University of Kentucky

UKnowledge

Theses and Dissertations--Educational Leadership Studies

Educational Leadership Studies

2024

LEADERSHIP STRATEGIES AND MULTI-FRAME THINKING OF RURAL SCHOOL SUPERINTENDENTS' DURING PERIODS OF CRISIS

Steven J. Moses

University of Kentucky, sjmo237@uky.edu

Author ORCID Identifier:

https://orcid.org/0009-0005-4240-4139

Digital Object Identifier: https://doi.org/10.13023/etd.2024.84

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Recommended Citation

Moses, Steven J., "LEADERSHIP STRATEGIES AND MULTI-FRAME THINKING OF RURAL SCHOOL SUPERINTENDENTS' DURING PERIODS OF CRISIS" (2024). *Theses and Dissertations--Educational Leadership Studies*. 50.

https://uknowledge.uky.edu/edl_etds/50

This Doctoral Dissertation is brought to you for free and open access by the Educational Leadership Studies at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Educational Leadership Studies by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Steven J. Moses, Student

Dr. Lars Björk, Major Professor

Dr. John Nash, Director of Graduate Studies

LEADERSHIP STRATEGIES AND MULTI-FRAME THINKING OF RURAL SCHOOL SUPERINTENDENTS' DURING PERIODS OF CRISIS

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Education at the University of Kentucky

By

Steven Moses

Lexington, Kentucky

Directors: Dr. Lars Björk, Professor of Educational Leadership

Lexington, Kentucky

2024

Copyright © Steven Moses 2024

https://orcid.org/0009-0005-4240-4139

ABSTRACT OF DISSERTATION

LEADERSHIP STRATEGIES AND MULTI-FRAME THINKING OF RURAL SCHOOL SUPERINTENDENTS' DURING PERIODS OF CRISIS

This dissertation examined the leadership strategies used by rural, public-school superintendents in the Central Appalachian region of Eastern Kentucky during and following the flood of 2022 that was considered a natural disaster. The context of this study was framed by a 1 in 1000-year flooding event that devastated school districts and communities in Eastern Kentucky. The geographic boundaries of this study were limited to school districts that were part of counties identified as "Appalachian" by the Appalachian Regional Commission (ARC). In addition, school districts in this study were also identified as rural by the National Center for Education Statistics (NCES) and the U.S. Census Bureau. Data from semi-structured interviews were coded using a two-tiered approach. A sequential, two-tiered analysis that utilized inductive coding that was followed by a deductive coding. Data were analyzed using both, based on Bolman and Deal's (2021) multi-frame thinking and Bass's (1990) model of transformational leadership. As a result of this study, there were four leadership strategies, including multi-frame thinking, identified among rural superintendents during this period.

KEYWORDS: Educational Leadership, Crisis, Appalachia, Rural, Superintendent

 Steven J. Moses
April 11th 2024

LEADERSHIP STRATEGIES AND MULTI-FRAME THINKING OF RURAL SCHOOL SUPERINTENDENTS' DURING PERIODS OF CRISIS

By

Steven Moses

Dr. Lars Björk
Director of Dissertation

Dr. John Nash
Director of Graduate Studies

Spring 2024

DEDICATION

I would like to dedicate this dissertation to those who supported me in my career. Those individuals include my grandparents, parents, wife, children, colleagues, and friends. I would not be at this point were it not for their continued love and support. Special dedication is to my mother, Vickie Hollen, and father, Bill Hollen, who gave me the confidence to complete this journey, and to my wife, Julia Moses, for her love and support of my dreams. Many individuals have supported me on this journey, and I am forever grateful for their love and support. I hope my work inspires the most important gifts in my life, my son Henry and my daughter Annalynn.

ACKNOWLEDGEMENTS

In this section, there are many individuals that I'd like to acknowledge for their love, time, understanding, and support throughout my dissertation journey. Thank you to Dr. Lars Björk, my dissertation chair, for his leadership and guidance through this process – he is a true mentor. I'd like to thank my wife, Julia Moses, for her continuous encouragement and support during these last eight years, of which, three of those she worked her way tirelessly through her own graduate studies. Thank you to my mother and father, Bill Hollen and Vickie Hollen, for their continuous love, encouragement, and value of educational attainment. In addition, I hope this work accurately reflects the pride, resilience, and fortitude of the people of Appalachia.

