella had to purchase more lab supplies in the science department to accommodate more groups participating in labs. During group activities, the participants were diligent in adhering to masking protocols, and after the group activities, all areas and supplies were thoroughly sanitized. As a result of the extra cleaning precautions, some instructional time was sacrificed to sanitize the areas and utensils used.

During the COVID-19 pandemic, the participants encountered and overcame many challenges. The emotional impact on the participants became apparent as they detailed their experiences working through the COVID-19 pandemic. The participants expressed feelings of exhaustion, anxiety, worry, stress, sadness, fear, loneliness, and frustration as they navigated through the institutional and curricular changes. While analyzing the interview data, it became apparent that the emotional impact of the pandemic was more prominent than the researcher

expected. Thus, an ancillary theme was formed that focused solely on the emotional impact that the COVID-19 pandemic had on the participants.

Ancillary Theme: Emotional Experience

Since this study was conducted while the COVID-19 pandemic was happening, scholarly work was still being developed. In the absence of scholarly works, interviews and webinars relating to the pandemic were used to provide context in this study. Dr. Richard Shadick, a clinical psychologist and mental health consultant for *Teach for America*, provided insight to the struggles teachers faced amidst the COVID-19 pandemic. According to Shadick (TFA Editorial Team, 2020, para. 4), teachers felt fearful, exhausted, stressed, and anxious. Shadick also noted that the psychological effects seen in frontline healthcare workers were becoming prevalent in teachers. Shadick also commented that the stress on teachers was "unrelenting," and that the ongoing nature of the pandemic was causing an "overwhelming sense of loss of control" that would result in a "more insidious form of burnout."

In a Newsday webinar, Lauren O'Rourke, social worker at Syosset Central School District, said that teachers in her district had expressed concerns that there was no downtime. Teachers expressed that they were always working, even while at home, answering parent and student emails, updating and grading in Canvas and Google Classroom, and looking for new strategies to use in the classroom to maintain rigor (Filler, 2020, 5:10). Richard Haase, president of the Half Hollow Hills Teacher Association, shared in the same Newsday webinar that teachers in his school felt that the work and personal life boundaries were gone and that every aspect of teaching was twice as hard as pre-COVID (Filler 2020). Clarisse agreed with O'Rourke and Haase wholeheartedly, saying,

> My school kids were super needy at the time. And I felt like I'd get on the computer at like 8:30 in the morning and, at midnight, I was still on because high schoolers do their work at midnight— And so they would be messaging me, and I felt the need to get back to them as soon as I could. So that was really stressful and exhausting.

Clarisse and Sam expressed that the COVID-19 pandemic caused them stress and anxiety. Clarisse admitted, "I've always kind of had that personality anyway, but I feel like it's really kind of gotten to me." Likewise, Sam felt anxious when thinking about how COVID-19 was going to impact schools, "I had a lot of anxiety thinking about kids not being in school; the damage that was going to do on our society." Dani also experienced high levels of stress throughout her experience, but through her tears, she shared that her most consuming feeling was fear:

> I'm also in that high-risk category. I'm a type-1 diabetic. So, I'm always cleaning, all the time, to make sure that everything's clean spotless for my own protection… I spend a lot of time at my desk, making sure I'm distanced enough. I would always be out in the classroom [before COVID-19], 'cause that's the teacher I am. And I'm scared because I don't want to get [COVID]. I feel like me, as an educator, I'm not doing my job as effectively because I am sitting at my desk. Because of fear.

O'Rourke commented that teachers felt overwhelmed by the change in teaching dynamic in multiple ways. Teachers were expected to teach in-person, hybrid, and remotely simultaneously, all while trying to maintain the pre-COVID rigor (Filler, 2020, 6:00). Brown remarked how teachers spent hours searching for new strategies to accomplish the same educational and social goals that the small-group activities once did (Filler, 2020). Stella shared that she was overwhelmed at first because "we didn't know really what was expected of us." Sam

exclaimed, “I have done more prep work, and I continue to do more prep work this year than any year since my first year as a teacher!” Clarisse also felt overwhelmed by the amount of prep work that was required:

> The hardest part was getting everything that the kids needed to see to be able to learn skills… Just trying to do my lesson plans and then make everything into a digital format… finding all those stories and stuff in PDFs so that I can share that online.

