

East Tennessee State University Digital Commons @ East Tennessee State University

Electronic Theses and Dissertations

Student Works

8-2022

Adaptation of Instructional Strategies and Practices During a Pandemic

Lacy E. York Hughes East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd

Part of the Education Commons, and the Social and Behavioral Sciences Commons

Recommended Citation

York Hughes, Lacy E., "Adaptation of Instructional Strategies and Practices During a Pandemic" (2022). *Electronic Theses and Dissertations.* Paper 4125. https://dc.etsu.edu/etd/4125

This Dissertation - unrestricted is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

Adaptation of Instructional Strategies and Practices During a Pandemic

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Lacy Elaine York Hughes

May 2022

Dr. Pamela Scott, Chair

Dr. John Boyd

Dr. Stacy Edwards

Dr. William Flora

Keywords: instructional strategies, crisis, pandemic, adaptation, mindset, effective teachers

ABSTRACT

Adaptation of Instructional Strategies and Practices During a Pandemic

by

Lacy Elaine York Hughes

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. Although there has been little documentation in the literature specifically regarding adapting instructional strategies and practices as a result of crises, crisis management, change theory, mindset theory, adaptation and teacher effectiveness characteristics became the framework through which to interpret the data.

Data collection strategies included one-on-one, semi-structured interviews with a total of eight participants, two principals and six teachers, who met specific research participation criteria. Analysis of data occurred in three phases: (a) categorization of data under themes, (b) building the explanation of data in narrative form, and (c) re-examination of the data. Triangulation of data protected the credibility of the analysis by corroboration of teacher interviews with principal interviews, reflexivity, audit trail, and member checking.

The results revealed that crisis management, change theory, mindset theory, and teacher effectiveness impacted the teachers' adaptations of instructional strategies and practices during

the pandemic. The results showed an interconnectedness of themes and the ways in which one impacted another. Seven themes emerged from the analysis of data, including: (1) commitment, (2) collaboration, (3) mindset, (4) teacher effectiveness, (5) supportive culture, (6) engagement challenges, and (7) learning gaps.

Copyright 2022 by Lacy E. York Hughes

All Rights Reserved

DEDICATION

For my husband, Jeremy, my three children, Carsyn, Remy, and Fynn, and my parents, Ricky and Linda York. You all inspire me and bring joy and learning to my life. I thank God for each of you, forever and always.

Quotes:

"Be joyful in hope, patient in affliction, faithful in prayer." –Romans 12:12

"I can do all things through Christ who strengthens me." -Philippians 4:13

"For I know the plans I have for you, declares the Lord, plans to prosper you not to harm you, plans to give you hope and a future." –Jeremiah 29:11

"The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty and we must rise with the occasion. As our case is new, we must think anew and act anew." –Abraham Lincoln

"Just get it done, and I'll take care of things here. I love you." -my Husband

ACKNOWLEDGEMENTS

First, I would love to give praises to God for the opportunity and mindset to be a lifelong learner, and for giving me what I need, when I need it, wherever He leads me. I would love to thank my husband and children for their encouragement, inspiration, support, patience, understanding, laughs, hugs, and love as I navigated my way through the difficulties of this academic adventure of higher education while living life with whatever it may bring. To my children, always remember to do your best and forget the rest, be kind and courageous, and who's child you are . . . God's. In addition, my Loves, do not be afraid of a challenge, be open to a variety of solutions to problems, and have GRIT, find joy wherever you go, be a listener and observer, seek adventures, and stay humble. To my husband, I am blessed to have you in my life. You show enduring love for me through thick and thin, support and encourage me, laugh and complain with me . . . I love you. I could not have done this without you. I also thank my parents for the love, strength, faith and support you both gave me throughout life and continue to give me now to lead up to and tackle an accomplishment such as this. Mom, you gave your time to give me time to accomplish this feat . . . I couldn't have done it without you.

Friends and family are important along the way. To my family, friends, colleagues, and church family, thank you for checking in on and encouraging me. Thank you to my cohort for wading the waters with me, too. Lastly, I would like to thank my dissertation committee Dr. Scott, Dr. Flora, Dr. Boyd, and Dr. Edwards, and my advisor and lead professor throughout the program, Dr. Foley, for guidance, support, straight-talk, questioning and learning along the way. Yes, this was a messy process. Thank you everyone! I am blessed by each of you and am forever changed personally and professionally by the whole experience! Thank you, God, for getting me through!!

| ABSTRACT2 |
|---------------------------------|
| DEDICATION |
| ACKNOWLEDGEMENTS |
| LIST OF TABLES |
| LIST OF FIGURES |
| Chapter 1. Introduction |
| Statement of the Problem13 |
| Significance of the Study14 |
| Purpose Statement |
| Theoretical Framework15 |
| Research Questions |
| Definition of Terms16 |
| Limitations and Delimitations16 |
| Summary17 |
| Chapter 2. Review of Literature |
| Crises19 |
| Transboundary Crisis20 |
| Crisis Management21 |
| Change24 |
| Mindset |
| Adaptation |
| Effective Schools Movement |

TABLE OF CONTENTS

| Teacher Effectiveness | |
|-----------------------------------|----|
| Instructional Delivery | |
| Relationships | |
| Classroom Management | 41 |
| Formative Assessment and Feedback | 44 |
| Personal Competencies | 45 |
| Innovation | 46 |
| Summary | 46 |
| Chapter 3. Research Methodology | 48 |
| Research Questions | 48 |
| Research Design | 49 |
| Site Selection | 51 |
| Population and Sample | 51 |
| Data Collection | 52 |
| Data Analysis Strategies | 53 |
| Assessment of Quality and Rigor | 55 |
| Ethical Considerations | 56 |
| Role of the Researcher | 57 |
| Summary | 57 |
| Chapter 4. Analysis of the Data | 58 |
| Introduction | 58 |
| Participant Profiles | 59 |
| Beechwood Middle School | 59 |

| Emmanuel Middle School | 61 |
|--|-----|
| Researcher's Profile | 63 |
| Researcher's Notes and Memos | 63 |
| Interview Analysis | 66 |
| Data Results | 68 |
| Overview of Emergent Themes | 69 |
| Commitment | 69 |
| Collaboration | |
| Mindset | 72 |
| Teacher Effectiveness | 73 |
| Supportive Culture | 76 |
| Engagement Challenges | 81 |
| Learning Gaps | 83 |
| Emergent Themes by Supporting Research Questions | 88 |
| Summary of Data Analysis | 95 |
| Chapter 5. Conclusions and Recommendations | 96 |
| Introduction | 96 |
| Research Question 1 | 96 |
| Discussion | 97 |
| Research Question 2 | 104 |
| Discussion | 105 |
| Research Question 3 | |
| Discussion | |

| Research Question 4 | |
|---|------------------------|
| Discussion | |
| Conclusions | |
| Recommendations for Practice | |
| Recommendations for Further Research | |
| Summary | |
| References | |
| APPENDICES | |
| Appendix A: Teacher Criteria Email to Principals | |
| Appendix B: Email Invitations to Principal and Te | eacher Participants133 |
| Appendix C: Teacher Interview Protocol | |
| Appendix D: Principal Interview Protocol | |
| VITA | |

LIST OF TABLES

| Table 1. Overview of Emergent Categories and Themes | |
|---|----|
| 6 6 | |
| Table 2. Emergent Themes by Supporting Research Questions | 69 |
| Table 2. Emergent Themes by Supporting Research Questions | |

LIST OF FIGURES

| Figure 1. A Framework for Leadership | 25 |
|---|----|
| Figure 2. Implementation Bridge | 27 |
| Figure 3. Teaching Practices | |
| Figure 4. Impact of Behavior Management | 43 |

Chapter 1. Introduction

Crisis has many forms. Crisis imposes many hardships, changes, and levels of severity and does not discriminate. The crisis of the pandemic was no different and has caused and continues to cause a ripple effect of devastation throughout the world (Fullan, 2020). COVID-19, a transboundary crisis, is on the forefront of minds around the world and has changed the ways we live, work, and educate. Crises changing education are not novel; they occur in every culture and country (Arendt, 1996; Grandi, 2016; Fullan, 2020; UNICEF, 2020; UNICEF, 2022). However, school closures, virtual classrooms, remote learning, hybrid schedules, face-to-face learning with socially distant practices have not occurred at this magnitude (The World Bank et al., 2021). During this period, education was and still is in uncharted territory. Teachers, especially, are on the frontline of these changes and, even when a pandemic is not looming, are considered the key to reaching learning goals. Teacher quality has been consistently identified as the most important school-based factor in student achievement (Goldhaber, 2016; Hattie, 2003; Hightower et al., 2011; Skourdoumbis, 2017; Stronge, 2013; The World Bank, 2019).

Statement of the Problem

Many critical issues faced education at the time of this study. For the years 2020 and 2021, the crisis of the pandemic instantly leapt to the top of that list, exacerbating many of the existing concerns of education (Fullan, 2020; Mineo, 2020; Tutoring & Time, 2021). Education underwent tremendous changes due to the crisis, and teachers felt the pressure.

The problem under study involved teachers having to shift instructional strategies and practices to virtual and hybrid instruction during the pandemic of COVID-19 and having to do so quickly. It was vital for teachers to be willing to use and develop new ways of educating to move education out of the preexisting state of affairs (Hussain et al., 2018). Reville, former Secretary

of Education in Massachusetts, discussed this status quo in an interview with the *Harvard Gazette*. According to Mineo (2020), Reville said,

In this situation, we don't simply want to frantically struggle to restore the status quo because the status quo wasn't operating at an effective level and certainly wasn't serving all of our children fairly. There are things we can learn in the messiness of adapting through this crisis, which has revealed profound disparities in children's access to support and opportunities. (para. 8)

Significance of the Study

This study might provide timely insight into the ways in which the participants in this study understood and responded to changes in education due to crisis, developed and adapted instruction to continue effectively to reach and teach students, and the way this new learning could change their ways of teaching moving forward from the pandemic. This information might be relevant to teachers, principals, other administrators, and stakeholders in the field of education as they continue through and emerge from the crisis of the pandemic.

Researchers discussed the disruption the pandemic caused and continued to cause with student achievement due to: a) inequities in access to technology; b) inequities in opportunities provided through remote and hybrid settings; c) inequities in social and emotional support for students, families and teachers; and d) imbalances in teacher experience, professional learning support, and mindset (Mendenhall, 2020; Murray, 2020; Reimer & Wang, 2020). Focusing on effective teachers and how they impact student learning could be beneficial in moving forward to support and prepare for future learning (Norman, 2010).

Purpose Statement

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. Having a clear understanding of the goal of a research study could aid the researcher in staying focused on the purpose and using time that did not advance the goals at hand (Maxwell, 2012). Understanding the purpose of this study guided the researcher in decisions regarding method and design to ensure the research was worthwhile and offered grounds to show that the results of the research might matter (Maxwell, 2012).

Theoretical Framework

The theoretical framework provided a synthesis of existing, pertinent literature that supported and guided analysis and interpretation of the data of this research project (Kivunja, 2018). Crisis, transboundary crisis, crisis management, change theory, adaptation, and mindset theory, formed the theoretical framework of this study, and were critical in giving a lens with which to interpret the data. The theoretical framework connected the data to existing theory, provided grounds with which to understand the data and make recommendations (Kivunja, 2018).

Research Questions

Research questions control the focus of a study. The primary research question for this study was: How did identified, effective middle school teachers adapt instructional strategies and practices as a result of COVID-19?

Supporting questions included:

RQ1. How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the spring of school year 2020 and moving forward?

RQ2. What factors supported effective middle school teachers' instructional strategies and practices during the pandemic from the spring of school year 2020 and moving forward?

RQ3. What factors were barriers for effective middle school teachers' instructional efforts during the pandemic from the spring of school year 2020 and moving forward?

RQ4. How will effective middle school teachers use the new learning acquired during the experience of teaching through a pandemic as education moves forward from the effects of COVID-19?

Definition of Terms

Effective Teacher. For the purpose of this study, the term effective will focus on teacher effectiveness. Effective teachers have high expectations for all students, contribute to positive outcomes for the whole child, use diverse resources to plan for learning, and collaborate with all stakeholders (Goe et al., 2008). This synthesis encompasses the complex roles teachers play in student learning outcomes.

Instructional Strategies. Specific techniques used by teachers to help students become independent, intentional learners (Learning, 2002) may include, but are not limited to, modeling, blended learning, explicit and implicit instruction, independent study, experiential learning, peer coaching, portfolio, collaborative learning, and brainstorming.

COVID-19. The disease caused by SARS-CoV-2 that stands for coronavirus disease originating in the year 2019 (Centers for Disease Control and Prevention [CDC], 2020).

Transboundary crisis. When life-sustaining systems, infrastructures, and functions are highly threatened, causing urgency in decision-making in unprecedented times and across all sectors of society, crosses geographical, financial, and industrial borders, and has an unclear time frame with effects that are practically unknown in depth (Ansell et al., 2010).

Limitations and Delimitations

Limitations in this study were elements out of the researcher's control (Simon, 2011). One such limitation was that the findings of this qualitative study lacked generalizability or transferability (Simon, 2011). The study was a small, purposive sample related to a single objective. Therefore, future studies with a larger population or in a different locale might confirm the findings of this study. With this study, there was an inability to draw causal conclusions due to the nature of the inquiry and methods chosen (Creswell & Creswell, 2017). The data of this study required collection within a certain amount of time in relation to the pandemic. The data related to a timely and emotional crisis experienced by the participants and researcher and may cause distortions in the data collected and interpreted.

Delimitations of this study focused the scope and defined the boundaries within the control of the researcher (Simon, 2011). The following delimitations restricted the study: The participants interviewed were from specific geographic region of East Tennessee. The participants of this study were middle school teachers who taught more than five years. This comprised the purposive sample of this study. The participants of the study were identified as effective by the building principal according to a profile of criteria given by the researcher.

Summary

Education and teachers alike will forever change and adapt, primarily to meet the needs of students and families, communities, and predictions of future societal demands. Some changes

are planned, expected, and chosen, but others are unexpected and thrust upon school systems. In 2020, the pandemic, known as COVID-19, influenced education in monumental ways The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19.

Chapter 1 established the need for this research study by presenting an introduction to the study, a problem statement, a statement of purpose, research questions, definitions of relevant terms, limitations, and delimitations of the study. Chapter 2 will review the literature that encompasses the supporting scholarly writing relevant to crisis, change, mindset, the effective school movement, and characteristics of teacher effectiveness. Chapter 3 will contain the research methodology and design. Chapter 4 will present the interpretation of data according to the themes and categories that emerged. Chapter 5 concludes with a summary of findings, conclusions, implications for practice and recommendations for further research.

Chapter 2. Review of Literature

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. This chapter summarizes the literature, which forms the basis, context, and theoretical framework of this study. Effective schools and teachers create impactful learning experiences that result in high learning outcomes for students (Hattie, 2003, 2008, 2012; Marzano et al., 2013; Stronge, 2013; Stronge, 2018). Studying the literature focused on effective schools, teachers, and instruction before the pandemic framed the current study and connected to the data of the study. To gain a better understanding of the situation in which the participants taught and lived, it was essential to research the literature surrounding crisis, change, and mindset.

Consequently, this literature review provides information regarding crises and crises management research first. Change is the main topic of the second section, which leads into the next section about the role mindset plays in synthesizing, adapting to, and using change to continue to be effective. The next section presents the effective school movement because teachers and students are parts of and affected by a larger community. Last are multiple sections on the essential elements of teacher effectiveness.

Crises

The participants in this study underwent significant change and turmoil, professionally and personally, due to the spread of the coronavirus that led to an illness known as COVID-19. This disease caused a significant crisis, a pandemic. The novelty of the coronavirus threat, its ambiguous behavior, and the required implementation of preventive measures to contain its spread, such as social isolation, created unusual conditions, causing distress in many forms

including physical, psychological, social, emotional, and economic (Taylor, 2020). A foundation of knowledge of crisis and crisis management is critical for interpretation of this study.

Taylor (2020) offered this definition to give better understanding and fully capture the meaning of crises.

An event or situation that arises suddenly or reaches a tipping point in its severity that has the effect of significantly disrupting lives and threatening the status quo, and that may also have long-term, harmful consequences on individuals or

groups. (para. 6)

As a result, crises could bring unexpected and intense difficulty that happens suddenly and requires rapid important decisions while producing emotionally stressful and traumatic changes in a person's life (Taylor, 2020).

Many types of crises exist with varying levels or subtypes. Lerbinger (2012) recognized eight types of crises, including: natural disasters (including biological), technological crises, confrontation, spitefulness, organizational misdeeds, workplace violence, gossip, and terrorist attacks or man-made disasters. If applying the research from Lerbinger, the COVID-19 crisis would comprise a natural disaster of a biological nature; however, how should one classify the magnitude of the disaster? For the purposes of the current study, the classification of the pandemic will be a transboundary crisis (Boin, 2019). A crisis of this magnitude affects every aspect of society worldwide.

Transboundary Crisis

Crises of this nature challenged and changed every aspect of life and caused a ripple effect through cultures. Crises differed from emergencies that occurred with regularity, thus providing enough past experiences to prepare better for future occurrences. With transboundary

crises, there were too few past experiences to provide enough guidance for the future (Ansell et al., 2010).

Furthermore, a transboundary crisis could escalate quickly and morph constantly, which created difficulty in determining and planning for consequences. This type of crisis, requiring interactions among many administrative parties, caused confusion concerning which administrative team should make the decision for the moment. This type of environment created difficulty in making responses fast and effective (Boin, 2019). Consequently, the participants in the current study underwent turmoil due to this landscape of crisis.

Ansell et al. (2010) noted the challenges of a transboundary crises nature were harder because they spread across geographical borders and policy boundaries and required more groups to be involved with each other. This caused a variety of individuals and groups that were less acquainted and had divergent agendas to come together, which produced management and analytical challenges. Managerially speaking, dispersed participants must quickly share information and coordinate their actions across the boundaries among organizations, professions, and political jurisdictions. From the analytical side, there was not necessarily an understanding of the kinds of organizational factors that could produce dependable enactment across the network of those involved.

Crisis Management

Managing transboundary crises called for many actions and decisions. Weick (1988) discussed the act of sense-making in crisis situations as more difficult because persons involved made decisions to understand the crisis that often seemed to exaggerate the crisis. He continued by comparing crisis situations to that of explorers. Explorers did not know what they had explored until after the exploration and consequent reflection. Weick also likened sense-making

in a crisis to an example of a plant's operating manual regarding large gas leaks that might state *we will learn more and more as we gain actual experience*. Sense-making was crucial in all circumstances. Sense-making involved enactment, which included a process and a product. Further, enactment involved the actions of an individual according to the beliefs set forward by the organization (Weick, 1988). Weick defended the importance of being proactive in crisis situations, highlighting the importance of enactment in relieving stress, with reimagining complex tasks into simpler more effective ones, with increasing skill levels, and in seeing potential causes of other crises and other places for possible interventions (Weick, 1988).

Against this backdrop of educational discourse due to the pandemic, school leaders and teachers alike were in a constant state of sense-making and enactment within the boundaries and shared beliefs of their educational organizations. Certain characteristics gained importance when surviving disorder. In a recent study, focused on school leaders shaping their identities while navigating seemingly endless school transformations in Singapore, Reyes (2020) found that the participants expressed relative autonomy and space for experimentation and innovation even within the parameters of control of the educational organization. This aided sense-making and adaptability, which were key in the formation of school leaders' and teachers' identities during a time of educational reform in Singapore.

Boin (2018) argued that "arrangements and processes that work reasonably well for 'bounded' crises are unlikely to work in the case of transboundary crises" (p.). Boin continued that the crises management plans in place in recent years, even though professionalized, were still no match for transboundary crises. Boin stated that one of three things needed to happen. First, responses to transboundary crises should be under the purview of national crises institutions. Secondly, there should be an investment in international organizations with

experience in handling matters of cross-border issues. Finally, organizations specifically focused on researching and creating new forms of crises management practices designed to handle transboundary crises should develop (Boin, 2018).

In reviewing existing research on crisis management, several themes emerged, predominantly flexibility and collaboration. A case study analyzing a Midwestern prekindergarten-12th grade school's crisis management plan featured themes of flexibility and collaboration. When exploring emerging aspects of the school's response to crisis, the researcher discovered the importance of self-correction and the development of a dynamic responsiveness model for crisis management (Liou, 2015).

Lerbinger (2012) noted crisis as not only hardship, but also a time for new learning and opportunity. The value of perceiving a crisis as an opportunity encouraged reflection and learning. Within crisis, Lerbinger distinguished between two types of managers. One recognized opportunities and was more likely to change mindsets and behaviors to accommodate the situation. This type of manager, a crisis manager, was better prepared to make necessary changes in the organization and not solely outcome- and process-focused as opposed to a risk manager. This type of learning mindset could produce more adaptive responses to difficult conditions as well as the ability to see opportunity in crisis.

Certain characteristics of managers of crises are more conducive to seeing opportunity out of crisis. Lerbinger (2012) described perceptions of crisis as an opportunity that could be attributed to the individual's and organization's values. This allowed self-regulation of behaviors and self-concepts with appropriate goals and standards, a strong sense of self-efficacy, and optimism. An organization's belief system also could foster or hinder a person's view of opportunity out of crisis.