TABLE OF CONTENTS

AC	KNOWLEDGEMENTS	iii
LIS	T OF TABLES	ix
LIS	T OF FIGURES	X
СН	APTER ONE: INTRODUCTION	1
	Overview	1
	Statement of the Problem	3
	Purpose and Significance of the Study	4
	Research Questions	4
	Research Design	5
	Definition of Key Terms	8
	Summary	10
СН	APTER TWO: LITERATURE REVIEW	11
	Introduction	11
	Leadership vs. Management	11
	Framing and Reframing Leadership Within Organizations	14
	Structural Leadership	16
	Human Resource Leadership	21
	Political Leadership	25
	Sources of Power	26
	Coalitions	27
	Political Frame	28
	Symbolic Leadership	29
	Rituals	30
	Metaphors	30
	Humor	31
	Stories	31
	Transformational Leadership	33
	Place-conscious Leadership (PCL)	34
	Rural Superintendent	37

The Role of "Place" in Education	38
Effective Superintendents	43
Superintendent Success in Times of Crisis	49
Crisis Preparation and Management	50
Crisis Communication	50
Crisis Support	51
Summary	51
CHAPTER THREE: METHODOLOGY	53
Introduction	53
Purpose of the Study	53
Research Design	54
Qualitative Design	54
Qualitative Interviews	57
Research Setting	60
Rural Areas in the United States	60
Rural Counties in Kentucky	62
Appalachia Region of the United States	62
Appalachia Region of Kentucky	62
Rural Appalachian School Districts in Kentucky	63
School Districts Affected by the Flood of July 2022	64
Selection of Participants	64
Interview Procedures	66
Data Collection Procedures	66
Interview-Respondent Interactions	68
Researcher Positionality	68
Insider-Outsider Perspective	70
Data Analysis	71
First-cycle Coding: Tier I	71
First-cycle Coding: Tier II	72
Second-cycle Coding	74
Validity and Reliability	75

Role of the Researcher	78
Research Ethics	79
Study Limitations	79
Summary	80
CHAPTER FOUR: FINDINGS	82
Introduction	82
Pioneer Gap Schools	83
District Description	83
The Flood at Pioneer Gap	84
Human Resource Leadership	87
Multi-frame Thinking	91
Structural Leadership	93
Fostering Collaboration.	95
Crisis Management.	97
Transformational Leadership	98
Symbolic Leadership	100
Political Leadership	103
Mountain Values	105
Coal Mountain Schools	105
District Description	105
The Flood in Coal Mountain	105
Human Resource Leadership	110
Multi-frame Thinking	112
Structural Leadership	114
Fostering Collaboration.	115
Crisis Management.	117
Transformational Leadership	118
Symbolic Leadership	119
Political Leadership	122
Mountain Values	125
Hill Valley Schools	126

	District Description	126
	The Flood in Hill Valley	126
	Human Resource Leadership	129
	Multi-frame Thinking	131
	Structural Leadership	135
	Fostering Collaboration	136
	Crisis Management	138
	Transformational Leadership	139
	Symbolic Leadership	140
	Political Leadership.	141
	Mountain Values	143
	Overview of Initial Analysis	144
	Data Analysis	147
	Summary	149
CH	IAPTER FIVE: DISCUSSION AND CONCLUSIONS	151
	Introduction	151
	Multi-frame Thinking as a Leadership Strategy During Crisis	152
	Multi-frame Thinking	152
	Human Resource Leadership	155
	Structural Leadership.	158
	Fostering Collaboration	160
	Comparisons Between Rural Superintendents' Use of Multi-frame Thinking.	162
	Comparisons of Multi-frame Thinking	163
	Comparisons of Human Resource Leadership	164
	Comparisons of the Structural Frame	165
	Comparisons of Fostering Collaboration	167
	Thematic Co-occurrences.	168
	Structural Leadership and Crisis Management	168
	Human Resource Leadership and Transformational Leadership	169
	Fostering Collaboration and Transformational Leadership	170
	Implications for Leadership Practice	171

Recommendations for Future Research	173
Conclusions	174
APPENDICES	176
Appendix A: Rural Appalachian School Districts in Kentucky Impacted by	176
the Flood	
Appendix B: Superintendent Interview Protocol	177
Appendix C: IRB Approval Letter	181
Appendix D: Participant Email Flyer	182
Appendix E: Informed Consent Form	184
Appendix F: Map of Appalachian Subregions	187
REFERENCES	188
VITA	200

LIST OF TABLES

Table 1.1, Definition of Key Terms

LIST OF FIGURES

Figure 3.1, Code Landscape of Major Themes	75
Figure 4.1, Results of First-cycle and Second-cycle Coding	147
Figure 4.2, <i>Dedoose</i> -generated Code Application Chart	148
Figure 4.3, <i>Dedoose</i> -generated Thematic Co-occurrences Chart	149

CHAPTER ONE

INTRODUCTION

Overview

Between July 25 and July 30, 2022, a devastating flood ravaged the citizens of eastern Kentucky. The climatological context for this devastating flash flooding event is extremely rare. The thunderstorms caused rainfall rates of more than four inches per hour over mountainous terrain. Rainfall estimates suggest that upwards of 14-16 inches of rain fell during this five-day period, most of which occurred on the night of July 27 and into the morning of July 28 (National Weather Service, n.d.). The highest totals occurred across northern Clay and southern Owsley counties, east through southern Breathitt and northern Leslie counties, into Perry, Knott, and Letcher counties (National Weather Service, n.d.). The rainfall totals between these dates were more than 600% above normal totals. The rainfall totals of 14-16 inches from these dates were historically unheard of, and there was a less than 1 in 1,000 chance of that amount of rain falling in any given year over a four-day period (National Weather Service, n.d.). Entire homes and large sections of communities were swept away, and severe damage was done to school buildings and structures. Tragically, the flood damage led to 39 deaths and more than 600 helicopter rescues (National Weather Service, n.d.). With school scheduled to start that August, school leaders were forced to make complex decisions and adjustments under extreme situations.