The participants in this study agreed that there was less peer interaction, and they felt less connected to their fellow teachers. Stella reminisced, “I just felt very alone on all of it, like I don't know what to do.” Stella wished that teachers could have gathered “so we could have vented, and seen what everybody else was doing, and just felt more connected.” Dani also felt the lack of connection to her fellow teachers and commented that,

> Teachers need a day a week or something; we don't get our lunches, we don't get time to talk to other teachers or discuss what's happened, or our content, our curriculum or standards, or anything. A day a week or even a half-day to discuss and talk and plan would be helpful!

Among the feelings related to institutional and curricular changes, the participants also shared feelings of stress, worry, and sadness towards their students. Ian shared,

> It's been kind of a struggle to know how it's impacting all the students and how much it is affecting them. I feel bad that they are being quarantined for whatever reason. I feel bad that they are not getting the social impact. I'd like to see them get online during different meetings and stuff and still stay involved whenever they can, just to communicate with them, so they aren't just stuck in a room all day by themselves… I don't know if some of them are getting sick and how sick they are and how they feel all the time, or if they have

> [COVID-19] and are not showing any symptoms. I don't want to cause extra pressure, so I am pretty lenient with [students] turning stuff in.

Clarisse remembered that she was “really stressed out” and that “it was strange not being able to see the kids every day and having that interaction with them. I cried a lot.” Stella empathized with her students:

> It made me sad. I felt bad for the kids. My kid's a senior this year and missing out on all that senior stuff that most seniors get to do; kids missing important things, being quarantined, not being able to play a game because a school got shut down or something. It makes me sad for the kids.

The emotions experienced by the participants as a result of the changes were undeniable. Exhaustion, anxiety, worry, stress, sadness, fear, loneliness, and frustration plagued all the participants in this study. Shadick (TFA Editorial Team, 2020) expressed concern that the stress and anxiety felt by teachers could be picked up by students in the classroom, causing student anxiety and behavioral problems. This study focused on the perceptions of teachers, so the impact on students is unknown. However, a follow-up study on students who attended school during the pandemic would provide insight into Shadick’s concerns.

Study Limitations

Data collection was limited to high school content-area educators in one rural-distant Missouri high school. Two male and five female educators agreed to participate in the study. Roberts and Hyatt (2019) recommend a small sample size, restricted to single- or double-digit numbers, for a qualitative study. Data were collected from the seven participant interviews, district updates, and the district’s 2020-2021 reopening plan. This study focused on the lived experiences of the participants and the changes they experienced while teaching through the

COVID-19 pandemic. Some changes that occurred within the institution may have been omitted due to the participants not knowing of the change or failure to recall during the interview process. District updates and the reopening plan were used in efforts to bridge this gap in the data. The relationship of the researcher was presented in Chapter 3 and the experience of the researcher was omitted from this study. Due to the ongoing nature of the COVID-19 pandemic during this research, the researcher could not continue to report new information as it became available and only immediate effects of the pandemic were reported.

Implications for Future Practice

Administrators

Findings in this study revealed that educators felt alone and lacked support from their administrators during the COVID-19 pandemic. Racines (2020) suggested that administrators frequently acknowledge the hard work their teachers are doing and empathize with the increased workload and stress levels they are experiencing. This empathy and acknowledgement remind teachers that they are not alone, and their hard work is appreciated. This study also revealed that teachers felt morale was low. Racines suggested doing weekly staff shout-outs to acknowledge and celebrate successes to boost morale. Racines' final suggestion was that administrators be transparent with teachers and staff. Teachers appreciate honesty, respect, flexibility, kindness, patience, and transparency from their administrators, which builds trust and community within the school (Racines, 2020; Cipriano & Brackett, 2020).

Schools

This study illuminated the emotional impact experienced by educators during the COVID-19 pandemic. A teacher survey conducted by Yale researchers revealed that the top five emotions experienced by teachers during the pandemic were anxious, fearful, worried,

overwhelmed, and sad (Cipriano & Brackett, 2020). Findings from the study suggested that schools should provide social-emotional support for teachers and staff to help cope with these emotions and boost teacher morale. Educators in this study expressed a need for time to gather and talk about these feelings with their peers. Similarly, teachers who responded to the Yale survey requested strategies to support their wellness and resilience. Cipriano and Brackett suggested that schools provide strong leadership, a positive school climate, and social-emotional learning (SEL) training, including support to lessen these emotions in teachers.