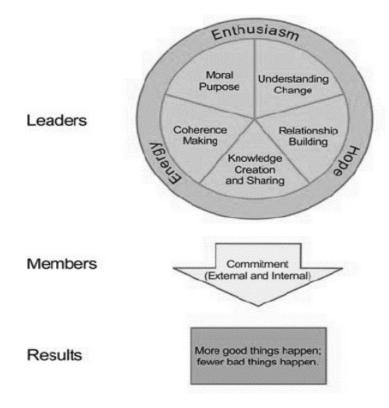
Change

When in a state of chaos created by crises, how should organizations respond? Change theory insisted that the process of change was always complex and rarely controlled (Fullan, 2001, 2020). Further, change involved a process in which leaders had to cultivate their own mindset toward confronting complex situations (Fullan, 2001), realizing that change was inevitable and a process that took time (Fullan, 2020). The cause of change could be either planned or unplanned, predicted or unpredictable. Again, researchers noted that change required time to work through and there was no perfect solution for creating a culture of change within an organization (Crosby, 2020; Fullan, 2001; Hall & Hord, 2011; Hayes, 2022). Fink et al. (1971). as cited in Meyers and Holusha (2018), suggested five distinct stages that companies went through as a result of unexpected change: shock, defensive retreat, acknowledgement, adaptation, and change.

Figure 1 illustrates Fullan's framework for thinking about and leading complex change. Leading through change, whether the principal of the school, classroom teacher, or leader of another public or private organization, required more than just managing. It required strong moral purpose to begin in the right direction (Fullan, 2001). Effective leaders worked toward understanding the change process, building positive relationships with diverse people and groups, and creating and sharing knowledge while working towards recognizing patterns that could lead to coherence-making with an energetic, enthusiastic, hopeful attitude (Fullan, 2001).

Figure 1

A Framework for Leadership (Fullan, 2001)



Hall and Hord (2015) presented a series of change principles that illustrated what happened when people and organizations were involved in and facilitated change. These principles summarized predictable aspects of change and reflected a planned approach to change efforts. The change experiences involved in the current study were unplanned. However, a study of Hall and Hord's (2015) principles, along with Fullan (2001) and Lewin, as cited in Crosby (2020), though focused on planned change efforts offered a solid foundation from which to derive understanding in interpreting and analyzing the data.

Hall and Hord (2015) suggested 12 change principles: 1) "change is learning" (p.9), 2) "change is a process, not an event" (p. 10), 3) "the school is the primary organizational unit for change" (p. 12), 4) "organizations adopt change - individuals implement change" (p. 12), 5)

"interventions are key to the success of the change process" (p. 15), 6) "appropriate interventions reduce resistance to change" (p. 15), 7) "administrator leadership is essential to long term change success" (p. 16), 8) "facilitating change is a team effort" (p. 16), 9) "mandates can work" (p. 17), 10) "both internal and external factors greatly influence implementation success" (p. 18), 11) "adopting, implementing, and sustaining are different phases of the change process" (p. 19), and lastly 12) "focus, focus, focus" (p. 19).

Hall and Hord's research highlighted a few key principles more applicable to unplanned change due to crisis. The first principle served as the basis for change; change was learning. Without learning, change could not exist. Learning aided making the change possible Professional learning was a key aspect that should be rooted in the change process (Hall & Hord, 2015), but difficult to provide in sudden, unplanned change.

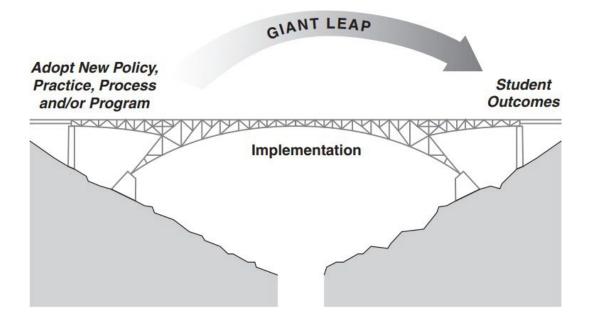
Regardless of change as expected or unexpected, sudden or not, change involved a learning process. The second principle highlighted that the process of learning in expected change could be accounted for and strategically planned (Hall & Hord, 2015). However, with unexpected change, the idea of learning through change as a process was essential for the organization to understand. Unplanned or not, when individuals must implement change, they should receive support.

The fourth principle illustrated in Figure 2 below shows the importance of support. The important parts to note in this figure are the *giant leap* and the *implementation bridge* that are key in whether or not the individuals implementing change are successful in changing practices to ensure positive outcomes for learning. In planned change, persons could anticipate supports from appropriate resources more easily and *giant leaps* become less necessary. However, with unplanned change, *giant leaps* were needed at times and might happen successfully, while some

might fail and others might stay in *current practice* that did not increase student outcomes (Hall & Hord, 2015). Communicating clear expectations, building capacity, and monitoring and reviewing individuals and groups were key in supporting and creating an *implementation bridge*.

Figure 2

Implementation Bridge (Hall & Hord, 2015, p. 13)



Principle 7 from Hall and Hord (2015) highlighted the importance of administrative support and feedback on innovations during change with the provision of continuous learning to those implementing the innovations. Principle 8 stressed that facilitating change should be a team effort. These two principles go hand-in-hand. For change to be successful and lasting, collaboration was necessary. Last, principle 10 emphasized the importance of context influencing the process of learning and change (Hall & Hord, 2015). The physical features of the school (facility arrangement, resources, policies, structures, schedules, etc.) and people factors (attitudes, beliefs, values, relationships, and norms) were key dimensions that affected change efforts of the individual and the organization. Fullan (2020) agreed, discussing *nuance* leaders and complex change. Nuance leaders were especially skilled at gaining a deeper, clearer understanding of the culture and context in which they led. They considered the lived experiences of others in making decisions, cared for the well-being of humanity, and worked for a culture of joint determination, adaptability when necessary, and mutual commitment (Fullan, 2019). Nuance leaders were key in developing quality change that could last. However, Fullan (2020) observed these expert leaders were "deskilled" (p. 26) when the job shifted and the context changed. Time was essential to gain the clarity and understanding of the new context and culture, but the pandemic created a context of constant change causing these type of leaders to become *de-skilled* almost weekly. Fullan (2020) argued that, even for nuance leaders, the pandemic caused such complex change and transition out of the status quo and into a new era that we might not know what it will look like for at least ten years. Fullan (2020) concluded by positing that schools were the transformation agent for communities around the world.

Seminal researcher Lewin (1951) created a three-step process on planned change known as CATS (Changing as Three Steps). Lewin's Change Model illustrated the process of change in three steps. Step 1 was the planning phase to unfreeze the status quo. Step 2 included the action phase to change the many structures and systems needed to implement new ones successfully. Step 3 offered the methods needed to solidify the processes and structures in a new form to represent the needed and desired outcomes. Fullan (2001) aligned with Lewin about the importance of re-culturing in the change process. Hoy and Miskel (2013) added that the process required intentional framing of the purpose for the change, scanning and interpreting external events, and commitment building within those affected by the change. In the midst of change, whether planned or sudden and unplanned, was mindset (Dweck, 2006).

Mindset

Mindset includes the lenses with which persons interpret or view everything around them (Arbinger, 2016). Neuroleadership research showed that shifting our mindset could help us stay focused and productive, allowing us to be more effective, even during a crisis (Derler et al., 2020; Weller & Derler, 2018). Neuroleadership referred to neuroscientific knowledge being used to "inform and influence theory and practice regarding a wide spectrum of leadership disciplines" (Laugherty & Alfred, 2010, p. 32). Neuroleadership studies how the brain might affect leadership abilities and how individuals problem-solve, make decisions, regulate emotions, influence and collaborate with others, and facilitate change (Laugherty & Alfred, 2010).

How persons respond to change, a challenge, or a setback depends in large part on the mindset they had for that situation. For example, when faced with a particular circumstance, a fixed mindset might respond with an attitude of negativity, resistance to change, a focus on proving oneself, and keeping the status quo. If one derived motivation from challenge, displayed curiosity about solutions, and sought feedback to improve, that person would have a growth mindset. Growth mindset individuals are more adaptive to change even in times of hardship and they understand that challenges, setbacks, and difficulties are opportunities for improvement and new learning. In crisis situations, those involved are forced to try new things (Grinstein, 2020); thus, requiring a choice of mindset to interpret and respond to the situation.

Recent growth mindset research noted that a person's mindset was not immutable and not necessarily fixed or growth. Mindset was situational; more like dimmers capable of being raised up or down depending on the context and less like a switch turned on or off. Mindset was not predetermined per person (Weller & Derler, 2018). Growth mindset could be developed and refined. An impact report from the Neuroleadership Institute monitored five corporations going

through major change and disruption to illuminate the significance of growth mindset initiatives to support successful transformations. The research from these case studies found three key benefits of developing a growth mindset within an organization during great change and disruption. The three key benefits of growth mindset in these five studies included: "behavior change at scale, increased employee engagement, and greater workplace satisfaction" (Derler et al., 2020, p. 4). Within this research, growth mindset developed the act of seeking out feedback to improve, the understanding of one's own impact on the organization, feeling more prepared and inspired through change, and resilience when faced with big challenges. Growth mindset developed a culture of learning, innovation, and feedback, and reinforced the concept of skills as fluid, not static (Derler et al., 2020).

The way in which persons responded to change, crises or not, had much to do with the moment between the stimulus or the cause and the response or the effect of a situation. Many stimuli arose during a time of crisis, which called for a response of some kind, and people tended to be reactive instead of proactive when choosing their response (Becker-Phelps, 2013). Much of the way in which people made decisions in the multitude of moments between stimuli and response involved mindset. In particular and related to the pandemic crisis, the mindsets of teachers were imperative to student learning outcomes (Hattie, 2012). Consciously or not, people noted incidents in their lives, their perception of those incidents, and their next steps. Mindsets framed these happenings and guided their interpretation (Dweck, 2006).

Mindset influenced human motivation and beliefs. A person's mindset could produce fulfillment of potential or stagnation. Dweck (2006), psychologist and leading researcher in the area of mindset, coined the terms fixed mindset and growth mindset. A fixed mindset believed in having only a certain number of capabilities, in other words, either a person was good at

something or not. The fixed mindset also viewed failure as the limit of ability and was threatened by the success of others. On the other hand, a growth mindset believed in the ability to learn anything of interest, which effort and attitude determined everything, and that failure produced an opportunity for growth. Persons with a growth mindset were inspired by the success of others (Dweck, 2016).

The mindset of persons affected their response to risk and the effort they would exhibit in a situation (Dweck, 2016). There are many types of mindsets discussed in the literature (Arbinger, 2016; Dweck, 2006, 2016; Kahn, 2018; Kuczmarski, 1998)). Being able to produce new, creative solutions to problems required the ability to think of others' needs with an outward mindset (Arbinger, 2016), to be open to failure, to have the ability to strategize and set goals, to collaborate with others, and to be open to feedback (Kuczmarski, 1998). Creativity paved the way for innovation as a mindset that embraced challenge and used creative thinking to solve problems (Kahn, 2018). Some people assessed the challenge ahead and looked forward to the effort and value for learning and growth as a return. However, others approached challenging stimuli with negative reactions and thoughts or attempted to avoid the challenge altogether. Change required risk, effort, new learning, mistake-making, and creativity. Growth mindsets offered an ability to see opportunity in the face of setbacks, which resulted in learning (Dweck, 2006, 2016).

Adaptation

Research indicated that innovation and adaptability worked together. The ability to adjust our actions, thoughts, and emotions to react to situations successfully defined adaptability (Collie et al., 2018). This involved adjusting thoughts to consider different options, undertake different actions, and lessen emotions that might be distracting (Collie et al., 2018).

Collie et al. (2018) conducted a study of 164 Australian secondary teachers. The teachers rated their adaptability along with work disengagement and commitment. The results revealed that, when teachers were more adaptable, they tended to report lower work disengagement and greater job commitment. In an additional question of this study, teachers reported about support from their principals pertaining to listening and encouraging initiative and innovation. The results indicated that teachers who reported higher principal support tended to be more adaptable (Collie et al., 2018).

In a study conducted in South Africa, regarding using WhatsApp to reach and teach university students, Nel and Marais (2020) stated, "a pandemic is the quintessential adaptive challenge and requires creating opportunities for innovative practice" (p.638). The findings and discussion revealed the importance of adapting, not only to be innovative, but also to improve from feedback to provide the best possible experience in meeting the needs of students and teachers (Nel & Marais, 2020).

Research suggested the importance of the ability to be adaptive during change. In a study out of Complutense University of Madrid about changing to an e-learning platform to meet the needs of students during COVID-19, the researchers focused on student opinions. The study found that students preferred a face-to-face teaching and learning process. However, the students adapted and found advantages to an e-learning platform that included time saving schedule flexibility. This quantitative study utilized a questionnaire completed by 306 students (Rodriguez-Rodriguez et al., 2020).

Being able to adapt to change in education was constant whether the change was expected or unexpected. Being adaptable during change depended on sufficient support. In a study that examined the perceptions of secondary teachers in their preparedness to implement the

change to Common Core State Standards, the researchers found that the level of support made a difference. The study surveyed 35 respondents and 55% reported an inadequate level of training support in changing to and teaching Common Core State Standards (Burks et al., 2015).

Effective Schools Movement

Coleman et al. (1966) concluded schools were not the major predictor of student achievement. They reported that family background had the greatest impact on student achievement, thus rejecting effective schools' movement. The study prompted a strong reaction, backed by an abundance of research. Some of the research agreed that schools did not produce the main impact on student achievement, while others supported findings that all children could learn and that the school controlled the factors needed to assure student success (Lezotte, 2001).

Brookover and Lezotte (1979), Edmonds (1982), Mortimore et al. (1988), and Rutter (1979) were the key researchers in the effective schools' movement with a focus on change. The researchers found examples of especially effective schools in varying locations and in both large and small communities. The task remained to identify the common characteristics among these effective schools. What philosophies, policies, and practices did the schools share? Edmonds (1982) identified five characteristics or correlates of effective schools. These attributes eventually became known as the Correlates of Effective Schools. He noted the following characteristics: purposeful and focused leadership, a focus on instruction, a safe and orderly environment, high expectations from teachers, and frequent monitoring and assessment of student learning.

Rutter (1979) confirmed similar findings that schools made a difference, depending on the quality of the school's climate, leadership, and quality of instruction. Brookover and Lezotte

(1979) added two correlates to Edmonds (1982) original five, which were positive home school relations and opportunity to learn and student time on task.

Through a meticulous longitudinal study Mortimore et al. (1988) reported eleven factors related to effective schools, which were: professional leadership, shared vision and goals, a learning environment, concentration on teaching and learning, purposeful teaching, positive reinforcement, monitoring progress, pupil rights and responsibilities, home-school partnerships, and a learning organization. The findings of these key studies (Brookover & Lezotte, 1979; Edmonds, 1982; Mortimore et al., 1988; Rutter, 1979), of effective schools were congruent and gave, and still give, valuable information concerning school improvement and affirmation.

Teacher Effectiveness

Research repeatedly pointed to the teacher as the single most influential in-school factor for student success (Hattie, 2003, 2008, 2012; Marzano et al., 2013; Stronge, 2013, 2018). Producing positive student learning outcomes demanded a quality, effective teacher (Ko & Sammons, 2013). The current study employed a five-point definition developed by Goe et al. (2008). This synthesis of research encompassed the complex role the teacher played in student learning outcomes.

The five-point definition of effective teachers included:

• Effective teachers have high expectations for all students and help all students learn.

• Effective teachers contribute to positive academic, behavioral, and socialemotional outcomes for students. • Effective teachers use diverse resources to plan and structure engaging learning opportunities; monitor student progress formatively, adapting instruction as needed.

• Effective teachers contribute to the development of classrooms and schools that value diversity and matters of the community.

• Effective teachers collaborate with other teachers, administrators, parents, and education professionals to ensure student success (Goe et al., 2008, p. 8).

The terms quality teacher and effective teacher are separate in research (Hightower et al., 2011; Skourdoumbis, 2017); however, for the purposes of the current study, the two terms complemented one another to portray overall teacher effectiveness that would yield effective instructional adaptations.

In addition,

A quality teacher is one who has a positive effect on student learning and development through a combination of content mastery, command of a broad set of pedagogic skills, and communication/interpersonal skills. Quality teachers are life-long learners in their subject areas, teach with commitment, and are reflective upon their teaching practice. They transfer knowledge of their subject matter and the learning process through good communication, diagnostic skills, understanding of different learning styles and cultural influences, knowledge about child development, and the ability to marshal a broad array of techniques to meet student needs. They set high expectations and support students in achieving them. They establish an environment conducive to learning, and leverage

available resources outside as well as inside the classroom. (Hightower et al.,

2011, p. 5)

Rowe et al. (2012) completed a research mapping and extensive literature review on good *teaching*. They found recurrent key features of effective teaching and identified three as good teaching practices. The first area encompassed the teaching environment, which involved creating a calm, well-disciplined, and orderly environment with new or redesigned spaces that were safe. Teachers worked to model and to encourage an attitude of aspiration and achievement for all with a positive emotional climate that was purposeful and interesting. The second area, teaching approaches, included features such as a social constructivist approach of working and learning together with teacher-student dialogue and questioning. In addition, teachers monitored pupil progress through feedback and student assessment. Teachers understood and worked to provide opportunities for student agency and voice to promote active engagement in their learning. Additional features in the second area included inquiry-based learning, effective planning and organization, scaffolding learning, personalization, responding to individual needs, family education, the use of new technology, and collaborative practice. Finally, teaching characteristics, the third area of good teaching, listed features of good subject knowledge, selfefficacy, high expectations, motivational, innovative, and proactive. Teaching characteristics also included being calm, caring, and sensitive to students, giving praise, and using humor as a tool to engage students. In addition, features of the third area of good teaching included creating trust and mutual respect, being flexible (where appropriate), self-reflecting, and the ability to build positive learning-focused relationships with students.

Effective instruction engaged students, which produced greater academic success. The teacher as a whole was the center of effective instruction, not their expertise on content or their

temperaments alone. Teachers brought to the classroom distinctive values, approaches, wisdoms, philosophies, hopes, motivation, knowledge, and skills, wrapped into one whole person, the teacher. They had a direct effect on how, what, and how much students learned, and the ways in which they interacted with one another and the world around them. Teachers had an influential, enduring impact on their students (Stronge, 2018). Educational reform research consistently pointed to two main factors key to academic success, effective teaching practices and student engagement, which the teacher had the greatest opportunity to influence (Dovale, 2020). Research continuously points to the greatest influence on student success being the teacher (Stronge, 2013).

Hattie (2008) discovered 138 factors for successful school learning and reviewed their effect size. Some factors influenced school learning more or less positively, some were not relevant, and others negatively impacted school learning. The arrangement of single factors into six thematic groups included influences on school learning from the student, the home, the school, the teacher, the curricula, and teaching approaches. He brought these factors into a rank order from the strongest positive on top to the weakest influences in the middle and negative, impeding influences at the bottom. Within the study, he found that the most influential group or theme of factors with the strongest effect size on student success was the teacher (Hattie, 2008).

According to The Wing Institute (2021), research illustrated a link between teaching and student academic performance and revealed that, of all factors under the control of a school, teachers had the most powerful influence on student success. The Wing Institute, through a review of literature about teacher effectiveness, found four teacher competencies that made a difference in student achievement. The four teacher competencies included: instructional delivery, classroom management, formative assessment, and personal competencies or soft skills

(The Wing Institute, 2021). The literature review for the current study highlighted these skills repeatedly with the addition of adaptation and innovation in relation to crisis and change.

Instructional Delivery

"The effectiveness of the systematic approach in designing instruction provides an empirical and replicable process for reliable assessment to continuously and empirically improve the developed learning experience" (Khalil & Elkhider, 2016, para. 36). When teachers offered explicit, active instruction, rather than turning control of content and pace over to students, better learning happened (Hattie, 2009).

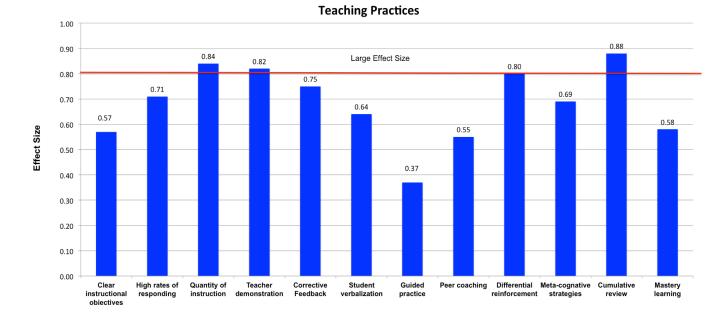
Delivery of instruction in a systematic, structured way focused on student understanding and fluency of new content and students' abilities in generalizing the new learning to future situations (The Wing Institute, 2021). This positioned the teacher as a learning activator as opposed to the learning facilitator of the classroom (Hattie, 2009). Researchers Archer and Hughes (2010) compiled features of explicit instruction as: teachers could select the learning area to be taught, set the criteria for success, inform students of the criteria ahead of the lesson, and show students the successful use of knowledge/skills through modeling. In addition, teachers would evaluate student attainment of learning objectives, provide remedial opportunities for acquiring the knowledge/skills if necessary, and provide closure at the end of the lesson. Within research, conflicting thoughts and findings occurred around explicit and implicit teaching and depending on what was taught, the objectives, styles of teaching, and other variables depended on the current needs (Rogers, 2016). The Wing Institute (2021) discussed,

the reality is that all effective instruction, regardless of philosophy, must aid students in generalizing newly taught knowledge/skills in a context that is greater than a single lesson. An explicit model accomplishes the goal of building toward "big ideas" by first

emphasizing mastery of foundation skills such as reading and mathematics, and then systematically introducing opportunities to integrate these critical skills in discoverybased lessons to maximize students' experience of success (para. 4).