The Central Appalachian region of the United States is of particular interest, not only due to the recent flood damage, but because of other cultural barriers, including low education levels, high poverty, and high unemployment. Although pockets of wealth exist

in Appalachia, the region is inhabited by large numbers of people who are retired, disabled, unemployed, and/or dependent on governmental assistance (Denham, 2016). School districts in Central Appalachia are situated in small communities with deep cultural traditions that may dispose them to work with and through others.

School superintendents are of specific interest in this study because they are expected to make decisions for multiple stakeholders in several schools and are often leaders in their respective communities. Within these communities, superintendents often serve as community leaders in a variety of roles, including chief educational officers. Adding to the complexity of their duties, superintendents in small communities have close ties to employees, many of which are friends and family to school personnel, blurring the line between professional and personal life.

Given the barriers associated with the Central Appalachian region, especially during periods of natural disasters, school district superintendents are faced with multi-level and multi-dimension crisis management and leadership problems. In these circumstances, scholars suggested that superintendents may benefit from several leadership strategies to help navigate issues ranging from internal conflicts to overcoming barriers caused by geographic isolation, high poverty, low education levels, and natural disasters. A successful strategy that may assist leaders in managing complex situations is to incorporate *multi-frame thinking*. For example, Dunford and Palmer (1995) found that management courses teaching multiple frames had a significantly positive effect on students. Their study found that 98% of their respondents rated reframing as helpful or very helpful and more than 90% felt that reframing gave them a competitive advantage. Bolman and Deal (2021) suggested that organizations that have multiple realities and a

leader who can use multiple lenses would be more likely to be more effective as compared to those who use only one perspective (Bensimon, 1989). Bolman and Deal (2021) explained *reframing* as requiring "an ability to think about situations from more than one angle, which lets you develop multiple diagnosis and strategies" (p. 6). The lack of empirical findings on superintendents' leadership strategies during periods of rapid change, particularly after natural disasters, suggests an opportunity to contribute to the knowledge base. This study is unique in time and place, given the devastating natural disaster that occurred in this area in late July 2022. The results of this study may inform aspiring and veteran superintendents of how they may work more effectively during periods of rapid change, particularly during natural disasters in rural areas in the Appalachian region.

This investigation is meant to be exploratory, both investigating and documenting school leadership immediately following a natural disaster within Central Appalachia. The circumstance brought on by a natural disaster offers specific and unique contextual realities that may differ from school to school; however, they may share similarities in how school district leaders handled the crisis. There is a paucity of research regarding how leadership is enacted in the context of natural disasters, and findings from this study may not only contribute to the knowledge base, but also may serve as the foundation for future research on crisis leadership in rural school districts (Tracy, 2020).

Statement of the Problem

Given the unique opportunity to investigate leadership practices under extreme change, such as in the aftermath of a natural disaster, it would be difficult to overemphasize the importance of this leadership study. Further, leadership has profound

impacts on schools ranging from logistical considerations (structural), such as staffing and procedures, to conceptual considerations, such as goals and culture, all of which are impacted by superintendents. As such, there is value to be found in studies that increase understanding of school leadership in Central Appalachia, particularly regarding the unique challenges brought by a natural disaster.

Purpose and Significance of the Study

This study offers the potential to provide superintendents, and other school leaders, with multiple models for how to solve complex issues within their organization and make use of multi-frame thinking as a strategy during periods of rapid change. In addition to superintendents, it may inform principals on how to approach difficult problems within their own school buildings. While other school leaders may use different approaches to develop the personal leadership capacities of staff, the way that superintendents use multi-frame thinking can influence how school leaders develop their own personal capacities (Huggins et al., 2016).

Findings from this study may also provide a basis for future crisis management and leadership studies that may focus on the use of multi-frame thinking among rural school district superintendents. In addition, findings may also inform professional development for school district superintendents focused on crisis management and leadership under conditions created by natural disasters.

Research Questions

This exploratory, qualitative study was guided by two overarching research questions. The primary focus was on understanding the leadership strategies of rural

public-school superintendents during a crisis event in the Central Appalachian region of Eastern and Southeastern Kentucky. These questions include the following:

- 1. How do superintendents use multi-frame thinking while working within their districts during periods of uncertainty and change, particularly during and after a natural disaster?
- 2. Are there similarities in how rural school district superintendents use multiframe thinking during periods of uncertainty and change, particularly during and after a natural disaster?