Recommendations for Future Research

This study was narrowed to focus on the changes that occurred in a rural Missouri high school due to the COVID-19 pandemic. The ongoing nature of the COVID-19 pandemic provided ample opportunity for study related to education. Though only one facet could be explored in this study, many others await exploration. Recommendations include

1. Replicate the current study in five years to explore the long-term effects that COVID-19 had on the education system.
2. Replicate the current study to investigate the educational changes that arose in urban and metropolitan schools.
3. Conduct a study to explore the educational changes and experiences from the perspectives of parents, students, or administrators.

These topics would provide insight to the changes brought about by the COVID-19 pandemic from a different point of view.

Conclusion

This phenomenological study explored the transformation of the education system in a rural-distant Missouri high school in the wake of the COVID-19 pandemic. This study examined

the lived experiences of seven high school content-area educators from a specified rural Missouri school district. The participants brought diversity to this study in terms of subject taught, gender, highest degree held, years of teaching experience, and average class size.

The results of this study provided evidence related to the changes experienced by content-area educators in a rural Missouri high school. The data gathered during the interview process, including the archival documents, provided insight into the institutional and curricular changes that occurred as participants navigated through the COVID-19 pandemic. The participants shared their lived experiences transitioning to virtual learning with minimal notice, preparing and teaching both virtually and in-person, and the emotional impact of the COVID-19 pandemic. Findings from this study supported previous literature, in that schools responded similarly during the COVID-19 pandemic as they did during the 1918 Spanish Flu and SARS pandemics (50 U.S. Cities, n.d.; Bertram & Gilliland, 2003). Findings in this study also supported claims that rural schools face unique challenges as compared to urban and metropolitan schools (Blair et al., 2013; Bergeron et al., 2018).

Overall, the lived experiences of the participants in this study provided valuable insight into the educational changes that occurred due to the COVID-19 pandemic. The participants' experiences answered the research question by describing curricular changes, such as implementing new digital resources and preparing a virtual curriculum, including institutional changes, such as physical distancing, enhanced cleaning, and technology advancements. The data collected also gave insight to the emotions experienced by the participants, such as anxiety, worry, stress, sadness, and fear. The experiences shared by the participants in this study are crucial in understanding how the COVID-19 pandemic changed, and will continue to change, education in the United States.

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Appendix A

Adult Consent Form

Southeastern University

PROJECT TITLE: A PHENOMENOLOGICAL STUDY ON THE TRANSFORMATION OF THE EDUCATION SYSTEM IN A RURAL MISSOURI HIGH SCHOOL IN THE WAKE OF THE COVID-19 PANDEMIC

INVESTIGATORS:

Methodologist: Dr. Janet Deck, Southeastern University

Principle Investigator: Dr. Katrina Hutchins, Southeastern University

Student Investigator: Amanda Burdick

PURPOSE:

This study will explore the transformation of the education system in a rural Missouri high school in the wake of the COVID-19 pandemic.

PROCEDURES:

The researcher will contact you to schedule an in-person interview. The interview will be audio-recorded, transcribed, and returned to you for validation. The interview that will consist of six questions with possible follow-up questions. The interview is designed to take approximately 30 minutes.

RISKS OF PARTICIPATION:

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life. You will not be personally identified in any reports or publications of the results.

BENEFITS OF PARTICIPATION:

Your participation will add to the understanding of how the education system has changed in the wake of the COVID-19 pandemic.

CONFIDENTIALITY:

The audio-recordings, transcripts, and notes of this interview will be made available only to the student researcher, principle investigator, and the dissertation committee's methodologist. Pseudonyms will be used in the written results to protect your identity. Raw recordings and transcriptions will be stored on a password-protected computer and backed up on a hard drive stored in a safe. Recordings and transcriptions will be destroyed five years after the study has been completed.

CONTACTS:

You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study:

Amanda Burdick: arburdick@seu.edu

Dr. Katrina Hutchins: kehutchins@seu.edu

Dr. Janet Deck: jldeck@seu.edu

PARTICIPANT RIGHTS:

I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time, without penalty.

CONSENT DOCUMENTATION:

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements:

I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

_____ _____

Signature of Participant Date

I certify that I have personally explained this document before requesting that the participant sign it.