Figure 3 illustrates The Wing Institute's review of research exhibited in effective teaching practices and their corresponding effect sizes.

Figure 3



Teaching Practices (The Wing Institute, 2021)

Relationships

Research well illustrated the importance of developing relationships within the school setting and between school and home and that each produced a positive impact on student outcomes (Fullan, 2001, 2016; Fullan et al., 2020; Rowe et al. 2012; Wong et al. 2012). "Relationships and engagement [were] the gatekeepers of learning" (Fullan et al., 2020, p. 17). Supportive relationships provided the foundation of challenging, engaging, and meaningful learning and became the basis of effective social-emotional learning (Enterprises et al., 2013). Educators rarely discussed the importance of human connections and relationships (Pierson, 2013) but "no significant learning can occur without significant relationships" (Comer, as cited in Pierson, 2013, n.p.).

Tutoring and Time (2021) reported that strong relationships between students and teachers and school staff created the foundation of student motivation, engagement, and learning. Relationships contributed to positive student behavior and stronger social skills. The report from *The Education Trust Report* from Tutoring and Time offered a survey of 25,400 sixth through 12th graders from a large diverse district. Less than one-third of the total student participants reported strong relationships with their teachers. By 12th grade, the number declined to 16%, and students of low-income backgrounds reported even fewer strong relationships with teachers. The research addressed the stress that teachers and students were under, both personally and professionally, due to the effects of the pandemic and the importance of strong relationships in the future as students recovered from academic gaps created by school closures and online learning (Tutoring and Time, 2021).

Building relationships between and among students, teachers, families, and community formed the key difference between deep learning taking place and a traditional type of learning focused on compliance (Fullan et al., 2020). According to Fullan et al. (2020), the *Life Ready Learning* report and the Education Endowment Foundation assessment concluded similar findings from the students' perspective. Students valued value teachers who knew them and that relationship formed how they learned best. Students preferred personalization over automation.

A qualitative study by Heilporn et al. (2021) examined the ways in which teachers fostered student engagement in a blended learning environment in higher education. From twenty interviews with professors and lecturers from several universities across Quebec, the

researchers found relationships as one of three meta-categories of their research. This study concluded that fostering relationships early on in a course resulted in higher levels of student engagement in blended learning courses (Heilporn et al., 2021).

A key factor in creating a climate and culture favorable for student academic growth and social-emotional development included the modeling and building of positive relationships between administrators and teachers and teachers and students and among students, teachers, and school and families (Fournier et al., 2019). Positive student-teacher relationships improved attendance, student engagement, motivation to learn, and self-regulation skills for social-emotional learning (*Why Strong Teacher*, 2021).

Classroom Management

Well-designed lessons aided classroom management. Godwin et al. (2016) found that instructional design influenced whether or not student behavior was on-task. During the pandemic, classrooms looked very different depending on where or what situation one was in when teaching and learning. Ultimately, the climate and culture of any learning environment, whether traditional, online, face to face, hybrid, or other combination, proved one of the more vital elements in successful learning outcomes. Well-managed classrooms could be characterized as safe environments where learning occurred freely (Dibapile, 2012). Sahin (2015) described classroom management as a process through which teachers established the essential organization to create and maintain an environment that encouraged learning. Effective classroom management influenced academic success and created positive classroom environments (Back et al., 2016).

A study by Back et al. (2016) examined the ways in which classroom management, staff relations, and school climate contributed to academic achievement measured by ACT scores in

an urban high school. Their results highlighted the importance of classroom management strategies and positive learning environments. Considering academic achievement over time through this study's chosen framework, classroom management and staff relations contributed positively to school climate and climate, in turn, contributed to academic achievement (Back et al., 2016).

Effective teachers might view classroom management as a process of organizing and structuring classroom events for student learning (Wong et al., 2012). Research from The Wing Institute (2021) emphasized four important areas that classroom teachers should show proficiency in to create a positive climate that maximized learning. The four areas, according to The Wing Institute research (2021) were:

1. Rules and procedures: Effective rules and procedures identified expectations and appropriate behavior for students. To be effective, these practices must be observable and measurable.

2. Proactive classroom management: Practices that teachers and administrators could employ to teach and build acceptable positive and helpful behavior, promoted social acceptance, and lead to greater success in school.

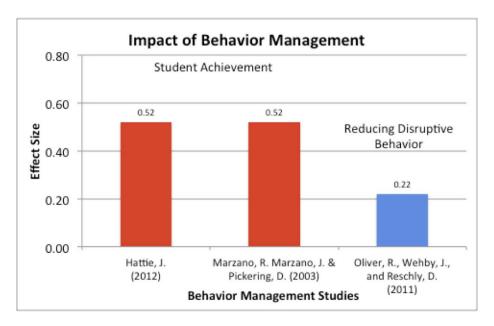
3. Effective and stimulating classroom instruction: The key to maintaining a desirable classroom climate was to provide students with quality instructional delivery aligned to the skill level of each student. This enabled students to experience success and kept them attentive.

4. Disruptive behavior reduction: These practices were necessary in the event the first three strategies were not effective. Behavior reduction strategies included giving students

timely, corrective feedback, minimizing reinforcement of a student's unacceptable behavior, and guiding students in appropriate behavior.

Classroom management was one of the most persistent areas of concern voiced by school administrators, the public, and teachers (Evertson & Weinstein, 2013). Research consistently placed classroom management among the top five issues that affected student achievement. To highlight even more, classroom management linked with an increase of 20% in student achievement when teachers taught and methodically used classroom rules, routines, and procedures (Hattie, 2005). An important piece of managing the classroom was the teacher's ability to manage behavior. Figure 4 illustrates the impact of behavior management on student achievement by effect size.

Figure 4



Impact of Behavior Management (The Wing Institute, 2021)

Effective teachers offered organized, structured, and consistent classrooms with a set of procedures or steps that guided students in the means to get things done. This plan structured the classroom so the students knew what to do, how to do it, and when to do it (Wong et al., 2012).

Seminal work in the area of classroom management concluded that good classroom management had more to do with teacher behavior than that of students did (Kounin, 1970; Sanford, 1984).

Formative Assessment and Feedback

Effective ongoing assessment, referred to in education literature as formative assessment and progress monitoring, was indispensable in promoting teacher and student success and frequently listed at the top of interventions for school improvement (Marzano et al., 2001). Feedback, a core component of formative assessment, worked as an essential tool for improving performance in sports, business, and education (The Wing Institute, 2021). Hattie (2008) identified feedback as the single most powerful educational tool available for improving student performance with a medium to large effect size ranging from 0.66 to 0.94.

Formative assessment consisted of a range of formal and informal diagnostic testing procedures conducted by teachers throughout the learning process to modify teaching and adapt activities to improve student attainment. Systemic interventions, such as Response to Intervention (RTI) and Data-Based Decision Making, depended heavily on the use of formative assessment (Hattie, 2008; Marzano et al., 2001; Stone et al., 2012).

Wisniewski et al. (2020) revisited a meta-analysis on the effects of feedback on student learning and discovered there were many types, variations, and degrees of feedback. Feedback was complex, encompassed many different forms, and had varying effects on student learning depending on delivery and type of learning (Wisniewski, 2020). The study found that feedback had more impact on cognitive and motor skill outcomes than it did on behavioral and motivational outcomes. Feedback was more effective, the more information it contained (Wisniewski, 2020).

Personal Competencies

Personal competencies, also known as soft skills, are an "accumulation of related capabilities that facilitate learning" (Carreker & Boulware-Gooden, 2015, p. 2). Redding (2014) proposed a Personal Competency Framework with the first element as personal competencies, which included four components,

1. Cognitive Competency—prior knowledge which facilitates new learning

2. Metacognitive Competency—self-regulation of learning and use of learning strategies

3. Motivational Competency—engagement and persistence in pursuit of learning goals

4. Social/Emotional Competency—sense of self-worth, regard for others, and emotional understanding and management to set positive goals and make responsible decisions (Redding, 2014, p. 4).

Carreker and Boulware-Gooden (2015) posited that a student's ability to develop these skills relied a great deal on the teacher understanding and using his or her own personal competencies. Personal competencies aided learning and goal attainment (Redding, 2014). The Wing Institute (2021) discussed personal competencies as follows:

A teacher's personal competencies, also known as soft skills, can inspire and influence students by stimulating their interest in learning, and the opposite. Unfortunately, some effective and ineffective teachers have no obviously evident personality differences. Some of the very best teachers are personable and caring, but ineffective teachers can be this as well. Conversely, some of the best teachers appear as firm, but whose influence is enormous in motivating students to

accomplish things they never thought possible. Typically, the finest teachers show enthusiasm and excitement for the subject they teach. (p.)

Innovation

Innovation in education was necessary for a sustainable future (Serdyukov, 2017). Innovation, however, was a process that began with creativity, the bringing to fruition and follow through of an idea. Creativity created the idea, while creative thinking allowed the innovation to come into play (Govindarajan, 2010). For one to innovate, one must have the ability to be creative. Innovating was challenging, requiring change and the right mindset (Dweck, 2006; Kouzes & Posner, 2017).

Govindarajan (2010) researched Fortune 500 companies about the innovation process from creative thinking to innovating and the execution of the innovation. He found that companies generated ideas more easily than they executed them. The execution of the idea, which was innovation, offered the greatest challenges. Serdyukov (2017) found that education in the United States was in desperate need of effective innovations on a scale that could produce the necessary high-quality learning outcomes across the system.

Summary

Crisis, transboundary crisis, crisis management, change theory, and mindset theory, the theoretical framework of the current study, were critical in giving a lens with which to interpret the data. Crisis, transboundary crisis, and crisis management framed the stories told from the data collected as the participants were amid a pandemic. Crisis brought about change, therefore, a review of literature pertaining to change and adaptability was appropriate. Mindset, according to research, played a role in the ways in which one responded to crisis and change (Dweck,

2016). Seminal research surrounding the effective schools' movement was next. Last, the literature review explored research about the characteristics of effective teachers, presenting a collection of key characteristics pertaining to effective teachers. This collection did not constitute an effective teacher but served as an accumulation of the most saturated characteristics found. In a mapping of seminal reports on effective teaching, Rowe et al. (2012) posited that a collection of characteristics and skills could not ensure effective teaching. Day et al. (2008), as cited in Rowe et al. (2012), pointed out, "Although there are generic features of effective and more effective teachers in action" (p. 2). Any range of strategies should essentially be adapted and refined to meet the needs, context and experience of the school, teachers, and students (Rowe et al., 2012).

The chapters to follow present information regarding methodology, findings, and conclusions. Chapter 3 details the research design employed in this qualitative research study, including the rationale, research questions, site selection, population and sample, data collection strategies and analysis, assessment of trustworthiness, ethical considerations and the role of the researcher. Within Chapter 4 are the findings of this research study. Chapter 5 discusses the findings in relation to the purpose of this study and its research questions, implications for practice, and recommendations for further research.

Chapter 3. Research Methodology

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. The essential research question of this study was: How did identified, effective middle school teachers adapt instructional strategies and practices as a result of COVID-19? This research stemmed from observations and interests of the researcher about differences in teachers approaching and adapting to sudden changes in instructional strategies and practices the specifics of the processes employed in this research project.

The first section of this chapter highlights the research questions that guide the study. In the next section, there is a description of the research methodology and rationale for using a qualitative research design, specifically, narrative inquiry. Included in the subsequent sections of this chapter is information on site selection, population and sample collection, data collection strategies and analysis, assessment of quality and rigor related to trustworthiness, and ethical considerations. Finally, there is a description of the role of the researcher and how it may affect the research.

Research Questions

The overarching research question for this study was, how did identified, effective middle school teachers adapt instructional strategies and practices as a result of COVID-19? The supporting research questions that focused the research inquiry of this study were as follows:

RQ1. How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the spring of school year 2020 and moving forward?

RQ2. What factors supported effective middle school teachers' instructional strategies and practices during the pandemic from the spring of school year 2020 and moving forward?

RQ3. What factors were barriers for effective middle school teachers' instructional efforts during the pandemic from the spring of school year 2020 and moving forward?

RQ4. How will effective middle school teachers use the new learning acquired during the experience of teaching through a pandemic as education moves forward from the effects of COVID-19?

Research Design

Qualitative methods were applicable for the study because rich, naturalistic interviews would provide significant details about how teachers processed, responded to, and adapted instruction and practices throughout the transboundary crisis of the pandemic known as COVID-19. Qualitative research in general, according to Denzin and Lincoln (2017), was an activity that pinpointed the observer in the world. Qualitative researchers use an interpretive framework to gather and structure information from participants to explain their personal truths. This study employed qualitative research that focused on exploring the ways in which individuals viewed, approached, and understood certain parts of their lives during the crisis of the pandemic caused by COVID-19 (Ravitch & Carl, 2019).

The purpose of this study called for the qualitative research method of narrative inquiry, also known as narrative analysis, which employed procedures to analyze stories of the individual participants. Narrative inquiry holds that people are storytelling beings who live storied lives (Connelly & Clandinin, 2006). Therefore, studying narratives was studying the way humans experienced the world (Connelly & Clandinin, 1990).

Through narrative inquiry, the researcher's goal was to develop an understanding of middle school teachers' perspectives of their personal experiences of quick shifts and changes in instructional strategies and practices due to the pandemic of COVID-19 that caused school systems to operate virtually, by hybrid means, or through a mixture of both. This would allow the researcher to collect and analyze the stories and narratives of the participants regarding the research purpose and questions the study sought to investigate. Qualitative inquiry allows the researcher to analyze stories gathered from participants to gain insight into the storied nature of human experience (Wright, 2017).

Narrative inquiry was appropriate for this study due to the nature of positioning the researcher as a storyteller of the participants' lived experiences. The researcher collects data from participant interviews and analyzes the data through themes rather than numbers allowing for collection of empirical evidence in a flexible, systematic approach. Moen (2006) stated,

As we make our way through life, we have continuous experiences and dialogic interactions both with our surrounding world and with ourselves. All of these are woven together into a seamless web, where they might strike one as being overwhelming in their complexity. One way of structuring these experiences is to organize them into meaningful units. One such meaningful unit could be a story, a narrative. For most people, storytelling is a natural way of recounting experience, a practical solution to a fundamental problem in life, creating reasonable order out of experience. (p. 56)

The researcher in this study sought to understand and learn from the experiences of the participants that adapted their teaching strategies and practices due to quick shifts in status quo caused by the pandemic of COVID-19.

Site Selection

The site of this study included schools in Upper East Tennessee. The research was not conducted on site. The interview data were derived via Zoom Video Communications online that better accommodated schedules of participants and the researcher of this study, gave a higher sense of comfort due to the circumstances of current affairs of the pandemic, and helped expedite transcriptions.

Population and Sample

Narrative inquiry explored lives through the lens of a narrative or story. These lived experiences created a starting place for significant understanding and knowledge (Clandinin, 2016). The focus of this research was on participants from the middle school level in school systems of Upper East Tennessee. The population for this study included school systems and middle school teachers of Upper East Tennessee. With narrative inquiry, it was not practical for the researcher to interview and analyze a population of this size. For this research study, a purposive sampling technique narrowed a representative group of the population (Patton, 2014).

The purposive sampling of participants involved in this study matched a descriptive criteria given to the principal of the building in which the teachers worked. More specifically, the type of purposive sampling was homogenous (Etikan et al., 2016). The homogenous sample in this study included identified middle school teachers who taught for five or more years. The participants in this sample were a mix of gender and race. While the participants were all middle school teachers, they came from a mix of 6th, 7th and 8th grade levels and various content areas. Six teachers and two principals participated in the study. The principals participated because of their expertise in effective teaching and for triangulation purposes to strengthen the

trustworthiness of the study. The total sample for this qualitative research study was eight participants.

Data Collection

For the purposes of this study, one-on-one, semi-structured interviews was the most appropriate method of data collection. Before collecting the data, however, the Institutional Review Board (IRB) of East Tennessee State University approved the interview question protocol, permissions to conduct research, and all other pertinent materials used for the interviews (i.e., informed consent document, purposive sample profile instrument, Zoom Video Communications platform). Periodic review assured all steps were taken to ensure the protection of the rights and welfare of all participants or any other materials that emerged as a result of this study.

The school system's Academic Excellence Committee also granted permission to conduct the study. Principals of the selected area middle schools received a list of criteria that described the teacher participants sought for the study. The researcher contacted the recommended teachers that met the criteria to pinpoint those who were interested in participating. The principal and teacher participants in this study reviewed and signed the informed consent form before proceeding with interviews. Teachers who agreed to be a part of this study received an email of gratitude and a small token of appreciation that was deemed appropriate by the committee of this study. The researcher and participants scheduled a time to conduct the interview via Zoom Video Communications.

The focus of this study called for semi-structured interviews with open-ended questions and responses for collection as data (Patton, 2014). Data collection best suited for the purpose of this research included one-on-one, semi-structured interviews with open-ended questions that

were aligned with the supporting research questions (Patton, 2014). Interviews formed the primary data collection for this study. Both principal and teacher participants used an interview protocol (see Appendices E and F). However, allowances were made for the addition or omission of questions according to the needs of the interview. A virtual meeting platform, Zoom Video Communications, served as a means of conducting the interviews. This platform allowed recording and transcribing the interviews. Interviews began by stating the purpose of the study and with an informal *meet and greet* introduction. Following, participants were asked questions that supported the research questions of this study, and probing questions were asked by the researcher, as needed. To close, participants were given an opportunity to share any additional information not discussed that supported the purpose of the study.

Data Analysis Strategies

Qualitative research requires the researcher to explore the formation and transformation of meanings through a holistic approach to studying phenomena (Corbin & Strauss, 2015). Transcriptions allowed the researcher to make connections across interviews and form meanings from the lived experiences of the participants. The researcher thoroughly analyzed the transcriptions through an iterative process and thematic analysis to establish patterns and to create codes and re-codes. Coding is not precise, but an interpretive process (Saldana, 2021). Recognizing patterns and developing codes within the transcriptions formed categories and involved a decoding and encoding process of data collection and analysis (Saldana, 2021). Analysis of these categories determined themes within the data of the transcriptions (Saldana, 2021).

In particular, data analysis was from a thematic standpoint. The primary source of information, in thematic analysis, comes from the content within the transcriptions (Butina,

2015). Guba and Lincoln (1981) described the relationship between data and the patterns found within,

Moreover, the layers cannot be described or understood in terms of separate independent and dependent variables; rather, they are intricately interrelated to form a pattern of *truth*. It is these patterns that must be searched out, less for the sake of prediction and control than for the sake of understanding. (p. 57)

The specific coding process involved in this study's data analysis combined inductive and deductive methods. The researcher used some predetermined or a priori codes from the theoretical framework as well as codes derived from the data. The researcher designed a codebook to document the process of codes developing over time, to track emerging patterns, and to keep definitions and explanations of the codes. Initially, open coding made up the first cycle of the coding process. The different types of coding applied in this iterative analysis included descriptive coding to assign short phrases, in-vivo coding to assess participants' language from the data, and process coding to describe actions of participants. Participant stories can yield multiple meanings within one passage or even one line of transcription. Therefore, throughout the cycles of coding, the researcher also employed double coding, which allowed multiple codes to be given to one excerpt. After categorizing the codes, axial coding formed the seven themes of this study. Organization of the seven themes aligned with the supporting research questions.

The theoretical framework is a synthesis of literature pertinent to the topic of study and gave a 'specialized lense' with which the data was viewed, analyzed and interpreted (Kivunja, 2018). The theoretical framework was a structure of seminal and current knowledge that also provided a basis for making recommendations and conclusions (Kivunja, 2018). The theoretical

framework of this study consisted of research in the theories of crisis, transboundary crisis, crisis management, change theory, adaptation, and mindset theory.

Assessment of Quality and Rigor

In qualitative research, there are ways in which the researcher can ensure quality and rigor. Trustworthiness, or truth value, is key to the integrity of the findings of qualitative studies (Connelly, 2016). Guba and Lincoln (1981) replaced objectivity, reliability and validity (more common terminology in quantitative research) with corresponding ideas to ensure trustworthiness within naturalistic or qualitative research studies. These parallel terms included credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1981).

Credibility assured confidence in the truth of the findings of a study and established whether the interpretations of data from the research illustrated the participants' original views (Anney, 2014). Dependability referred to the study's capacity for replication and stability over time and conditions (Anney, 2014). Another term, transferability related to a study's ability to be applied or useful to others in similar situations (Connelly, 2016). However, qualitative studies are unsuitable for transferring to other situations, given that the findings of naturalistic projects are unique to a certain population and sample (Shenton, 2004). Confirmability noted the neutrality and consistency of the findings (Connelly, 2016).

Methodological strategies could establish qualitative rigor to reduce distortions of biases within data (Lincoln & Guba, 1985). The researcher employed the following strategies to ensure trustworthiness of the study: a) reflexivity or memoing (Razaghi et al., 2015); b) triangulation (conducting two principal interviews to corroborate data from six teacher interviews); c) member checking (sending transcriptions to the participant for review (Birt et al., 2016); d) audit trail (descriptions of the process of coding into themes); e) code and re-code (re-reading the

transcripts multiple times to relabel codes, if needed); f) peer debriefing (dissertation committee); and g) thick description.

Ethical Considerations

Ethical considerations within the human relationships formed for narrative inquiry are essential. The narrative researcher has a responsibility to uphold the confidentiality, integrity and well-being of the participants (Wang & Geale, 2015). The Institutional Review Board of East Tennessee State University granted permission to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis. Also, the researcher obtained approval from the school system(s) that participated in the research and made recommended adjustments according to the approval committee(s).