Research Design

This exploratory study utilized a qualitative design. Specifically, qualitative research designs utilized in-depth, semi-structured interviews that provided opportunities for rich data collection. Interviews provide a rich and indispensable source of knowledge about phenomena (Brinkmann, 2013). The qualitative, semi-structured interviews provided the researcher with descriptions of events relating to the research question, including multi-frame thinking during periods of extreme crisis.

The recruitment pool included superintendents of Kentucky school systems that are within the parameters of NCES's (2019) definition of *rural* and are in the Appalachian region as designated by the Appalachian Regional Commission (ARC). The geographical criteria for this study were bound by the Central Appalachian regional counties in the state of Kentucky as defined by the ARC (ARC, n.d.). The following Kentucky counties are within the geographical region as defined by the ARC: Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan,

Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe (ARC, n.d.).

A purposive sample was selected that included participants who have superintendent certification and currently serve as a superintendent in a public school within a rural area in the Central Appalachian region of Kentucky. Purposive sampling also included those most affected by the devastation caused by the flood. According to the National Weather Service (n.d.), the counties that received the most catastrophic damage included Perry, Clay, Owsley, Knott, and Letcher counties. Superintendents from school districts within these counties were asked to participate in the study. A *snowball sampling* method was used, wherein participants recommended and referred others who should be interviewed (Fraenkel et al., 2019). No retired superintendents were interviewed in this study.

Given the unique circumstances of the flood, in-depth interviews were more appropriate for collecting information directly from superintendents in school districts that were most affected by this natural disaster. Qualitative interviews were conducted and enabled the researcher to gain a deep, personal understanding of events from the perspective of the superintendents' lived experiences that would not be possible using other methods, such as questionnaires. Consequently, semi-structured interviews were used, which allowed the researcher to incorporate a combination of open-ended and follow up questions focused on answering the research questions that guided the study. In addition, in-depth, semi-structured interviews facilitated the researcher and participants in establishing mutual trust, candor, and reciprocity, which enhanced the quality of data

collected. Engagement relies on a *give and take* between the researcher and participants and occurs in a communicative space (Fraenkel et al., 2019).

Superintendents in the Appalachian region of Kentucky might have been hesitant to divulge information to "outsiders" and to those who may not be knowledgeable of the region's culture. The researcher is not an "outsider," rather, the researcher is a tenth-generation Appalachian, and was born, educated, and currently employed in the region. Importantly, the researcher understands the cultural norms, language, and context of Appalachia. The researcher's background and knowledge may have contributed to participants being more responsive and perhaps led to collecting richer data.

After the interviews were completed, a two-tiered approach was used to analyze the data, which included inductive open-coding and deductive *a posteriori* coding (Saldaña, 2021). Inductive coding allows the researcher to organize and conceptualize data spontaneously, creating original codes. Inductive coding is data-driven, which offers insight without preconceptions and extracts categories without a framework (Saldaña, 2021). After the initial analysis, the second tier utilized two frameworks: a) Bolman and Deal's (2021) leadership frames; and b) Bass's (1990) model of transformational leadership. The second-tier coding analysis guided the data to specifically address the research question(s). Provisional coding was also used to revise, modify, delete, or expand additional codes, depending on the results of the analysis (Saldaña, 2021). *Dedoose*, a computer-assisted qualitative data analysis system (CAQDAS), was used to further assist with data analysis.

Definitions of Key Terms

For this study, key terms are important to understand the context, content, and focus of the consequent chapters in greater detail. The terms are research-based and are found in the following table.

Table 1.1

Definitions of Key Terms

Term	Definition
Appalachia	Appalachia is the region in North America, usually
	mountainous, that extends from the southernmost counties in
	the state of New York southward and westward, stretching
	into northeastern Mississippi (ARC, n.d.).
Leadership	Rost (1991) defined leadership as "an influence relationship
	among leaders and followers who intend real changes that
	reflect their mutual purposes" (p. 102). Educational leaders
	use influence to effect lasting change in school organizations.
Management	Koontz and Weihrich (2010) described management as
	creating an environment in which individuals work
	collaboratively to efficiently accomplish goals. Fayol (1949)
	defined management as efforts to predict, plan, organize,
	command, coordinate, and control employees or subordinates.
Rural	The National Center for Education Statistics (NCES) defined
	a school district using four different urban-centric locale
	codes: city, suburb, town, and rural. Rural includes three
	different classifications: fringe, distant, and remote. Rural
	remote is a census-defined rural territory that is more than 25
	miles from an urbanized area and also more than 10 miles
	from an urban cluster (NCES, n.d.). The U.S. Census Bureau
	defined rural using two classifications: mostly rural and
	completely rural (U.S. Census, 2023).