_____ _____

Signature of Researcher Date

Appendix B

Interview Guide

Interview Protocol*: Responses from high school content-area educators on the transformation of the education system in a rural Missouri high school in the wake of the COVID-19 pandemic.*

Interviewer: Amanda Burdick

Interviewee:

Time:

Date:

Place:

Purpose of the project: The purpose of this phenomenological study is to explore the transformation of the education system in a rural Missouri high school in the wake of the COVID-19 pandemic.

Questions:

Background Information

1. What is your name and what degrees do you hold?
2. In what areas are you certified to teach?
3. Do you have any additional teaching endorsements?
4. How many years have you spent teaching?
5. What is your position in the school district?
    a. What grade level/subject(s) do you teach?
    b. How many students are in a typical class?

Core Questions

6. Tell me about your experience in transitioning from a traditional classroom teacher to an online classroom teacher.
7. From your perspective, what institutional changes have occurred at the high school due to COVID-19?
8. From your perspective, what curricular changes have occurred at the high school due to COVID-19?
9. What changes have occurred in your content area or within specific grade levels due to COVID-19?
10. Tell me about the personal impact that COVID-19 has had on you as an educator.

Closing Questions

11. What suggestions do you have to improve the effectiveness of institutional processes and procedures/curricular changes due to COVID-19?

Conclusion

Thank you for your time today. I appreciate your willingness to be part of this research

Appendix C

Email Invitation to Participants

Dear Colleague,

I am conducting a research project that explores the changes that the education system is undergoing due to the COVID-19 pandemic. This project specifically focuses on high school teachers' lived experiences in a rural school district who have taught (and are teaching) through the COVID-19 pandemic. The purpose of this email is to ask for your participation in this research project. This study has been approved by both Southeastern University and Smithton R-VI High School. If you agree to participate, we will arrange a convenient location to conduct the interview. The interview length will be approximately 30 minutes and can be conducted in a place convenient for you. I am interested in the changes you have seen and experienced in the education system throughout the COVID-19 pandemic. The interview will be digitally recorded, and the recordings will be transcribed. The recorded interview and the interview transcription will be kept on a secure hard drive in a safe for five years. At the end of the period, the material will be erased. No identifying information will be used in any materials created from these interviews. The information obtained in this study will be published in my dissertation and may appear in journal articles.

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting our relationship. Your participation in this research will contribute to the conversation about how education is changing due to the COVID-19 pandemic. Please indicate whether you are interested in participating in this research by contacting me at the contact information below. I look forward to hearing from you and the opportunity to hear about your experience teaching through the COVID-19 pandemic.

Respectfully,

Amanda Burdick – arburdick@seu.edu

Principle Investigator and Dissertation Chairperson: Dr. Katrina Hutchins

Southeastern University

Appendix D

IRB Approval Letter

SOUTHEASTERN UNIVERSITY

NOTICE OF EXEMPTION FOR HUMAN RESEARCH

DATE:	October 1, 2020
TO:	Janet Deck, Amanda Burdick, Katrina Hutchins
FROM:	SEU IRB
PROTOCOL TITLE:	Phen. Study on the Transformation of the Educ System in a Rural MO High School in the Wake of Covid 19
FUNDING SOURCE:	NONE
PROTOCOL NUMBER:	20 ED 29
APPROVAL PERIOD:	Approval Date: October 1, 2020 Expiration Date: September 30, 2021

Dear Investigator(s),

The Institutional Review Board (IRB) for the protection of human subjects has reviewed the protocol entitled, Phen. Study on the Transformation of the Educ System in a Rural MO High School in the Wake of Covid 19. The project has been approved for the procedures and subjects described in the protocol.

Any changes require approval before they can be implemented as part of your study. If your study requires any changes, the proposed modifications will need to be submitted in the form of an amendment request to the IRB to include the following:

- Description of proposed revisions;
- *If applicable,* any new or revised materials;
- *If applicable,* updated letters of approval from cooperating institutions

If there are any adverse events and/or any unanticipated problems during your study, you must notify the IRB within 24 hours of the event or problem.

At present time, there is no need for further action on your part with the IRB.

This approval is issued under Southeastern University's Federal Wide Assurance 00006943 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under the IRB's Assurance, please do not hesitate to contact us.

Sincerely,

Rustin Lloyd
Chair, Institutional Review Board
irb@seu.edu