The participants were completely informed of all details of the research project in written form and verbally. Each received an informed consent letter, which set forth the nature and purpose of the study, the identity of the researcher, the role of the participant, the means of data collection, the way the study could be used, and any potential risks and benefits of the study to the participants (Wang & Geale, 2015). Follow-up email contained written communication of the purpose of the study and a research summary. The participants received verbal communication of the purpose of this study during the interview process. Considerations and actions included to do no harm, to ensure confidentiality through pseudonyms for participant names, to emphasize voluntary participation, and to assure the protection of the data. Finally, all participants received a copy of the study for review to ensure protecting their confidentiality.

Role of the Researcher

The role of the researcher in qualitative research is to try to retrieve the thoughts and feelings of the participants (Sutton & Austin, 2015). However, the researcher has many roles within the process of narrative inquiry. Another important role of the researcher was to protect data being collected and to protect the participants through measures that were fully explained to the participants from the beginning. Narrative inquiry also calls for the researcher's role to be one of a human instrument. According to Ravitch and Carl (2018), the researcher brings an interpretive lens to reconstructing the stories of the participants. The researcher collects open-ended data to be thematically analyzed and makes knowledge claims primarily on constructivist perspectives (Creswell & Creswell, 2017).

Summary

Chapter 3 detailed the research questions, the methodological design and rationale for using narrative inquiry for this research project. Narrative inquiry allowed the researcher to fulfill the purpose of this study to understand the experience of the participants at a moment in time. This chapter furthers the description of this study's methodology by illustrating site selection, population and sample, data collection and analysis strategies. In addition, the chapter lists steps taken to assure quality and rigor through strategies of trustworthiness and explains ethical considerations taken and role of the researcher. Following this chapter will be the findings of this research study detailed in Chapter 4 and conclusions discussed through implications for practice and recommendations for further research in Chapter 5.

Chapter 4. Analysis of the Data

Introduction

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. One primary research question and four supporting research questions informed this qualitative research study. The primary research question of this study was: How did identified, effective middle school teachers adapt instructional strategies and practices as a result of COVID-19? The supporting research questions that guided this study were as follows:

RQ1. How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the spring of school year 2020 and moving forward?

RQ2. What factors supported effective middle school teachers' instructional strategies and practices during the pandemic from the spring of school year 2020 and moving forward?

RQ3. What factors were barriers for effective middle school teachers' instructional efforts during the pandemic from the spring of school year 2020 and moving forward?

RQ4. How will effective middle school teachers use the new learning acquired during the experience of teaching through a pandemic as education moves forward from the effects of COVID-19?

Through semi-structured interviews, participants detailed stories of their path, including successes and barriers, in adapting instructional strategies and practices during a pandemic. Triangulation of the interview responses from principals and teachers and researcher memos increased this study's credibility. All participants received typed transcriptions of the interviews

for review and encouraged to read the record of the interview and provide feedback on changes that needed to occur. Member checking was an effective way to provide more credibility for this study. Chapter 4 presents the profiles of each participant and the findings of the semi-structured interviews of eight participants, two principals and the six teachers identified by their principal as an effective teacher. Also, this chapter details the researcher's profile, discusses the researcher's memos, and presents an analysis of interviews and data.

Participant Profiles

There were eight total participants in this study. All participants were active in the field of education before the pandemic, during the COVID-19 pandemic, and on into the following school year. Two of the participants were middle school principals and six participants were middle school teachers of varying content areas. Of the eight participants, two were male and six were female. The participants ranged in years of experience in education from 10 to 34 years. All participants were Caucasian.

The data contain many identifying markers. For confidentiality purposes, the researcher assigned pseudonyms to the participants and masked all other identifiable information. The middle schools from this study are called Beechwood Middle School and Emmanuel Middle School. The participants are identified as Elaine (principal), James (teacher), Ealin (teacher), Linda (teacher), Ervin (principal), Kaylynn (teacher), Ricky (teacher), and Stacey (teacher). This section describes the participants' backgrounds in education. The participant profiles grouping is by school, arranged by the principal first, followed by the teachers.

Beechwood Middle School. Elaine, principal of Beechwood Middle School (BMS), holds her undergraduate degree in Business Management and worked outside the education field for five years. She went back to school to earn her Master's in Education and became a fourth-grade

teacher for two years. When her spouse transferred locations for his job, she moved to a new school system. After relocating, she taught fourth grade for five years at the new school, which gained recognition as a Reward School. With this title, the state piloted a new program and asked schools to nominate a teacher as an ambassador to be placed on loan for a year. Elaine became her school's ambassador and over the year, she worked as an instructional coach in a low-performing district for elementary, middle, and high school age students. While serving in this role, she earned an administrative endorsement and began work on a doctorate in Middle Tennessee. Subsequently, she served as an Associate Principal in an Upper East Tennessee, middle school for three years, as Principal in an elementary school for the following three years, and as Principal of BMS at the time of this study.

James, a teacher at Beechwood Middle School, began his career in education in 2014 as a student teacher in a nearby middle school. The following year, he was offered a position as a science teacher and stayed there for six years. He moved to BMS during school year 2021-2022 and served as a seventh-grade science teacher, Science Olympiad, and Robotics coach for BMS and another middle school in the same school system. Teaching was a career change for him. He earned an M.A. in Education from a local college and holds a certification for fourth through eighth grade science, a middle school endorsement for all subjects, and an algebra and geometry add on. In addition to teaching and coaching science extracurricular classes, James was also heavily involved with his school system's curriculum and instruction team that supported the whole system with training teachers to use the Learning Management System (LMS) during the pandemic.

Ealin is a Special Education teacher at Beechwood Middle School. She is currently in her 14th year of teaching in the classroom. She chose to stay at home with her children for several

years but has since returned. She is currently in her fourth year at BMS. She teaches elementary special education classes and has served in an administrative capacity for special education. During the onset of the pandemic, she taught reading intervention and has added math intervention.

Linda is a seventh-grade math teacher at Beechwood Middle School. She obtained her undergraduate degree in secondary education and mathematics in 2010, followed by a Master's of Curriculum and Instruction. She is currently working on her doctorate in Curriculum and Instruction but progress has been slow due to the pandemic. Linda is in her 11th year of teaching, primarily at the high school level with juniors and seniors. She recently moved to the middle school level and has enjoyed the change, especially teaching Algebra 1.

Emmanuel Middle School. Ervin is the Principal of Emmanuel Middle School (EMS). He originally planned to attend medical school and was a science major in college. However, through supporting his wife's internship as a teacher, supporting two struggling readers, and helping in a summer education program, he realized that his path was in education. He completed a Master's of Education program. Ervin's first classroom was multi-age, which he described as *a stretch* for a first assignment. After that, he taught elementary level students in 3rd, 5th, and 1st grades at a different Upper East Tennessee school system for nine years. He spoke highly of that experience and stated that was where he "learned to become a master teacher." However, he left that school system to become a principal in a nearby system at an elementary school for two years, moved to the central office of that same school system for several years, and became superintendent of that school system for five years. At the time of this study, he served as the Principal of EMS.

Stacey, a science teacher at EMS, has a family history of teaching secondary science. She states that she "came by the profession honest" and that "she loves what she does." She graduated from college with a science major and math minor and struggled to find a teaching job at that time. She could not relocate because her spouse was in a graduate degree program. She passed on one opportunity to teach at a minority school. However, another opportunity allowed her to use her education degree in a different way. She worked at a bank as a teller for six months when they asked her to develop a program, curriculum and test, to train incoming tellers. She worked at the bank for three years until relocating and being hired to teach 7th grade science at EMS. She taught 7th grade for one year before moving to 6th grade science. She has been at EMS teaching 6th grade science for 32 years and is in her 34th year of teaching.

Ricky has been at EMS for her entire 34-year career. Although she left the classroom to be Associate Principal for one year, thirty-three years were as a classroom teacher with 8th grade students. She stated that she "learned a lot in that year, but mostly learned that she was a teacher." She returned to the classroom the following year. Her content area is math, specifically Algebra 1, Geometry, and Math 8. She was a math major and is certified 6th-12th but loves middle school. She has the opportunity to teach high school courses at EMS but, at the time of this study, she had only Geometry and Math 8 because she realized that teaching three subjects was too much. Ricky also works with an enrichment group called Math Counts during a whole school designated time, Multi-Tiered Support System (MTSS).

KayLynn is an English Language Arts (ELA) teacher at EMS. She earned her Master's in Education in 2010. Although she did her student teaching at the high school level in the current system, she moved away for two years and began her career teaching high school in another

state. When she returned, she took a position teaching eighth grade ELA at EMS but switched to seventh grade ELA. She has been in this position for six years and states that she loves it.

Researcher's Profile

The researcher of this study served as an interpretive instrument; therefore, the background of the researcher is of importance to this study's data analysis. The researcher has been an educator for 17 years and has taught in three different school systems. The first two years of the researcher's career consisted of an internship and interims of kindergarten, 1st grade, 2nd grade, pre-kindergarten through 8th grade computer lab, and a substitute teacher for many levels and schools. The researcher has taught the majority of her career in early childhood: pre-kindergarten for twelve years, kindergarten for two years, and first grade for one year. The researcher has held a variety of leadership roles throughout her career. Some of those roles include connections with the community preschool leaders to provide a more cohesive school readiness plan, cross training colleagues, mentoring aspiring and new teachers, presenting at many local, statewide and out of state conferences, serving in the role as system-wide lead mentor for pre-kindergarten teachers, school wide action team leader, and an extracurricular club facilitator. This background gives experience in education to the interpretive lens.

Researcher's Notes and Memos

As a strategy to ensure trustworthiness, the researcher employed reflexivity during the interviews and throughout the coding and recoding process. The researcher used memoing as the participants shared their stories during the interviews and journaling during the iterative coding process. Encoding, decoding, and recoding were essential to the integrity of the research process, the well-being of the participants, and the personal growth of the researcher (Probst, 2015). The researcher's memos included consistent patterns that arose throughout all of the interviews,

emotions exhibited by participants and the researcher during and after the interviews, and other observations and thoughts that supported the purpose of this study.

The researcher's memos noted participants had a genuine love for students and the teaching process as motivation to continue to give the extra time and energy in adapting instructional strategies and practices to meet the needs of the students during the pandemic. This was perceived as a commitment, not only to the profession, but also to the overall well-being and education of students.

Also noted was a connection among barriers, mindset, and teacher effectiveness. Effective teachers maintained optimistic, growth mindsets that sought solutions and were flexible when met with a challenge. These teachers used feedback for adapting, differentiating, being reflective and being innovative in lesson design and with other decisions in meeting the needs of the whole child.

Furthermore, prominently shown, were the connections of categories in the supportive culture theme from principals to teachers to students. There were corresponding themes that existed in both the principal and teacher interviews. However, the principals exhibited the parallel themes toward the care of teachers, and, in turn, the teachers exhibited those same themes toward the care of students. For example, principals encouraged and supported teachers' mental health, and teachers encouraged and supported students' mental health.

Experience in education, different grade levels and positions, was prevalent in the background of the participants and the researcher. This was evident in the back-stories of the participants' at the opening of the interviews and throughout the conversations during the interviews. Experience, according to the data, indicated the number of years in education and

also the variety of roles and involvements the participants had over those years. Experience in years of participants and researcher ranged from 10 to 34.

The participants' experiences of middle school differed from the researcher's experiences of early childhood and became a linking piece for us to relate to one another and make connections. Also noted was the contrast between those with experience in online courses or those who taught online courses and those who had not. Those who had no experience with online classes had taught 30 years or more and had the consequent knowledge of strategies and practices. The teachers with experience in online courses did not have a thorough understanding of strategies and practices. This contrast of experiences supported the teacher effectiveness theme in designing lessons and supporting student outcomes and interestingly led to the collaboration theme as well. The contrast of experiences aided teachers in coming together to share abilities, to make sense of the situation and task at hand, and to create more effective experiences for students. This lead to the next memo of the interconnectedness of categories and themes.

During the interviews, the researcher noted a thematic correlation evidenced during the process, even before coding. During coding, a note referenced the beauty and turmoil of trying to code the transcripts because the quotes could fall into more than one category, possibly a variety of themes for each quote. Furthermore, analyzing the categories to go into themes and themes sorted to support the research questions offered the same welcomed struggle. The researcher read and reread quotes, sections and interview questions to reflect on the sole purpose and meaning of the particular quote, category and theme to make the decision of where the information best fit.

Interview Analysis

The goal of qualitative coding is to provide structure by assigning codes to the unstructured or semi-structured data across interview transcripts, researcher memos, and other forms of data collection (Creswell & Poth, 2017). This demands an iterative process of analysis of data records through thematic coding to identify categories and themes. Reflexivity, awareness of the researcher's biases, during this process is critical. Organization of codes was also a critical task in analyzing the data across interviews. Therefore, the researcher of this study kept a codebook that explained the meaning of each code and examples of what the code represented as part of the audit trail. Table 1 presents the categories and themes that emerged from the data in the analysis process. Table 2 illustrates emergent themes by supporting research questions. The next section, Data Results, illustrates the themes with supporting data in the form of quotes from the interviews.

Table 1

| Categories | Themes |
|--|-----------------------|
| Motivated/Passionate Teachers | Commitment |
| Extra Time Given | |
| Moral Purpose | |
| Energy from the students | |
| School-wide | Collaboration |
| System-wide | |
| School and families | |
| Students and teachers | |
| Sense-making | |
| Focused | |
| Sharing of leadership, knowledge, ideas, | |
| abilities, time, materials, experiences | |
| Growth | Mindset |
| Opportunity/Positive | |
| Solution-Oriented | |
| Flexibility/Adaptability | |
| Lesson Design | Teacher Effectiveness |

Overview of Emergent Categories and Themes

| Feedback Being Reflective Data-Informed Blended Learning Personalizing Content Experience Soft Skills Humor Innovation and Creativity Adaptability Classroom Management | |
|---|-----------------------|
| Student Support (the whole child) Teacher Support (the whole person) Relationships Communication Consistency Encouragement of Risk-taking | Supportive Culture |
| Student Apathy Student Access Student Agency/Distractions Decline in Student Work Quality Lack of Motivation Relationship Development Online classroom management | Engagement Challenges |
| Academic How to be a Student Online Etiquette Technology Redesigning Instruction Boundaries Expectation shifts Social Emotional skills/mental health | Learning Gaps |

Table 2

| Emergent | Themes | by Si | ipporting | Research | Ouestions |
|----------|--------|-------|-----------|----------|-----------|
| | | | | | |

| Keywords in Supporting Questions | Themes |
|----------------------------------|-----------------------|
| Adapt Instruction | Commitment |
| | Collaboration |
| | Teacher Effectiveness |
| | Supportive Culture |
| | Mindset |
| | Engagement Challenges |
| | Learning Gaps |
| Supported Efforts | Supportive Culture |
| | Collaboration |
| | Teacher Effectiveness |
| | Mindset |
| Barriers to Efforts | Engagement Challenges |
| | Learning Gaps |
| New Learning | Teacher Effectiveness |
| | Mindset |

Data Results

During interviews, participants initially revealed information about their history in education from their own educational backgrounds to their careers in education. This allowed the participants to become established in their stories and the data. The principal investigator asked the interview questions that directly corresponded with each supporting research question. Probing questions, as the researcher thought necessary, offered more detailed data for rich, thick description. For member checking, each participant received the interview transcripts for review. The researcher, upon request from the participant, made omissions and additions.

The principal investigator conducted an initial coding process of the participants' stories. An iterative process of coding allowed emergent categories and themes to be evident. The overall categories and themes are in Table 1 above, while the emergent themes, according to supporting research questions, are in Table 2. Certain categories and themes, as evident in Tables 1 and 2, overlap and were direct reflections of the results of the data.

Overview of Emergent Themes

Commitment. The theme of commitment emerged through comments that illustrated being passionate and motivated about teaching, hopeful for future successes of students, and love of their chosen career. Teachers and administrators made evident the theme of commitment through perceptions of extra time spent by faculty and staff to support students and families beyond their regular workday hours, dedication to a clearly understood moral purpose of education, and comments of joy and energy from being with the students.

Ricky, from Emmanuel Middle, wrote an article about the pandemic and learning, proceeded to show moral purpose, and said with passion,

"And I get real discouraged, like this morning, I heard on the news that 16% of the people in the country believe that the students will never catch up, and I wanted to cry. Like I was getting ready for school and I was almost...if my husband hadn't been asleep, I would've yelled at the TV, 'Oh no, we're not. We will. We will get these kids caught up.' And it makes me angry to think that there are even anybody out there that thinks we're not capable of doing that. Like, is it gonna be hard? Hell yeah, it's hard. But if you have teachers that are willing to recognize what the gaps are, I wanna fill 'em. Like these students are still gonna graduate from high school, and I don't want the nation as a whole to feel like that we're falling behind and more behind. No, we're moving forward. And it's been difficult, but it's not insurmountable."

She continued, "It just so happens to be, I think, because I've done this for so long, but I do have a genuine love for these kids."

James, from Beechwood Middle, discussed the extra time given to all the new discovery and effort put into learning the new technology platforms and tools. First, he discussed the time given to teaching one's self about a new learning tool and how it could be effective as a teaching tool for lessons. He mentioned the time it took to teach students how to use the new tools and programs for productive learning to occur whether virtual, hybrid or in person. He said positively, while reflecting,

"I definitely have days where I'm worn out, but I also get a lot of energy from being in front of the kids, interacting with them, and I'm definitely ready to go home at the end of the day, just like anybody else, but I enjoy it."

Ealin, teacher at Beechwood Middle School, demonstrated commitment through extra time spent diligently calling students to support them. She said,

"I try to call and check in on them over the phone, and even during the pandemic, even when we were shut down or virtual or hybrid or whatever, my teaching assistant and I made phone call after phone call after phone call to check on students and say, 'Hey, are you working on your social studies? Let's talk through this, let's talk through whatever'."

Collaboration. The theme of collaboration encompassed a range of participant perceptions about school and system-wide teamwork, schools and families, and students and teachers helping each other. Collaboration included a time of focused, data-informed discussion and decisions perceived as a time of shared leadership opportunities, sharing ideas, abilities, time, and materials.

The perception of the importance of collaboration was evident in all eight interviews. Focused, data-informed, system-wide (content area) and school-wide (grade level) collaborative meetings were prevalent and intentional as illustrated by Ervin, principal of Emmanuel Middle. He stated about system and school-wide collaboration,

"And the other piece is they work together. We had, from different teachers across the system, all the science teachers were working together on Science content, we had Math teachers working on Math content, and so they looked at their pacing guides and they just tried to move week to week to week on building quality lessons in a new format."

He later added,

"We have a weekly collaborative that we work with every team in the building, every grade level team, and our administration goes in, they're working on those specific things that are tied to our pacing guides to make sure we have a good idea and that we are uniform in how we move forward. So, I think that that's a huge piece."

Elaine, principal of Beechwood, reiterated the importance of collaboratives for sensemaking,

"We spent a lot of time in collaboratives, really trying to identify some focused standards for each grade . . . what standards do we absolutely have to focus on? . . . and how we can get everything taught in an effective way, in the limited time we had. So, we continued collaborative meetings probably more than in a typical year for that reason."

The importance of collaboration was consistent with teacher participants as well. Linda discussed the importance of collaboration and sense-making among others who thought differently and had a different skill set. She noted,

"So, just continuing to learn from those around me in the way that they do things and know that . . . just because the way I do it doesn't mean that it's necessarily the best way or the right way, that there's always gonna be work room for improvement."

Collaboration between school and families was recounted by Ricky. "I tell you . . . when people want to give me [credit] . . . Oh, let me tell you, I couldn't have done it by myself. Like these parents made sure the students showed up, or we could have never done it, but we did it."

Linda illustrated student and teacher collaboration.

"I have to rely a lot on other people, which is hard for me. I'm very much a control freak. So having to lean on others and sometimes even the kids, because like a program will come up and I'm like, 'I'm not really sure how to use it,' and they're like, 'Oh, you do da, da, da,' and I'm like, 'Ha, now I know how my parents feel. Okay, I got it, I get it, I understand what we're doing.' So just not being afraid to learn from even my students, because they know the latest technology that's coming out and how to use that technology with what I need to accomplish."

Mindset. The participants' mindset, habits of mind or attitudes and behaviors surrounding issues, was evident in each interview. Through comments of growth and learning from mistakes, effort, and from others, flexibility, optimism, and opportunity out of hardship, the theme of mindset emerged.

James, in a few accounts, demonstrated positive, opportunistic thinking in the midst of hardship,

"And I felt like I got an opportunity to help. So, it's weird to think about it [the pandemic] with having positives without some guilt about it, but it felt like I got a lot of opportunity to be a leader and be a support to my colleagues and move things forward in that way, in a way that I wouldn't have normally."

Principal Ervin reflected on growth and learning from decisions made during the pandemic.

"Looking back on that [trying to schedule an equal amount of instruction for all students during hybrid] . . . it would have benefited all the students to be able to have live instruction where teachers filmed themselves at the starting of one period everyday . . . that live instruction is what students missed. So, we learned a lot during the pandemic . . . I would think that we are better today because of it."

Being flexible and showing adaptability of thinking and action emerged in the theme of mindset to support efforts of teachers adapting instruction. Teacher Ricky responded, "For me, me being willing to adjust and not think that, 'Oh, I got this covered,' when I've never done it before, you know, and talking with other teachers what's gonna work best and being just that willingness to adjust as needed."