Table 1.1 (continued)

Term	Definition
Superintendent	For this study, <i>superintendents</i> serve in public-schools in the
	United States. Superintendents are responsible for carrying
	out state education rules, regulations, policies, and local
	school board directives. The superintendent's roles include
	teacher-scholar, business manager, democratic leader, applied
	social scientist, and effective communicator (Kowalski &
	Björk, 2005).
Flood	For this study, flood refers to the severe flooding event
	occurring in the following Kentucky counties: Clay County,
	Owsley County, Breathitt County, Leslie County, Perry
	County, Knott County, and Letcher County between July 25,
	2022 and July 30, 2022. Between 14-16 inches of rain fell
	during those dates, resulting in a 1 in 1,000-year flooding
	event (National Weather Service, n.d.).
Multi-Frame Thinking	Bolman and Deal (2021) described multi-frame thinking as the
	"ability to think about situations from more than one angle,
	which lets you develop multiple diagnoses and strategies" (p.
	6). Mental models, or frames, are defined as a set of ideas and
	assumptions that leaders can use to understand or negotiate a
	particular issue or sets of issues.
Culture	Schein (1992) defined culture as "a pattern of shared basic
	assumptions that the group learned as it solved its problems of
	external adaptation and internal integration, that has worked
	well enough to be considered valid and, therefore, to be taught
	to new members as the correct way to perceive, think, and feel
	in relation to those problems" (p. 12).

Table 1.1 (continued)

Term	Definition
Transformational	A transformational leadership model places significant
Leadership	emphasis on a) expansion of followers' needs; b) exceeding
	followers' self-interests; c) elevation of followers' need to
	increase to a higher Maslow level; d) building confidence in
	followers; e) elevation of followers' subjective probability of
	success; and f) elevation of value of designated outcomes for
	followers (Bass, 1990).

Summary

This chapter provided an overview of this exploratory study of school district superintendents' management and leadership during a natural disaster affecting rural, Appalachian public school districts in Eastern Kentucky. This study contributed to the knowledge based on rural superintendents and their use of multi-frame thinking as a leadership strategy during and after a natural disaster.

Chapter Two presents an overview of the scholarly literature relevant to the study of superintendent leadership in the Central Appalachia region in the State of Kentucky during a natural disaster. It discusses superintendent leadership and management roles and organizational leadership theory that may help explain how they enacted their roles during and after a catastrophic natural disaster. Chapter Three presents a discussion of the research methodology, research setting, sample size, data collections and data analysis procedures, as well as the role of the researcher. Chapter Four presents the findings of the study, and Chapter Five discusses and summarize the findings and provides recommendations for further research.

Copyright © Steven Moses 2024

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter includes a discussion of leadership and management, reframing leadership within organizations, an overview of Bolman and Deal's (2021) four leadership frames, and transformational leadership. The chapter also includes background information regarding superintendent leadership, specifically superintendent success during times of crisis, the role of place in education and place conscious leadership.

Leadership vs. Management

Although the foremost speaker on the topics of leadership and change, John P. Kotter, expressed a clear distinction between leaders and managers, education scholar, Howard Gardner, was hesitant to contrast them in a similar fashion. However, Gardner did claim that leaders have a farther-reaching vision and influence in comparison to managers (Bolman & Deal, 2021). Bolman and Deal (2021) offered further insight into the complexity of leadership. They asserted five ideas to represent the evolution of leadership: a) leadership is an activity, not a position; b) leadership *is* different from management; c) leadership is multi-lateral, not unilateral; d) leadership is distributed rather than centralized at the top; and e) leadership is contextual and situated not on the leader, but in the exchange between the leader and the follower.

Early theorists defined the act of leadership as occurring only when the manager makes a follower do what the follower would not have otherwise done. Consequently, these early scholars viewed management and leadership as synonymous. Leadership theorists from the 1930s long instilled the values from the industrial model into their

understanding of leadership, often equating leadership with good management (Rost, 1991). Contrarily, Burns (1978) defined leadership as occurring when leaders "induce followers to act for certain goals that represent the values and motivations—wants and needs, the aspirations and expectations—of both leaders and followers" (p. 17).

Rost (1991) claimed leadership and management are mutually exclusive. Under Rost's theories, the new definition of leadership included the idea that influence is multidirectional and noncoercive. If a *leader* attempts to use coercion or communicates and delegates using only vertical processes, the leader is *not* a leader and is merely a *manager* (Rost, 1991). He further claimed that those in an authority position are automatically managers due to the simple definition of *manager*—a person who holds a position of authority (Rost, 1991). A leader, however, does not require an official position of "authority." Leaders can be followers, and followers can be leaders. For example, if managers view themselves as solely managers, they cannot be followers, and therefore they cannot be leaders. Naturally, however, the influence patterns remain unequal, giving more influence to the leader. This "new" definition of leadership includes the idea that leaders and followers develop mutual purposes. Rost (1991) summarized the relationship between leaders and followers emphasizing four characteristics:

- 1) The mutuality of these purposes is forged through the noncoercive, influence relationships;
- 2) These are purposes, not goals. Purposes are more overarching and holistic than goals, and they are less oriented to qualification. Purposes allow for the development of more mutuality; goals tend to be more fixed and rigid;
- 3) The leaders and followers reflect, not realize, their purpose;
- 4) Mutual purposes become common purposes because followers and leaders engage in leadership together. Independent goals mutually held do not qualify for what is meant here as mutual purposes. Mutual purposes are common purposes held by a community of believers. (p. 123)

Conversely, management theory takes no consideration of subordinates and focuses only on what the manager does. Management does not include the actions of the subordinate regarding the goals or purpose. Therefore, management characteristics are inherently different and contrast with Rost's "new" definition of leadership (Rost, 1991).

Rost's (1991) notion of leadership represents a significant paradigm shift within leadership theory. Rather than focus on managerial characteristics such as goal achievement and producing a good/service, the postindustrial school of leadership focuses on intending change as a primary social process. Rost (1991) took it further and claimed that the shift could help people transform their societies. Given the drastic changes in technology, culture, and society, a postindustrial school of leadership could help people change the paradigm governing their society and hopefully solve some of the problems left over from the industrial era. The shift represents a transition from management and leadership being viewed as complementary, to being viewed as inherently separate, distinct, and even mutually exclusive (Rost, 1991).

Rost's (1991) post-industrial definition of leadership utilized the impact of relations on leadership. McGregor (1960) confirmed Rost's (1991) notion that postindustrial leadership not only utilizes relationships in leadership, but that relationships are required. Theory "Y" further supported Rost's and McGregor's notion (Rost, 1991). Theory "Y" was based on nurturing identification of, and commitment to, mutual objectives and purposes, as well as building mutual respect and trust. Building trust and confidence between all levels of employees including friendly supervisor-subordinate interactions is an integral component of the new definition of leadership. Similarly, multidirectional relationships allow anyone to be a leader and/or follower.

These relationships can be formed in small groups, large groups, and departmental groups, and can be based on many different characteristics (Rost, 1991).

Framing and Reframing Leadership Within Organizations

Bolman and Deal (2021) described reframing as the "ability to think about situations from more than one angle, which lets you develop multiple diagnoses and strategies" (p. 6). Goran Carstedt, a successful executive for Volvo, argued that leaders and managers must have a mental model approach to solving complex problems in organizations and the mental model needs to be fluid and adaptable (Bolman & Deal, 2021). *Mental models*, or *frames*, are defined as a set of ideas and assumptions that leaders can use to understand or negotiate a particular issue or sets of issues. Frames can serve as filters or maps that help navigate, solve problems, and accomplish goals (Bolman & Deal, 2021).

The need for multiple frames has arisen because organizations have become extensive and dominant, leading them to become harder to manage and understand (Bolman & Deal, 2021). Providing leaders with four diverse leadership frames offers leaders a more complete idea of what is happening in an organization and how to react. Bolman and Deal (2021) reflected on the recent COVID-19 pandemic:

Think of the enormous differences in levels of suffering and death between the relatively few countries that contained the COVID-19 pandemic effectively, and the many that did not. Our basic premise is that the primary cause of managerial failure is faulty thinking rooted in inadequate ideas and truncated possibilities. Managers and those who try to help them too often rely on narrow models that capture only part of organizational life. (p. 23)

When the world seems chaotic, hopeless, and confusing, reframing is a powerful tool to gain perspective, obtain clarity, generate new questions, and find solutions that actually make a difference (Bolman & Deal, 2021). Learning multiple leadership

perspectives can serve as a defense against crisis situations. Each frame can serve multiple functions, including preventing myopic leadership. Ineffective management and leadership can occur in small or large organizations and during subtle crisis events or blatant catastrophes (Bolman & Deal, 2021).

Past research on leadership framing related to leadership effectiveness indicated that managers often use only one or two frames, but more effective leaders use three or more (Tan et al., 2015). Bensimon et al. (1989) suggested that the ability to apply multiframe/reframe thinking reflects a higher level of cognitive ability. Leaders' thinking is directly correlated with leadership effectiveness and using multi-frame alignment yields effective results. Successful leaders may utilize different frameworks depending on circumstance and "will need multiple tools, the skill to use them, and the wisdom to match frames to situations" (Tan et al., 2015, p. 1). The value of using multi-frame thinking occurs when leaders can adapt their leadership styles to the context in which they are functioning. "Leadership styles are approaches to guide people," which should vary depending on situation, task, or circumstance (Tan et al., 2015, p. 1).

There are numerous organizational theories leaders can use to make decisions and solve complex issues. Bolman and Deal's (2021) four-frame model is especially appropriate for the current study due to its past applications in educational leadership. However, most applications have been applied within the context of higher education administration (Tan et al., 2015). Therefore, a significant gap in the literature exists within educational leadership that explores the application of multi-frame thinking of school district superintendents within the context of public schools in Appalachia, particularly during periods of a crisis event. Bolman and Deal's (2021) four leadership

frames are discussed in the following sections and include structural leadership, human resource leadership, political leadership, and symbolic leadership.

Structural Leadership

Viewing problems through a structural lens provides leaders with analysis focusing on hierarchical structures and clearly defined roles. If organizations fail to establish and assign key responsibilities, a loss of production could result. Bolman and Deal (2021) stated that having a standard operating procedure (SOP) helps to reduce the variance in routine tasks and allows for consistency among the organization. Well-defined lines of authority, communication, responsibilities, and relationships improve organizational performance. Specifically, within education, structural analysis can be synonymous to systems analysis. Establishing policies, or systems, is an effective way to ensure efficiency and effectiveness. Early organizational theorists suggested that organizational efficiency is the essence of organizational rationality, and the goal of rationality is to increase the production goods and services (Shafritz et al., 2014). Similarly, modern structural theory suggests organizations should put people in the right roles to achieve the organizations goals. Bolman and Deal (2021) identified six assumptions associated with the structural frame:

- 1) Organizations exist to achieve established goals and objectives and devise strategies to reach those goals;
- 2) Organizations increase efficiency and enhance performance through specialization and appropriate division of labor;
- 3) Suitable forms of coordination and control ensure that diverse efforts of individuals and units mesh;
- 4) Organizations work best when rationality prevails over personal agendas and extraneous pressures;
- 5) Effective structure fits an organization's current circumstances (including its strategy, technology, workforce, and environment);
- 6) When performance suffers from structural flaws, the remedy is problem solving and restructuring. (p. 50)

Successful structuralists share common characteristics: a) they do their homework; b) they rethink the relationship of structure, strategy, and the environment; c) they focus on implementation; and d) they experiment (Bolman & Deal, 2021). If production or performance issues exist within an organization, a successful structuralist would rely on a system design or redesign of the organization for possible solutions. Structural leaders must deal with multiple influences, both inside and outside the organization. Internal and external environments can impact organizational structure; however, the degree to which they are influenced is highly variable. Although the external environment can threaten the efficiency of the organization, successful structuralists anticipate and insulate their systems from external factors (Bolman & Deal, 2021). Some organizations are more influenced by external factors than others. Public schools, for example, tend to be more impacted by external factors than private companies due to a reliance on public funding and their obligation to educate all students.

Historically, most organizations have been heavily influenced by the industrialists of the 19th and 20th centuries, largely relying on hierarchical authority and vertical integration to ensure efficiency (Bolman & Deal, 2021). Companies during the industrial period relied on formal authority and centralized structures. Decentralized structures were viewed as uncertain, risky, and susceptible to conflict. German sociologist Max Weber argued that hierarchy and bureaucracy serves as an "official jurisdiction" for managers (as cited in Shafritz et al., 2014). Early organizational theorists suggested authoritative managers ensure the actions of the employees are aligned with the vision and goals of the organization (Bolman & Deal, 2021). Bolman and Deal (2021) posited that "the work of industrial analysts were focused largely on designing organizations for maximum efficiency" (p. 50).

Industrialists stressed that an efficient organization must include a hierarchical chain of command with superiors possessing legitimate authority to direct the behavior of superiors at lower levels. Thus, the organization is most effective when employees are subordinate to superiors.

Early industrial theorists explicitly linked authority to legitimacy and claimed that managers must provide direction to ensure that goals are met. Max Weber noted the requirement of rules within organizational hierarchy claiming officials are not limited to policy to influence compliance, which exist at the disposal of the official (as cited in Shafritz et al., 2014). Weber further described *monocratic bureaucracy*:

[It is an] ideal form that maximized efficiency . . . and outlined several major features: a) a fixed division of labor; b) a hierarchy of offices; c) a set of rules governing performance; d) a separation of personal from official property and rights; e) the use of technical qualifications (not family ties or friendship) for selecting and promoting personnel; and f) employment as primary occupation and long-term career. (as cited in Bolman & Deal, 2021, p. 51)

Within the structural frame, rules and policies govern the way employees complete tasks so that behavior is consistent and predictable (Bolman & Deal, 2021). Rules provide a standard operating procedure within an organization and strive to prevent digression from the objective.

Modern structuralists would argue rules and processes that are too rigid and lack differentiation and integration can be counterproductive to organizations. Therefore, Bolman and Deal (2021) suggested employing a variety of methods to coordinate efforts to connect plans to goals. Vertical coordination is effective if the environment is stable and there is minimal uncertainty. However, effectiveness relies on employees' willingness to be led and is better suited for smaller organizations (Bolman & Deal, 2021). Conversely, lateral

coordination is generally more flexible than authority-bound systems and are better suited for complicated tasks.