Ervin, principal of Emmanuel Middle School, recognized a resilient mindset in the teachers of EMS with adapting instruction. Ervin noted, "Okay. So, the things that helped teachers to be successful, I would say, first and foremost, was their resilience." *Teacher Effectiveness*. Teacher effectiveness was a theme with many categories and highly evident from all participants. Teacher effectiveness included creative lesson designs focusing on the whole child, feedback for learning and adapting, being reflective, and leveraging technology to create a blended learning experience. Teacher participants in this study exhibited and principals verified the importance of being creative and innovative, personalizing videos and lessons to connect with students and elevate engagement, condition student agency in a positive way, classroom management, and using humor and experience to their advantage in meeting student needs.

The importance of teaching and taking care of the whole child was evident in the data from the interviews and memos. Teacher Linda exhibited creative lesson design with a whole child focus during a hybrid schedule. She said,

"Well, the very first time I tried it was with my honors students, was an honors Algebra two class, and we were reviewing some kind of concept and they were playing Battleship. So, I put one person in a room [breakout room on Zoom]. And of course, the kids here have headphones, and so I didn't hear 500 conversations going on at one time 'cause that would have killed me, but I just partnered them up with somebody that was online and they played battleship through their computer. I just popped in and out of those breakout rooms [to monitor], and that was pretty fun. I enjoyed it. It took a lot of work on my end, but, once I figured it out, the kids loved it. And especially with that class, a lot of their friends were still sitting at home. So they may not actually get to interact with them because they're at home and they're here. So, I just gave them another avenue to interact with those kids that they aren't seeing on a daily basis."

Teacher James reflected on feedback for learning and adapting many times throughout the interview. He reported,

"And I got feedback from students too. I pretty regularly gave them Google forms where they could give me feedback on what they like and what was successful and what wasn't successful. And I learned a lot of things that were interesting to me, like the instructional design aspect for Canvas [Learning Management System, LMS] that moves forward as well, we were delivering it digitally, which sure certainly doesn't do everything, but to me in my mind, I thought they [students] would like little chunks of stuff and they can move forward. And then I got feedback that they wanted, if I was going to give them content, they wanted it all on the same page, they wanted to scroll through the same thing."

Personalizing content to elevate engagement and meet the needs of students was a consistent pattern within the data on teacher effectiveness. Personalization included teachers videoing themselves reading to students, sending a message, delivering content, reviewing math problems, telling jokes, and more in order for the student to make a connection to their teacher. James described it as avoiding the temptation "to just use plug and play stuff when it's all digital" and the "biggest driving thing for making that stuff [learning content] successful is adapting it to the students and finding ways for personalities, theirs and mine, to come through." Personalization also included making sure the content fit the needs of students. Teacher Ealin reflected,

"At that time, I taught reading intervention. And so, what I did was I found an online magazine portal that was a sister to our curriculum. It was published by the same group that published Read 180. They do a monthly magazine of high interest, low readability articles geared toward middle schoolers with lesson plans to go along with that. And so, I would push that out through our Canvas portal. What I would do is because my students were struggling readers, I would video myself teaching the lesson or video myself reading the text or whatever, going through the lesson, whatever I needed to do."

Teachers used prior and current experiences from years in the field and from different involvements to their advantage in designing effective lessons, empathizing with students, and supporting colleagues. Principal and teacher participants used experience and learning from the initial onset of the pandemic to guide decisions continuing through the pandemic and beyond. Principal Ervin said, "We learned a lot during the initial phase of the pandemic about how to

readily move from face-to-face instruction to a hybrid instruction model where we had students remotely learning . . . I would think that we are better today because of that."

Linda reflected about using her own experience of teaching online and being a college student online to guide her,

"I think also for me, just having worked at [an online school] for as long as I have and being in my own schooling where it is already like . . . [College the teacher is currently attending] is completely online, so just kind of being in my own online platform and having to see that as the student side, I think helped me be little bit more sympathetic on the teacher side."

Supportive Culture. Supportive culture played a key role in adapting instructional strategies and practices. Student and teacher support in a variety of ways, relationship building, communication consistency, risk-taking, creativity and innovation, and social-emotional learning and support created the supportive culture that emerged from this study.

KayLynn, a teacher from Emmanuel Middle, spoke highly of the support that was given to teachers from her school system and gave details,

"My school system is very, very supportive with providing platforms and programs for us to use. They are also not critical of things that we're trying. If we try something new, they're willing to let us step up and give that a try and then let us make a decision, 'Oh, this program, it really didn't meet the needs that I thought it would.' So we've had Canvas that they introduced to us, that we learned how to use and they provided that as a wonderful platform for us. They also have been wonderful with supplying us with opportunities to have testing site availability, where we can pull test questions to help support what the state test will be like. So, it makes it a little bit easier than me having to

go out on the internet and try to find question types or graphs or reading pieces that I need a student to read, and then supply answers or questions and answers for that reading piece. So those are wonderful supports that were begun. The support that we're receiving from our administration that 'you all are doing the best you can right now to teach the students,' not only are we teaching them the skills and the standards that they need to know now, but we're also teaching them how to be a student . . . because they missed face-to-face with their teacher for a pretty good period of time, learning those, just social skills that kids need. And so, our system has been . . . They know we're still working on getting our standards done but they also know the whole child is important, and that we need to worry about the health of the kids, we need to worry about the ability to be able to work together to understand what it is to be a student, to interact as a person with other kids and with adults also. So, they've been really good about being not so strict about, 'What are your scores? What's your benchmark? Blah, blah, blah'."

Principal Elaine focused much of her discussion on efforts to adapt instruction through supporting teachers, personally and professionally. She stated,

"One [path] that I think was important that is not directly related to instruction, but I think is extremely important, and indirectly related was, we really focused on supporting teachers, and their desire to continue to help students in an unknown setting. We tried to support their fatigue. Just, it seemed like there were lots of changes that happened, we tried to be encouraging, we went out of our way to provide extra treats for them. If you will, lots of, 'We just want to check in and see how you are doing personally.' But, really working on that self-care, that's a buzzword that's overused, but really working with

teachers to be sure that they felt supported just emotionally, psychologically supported in a time when they were asked to do some difficult things"

Supportive cultures required relationship building, which had been difficult amidst the barriers of the pandemic, according to the participants. However, relationships were still made between teachers and students and teachers helping students develop relationships with each other. Teacher James spoke of the difficulty of developing relationships with students without being in-person. He said, "It's just really hard to not do that without face time and being able to tell jokes and stuff. I mean . . . literal face time, not the virtual one. But getting people comfortable enough that they could take an approach was good."

KayLynn discussed her efforts in trying to support relationship building. "Being able to have the Google Meets with them . . . And sometimes I would just do a free Google Meet like on a Friday. I'd say, 'Guys, we're gonna do a group Google Meet, anybody who wants to come, come.' And they were so cute, you would [see] them looking at each other, they would have their little faces up there . . . they'd have their pet, yes, and they'd pull up their cat . . . their dog, and be waving at the camera . . . So, it was fun to be able to let them have just a fun class time."

In a supportive culture, relationships served as the avenue through which students were cared for, not just academically, but for the whole child. Relationships supported communication consistency and risk-taking. KayLynn was passionate and thoroughly discussed how she kept track of her students as a whole child,

"[after not finding success in emailing students and parents in checking up on students who were not logging on] So, I found it much more beneficial to keep track of my kiddos by giving an exit ticket every day. I gave them an exit ticket that went over what we

learned that day . . . I always had a question about, 'What have you eaten today?' . . . just was feeling my kids weren't . . . I wasn't seeing them enough, and I was really worried about some of them and what their home lives were like. Some of them would say, 'I haven't eaten yet.' So they knew that if that was on there, I was gonna email them and I would email them pretty quickly after I saw that. So that made me feel better that they knew that I was worried about whether they'd eaten anything yet. And then my last question was always, 'Is there anything you would like to share with me?'

The schools of this study were fervent about providing support to students and teachers. Counselors were active in working toward a supportive culture. Principal Elaine highlighted, "I think I leaned a lot on our counselors during that time. We have really great counselors here who advocate, not only for our students, but for our teachers." Principal Ervin added, "The other piece was, is we had to spend a lot of time calling homes for students . . . our counseling office spent quite a bit of time doing that."

Communication was key in providing a supportive culture. Just as other categories, there were many facets to communication, such as expectations for teachers and students, assignments through technology, and communication to have better collaboration. Consistent communication released people to be able to focus on other goals. Principal Elaine said it well,

"And also trying to figure out how to even manage what at the time we thought would be an entire year or could be an entire year of virtual or hybrid. So, I think trying to clearly communicate expectations for teachers. So, we could take that off their plate, like, 'I know that the administrator's expectations are. So now let me try to just focus on, how we get this learning to happen?' So, I think trying to clearly communicate with teachers and staff about expectations and like, this is an odd year and it's off for all of us."

Principal Ervin noted the importance of communication with parents,

"Some other instructional adaptations we chose to make were making sure that parents can follow. It's not just a piece where, it's not just a piece where you now have a student who you have to help navigate, the parents have never been on Canvas and used a calendar to be able to look at how that would impact their week."

Stacey discussed the importance of technology platforms and programs in adapting instruction to communicate with students, parents, and schools during a time when people were quarantined in class, at home and coming back on different days. She said,

"So, Canvas was our LMS [Learning Management System], where we would post and almost like curate all of our activities or our curriculum and the students could see what order we were going in, but in the actual work and assignments, we would use our online textbook system [StudySync] and we would meet and have office hours once a week." She continued later,

"With what's going on right now, you had this year people quarantined for a different set of days, people coming back on different days, so the fact that we still have Canvas modules and daily pages, keeping that going that helped students be in this routine of, 'Oh, check Canvas, check my module. What do we do today?' So that's been helpful just to have that routine."

In contrast, the lack of or poor timing of communication caused barriers. For James, in his reflection on the district-wide announcement about grades, initially in spring 2020, caused barriers. He expressed,

"One, I think there's two perspectives on grades, it's either the paycheck that the kid gets or it's a piece of communication. And then there's a balance in there of whatever it is.

That's whether it's letter grades or mastery numbers or like on track, off track, whatever. The paycheck one is probably when people have it out for grades and is the one that they don't like, because the learning should really be the payoff at the end of the day, but the communication thing was hard to replace. What do you say to a bunch of preteens and eighth graders who are just learning brand new hormones? . . . And like, 'Hmmm, I think I'm an adult now.' It's difficult to go into a situation where you've said no matter what you do, summer vacation already started and your outcome is the same. And that was difficult for really motivated kids because a lot of motivated kids like to track their success just like anybody else does . . . I really wish that we had waited even if we were going to do what we did with grades as a district, I wish we had waited until the end of the year to do that."

Engagement Challenges. A highly prevalent theme throughout the interviews, engagement challenges emerged with categories of student apathy and agency, student access, distractions, lack of motivation and a decline in student work quality.

Stacey, a teacher from Emmanuel Middle, in beginning a discussion about adaptations immediately noted an engagement challenge of low student attendance in an online Socratic Seminar,

"I actually did an online Socratic Seminar where I prepared students. It was really, I like it now, I will say, of my 80-90 students that year, I might have had 15 that really jumped on board and was part of the Socratic Seminar. So, I don't know if that should come up right now in the interview, but that was a big challenge getting people's participation."

KayLynn, a teacher participant, spoke of her number one barrier in being successful with adapting instruction,

"It took a couple of three weeks, parents were frustrated, I know, I understood. Some parents weren't there because they had to work, some were trying to do their job from home, grandparents were raising kids, these kids were trying to babysit younger kids, it was a really huge barrier for kids to be able to be successful and to be engaged, so that was probably my number one."

Ealin, a teacher participant, recounted that her biggest struggles were engagement challenges of student access, lack of engagement, and a decline of student work quality,

"Once we shut down in March of 2020, it was hard to access them so they could access us. Many students just checked out. They thought they were on an extended summer break and we never heard from them. So, accessing the students to gain access to us was a major challenge. Beyond that, just student engagement, the ones that could engage, they would turn in blank documents. If a Gen Ed teacher or Special Ed, if an assignment was to be turned in via a Google doc, they would turn it in blank, and then they would say, 'Oh, well something happened to my computer, it froze up or it didn't submit.' So general challenges like that, and we had to take the student's word for it because we didn't know. So, technology issues on the student's home side, access to internet, us being able to physically access them, call them and say, ' Hey, I'm having a Google Meet at 10:00 AM. I need you on.' And then just quality of work. The quality of work declined."

Motivation was a commitment factor for teachers. However, a lack of motivation in students was an engagement challenge for adapting instruction. James noted, "So figuring out the motivations and looking at like, 'What is my purpose? And what's the source of why I'm doing this? And then, what's the source of why the kids are doing this? And how can we have a

conversation about this so that they come to the table ready to do it?' And that was a big barrier to get past because I don't think any kids felt like they were giving up on and moving away from that."

Learning Gaps. The theme of learning gaps was originally evident in the discussions of academic-related gaps. This theme grew to encompass categories of challenges from boundaries and expectations of students and technology being used appropriately to parents and students not recognizing teachers' workday hours to students having learning gaps with 'how to be a student.' Other challenges included teachers having to learn how to redesign instruction and how to use all the new technology platforms. Learning gaps existed with more than just academics.

Ricky recounted her concern for academic gaps,

"And again, I say, not as much with my high school courses, but with the grade-level courses, there are gaps. That's a barrier to learning. Math is a subject that builds, and there are gaps. And I'm trying to fill them, and I realized that for my eighth grade, sixth grade was their last time they were really in a regular setting, but only for part of a year, it was really fifth grade. And taking time to also look at what are these standards that they still don't know, that if you don't know then, this is gonna be hard. And trying to erase that as a barrier has been a challenge."

There were learning gaps with expectations of how to behave online and with honesty in using technology. Linda expressed this concern,

"Really, I guess that what continued from that was just the kids' lack of knowledge, I think of how to really behave online. They just don't know . . . They just have never really been taught how to behave online. Us as adults, we go into a Zoom meeting and we

know how we're supposed to act, but they don't. And how can you teach them how to do that, and then even some of their parents, really. [chuckle]"

James further discussed a learning gap of expectations of honesty in using technology for assignments. He states,

"And then also stuff, there's new types of dishonesty for kids to get out of the work, to deal with and like go, 'Oh, this isn't working and stuff.' Especially early in the pandemic, they would say, 'Oh, this isn't working.' I'm like, 'Oh, well you're just doing this.' Or they would log into the wrong YouTube account so that it would stay blocked and they couldn't watch a video and so an assignment. And that's a barrier that's there, too. But I think that we're getting to a point where everybody's getting wise to everything and that's going away."

Other gaps that were prominent in the data were of students relearning how to be students and social emotional skills. KayLynn expressed this concern, "So, number one, probably the fact that these kids are not understanding how to be a student. They are not maturing at the rate that the students in the past have matured." She later added, "They are still acting elementary, and there's nothing wrong with that, it's just that that's not age-appropriate for them." She also discussed the lack of social skills in working and interacting with others once the students returned to school.

"But I noticed that the kids wouldn't . . . that they would look away when I would look, for the majority of them. Now I have maybe in each class ten kids that would maintain my eyes when I would look at them and then I'd glance onto the next student and the next one. But I had much more, twenty kids in each class that would look away when I would look at them . . . And about a month ago, it dawned on me, I think that they were not

used to engaging face to face and eye to eye, and it made them feel uncomfortable. They're getting better at it . . . but that's what was going on, and I feel like that was something that I'm gonna continue that I need to really focus on, that kids need face-toface engagement."

She continued later,

"Then also when I began, when we did hybrid last year, they didn't know how to work as a partner. I have several rules that they have to follow to be a partner, they have cues that they follow I ring the chimes and tell them what I want them to discuss. I give them that moment to discuss, they are to look at each other, they're not to sit in front or behind each other lots of different rules that helped them be a good partner and be able to have eye-to-eye contact it was the most uncomfortable for them. I felt sorry for 'em." Stacey, a teacher participant from Emmanuel Middle, discusses learning gaps of many different types of expectations,

"Yeah, because you have some students that They're used to just working by themselves at home, and so they're like, 'Can I just do this by myself? And there are times that the activity isI'm like, 'Yeah, okay, sweetie, go ahead and work by yourself.' But there are sometimes it's like, 'I want you to work on this with a partner, I want you to hear what they have to say.' I do think that it's hard to not think that this is a reason, but you have some classes where you definitely see that not being in school and have that routine of raising your hand, you have these...... Now you have blurt-outs from all years, I'm sure, but it justIt's more noticeable that students have not been accustomed to maybe following certain directions or rules or classic expectations, and having to reinstate those in a way. Even going to the lunchroomI have seventh

graders, so when they got out of fifth grade and then didn't have middle school lunch, we ate in our classrooms, and then right now . . . about three of the classes we're having them eat together, and it's not like the lunches I've had before. There's a learning curve of just going to lunch and knowing to stay seated . . . there's just this lunchroom norm expectation that they're not used to."

Principal Ervin conversed about students having difficulty rising to the difference in academic expectations of in-person learning versus the initial online learning of the pandemic. He stated,

"I think there's some adaptations with instruction where just doing online learning is not as rich as what we would provide. So that's been a ... That's been a major barrier is that students who have had that for two years are coming into a situation where we have higher expectations now and they are not quick to meet the challenge. So, I would say the adaptation of instruction, it's very difficult when students cannot reach the level of instruction. We had a meeting recently where our seventh-grade math, they gave an inventory, and the average math capability on the inventory was about four and a half. So, it's fourth grade, fifth month, and that was the average. So, what we're trying to do is the prerequisite skills that are needed to be able to access the learning in 7th grade but of them they're just not there. In a normal year, we'd probably be in the fifth grade, ninth month when they're given the inventory before. It's not that they're still behind, it's a whole year behind. So, we're fighting that right now."

A lack of boundaries as a learning gap emerged from the data. Boundaries with using technology in the classroom as a learning tool and not for gaming or other play type activity and boundaries with parents and students not respecting teachers' work hours with the expectation

that teachers should be available all the time. Teacher Linda lamented about proper use of the Internet during school,

"Yeah, no, they don't, they just don't care. They know no boundaries, there're none, zero, it's just . . . The Internet is at their fingertips, they don't know how to use it properly and it ends up being a detriment in here, so I've had to go pretty much all paper in here and stop using the Internet."

Linda continued to express the lack of boundaries as morphing from one type of behavior to the next from students and parents. She stated that it was "instant gratification is really like the only word I have for that" type of attitude. She offered insight, "They think that if they email you at 8:00 PM, you should answer. Like, they're doing their work, so you should be available to answer. And then it was followed by parents." She later explained how this lack of boundaries type of thinking morphed into not using applications (such as Mathway or Photomath) appropriately, "It's just crazy how it morphed from, 'You need to be available all the time,' to, 'Why can't I use all my resources?' I'm like, 'You need to understand what a resource is." The students and parents were using certain math apps to do the students' assignments, not to just check the math after the student first completed the work. Teacher Linda explained that the parents and students did not understand the boundary or the difference between the two and became angry.

Emergent Themes by Supporting Research Questions

Research Question One (RQ1) for this study was: How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the spring of school year 2020 and moving forward?

In all eight participant interviews, the themes of commitment, collaboration, and teacher effectiveness emerged as factors in adapting instruction during a pandemic. All other themes emerged in the data involving RQ1 as well, including mindset, supportive culture, engagement challenges, and learning gaps.

Principal Ervin discussed the experience of the pandemic as bringing to light the integral theme of commitment and collaboration in adapting not only instruction but also to the situation, whatever it brought. He expressed,

"But the thing that we have been most blessed with is our ability to work together through something that's difficult and coming out the other side stronger. These people, who have gone through the pandemic instructionally, are changed teachers. And they're going to be for their career, they're going to be rock solid in a way that people coming into the profession in a couple of years will not understand, but they will be rock solid for their career. So, I think we're lucky to have the teachers we have 'cause they work so hard. They work better together. They commiserate a little better together too at times. That we know that there's a responsibility we all have to pick people up, because . . . when I tell you it's been two years. It hasn't just been one day where we ask a lot . . . we have had a lot of teams trying to work through difficult insurmountable type odds and while they're just sick."

Teacher effectiveness was a key element in adapting instruction in a variety of ways. Teachers adapted and differentiated according to feedback from data, observations and student needs. James observed,

"Kids watch that very, very quickly. Even if it's just been picking up on the competence of a kid that's consistently successful. They're wise to that. So, it's nice to make that invisible. The other thing that was a big adaptation is keeping those asynchronous things that were successful and using those tools for it. So, like having a classroom discussion is great, but maybe a kid's going to think about that in five hours and have an idea and then they're not going to have the opportunity to share it. So, replacing or augmenting rather is really what I've done. I'll have a classroom discussion, but I'll also have a discussion [board] that goes with it. So, I've got extroverted kids talk in class, at the same time, I've got introverted kids making comments on there. Then scoring their participation and use the claim, evidence-reasoning scaffold for that, so that I have a really consistent way to grade them. They know they got a three out of three. They got the claim and the evidence reason, but maybe they have that thought. They don't have a thought in class, but they have a thought after dinner, and they get on the discussion board and they add onto another student's claim. That's been great."

Research Question Two (RQ2) for this study was: What factors supported effective middle school teachers' instructional strategies and practices during the pandemic from the spring of school year 2020 and moving forward?

The themes of collaboration, supportive culture, teacher effectiveness, and mindset emerged as supports in teachers' efforts to adapt instructional strategies and practices during a pandemic.

Collaboration was a theme that emerged as key in supporting efforts to adapt instruction. Linda reflected on her collaborative, shared leadership experience.

"So, the number one thing is just my colleagues because what would work for me may not work for someone else . . . So a lot of our older teachers who have never used Canvas before, even though our district had it for five or six years, never used it, now here all of a sudden they need all this help because they have to put all their twenty some odd years of teacher on to Canvas. And so honestly, seeing some of the things that they were doing once they felt comfortable in using Canvas and interacting in that platform and other platforms, it was just . . . It was what got me through and what helped me work other things in my room when seeing what they were doing and what was working for them. Because then I could kind of adapt that to my room with my subject or if there was something working for me, I would adapt it and help them with their subject. So really, just bouncing ideas off of my colleagues together and collaborating through all of that is what helped me be successful in any of that what-so-ever."

Teacher effectiveness included the category of technology. Technology was an important support of efforts in lesson design, being data-informed, communication, and teacher and student support. Teacher Stacey concluded,

"Yeah, definitely the screencast features, the video capture of Loom, I love that program. The Nearpod I really, really love. I've learned a lot about Canvas, I do say . . . I love it as a whole and what I think it can do for student and teachers to have all this learning available and correlated and crafted into a structure that students, it's clear to them like, "What I need to do." And how to even . . . Really, I think Canvas is a great tool to

integrate different curriculum together science and things. So that a student can see a module tie in science and social studies with ELA [English Language Arts] easily."

The mindset that the participants exhibited was a factor in developing and adapting instructional strategies and practices throughout the pandemic. Mindset supported teachers' efforts. Linda, through a comment on blended learning and self-reflection, demonstrated a growth mindset along with the other themes of collaboration, supportive culture, and teacher effectiveness. She stated,

"One of the things that I have learned from it is to not only work with the demographic that I have to teach, but also my peers. 'Cause I'm kind of right, and I think you and I are very close in age, so we're kind of right there at that gap where we didn't grow up with internet, but then we got it. So, yeah, like we have both sides. So, we understand how to bridge the two, and I think what I've learned the most is how to teach them [colleagues] to bridge the two, that they can be a happy mix. We just have to get to that mix. So, I guess my teaching has just kind of changed to mirror that and trying to bridge both at some point in time. And even down to our welders and stuff like that, like every single job has some kind of technology involved in it. So, I try to mirror that and the proper uses of that. But I guess probably the biggest thing I have learned ... Well, is ... Well, I guess maybe the biggest thing I've learned is that I don't know it all."

A supportive culture in the classroom, school, and school system emerged as a theme in supporting teachers' efforts and students alike. Principal Ervin emphasized,

"So, I would say there's a lot of support for the teachers right now. Part of the ESSER [Elementary and Secondary Emergency Relief] dollars that we were able to have as a system went to a coordination of . . . We have different programs to help struggling

students. So, anytime that we do something good to help that gap of where students are behind, that helps the teacher move forward in their classroom."

Research Question Three. Research Question Three (RQ3): What factors were barriers for effective middle school teachers' instructional efforts during the pandemic from the spring of school year 2020 and moving forward?

Participants in this study identified the following themes as barriers in their efforts to adapt instructional strategies and practices: engagement challenges and learning gaps. Barriers existed in getting and keeping students engaged. One engagement issue that emerged was student apathy or lack of concern for academically-focused work and activities. Ricky stated, "They got lazy. They were used to being on their phone and their computer whenever they wanted to and not for educational reasons." Ricky continued, "The initial barriers were, of course, getting them to . . . I guess, buy in to what we were trying to do." Teacher KayLynn reported, "Number one was engagement, finding a way to get my kids engaged, to get them to get on their Chromebook."

Teacher Linda offered,

"They're not logging on in the particular class, so I just try to . . . If they are quarantined and they care, I try to leave open time where they can Zoom in with me, for a lack of a better term, in case they need some extra help. But the only kids who do that are my algebra kids, the other ones don't really care, so."

Another engagement challenge was distractions and student agency or choice. James, teacher participant from Beechwood Middle, discussed,

"It's always marketing what you teach the kids to getting the buy in but feeling like I was competing with the whole Internet in a way that I couldn't just get them to put it away and not winning at the outset."

He later concluded,

"The competition of them having to be online to learn was a barrier because there's tons of other things that are fun online. They'll play that damn little dinosaur game on Google, even though it's not any fun, just because it's an alternative. And that continues to be a barrier with technology and with everyone being comfortable with technology."

There were learning gaps that existed in expectations, academics, social emotional learning, and behaviors of how to be a student, online etiquette, students' and parents' understanding of boundaries, and teachers and families (students and parents) with technology. A comment about learning gaps and loss of motivation as a barrier came from Teacher Ealin. She said,

"So, I say this all the time, we are still dealing with the effects of the pandemic and we probably will for quite some time. It seems that now students have lost motivation. And so, for us, trying to find ways to re-motivate students because they have it in their mind, 'Well, I can't fail because you're not going to fail me. So, I'm just not going to do the work'."

Question Four (RQ4): How will effective middle school teachers use the new learning acquired during the experience of teaching through a pandemic as education moves forward from the effects of COVID-19? Participants in this study identified the following themes as new learning gained from the experience of teaching through a pandemic: teacher effectiveness and mindset.

New learning was prevalent in participants' accounts of teacher effectiveness. Teacher Ealin stated,

"Okay. I think, not necessarily a strategy, but continuing to utilize Canvas. What I like is that you can upload basically any type of lesson, any type of video. It had never occurred to me to video a message to students or video my instruction, and now that's become the norm. Like if I'm absent, I can create a video message sitting here in my dining room, upload it to Canvas, and the kids can watch it while I'm gone. So that strategy or instructional technique would be definitely something I will continue."

James illustrated mindset and new learning as he recounted his process of changing his thinking during the "push of the pandemic" to keep positive and improve his teaching,

"Yeah, it just had to be. It was a new job all of a sudden. It was very different, especially like I said, I'm a stage-actor-approach teacher and very personality based that anybody isn't that sticks with this career, but it was a whole new job all of a sudden. At times it felt devastatingly clerical, and at other times it was that. And that was my emotional life preserver for myself was, 'this is just an opportunity to grow,' if I don't use it in that way, I'm going to be worse. Because, at the very least, if it's a different job and then I go back to traditional teaching later . . . And, if I go back and it's different, well I want to be different too."

Teacher effectiveness, collaboration, and mindset were evident in a discussion with Teacher Ricky. She noted,

"For me, me being willing to adjust and not think that, oh, I got this covered when I've never done it before, you know, and talking with other teachers what's gonna work best and being just that willingness to adjust as needed, but I'm gonna give my students

credit, wow. They stayed with me and I think part of it had to do with what I had already established in my classroom. They cared about learning because I care about learning and I set a high standard for them."

Summary of Data Analysis

Chapter 4 presented the data analysis related to the essential research question: How did identified effective middle school teachers adapt instructional strategies and practices as a result of COVID-19? Through an iterative process of thematic coding, several categories emerged. More analyses of the categories led to a development of seven themes. Table 1 above presents an overview of categories and themes that emerged from the interview data of this study. Table 2 above presents the emergent themes by supporting research questions. RQ1's, instructional adaptations, most relevant themes were commitment, collaboration, and teacher effectiveness. Supportive culture, collaboration, mindset, and teacher effectiveness were the most related themes pertaining to RQ2 about supports. The themes of engagement challenges and learning gaps related most to RQ3 about barriers. RQ4's most relevant themes about new learning from the experience of the pandemic was teacher effectiveness and mindset. The framework of crisis management, change theory, effective schools and teachers, mindset theory, and research of adaptability and innovation examined and categorized data. The interpretation of the data relating to the emergent themes and recommendations for practice and further research are presented in Chapter 5.

Chapter 5. Conclusions and Recommendations

Introduction

The purpose of this study was to explore the stories of identified, effective middle school teachers as they experienced changes in instructional strategies and practices as a result of an identified crisis, COVID-19. The identified crisis of this study was the COVID-19 pandemic. School principals identified effective teachers according to a list of characteristics of effective teachers obtained from research and operationally defined in Chapter 1 of this study. The definition of instructional strategies includes techniques employed to help students become independent, strategic learners (Learning, 2002). The answers to the essential question of this study, "How did identified effective middle school teachers adapt instructional strategies and practices as a result of COVID-19?" may contribute to the literature concerning educators' abilities to adapt instructional strategies and practices through a crisis.

Drawing from research on change theory, mindset theory, crisis management, adaptation research, and teacher effectiveness research, Chapter 5 offers discussions of the seven emergent themes in relation to research and the supporting research questions of this study. Furthermore, Chapter 5 offers conclusions and recommendations for practice and future research.

Research Question 1

Research Question One (RQ1) for this study was: How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the spring of school year 2020 and moving forward?

The interview questions that supported RQ1 concerning adapting instruction caused participants to discuss events and actions that incorporated all seven emergent themes:

commitment, collaboration, mindset, teacher effectiveness, supportive culture, engagement challenges, and learning gaps.

Discussion

Adapting instructional strategies and practice during a crisis takes commitment, collaboration, mindset, teacher effectiveness and a supportive culture to overcome challenges of engagement and learning gaps. Regarding change, unplanned or not, individuals implementing change should be supported (Hall & Hord, 2011). Taylor (2020) discussed crises as causing emotional stress and traumatic changes in a person's life.

<u>Commitment</u>. Motivated and passionate teachers, extra time given above and beyond the contracted day to meet the needs of students, moral purpose in making a difference in the lives of others and gaining energy from the students were the categories present under the theme of commitment and evident throughout each interview. A quality teacher is a lifelong learner, teaches with commitment and is reflective (Hightower et al., 2011). Fullan's Framework for Leadership (2001) (see Figure 1) exhibited moral purpose and commitment as key elements in gaining results. Teacher Stacey exhibited commitment,

"Also, just that connection that you have with kids, and that daily of, you get here to school, and that's why you got into this profession, is because of that connection, those stories, those memories you make with those kids that when they see you in the grocery store five years, they wanna say hi and things like that."

Teacher Ricky showed commitment through caring about reaching all students to get them to work hard and give effort. She stated,

"Pitiful little ones who are not pitiful anymore. But it's like the parable that talks about, I can start crying when I say this, but . . . He leaves the 99 for the one. And it's kind of

where I am, you know, I think, 'Oh, no, but you are still important and you still matter.' So seeing that one, and it's probably more like ten and not leaving them. It'd be easy to leave them, but I just can't."

She continued later, "And I... It just so happens to be, I think, because I've done this for so long, but I do have a genuine love for these kids . . . but along with that love, making sure that you're working hard."

<u>Collaboration</u>. Categories that comprised the theme of collaboration included school and system-wide collaboration, schools and families working together, and students and teachers collaborating. In addition, sense-making took place within collaborative groups to work through all the elements that the crisis brought and ways to proceed that would take care of students' needs. Also, collaborative meetings of teachers and administrators were frequent, data-informed, and focused. With collaboration, the element of having shared leadership and the sharing of knowledge, ideas, abilities, time, and materials were apparent and essential in adapting instruction directly related to and illustrated research from Rowe et al. (2012).

Teacher Ealin discussed the elements of continued collaboration. She stated,

"I think that we continue to collaborate is important, and really talk about what we saw work during the pandemic that maybe we would've never tried otherwise? What we saw that did not work? What data do we have to support either one of those? But I think it's true collaboration." <u>Mindset</u>. Mindset was key for other themes to be a success in adapting instruction. Mindsets framed these happenings and guided the interpretation of them (Dweck, 2006). Teachers and principals exhibited a growth mindset, one of opportunity for learning from mistakes and barriers. Participants were solutions-oriented, flexible, and adaptable when met with a challenge. The process of change was a process in which the leaders had to cultivate their own mindset toward confronting complex situations (Fullan, 2011). Shifting one's mindset allowed a person to stay focused, productive, and more effective (Derler & Weller, 2018; Derler et al., 2020).

Teacher Stacey demonstrated a flexible mindset. She discussed adjusting her expectations and attitude toward student work completion.

"So I think one of the things that I've learned to deal with is just roll with the punches. There is that sense of responsibility, you've got to get it done, but then there's also that side of, 'Hey, you've been sick or you've been at home, and you're here now, and I'm gonna get you caught back up and we'll work together to get you through it' type thing."

Principal Ervin exhibited mindset as being the key to see opportunity out of experience and effort in adapting instructional strategies and practices. He concluded,

"I think that pretty much everyone has a Canvas course. That's what we're teaching from, even though we're doing just daily face-to-face instruction, it all comes back to a Canvas course cause we know . . . knew if we ever had to go back to a virtual-type environment, those Canvas courses would have to be built out and be there daily. So, we're requiring teachers to have that built out at all times. But it's helped us and if we even had snow days in the future we wouldn't have to take them. We could just move to a virtual day and we'd be done."

Teacher effectiveness. Teacher effectiveness comprised many categories. Lesson design with feedback, being reflective, and making data-informed decisions was evident when teachers discussed adapting instruction. Also, blended learning, personalization, and a teacher's experience in years and involvement supported the theme of teacher effectiveness. Research supported the teacher as the single, most influential school-based factor in student success (Hattie, 2003, 2008, 2012; Marzano et al., 2013; Stronge, 2013, 2018;). Hightower et al. (2011) suggested that teachers, through a combination of content mastery, commanded a broad set of pedagogic skills, and communication/interpersonal skills, had a positive effect on student learning.

Teacher James displayed teacher effectiveness in using experience (teaching in a pandemic and prior experience from college years), reflection, and feedback to help keep himself and his students accountable to the learning while virtual. When discussing adaptations of builtin feedback areas within Canvas courses, he explained,

"And I think that stuff was useful for feeling like you were in there and there was a person on the other side of it and making sure you're getting a lot of feedback. Because I thought about what I didn't like, I never really liked online classes at the college level and just missed the boat on being exposed to them in high school. But it was always just that I felt like I was just checking stuff off a to-do list and I never felt there was a ton of feedback. And I think if I can contribute success to something is making the activities in such a way that they were dependent on me giving feedback so that I could resist the temptation to just flaking out on it and letting them go on autopilot."

Teacher Ealin illustrated characteristics of an effective teacher when adapting and being innovative to meet students' needs. She stated,

"One of the things that we did when we [teachers] returned to school at the beginning of last school year, the complete shutdown, [when] the no students in the building was still in place, we were able to bring in certain students that we felt like had the greatest need or had the risk of becoming further and further behind. And so, I brought them into school. Their parents brought them in, dropped them off for a couple of hours. We worked on things for my classes, but then also things for their Gen Ed classes and it really was just a time and a place for them to come to work through that, [for me] to answer questions, and just an accountability piece."

Supportive Culture. A supportive culture encompassed many characteristics in creating an environment conducive to adapting instructional strategies and practices during a pandemic. Decisions of all kinds had to be made, even logistically speaking, in creating a supportive culture. Ansell, Boin, and Keller (2010) discussed the challenges of a transboundary crisis and the requirement for groups of people to become more involved with each other. Administratively speaking, it was especially important for dispersed participants to share information quickly and coordinate their actions.

Principal Ervin discussed logistical difficulties that exhibited the importance of this research. Decisions were made to support the learning and communication of teachers and students. He stated, "We moved fifteen teachers this year to make sure that all of them are together in the content area. That made the opportunity for them to have some common planning time to get things done." He later discussed the importance of a single sign-on username and password with a platform called ClassLink. This allowed students to access their learning sites and content shared from teachers more easily during virtual or hybrid platforms and even as students returned to school full time.

All participants spoke of the different layers of support in their school systems. One support for teachers that was specifically discussed as a positive aid in adapting methodology was instructional coaches. Principal Elaine spoke of taking care of teachers personally and professionally as an indirect yet vital piece of supporting adaptations of instructional strategies and practices as highlighted in Chapter 4. She continued to discuss the importance of supporting teachers to support students through limiting new initiatives during the time of great change in order for there to be a focus on students' social and emotional well-being, online instruction, and student engagement.

Teacher support was evident during the pandemic. Teachers had to meet more socialemotional needs than ever before alongside their own emotional turmoil. Principal Ervin spoke of ways in which Emmanuel Middle tried to create a supportive culture. He discussed,

"Other things that we've done is try the SEL (social emotional learning) as far as that goes, is trying to build strong relationships with teachers and kids. We take care of a lot of the discipline that folks have, and we work to make sure this is a good environment to come to work every day. And so, I think that comes from reducing the number of meetings we have. We try to take care of . . . reduce the after-school time that they might have, because it's been challenging to take care of students this year, the behaviors and the issues that they had. But we spend . . . we work about 24 hours a day, literally, to make sure teachers have what they need."

Teacher KayLynn confirmed Principal Ervin's statements.

"My school system is very, very, supportive with providing platforms and programs for us to use. They are also not critical of things that we're trying . . . if we try something new, they're willing to let us step up and give that a try and then let us make a decision."

She continued,

"The support that we're receiving from our administration that you all are doing the best you can right now to teach the students, not only are we teaching them the skills and the standards that they need to know now, but we're also teaching them how to be a student from...those, just social skills that kids need. And so, our system has been . . . they know we're still working on getting our standards done, but they also know the while child is important, and that we need to worry about the health of the kids. We need to worry about the ability to be able to work together to understand what it is to be a student, to interact as a person with other kids, and with adults, also. So, they've been really good about being not so strict about, 'What are your scores? What's your benchmark? Blah, blah, blah.' They're not . . . supporting the teacher in turn supports the student."

Engagement Challenges. Participants spoke with concern, frustration, and optimism when discussing student apathy and lack of motivation, poor choices made with student agency, student access to school material and technology, student work quality declining, difficulty in forming relationships, and distractions. James, even though frustrated, kept a growth mindset while discussing student agency and the temptations of distractions with online access. He reported,

"They're still going to have those temptations they have to deal with, which means the stuff they're going to invest their time in's going to end up having to be something that they're passionate about. And even if it's not, hopefully we can help them learn how to deal with those temptations. In middle school, I think it's the last place where it's absolutely safe to fail at things. So, I'd rather them struggle through that now than high school when their GPAs can affect their college placement or college when that's going

to affect their graduation, and then at work where it's going to affect their whole life and the type of life they want to build. So, while there is a barrier, I think there's some opportunities in it too. But I think that's the biggest one, it's just the walls of the classroom are not there really anymore."

Learning Gaps. Learning gaps existed in a multitude of ways from students to parents to teachers. Student learning gaps comprised academic, behaviors on how to be a student, online etiquette, social emotional learning, and rising to expectations. Lack of boundaries with teachers' contracted workday and appropriate use of resources created learning gaps for parents and students. Learning gaps for teachers existed with technology and redesigning instruction.

Principal Ervin spoke of learning gaps with expectations for students as they returned to school full time,

"Online learning is not as rich as what we would provide. So that's been a ... That's been a major barrier is that students who have had that for two years are coming into a situation where we have higher expectations now and they are not quick to meet the challenge."

Later, he discussed teacher expectations needing adjustments to meet student needs. "I think to the high expectations of teachers while it's difficult, I think that some of that needs to be adjusted. I think we don't want to dial back because we don't wanna be ... we wanna be excellent. But I think that now, behavior of students and them just being, 'students' being ready to just learn every day, it's taken a toll on kids."

Research Question 2

Research Question Two (RQ2) for this study was: What factors supported effective middle school teachers' instructional strategies and practices during the pandemic from the

spring of school year 2020 and moving forward? The themes that were most prevalent in supporting teachers' efforts in adapting instruction were supportive culture, collaboration, mindset, and teacher effectiveness.

Discussion

Weick (1988), in seminal research on crisis management, compared a crisis situation to that of exploration and discussed explorers not knowing what they explored until after exploring and reflecting on the experience. Sense-making was crucial in all circumstances but even more so in crises (Weick, 1988). Crisis brought an abundance of change and change took time to work through with no perfect solution (Crosby, 2020; Fullan, 2001; Hall & Hord, 2015; Hayes, 2018). Change is a learning process (Hall & Hord, 2015). When individuals are expected to implement change, support should be given. Principals, teachers, students and families experienced change in a context that greatly influenced the process of learning (Hall & Hord, 2015). The process of change was difficult and required intentional framing of the purpose (Hoy & Miskel, 2013).

Supportive Culture. A culture of supportive relationships and a positive growth mindset contributed to collaboration and teacher effectiveness, which allowed for the process of learning and adaptations of instructional strategies and practices. Communicating clear expectations, building capacity, and monitoring and reviewing individuals and groups are key in supporting and creating an implementation bridge to take teachers from current practice to changes in practice resulting in an increase in outcomes (Hall & Hord, 2015). An integral element to a supportive culture is developing trusting relationships. According to Fournier et al. (2019), Roland Barth stated, "If the relationships between administrators and teachers are trusting, generous, helpful, and cooperative, then the relationships between teachers and students,

between students and students, and between teachers and parents are likely to be trusting, generous, helpful, and cooperative" (p. 2).

<u>Collaboration</u>. Facilitating change was a team effort (Hall & Hord, 2015). Collaboration is necessary in implementing and supporting the adaptations of instructional strategies and practices. Teacher Ricky discussed,

"And we talked as an eighth-grade team to try to get some consistency. And realized very quickly that, for example, I use Canvas. Some other people used Google Classroom, and that was very difficult for the students to have multiple platforms, and so we knew then that last year, everybody's gonna be on the same platform, and we were. Last year was much better. We were all on Canvas, which I think is great and worked out great, but we needed to all be on the same page. I also talked to eighth grade teacher through Zoom meetings about, what are you doing? What am I doing? So that we were at least doing a lot of the same things for kids. And are you doing Zoom meetings [with students]? What time is your Zoom meeting, so that we don't overstep someone else's time. Ended up that, to me, the most logical thing was you hold your same meeting during your class time, as if they're following a schedule."

<u>Mindset</u>. Neuroleadership research showed that shifting our mindset can help us stay focused and productive, allowing us to be more effective, even during a crisis (Derler & Weller, 2018; Derler et al., 2020). Teachers' mindsets played a key role in adapting instructional strategies and practices. A mindset for adapting, according to the data of this study, included having a growth mindset, seeing opportunity out of barriers, being optimistic, and being solutionoriented, flexible and resilient. A growth mindset helped teachers be open and reflective to blending and balancing technology with more traditional type lessons to best support students. Teacher Linda explained,

"I still really want to figure out how best to marry the paper world with the online world. I know it's never gonna be perfect, just like a lesson is never gonna be perfect, you can always refine it, and so I know that that aspect of the classroom will always need to be refined. But I guess I'm still trying to find my foothold in that and making sure that I'm balancing that well."

<u>Teacher effectiveness</u>. Mindset allows for teacher effectiveness. Teacher effectiveness includes lesson design, using feedback for improvement, being reflective, being data-informed, building relationships, using humor to connect and engage students, and personalizing learning. Well-designed lessons aid in classroom management (Godwin et al., 2016). Effective teachers possess a range of personal competencies, known as soft skills, and support students in developing these competencies. An accumulation of this range of capabilities facilitates learning (Carreker & Boulware-Gooden, 2015). Redding (2014) identified four elements in a Personal Competency Framework: cognitive, metacognitive, motivational, and social emotional. Effective teachers also have command over an essential tool of formative assessment, feedback (The Wing Institute, 2021). Feedback is the single most powerful educational tool for improving student performance (Hattie, 2008).

Teacher KayLynn illustrated these many characteristics of teacher effectiveness to support her own learning and the learning of her students. She asserted,

"The very first year, it was a quick, 'we've gotta figure out how to do lots of different kinds of things,' so it felt like each week I was getting a little better with what I did. I'm a list person, I like to number things, 'Number one, do this, number two, do this,' and so I found it was my learning style to tell the children at the top of their Canvas page, 'You

will have blank tasks to do today,' and then I would number, 'Number one, number two, number three.' I got much better with that as the weeks went by, seeing the feedback that they wouldn't understand how to do something, and so I realized, 'Hmmm, I need to go back and give better directions in this.' And so it really was a work in progress, the rest of the year. It was great because it gave me a launching pad for the next school year as we started hybrid the next year, and I had digital lessons I needed to do. The things that I developed, I developed digital units, and I learned how to do a screencast and teach something to a computer screen, talk to it, then to manipulate a document on the screen while I talked over it, to video myself doing different things, and I'd never done any of that before. So, it was all brand new."

Using humor and personalizing learning are characteristics of effective teaching as James exhibited,

"And I got goofy with the videos and like using myself like a character. It kind of got me out of my comfort zone, making content videos for the kids because I had legitimately not met them. So, I made a lot of little goofy videos where I was talking about concepts and I would edit myself playing two different characters, and one was making a good claim and one was making a silly claim."

Research Question 3

Research Question Three (RQ3): What factors were barriers for effective middle school teachers' instructional efforts during the pandemic from the spring of school year 2020 and moving forward? Identified barriers to teachers' instructional efforts included the themes of engagement challenges and learning gaps.

Discussion

Barriers to teacher's efforts in adapting instructional strategies and practices in the data are interconnected with the supports to their efforts. Effective teachers, when met with a barrier of engagement challenges or learning gaps, reflected and worked to find a solution to adapt instructional strategies and practices. The barriers of this study corresponded with processes of Change Theory. The unfreeze phase, step one of Lewin's Change Model, pertained to actions of recognizing the need for change, determining the need for change, and encouragement of the replacement of old behaviors and attitudes while being strongly supported (Burnes, 2004). Additionally, Fullan (2001) discussed the importance of re-culturing in the change process. The process of change was difficult and required intentional framing of the purpose for change, scanning and interpreting external events and commitment building within those affected by the change (Hoy & Miskel, 2013).

Engagement challenges. Engagement challenges were evident primarily with students. However, data showed struggles with engagement for teachers as well. Teacher James commented that it was a challenge for him trying to work from home initially.

"And that's another challenge, the internal motivation stuff. I have a three-year-old, it's very difficult when I was working from home to be like, if it was video games or something, I was like, 'I want to go watch TV instead of getting on the Zoom with these kids.' That's tough already, but it's much tougher when you're like, 'Oh, one of the good things about this is I get so much more surprise time with my daughters, with me instead of a daycare.' And that's harder to talk yourself out of."

Another engagement challenge for teachers and students was social-emotional toil. Linda concluded, "Just tired. I'm sure you all are as well, [chuckle] just constantly tired." Ricky agreed about emotional toil,

"Yeah. But it's been hard for me because I'm one of those, probably like you, I wanna fix everybody that walks through that door. And I've had a pretty good success rate, but this year, I don't feel like I'm helping as many as I usually do."

Crisis brings intense and emotionally stressful difficulty (Taylor, 2020). Too many responsibilities for teachers and students caused engagement challenges. Teacher KayLynn spoke of trying to engage her students during virtual class time,

"Some parents weren't there because they had to work, some were trying to do their job from home, grandparents were raising kids, these kids were trying to babysit younger kids, it was a really huge barrier for kids to be able to be successful and to be engaged." She earlier said, "And to be honest, some of their sharing was really sad. 'I'm lonely, I wish I was in school, my mom has to go to work, and my little brother's here and I'm trying to get him to do his lesson. So, they were really honest."

Teachers were aware that relationships were key to creating engagement in learning but the circumstances of virtual and hybrid made it difficult to build relationships. According to Fullan et al. (2020), "Relationships and engagement [were] the gatekeepers of learning" (p. 17). Supportive relationships are the foundation of challenging, engaging and meaningful learning, and are the basis of effective social emotional learning (Enterprises, 2013). James stated,

"We had that continued barrier of the entire temptation of the Internet and websites that have billions of dollars of development to get them to login and get dopamine to look at ads. It's impossible to compete with. There's nothing that you can compete with except

for are just the relationships that you can have with kids, is the only way to fight through it."

Engagement challenges involved students and teachers and resulted in the need for certain supports within a committed, collaborative, supportive culture. The engagement challenge of student apathy and student work quality combined with the learning gap of students learning how to be students again and expectation shifts. Principal Elaine commented,

"I think what continues to be a barrier is student apathy and engagement. We're having a real struggle trying to get kids back in, to even get our attendance rate has dropped. Our work completion has dropped, even for the kids that are here, and I don't know if it's a sense of, 'Hey, we really didn't have to do that much last year, we still made it.' I think that's probably the biggest barrier. I think teachers would say the other barrier, again not directly related to instruction but very much indirectly related, is student behavior. They almost had to relearn how to do school again. How to interact socially."

Learning gaps. Learning gaps created another barrier for teachers in adapting instructional strategies and practices. Teacher Linda noticed a gap in learning for students in being able to interact socially and make connections when she taught the hybrid model. She also observed a learning gap for herself in keeping all students accountable for interactions. This happened when her school was in what she called a "true hybrid" schedule where she was simultaneously teaching part of the class in-person and the other half virtually. She worked to find a solution. She discussed,

"I would put the kids up on the screen, some of them don't like to turn their cameras on, but I'd put their boxes up there so that the kids in here could see who was there and try to have some interaction with them. I tried some different things, such as breakout rooms

and putting a kid that was on the Internet in a breakout room with a kid that was here [in class]. That way that they were kind of crossing with each other. And I just really . . . a big thing for me was trying to get them to interact on both sides, that way it felt like everybody was together instead of separate. So that was my biggest thing, was trying to bridge that gap and just making sure that I was using practices where I'm not just questioning who were in front of me. I can see their facial reactions, but also remembering that I've got these kids over here. So, I had to make little tally marks for myself, and say did I ask it . . . how many questions did I ask people on the internet and how many people did I ask in front of me? So that I can make sure I was balanced and not just asking one side and not the other."

Learning gaps were evident in redesigning instruction and technology. Principal Ervin affirmed,

"The other thing I would say is that instruction also builds from the fact that we had teachers who were . . . in their content area, were extremely solid, but maybe their computer skills did not match their ability to teach. We had some . . . fantastic teachers have a difficult time making the adjustment to be completely online. So, we knew that we had to do more training and support for teachers around the technology pieces." Teacher KayLynn's statement corresponded,

"Creating successful strategies was another [barrier]. My end of the year standards were great to teach because they're fun and they're engaging topics, but the kids, it was just difficult to take it from me in the classroom and being able to do some hands-on. I have several labs that I always do at the end of the year with them, none of that could occur, it all had to be a demonstration."

Research Question 4

Research Question Four (RQ4): How will effective middle school teachers use the new learning acquired during the experience of teaching through a pandemic as education moves forward from the effects of COVID-19? In moving forward, teachers leveraged new learning from the experience of teaching through the pandemic within the themes of teacher effectiveness and mindset.

Discussion

Research suggested that crisis is not just hardship, but also a time for new learning and opportunity (Lerbinger, 2012). Lerbinger (2012) discussed the way in which the values of an individual and an organization could foster and allow for behaviors and attitudes of self-efficacy and optimism. Crisis not only significantly disrupts lives in the moment, but may cause long-term, harmful consequences on individuals or groups (Taylor, 2020). As students returned to school in the school year 2020-2021 and beyond, the effects of the pandemic were evident; however, teachers' new learning would continue to support students' learning outcomes, academically, socially, and emotionally.

<u>Mindset</u>. Mindset supported teachers' perspectives of new learning in adapting instructional strategies and practices. Principal Ervin spoke of teachers' resilience in helping them be successful in adapting.

"I think that the adaptations they made when they decided that they were going to do voice-overs on some of the instruction, do voice-overs on directions, and spend time making sure students that needed accommodations like read aloud or that type of thing. They've worked on possibilities for all those things to happen. They were so creative with that."

Teacher James from Beechwood Middle illustrated an opportunistic growth mindset from a barrier. In discussing the barrier of the competition teachers had with the distraction of social media and other types of media, he said,

"That's going to continue to be a barrier for anything. And one thing that I think is good about that being a barrier is those are going to be barriers in their professional lives. Those are going to be barriers they have in their career because I know that not very many jobs are like this, but there are jobs that you imagine somebody going to work and they're sitting in front of the computer for eight hours or even if they're working remotely."

Teacher Stacey noted new learning shifted her perspective, which helped her shift her mindset to adapt.

"I think it [teaching through a pandemic] has broadened my sights to what can be done, things that can be done, and how things can be organized and put out there. I read this article a long time ago about a professor who puts just everything about his course out there for everybody, and some people asked him, 'Why do you do it? Most kids don't look at it.' And he said that 'Yeah, but one might.' And so I try to think of that, when I don't wanna do."

<u>Teacher Effectiveness</u>. New learning was evident with lesson design and personalizing learning. Teacher Stacey discussed new learning from risk-taking to do Socratic Seminar, a virtual form of discussion with students about a text. She reflected,

"I actually did an online Socratic Seminar where I prepared students. It was really, I like it now, I will say, of my 80-90 students that year, I might have had 15 that really jumped on board and was part of the Socratic Seminar. So, I don't know if that should come up

right now in the interview, but that was a big challenge getting people's participation, but I invited some other teachers to come watch these online Socratic Seminars. So, I might have had probably five groups of three, and for each question, each group picked who was gonna answer what question, and they got point on things they said in the class. So, we were able to . . . I was verbally able to give them feedback on their answers. I was able to give them points using a chalkboard at my house, and so that was a culminating task with those kids in quarantine during that March 2020."

Principal Elaine deliberated about the importance of taking new learning and refining it to better support students within the classroom. She maintained, "Now that we've tried it out, we've used lots of new stuff, 'How do we use that to enhance learning?' So I think we're in the process of moving from using technology as a replacement to a tool to enhance student learning."

Conclusions

The barriers caused by the crisis of the pandemic in this study of engagement challenges and learning gaps necessitated change. Through a supportive culture, an optimistic, growth mindset, commitment, and collaboration, effective teachers adapted instructional strategies and practices in trying to meet the needs of students. It became evident during the interviews, as noted in the researcher's memos and affirmed in the analysis of data and reporting of findings, that participants discussed less about specific strategies and more about pathways of supports and barriers to overcome as a whole.

In a pandemic with effective teachers, the research of this study suggests that barriers of learning gaps and engagement challenges are interrelated with the supports that helped teachers adapt instructional strategies and practices. Administrator and teacher participants reported and

confirmed similar emotions, perceptions, and experiences in adapting instructional strategies and practices due to the crisis of COVID-19. Leading through change requires strong moral purpose, building relationships with diverse people and groups, creating and sharing knowledge, and working towards noticing patterns that will lead to coherence-making with an energetic, hopeful attitude (Fullan, 2001).

Recommendations for Practice

The findings and conclusions of this study enabled the researcher to identify the following recommendations for practice.

• Schools should provide professional development and employ intentional classroom practices and communications that educate, support, and encourage mindset development in students, teachers, and administrators. Mindset is the pathway to being open to and utilizing a supportive culture to assist in adapting instructional strategies and practices for successful learning outcomes. A positive, growth mindset allows a person to see opportunity from barriers, be solutions oriented, and seek out new learning.

• Schools should develop supportive culture systems and practices to be in place to encourage continued commitment, collaboration, and teacher effectiveness as it, along with mindset, combats engagement challenges and learning gaps.

• The effects of the pandemic, personally and professionally, for teachers and students alike will be an ongoing barrier. School systems should support the socialemotional learning and well-being of students and teachers. Social emotional learning should be a priority moving forward.

• Feedback should continue to be a cornerstone for school systems at all levels and for many purposes to guide next steps for improving learning outcomes of the

whole child and the entire educational experience. Whether it is teacher feedback to administrators, student feedback to teachers, feedback from teachers to students, or family feedback to schools, it is a vital process for learning and improving.

• Schools should have an intentional focus on supporting students with learning the skills of how to be a successful student and learner. Students at the middle school level post pandemic need explicit teaching on how to interact with others in a face-to-face setting, give eye contact, be a partner in an activity, and regulate emotions to be successful in these situations. This should be a vital part of the overall educational experience.

• Family education and communication is an essential piece in student learning outcomes. Schools should give more intentional focus toward programs that educate families with their students on appropriate academic supports, what supporting their child at home looks and sounds like, online etiquette, the importance of less screen time, and interactions face-to-face.

• Schools should give more in-depth, goal-focused, continuous support for teachers learning how to redesign lessons and use new tools and practices and strategies. As education continues to progress, this should be a top priority of all school systems.

• Shared leadership allows ownership and efficacy in the task and aids in providing a supportive culture with teachers and students. Schools should provide more opportunities for teachers and students to use gifts, talents, and interests in leadership roles.

• Relationships are essential in educating and supporting the learning of all. Schools are encouraged to develop positive, respectful, nurturing relationships between

teachers and students, colleagues, and school and home to promote engagement and motivation in learning.

Recommendations for Further Research

• This study could be replicated and conducted at the elementary and high school levels. In addition, this study could be replicated in a variety of geographical locations.

• This study could be replicated with a larger sample size of both teacher and principal participants to confirm the findings of this study.

• Further research conducted about new learning of instructional strategies and practices from the experience of the pandemic, what those in education plan to continue to use, and what strategies and practices will be left behind may be beneficial.

• In addition, further research on the interconnectedness of barriers and adaptations could be valuable.

• This research may be expanded to include perceptions of the student and family with a comparison of the student and family data with the principal and teacher data.

• Conducting studies on the long-term effects of the pandemic, not only students' academic learning and social emotional health and well-being, but the long-term effects of the pandemic on teachers' health and well-being could be valuable.

Summary

Chapter 5 presented the interpretation and discussion of data related to the emergent themes from the analysis of data and related to this study's essential questions: How did identified effective middle school teachers adapt instructional strategies and practices as a result

of COVID-19? Data were analyzed, presented by emergent themes, and presented according to supporting research questions. The framework of crisis management, change theory, mindset theory, and research from adapting to change and teacher effectiveness aided interpretation of the data in this study and informed the recommendations for practice and further research.

References

- Alberta Learning. (2002). For kindergarten to grade 9 health and life skills guide to implementation. https://education.alberta.ca/media/1477143/healthgi.pdf
- Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-learning critical success factors during the covid 19 pandemic: A comprehensive analysis of e-learning managerial perspectives.
 Education Sciences, 10(9), 216.
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5, 272-281.
- Ansell, C., Boin, A., & Keller, A. (2010). Managing transboundary crises: Identifying the building blocks of an effective response system. *Journal of Contingencies and Crisis Management*, 18(4), 195-207.

Arbinger Institute. (2016). The outward mindset: Seeing beyond ourselves. Berrett-Koehler.

- Archer, A. L., & Hughes C. A (2010). *Explicit instruction: Effective and efficient teaching*. Guilford.
- Arendt, H. (1996). *The crisis in education*. https://www.planetadelibros.com/libros_contenido_extra/32/31540_Entre_el_pasado_y_e 1_futuro.pdf
- Back, L. T., Polk, E., Keys, C. B., & McMahon, S. D. (2016). Classroom management, school staff relations, school climate, and academic achievement: Testing a model with urban high schools. *Learning Environments Research*, 19(3), 397-410.

Becker-Phelps, L. (2013, July 23). Don't just react: Choose your response. https://www.psychologytoday.com/us/blog/making-change/201307/dont-just-reactchoose-your-response

- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation. *Qualitative Health Research*, 26(13), 1802-1811. https://doi.org/10.1177/1049732316654870
- Boin, A. (2009). The new world of crises and crisis management: Implications for policymaking and research. *Review of Policy Research*, 367-377.
- Boin, A. (2019). The transboundary crisis: Why we are unprepared and the road ahead. *Journal* of Contingencies and Crisis Management, 27(1), 94-99.
- Bridgeland, J., Bruce, M., & Hariharan, A. (2013). The missing piece: A national teacher survey on how social and emotional learning can empower children and transform schools.
 (ED558068). ERIC. https://eric.ed.gov/?id=ED558068
- Brookover, W. B., & Lezotte, L. W. (1979). Changes in school characteristics coincident with changes in student achievement: Occasional paper 17 (ED181005). ERIC. https://eric.ed.gov/?id=ED181005
- Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies*, 977-1002.
- Butina, M. (2015). A narrative approach to qualitative inquiry. *Clinical Laboratory Science*, 28(3), 190-196.
- Carreker, S., & Boulware-Gooden, R. (2015). The personal competencies: Through the eyes of the classroom teacher. *Center on Innovations in Learning*. http://www.centeril.org/resources/PCs_and_the_Teacher.pdf

- Center for Disease Control and Prevention. (2020). *Disease or condition of the week: Covid-19*. U.S. Department of Health and Human Services. https://www.cdc.gov/dotw/covid-19/index
- Center for Disease Control. (2020, November 13). *Coronavirus disease (COVID-19): Saving lives, protecting people* https://www.cdc.gov/coronavirus/2019-ncov/faq.html

Clandinin, D. J (2016). Engaging in narrative inquiry. Taylor & Francis.

- Coleman, J. S. (1966). *Equality of educational opportunity*. U.S. Department of Health, Education.
 - Collie, R. J., Martin, A. J., & Granziera, H. (2018). Being able to adapt in the classroom improves teachers' well-being. *The Conversation*, *5*(21), 1-5.
 - Connelly, F. M., & Clandinin, D. J. (2006). Narrative inquiry. Green, Camilli, & Elmore (Eds.), Handbook of Complementary Methods in Education Research (pp. 375-385). Mahwah, NJ: Lawrence Erlbaum.
 - Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14.

Connelly, L. M. (2016). Trustworthiness in qualitative research. Medsurg Nursing, 25(6), 435.

- Corbin, J., & Strauss, A. (2015). Basics of qualitative research: Techniques and procedures for developing grounded theory. SAGE.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Crosby, G. (2020). Planned Change: Why Kurt Lewin's social science is still best practice for business results, change management, and human progress. Productivity Press.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2017). The Sage handbook of qualitative research. Sage.

Derler, A. (2020). Impact report: Growth mindset supports organization through disruption. https://www.researchgate.net/publication/341219768_IMPACT_REPORT_Growth_Min dset_Supports_Organizations_Through_Disruption

Dibapile, W. T. S. (2012). A review of literature on teacher efficacy and classroom management. Journal of College Teaching and Learning, 9(2), 79–92. https://doi.org/10.19030/tlc.v9i2.6902

Dovale, M. M. (2020). The relationship between instructional delivery and student engagement in selected classrooms: A cross-case analysis. *Dissertations, Theses, and Masters Projects* (1593091746). http://dx.doi.org/10.25774/w4-7jg0-jt38

Dweck, C. S. (2006). Mindset: The new psychology of success. Ballantine.

- Dweck, C. (2016). What having a growth mindset actually means. *Harvard Business Review*, *13*, 213-226.
- Enterprises, C., Bridgeland, J., Bruce, M., & Hariharan, A. (2013). *The missing piece: A report* for CASEL: A national teacher survey on how social and emotional learning can empower children and transform schools. Civic Enterprises.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Evertson, C. M., & Weinstein, C. S. (Eds.). (2013). Handbook of classroom management: Research, practice, and contemporary issues. Routledge.

Fournier, R., Cervera, M. S., Buckley, K., & Gutierrez, A. (2019). *Stories from the field: Cultivating relationships through administrator actions*. Transforming Education.

Fullan, M. (2001). Leading in a culture of change. Jossey-Bass.

Fullan, M. (2011). Whole system reform for innovative teaching and learning.

http://www.michaelfullan.ca/wp-content/uploads/2016/06/Untitled_Document_5.pdf

Fullan, M. (2018). Nuance: Why some leaders succeed and others fail. SAGE.

Fullan, M. (2020). Learning and the pandemic: What's next. Prospects, 49(1), 25-28.

- Godwin, K. E., Almeda, M. V., Seltman, H., Kai, S., Skerbetz, M. D., Baker, R. S., & Fisher, A.
 V. (2016). Off-task behavior in elementary school children. *Learning and Instruction, 44*, 128-143.
- Goe, L., Bell, C., & Little, O. (2008). *Approaches to evaluating teacher effectiveness: A research synthesis* (ED521228). ERIC. https://eric.ed.gov/?id=ED521228
- Goldhaber, D. (2016). In schools, teacher quality matters most: Today's research reinforces Coleman's findings. *Education Next*, *16*(2), 56-62.
- Govindarajan, V. (2010). Innovation is not creativity. *Harvard Business Review*. https://hbr.org/2010/08/innovation-is-not-creativity.html

Grandi, F. (2016). Left behind: Refugee education in crisis. https://www.unhcr.org/left-behind/

- Grinstein, J. (2020, May 20). *Cultivate your growth mindset to thrive through crisis. Your brain at work*. https://neuroleadership.com/your-brain-at-work/growth-mindset-thrive-throughcrisis/
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches. Jossey-Bass.

- Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes (*3rd ed.). Pearson.
- Hall, G. E., & Hord, S. M. (2015). *Implementing change: Patterns, principles, and potholes* (4th ed.). Pearson.
- Hattie, J. (2003, October). Teachers make a difference: What is the research evidence [Paper presentation]. ACER Research Conference, Melbourne, Australia. http://research.acer.edu.au/research conference 2003/4/
- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Taylor & Francis.
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Hattie, J., & Yates, G. C. (2013). Visible learning and the science of how we learn. Routledge.

Hayes, J. (2022). The theory and practice of change management. Bloomsbury.

- Heilporn, G., Lakhal, S. & Bélisle, M. (2021), An examination of teachers' strategies to foster student engagement in blended learning in higher education. *Int J Educ Technol High Educ, 18*, 25. https://doi.org/10.1186/s41239-021-00260-3
- Hightower, A. M., Delgado, R. C., Lloyd, S. C., Wittenstein, R., Sellers, K., & Swanson, C. B.
 (2011). *Improving student learning by supporting quality teaching*.
 https://epe.brightspotcdn.com/96/bd/c7ea3e084ade93466ae02042ba7d/epercqualityteaching-12.11.pdf
- Hoy, W. K., & Miskel, C. G. (2013). Educational administration: Theory, research, and practice. McGraw-Hill.
- Hussain, S. T., Lei, S., Akram, T., Haider, M., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in

organizational change. *Journal of Innovation & Knowledge*, *3*(3), 123-127. https://doi.org/10.1016/j.jik.2016.07.002

Kahn, K. B. (2018). Understanding innovation. Business Horizons, 61(3), 453-460.

- Khalil, M. K., & Elkhider, I. A. (2016). Applying learning theories and instructional design models for effective instruction. *Advances in Physiology Education*, *40*(2), 147-156.
- Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the field. *International Journal of Higher Education*, 7(6), 44-53.
- Ko, J., & Sammons, P. (2013). *Effective teaching: A review of research and evidence*. CfBT Education Trust.
- Kounin, J. S. (1970). *Discipline and group management in classrooms*. Holt, Rinehart and Winston.
- Kouzes, J. M., & Posner, B. Z. (2017). The leadership challenge. John Wiley & Sons.
- Kuczmarski, T. (1998). The ten traits of an innovation mindset. *The Journal for Quality and Participation*, 21(6), 44-46.
- Lafferty, C. L., & Alford, K. L. (2010). NeuroLeadership: Sustaining research relevance into the 21st century. *SAM Advanced Management Journal*, 75(3), 32.
- Learning, A. (2002). *The kindergarten to grade 9 health and life skills guide to implementation*. https://www.buffalo.edu/ubcei/enhance/designing/learning-activities/instructionalpractices.html

Lerbinger, O. (2012). *The crisis manager: Facing disasters, conflicts, and failures*. Routledge. Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Harpers.

Lezotte, L. (2001). *Revolutionary and evolutionary: The effective schools movement*. http://www.brjonesphd.com/uploads/1/6/9/4/16946150/revolutionary_and_evolutionary_ the effective schools movement - dr. lawrence_w. lezotte.pdf

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage.

- Liou, Y. H. (2015). School crisis management: A model of dynamic responsiveness to crisis life cycle. *Educational Administration Quarterly*, *51*(2), 247-289.
- Marzano, R. J., Pollock, J. E., & Pickering, D.(2001). *Classroom instruction that works*. Association for Supervision and Curriculum Development.
- Marzano, R. J., Carbaugh, B., Rutherford, A., & Toth, M. D. (2013). Marzano center teacher observation protocol for the 2014 Marzano teacher evaluation model. Marzano Center/Learning Sciences International.
- Maxwell, J. A. (2012). *Qualitative research design: An interactive approach*. Sage.
- Mendenhall, J. (2020). Turning losses into wins. Principal, 100(1), 32-35.
- Meyers, G. C., & Holusha, J. (2018). *Managing crisis: A positive approach*. Routledge.
- Mineo, L. (2020). *Time to fix American education with race-for-space resolve*. https://news.harvard.edu/gazette/story/2020/04/the-pandemics-impact-on-education/
- Moen, T. (2006). Reflections on the narrative research approach. *International Journal of Qualitative Methods*, *5*(4), 56-69.
- Mortimore, P., Sammons, P., Stoll, L., & Ecob, R. (1988). *School matters*. University of California Press.
- Nel, C., & Marais, E. (2020). Preservice teachers use of WhatsApp to explain subject content to school children during the COVID-19 pandemic. *International Journal of Work-Integrated Learning*, 21(5), 629.

- Norman, A. D. (2010). Assessing accomplished teaching: Good strides, great challenges. *Theory Into Practice*, 49(3), 203-212.
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage.
- Pierson, R. (2013, May). *Every kid needs a champion* [video]. TED Conferences, https://www.ted.com/talks/rita_pierson_every_kid_needs_a_champion
- Plaisir, L. J. (2020). Perceptions of middle school teachers' experiences with student-centered learning strategies [Doctoral dissertation]. *Walden Dissertations and Doctoral Studies*.
 9627. https://scholarworks.waldenu.edu/dissertations/9627
- Ravitch, S. M., & Carl, N. M. (2019). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Sage.
- Razaghi, N., Abdolrahimi, M., & Salsali, M. (2015). Memo and memoing in qualitative research: A narrative review. *Journal of Qualitative Research in Health Sciences*, 4(2), 206-217.
- Redding, S. (2014). Personal Competency: A framework for building students' capacity to learn (ED558070). ERIC. https://eric.ed.gov/?id=ED558070
- Reimer, T. & Wang, M. (2020, September/October). Adapt or perish. Principal, 100(1).
- Reyes, V. C., Jr, (2020). Clipped wings: School leaders' identities in ICT-enriched education landscapes: A narrative inquiry. *Educational Management Administration & Leadership*, 49(5). doi: 1741143220918257
- Rodríguez-Rodríguez, E., Sánchez-Paniagua, M., Sanz-Landaluze, J., & Moreno-Guzmán, M. (2020). Analytical chemistry teaching adaptation in the COVID-19 period: Experiences and students' opinion. *Journal of Chemical Education*, 97(9), 2556-2564. doi: 10.1021/acs.jchemed.0c00923

- Rogers, J. (2016). *Balancing literacy instruction. Part two: Explicit instruction vs implicit instruction.* https://rogerseducationconsulting.com/2016/01/31/balancing-literacy-instruction-part-two-explicit-instruction-vs-implicit-instruction/
- Rowe, N., Wilkin, A., & Wilson, R. (2012). *Mapping of seminal reports on good teaching*. https://www.nfer.ac.uk/publications/RSGT01/RSGT01.pdf
- Rutter, M. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. Harvard University Press.
- Sahin, A. E. (2015). Comprehending elementary school teachers' classroom management approaches. International *Journal of Progressive Education*, *11*(3), 131-139.

Saldaña, J. (2021). The coding manual for qualitative researchers. Sage.

- Sanford, J. P. (1984). Management and organization in science classrooms. *Journal of Research in Science Teaching*, 21(6), 575-587.
- Serdyukov, P. (2017). Innovation in education: What works, what doesn't, and what to do about it. *Journal of Research in Innovative Teaching & Learning*, 4-33.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75.
- Simon, M. K. (2011). Dissertation and scholarly research: Recipes for success. CreateSpace Independent Publishing Platform.
- Skourdoumbis, A. (2017). Teacher quality, teacher effectiveness and the diminishing returns of current education policy expressions. *Journal for Critical Education Policy Studies*, 15(1), 42-59.
- Stone, B., Hubbell, E. R., Dean, C. B., &Pitler, H. (2012). *Classroom instruction that works: Research-based strategies for increasing student achievement*. ASCD.

Stronge, J. (2013). *Effective teachers=student achievement: What the research says*. Routledge. Stronge, J. H. (2018). *Qualities of effective teachers*. ASCD.

Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226.

Taylor, J. (2020). Under the microscope: What is a crisis.

https://news.harvard.edu/gazette/story/2020/04/the-pandemics-impact-on-education/

Tutoring, T. I., & Time, E. L. (2021). Strategies to solve unfinished learning. https://edtrust.org/wp-content/uploads/2021/03/Targeted-Intensive-Tutoring-as-a-Strategy-to-Solve-Unfinished-Learning-March-2021.pdf

- UNICEF. (2020). Education in emergencies: Education is a lifeline for children in crises. https://www.unicef.org/education/emergencies
- UNICEF. (2022). School year nears tragic end in Ukraine amid child deaths, empty classrooms, and destruction of educational facilities. https://www.unicef.org/press-releases/schoolyear-nears-tragic-end-ukraine-amid-child-deaths-empty-classrooms-and
- Wang, C. C., & Geale, S. K. (2015). The power of story: Narrative inquiry as a methodology in nursing research. *International Journal of Nursing Sciences*, 2(2), 195-198.
- Weick, C. E. (1988). Enacted sense making in crisis situations. *Journal of Management Studies*, 305-317.
- Weller, C., & Derler, A., & (2018). *The truth is no one has a fixed or growth mindset*. https://neuroleadership.com/your-brain-at-work/people-dont-have-fixed-growth-mindset/
- Why strong teacher relationships lead to student engagement and a better school environment. (2021, October 6). https://www.waterford.org/education/teacher-student-relationships/

- The Wing Institute. (2021). *How to drive positive change in schools*. https://www.winginstitute.org/
- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The power of feedback revisited: A metaanalysis of educational feedback research. *Frontiers in Psychology*, *10*, 3087.
- Wong, H., Wong, R., Rogers, K., & Brooks, A. (2012). Managing your classroom for success. *Science and Children, 49*(10), 60.
- The World Bank. (2019). *The education crisis: Being in school is not the same as learning*. https://www.worldbank.org/en/news/immersive-story/2019/01/22/pass-or-fail-how-can-the-world-do-its-homework
- The World Bank, UNESCO, & UNICEF. (2021). The state of the global education crisis: A path to recovery. https://www.worldbank.org/en/topic/education/publication/the-state-of-theglobal-education-crisis-a-path-to-recovery
- Wright, K. O. (2017). Narrative analysis/inquiry. The International Encyclopedia of Communication Research Methods, 1-9.

APPENDICES

Appendix A: Teacher Criteria Email to Principals

Principal email about teacher profile

-Emailed to Principals only-

Hello [name of principal],

Thank you for agreeing to participate! My name is Lacy Hughes and I am the principal investigator of this research study. The purpose of this study is to explore effective instructional adaptations at the middle school level during the pandemic of COVID-19. For this research, a purposive sample is needed for the data. I am looking for a particular type of teacher. Therefore, attached to this email, you will find a profile describing the teachers I wish to interview. Due to your expert knowledge and observations of your teacher population, your guidance is necessary and important for this study moving forward. Will you please review the bulleted descriptors on the attachment, think thoroughly about your teachers, and recommend a list of participants that I may contact to invite to be a part of this research study? Please, contact me at the information below if you have any questions. I truly appreciate your time and help concerning this research study.

Thank you,

Lacy Hughes ETSU Doctoral Student and Kingsport City Schools Teacher <u>lhughes@k12k.com</u>

Appendix B: Email Invitations to Principal and Teacher Participants

Principal/Teacher Participant Invitation Email

Hello KCS Principal (insert 'Teacher' for teacher emails),

I am an Educational Leadership doctoral student at East Tennessee State University (ETSU) and a teacher in Kingsport City Schools. I am conducting a research study that involves exploring the stories of middle school teachers as they experienced and adapted to changes in instructional strategies and practices during the pandemic of COVID-19. I am looking for principals (teachers) who lead (taught) at the middle school level and have lead (taught) more than five years, specifically before and during the pandemic. Participation in this study will involve a review of a list of characteristics sought in teacher participants, provision of a recommendation list of teachers (with their emails) that meet the list of characteristics (this will be omitted for the teacher email), completion of an informed consent form, and a one-on-one interview, which should take no longer than 45 minutes to one hour (or one to two hours for teachers). The interview will take place online via Zoom in the setting of your choice. Please consider participating. Participation is completely voluntary. I will contact you within the next couple of days to check your interest in participating. If you have any questions, please contact me at https://www.lughes@k12k.com. Thank you for considering participating!

Sincerely,

Lacy Hughes ETSU Student and Kingsport City Schools' Teacher East Tennessee State University <u>Ihughes@k12k.com</u>

Appendix C: Teacher Interview Protocol

Research Teacher Interview Protocol

Welcome and PI intro...

"Hello, my name is Lacy Hughes. I am so thankful that you have volunteered to be one of the participants in my study. Thank you so very much for taking the time to meet with me!

Just a little about myself and the research...I am a teacher in Kingsport City Schools at Johnson Elementary. I have taught a variety of early childhood levels in my 17 years of experience, and am currently teaching 1st grade. I am a graduate student of ETSU and am in the doctoral program for Educational Leadership and Policy Analysis. I absolutely love learning from and collaborating with others, and that is what led me to the topic of this research project."

Quick review of research purpose...

"Just as communicated previously in the summary of research and informed consent, the purpose of this research study is an exploration into instructional adaptations during a pandemic in the area of middle school. My hope is that you are comfortable and speak freely in knowing that everything we discuss will not have any identifiers what-so-ever. If you need a break or anything throughout the interview, please let me know, and we will pause for a moment."

Participant background info...

"Let's begin with a little about you. Background information is important...so, please tell me about yourself...in which grade and content area do you teach? How many years have you been teaching? ...and anything else that you would like to share about yourself as a teacher."

Interview 'Main Body' Questions...

Essential Research Question: How did identified effective middle school teachers adapt instructional strategies and practices as a result of COVID-19?

<u>Research Question 1</u>: How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 1: Can you give me some background information about the path your school took throughout the COVID-19 pandemic?

Interview Question 2: Tell me about the instructional strategies and practices that you adapted during the beginning of the pandemic.

<u>Research Question 2</u>: What factors supported identified effective middle school teachers' instructional strategies during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 3: Please, talk with me about the different factors that you believe helped you and your adaptations be successful.

Interview Question 4: What continues to support your efforts in adapting instruction?

<u>Research Question 3</u>: What factors were barriers for identified effective middle school teachers' instructional efforts during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 5: Tell me about initial barriers to your efforts to adapt instruction.

Interview Question 6: What continues to be a barrier to your work in changing and adapting instructional practices and strategies to meet the needs of students during this time (of the continued pandemic)?

<u>Research Question 4</u>: How will identified effective middle school teachers use new learning from the experience of teaching through a pandemic?

Interview Question 7: How has the experience of teaching through a pandemic changed your teaching...what new learning have you gained?

Interview Question 8: What are strategies and practices that you plan to continue to use and adapt as you move forward?

Possible closing questions...

*Is there anything else you would like to share with me, specifically pertaining to the purpose of this study?

*Is there any other question(s) that I should ask, specifically pertaining to the purpose of this study?

Appendix D: Principal Interview Protocol

Research Principal Interview Protocol

Welcome and PI intro...

"Hello, my name is Lacy Hughes. I am so thankful that you have volunteered to be one of the participants in my study. Thank you so very much for taking the time to meet with me!

Just a little about myself and the research...I am currently a teacher in Kingsport City Schools at Johnson Elementary. I have taught a variety of early childhood levels in my 17 years of experience, and am currently teaching 1st grade. I am a graduate student of ETSU and am in the doctoral program for Educational Leadership and Policy Analysis. I absolutely love learning from and collaborating with others, and that is what led me to the topic of this research project."

Quick review of research purpose...

"Just as communicated previously in the summary of research and informed consent, the purpose of this research study is an exploration into effective instructional adaptations during a pandemic in the area of middle school. This interview will serve in triangulating the data I will collect from teacher interviews to establish and maintain trustworthiness and rigor of data analysis. My hope is that you are comfortable and speak freely in knowing that everything we discuss will not have any identifiers what-so-ever. If you need a break or anything throughout the interview, please let me know, and we will pause for a moment."

Participant background info...

"Let's begin with a little about you. Background information is important...so, please tell me about yourself...How many years have you been in education?...as a principal?...as a teacher? How long have you been in your current position?...and anything else that you would like to share about your educator history."

Interview 'Main Body' Questions...

Essential Research Question: How did identified effective middle school teachers adapt instructional strategies and practices as a result of COVID-19?

<u>Research Question 1</u>: How did identified effective middle school teachers adapt instructional strategies and practices in the changing instructional environment during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 1: Can you give me some background information about the path your school took throughout the COVID-19 pandemic?

Interview Question 2: Tell me about the instructional strategies and practices that you have observed being adapted during the beginning of the pandemic.

<u>Research Question 2</u>: What factors supported identified effective middle school teachers' instructional strategies during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 3: Please, talk with me about the different factors that you believe helped teachers' adaptations be successful.

Interview Question 4: What continues to support teacher's efforts in adapting instruction?

<u>Research Question 3</u>: What factors were barriers for identified effective middle school teachers' instructional efforts during the pandemic from the school year 2020 to the end of the next school year 2021?

Interview Question 5: Tell me about what you believe have been barriers to your teachers' efforts to adapt instruction.

Interview Question 6: What have you observed that continues to be a barrier to your teachers' work in changing and adapting instructional practices and strategies to meet the needs of students during this time (of the continued pandemic)?

<u>Research Question 4</u>: How will identified effective middle school teachers use new learning from the experience of teaching through a pandemic?

Interview Question 7: What new learning have you observed from teachers?

Interview Question 8: What are strategies and practices that you believe teachers plan to continue to use and adapt as they move forward?

Possible closing questions...

*Is there anything else you would like to share with me, specifically pertaining to the purpose of this study?

*Is there any other question(s) that I should ask, specifically pertaining to the purpose of this study?

VITA

LACY E. YORK HUGHES

| Education: | East Tennessee State University Doctor of Education of Educational Leadership and Policy Analysis, 2022 |
|--------------------------|--|
| | Milligan University Masters of Early Childhood Education, 2006 Published Thesis: The Relationship Between School Readiness and Reading Performance of Grade Two Students at a Selected Elementary School |
| | Milligan University Bachelor of Science in Early Childhood Development, 2005 Concentration in Early Childhood Education Milligan College's Female Athlete of the Year, 2004-2005 |
| | Northeast State Community College Summer Term, 2003, 2004 |
| | East Tennessee State University Summer Term, 2002 |
| Professional Experience: | Kingsport City Schools, Andrew Johnson Elementary School 1st Grade Teacher, July 2021-present |
| | Kingsport City Schools, Andrew Johnson Elementary School <i>Kindergarten Teacher, July 2019-2021</i> |
| | Kingsport City Schools, Andrew Jackson Elementary School Pre-Kindergarten Teacher, November 2017 – May 2019 |
| | Kingsport City Schools/Head Start Collaboration, Thomas Jefferson Elementary School Pre-Kindergarten Teacher, July 2009 – November 2017 |

| | Kingsport City Schools, Palmer Center |
|----------------|---|
| | Pre-Kindergarten Teacher, July 2007 – May 2009 |
| | Carter County Schools, Valley Forge Elementary School |
| | Kindergarten Interim, October 2006 – December 2006 |
| | Carter County Schools, Range Elementary School |
| | <i>First Grade Interim/PreK-8th Grade Computer Lab Interim, August</i> 2006 – September 2006, January 2007 – May 2007 |
| | 2000 – September 2000, January 2007 – May 2007 |
| | Johnson City Schools, North Side Elementary School |
| | 2 nd Grade/Kindergarten Intern, August 2005 – May 2006 |
| Presentations: | STREAMS: An Early Childhood Approach to STEM, NAEYC, |
| | Atlanta, 2017 |
| | STREAMS: An Early Childhood Approach to STEM, ETSU Early |
| | Childhood Conference, Kingsport, 2017 |
| | STREAMS: An Early Childhood Approach to STEM, LEAD |
| | Conference, Nashville, 2016 |
| | School Readiness, Week of the Young Child, Kingsport City |
| | Schools, 2014 |
| | School Readiness, TAEYC, Knoxville, 2013 |
| | |
| Awards: | Teacher of the Year, Kingsport City Schools, Andrew Johnson Elementary, 2022 |
| | |
| | Farm Bureau Teacher of the Year, Sullivan County, 2022 |
| | Teacher of the Year, Kingsport City Schools, Palmer/V.O. |
| | Dobbins, 2015 |
| | Volunteers for the Classroom Recruit of the Year, Head Start, V.O. |
| | Dobbins, 2012 |