A more contemporary view of the structural frame aims to consider not just employees of the organization, but also the "social architecture of the work" and goes beyond simple bureaucratic hierarchy (Bolman & Deal, 2021, p. 72). The structural frame exists to consider both the loosely connected entrepreneurial business and also the tightly controlled, centralized organization allowing for application in a wide variety of public and private organizations. However, successful implementation of the structural frame depends on the inclusion of both differentiation and integration. The work can be divided by creating specialized roles with unique functions. Organizations must use both vertical and horizontal procedures to mesh the elements together and, according to Bolman and Deal (2021), the "right structure depends largely on the organization's goals, strategies, technology, people, and environment" (p. 72).

The structural frame has been applied to organizational for more than a century. The emphasis of formal roles, formulation of rules, division of labor, and focus on policy allow the structural frame to be applied to many different organizations, including schools. The structural frame may have its foundations firmly rooted in the industrial era, but the adaptations and the integration of lateral coordination has allowed application to be transplanted to a variety of organizations. One of the strengths of the structural frame is that a team of leaders can design and restructure large or small organizations to meet their specific needs. Additionally, the structural frame is, at its core, results driven. The frame's ultimate objective is effective goal or product realization.

There is no single, superior approach to structural leadership. Therefore, trial and error may be needed to find the appropriate method. Structural leadership is not without its risks. Implementation of the structural frame may lead to autocratic management, if poorly instituted. Additionally, restructuring using the structural frame can be challenging simply because change in any context can be difficult. Leaders who fail to acknowledge the potential resistance may be ill-prepared to create buy-in. Understanding external factors and internal resistance helps to overcome issues of organizational inertia.

Successful application of the structural frame relies on the ability and willingness to restructure, making it difficult to implement. Organizations may experience environmental shifts, technology changes, growth, or leadership changes that require structures to be changed. For example, organizations that once relied on a simple hierarchy may need to adopt a more complex structure, or an older organization may become bureaucratically stagnant due to outdated information systems that fail to detect the need for change. Furthermore, a loosely connected organization may lack strategy and/or leadership and become a "headless giant," thereby leading to dysfunction (Bolman & Deal, 2021). For that reason, the solution to a problem may involve analysis of a more unpredictable variable. A weakness of the structural frame is its lack of emphasis on the human dimension in an organization.

Like other public agencies, schools are predisposed to rigid hierarchical structures.

As Moeller (1964) posited, teachers in bureaucratic school systems were significantly higher in a sense of power than those in less bureaucratized systems. The findings were in opposition to the study's original hypothesis stating, "bureaucracy in school system organization induces in teachers a sense of powerlessness to affect school system policy"

(Moeller, 1964, p. 145). Establishing a system for procedures is paramount to efficiency and effectiveness in complex organizations such as public schools. The ability to learn how and when superintendents view issues through a structural frame provides insight to how often they rely on systems and structures to analyze and respond to organizational inefficiencies.

Human Resource Leadership

Human resource leadership evolved from founding theorists such as Mary Parker Follett and Elton Mayo, who questioned long-standing management theories involving the rights of employees (as cited in Bolman & Deal, 2021). Follett and Mayo criticized pre-existing management theory because a) it was unfair; and b) it was bad psychology (as cited in Bolman & Deal, 2021, p. 117). Early pioneers of human resource leadership claimed that people's skills, energy, attitude, and dedication are important organizational resources (Bolman & Deal, 2021).

Unlike the structural frame, which relies on structure and defined policies and/or systems, the human resource frame forces leaders to focus on the people in the organization. The human resource frame assumes that organizations exist to serve humans and those organizations need people to provide ideas, energy, and talent (Bolman & Deal, 2021). Improving the effectiveness and efficiency of organizations is largely based on meeting the needs of the people, but also achieving goals and producing a quality product or service. The human resource frame is built on four assumptions, as outlined by Bolman & Deal (2021):

- 1) Organizations exist to serve the human needs rather than the converse;
- 2) People and organizations need each other. Organizations need ideas, energy, and talent; people need careers, salaries, and opportunities;

- 3) When the fit between individual and system is poor, one or both suffer. Individuals are exploited or exploit the organization or both become victims; and
- 4) A good fit will benefit both. Individuals find meaningful and satisfying work, and organizations get the talent and energy they need to succeed. (p. 121)

The human resource frame views people as the primary basis for productivity and thus the most important form of capital (Bolman & Deal, 2021). Understanding an organization's most important source of production begins with employee needs. Some theorists have claimed that employee needs are inherently vague and too broadly defined and therefore cannot adequately explain behavior. Other theorists, such as psychologist Abraham Maslow (1947), suggested that needs are a vital aspect of motivation (as cited in Bolman & Deal, 2021). Maslow claimed that certain needs must be satisfied before pursuing higher levels of need. Physiological needs such as food, shelter, and water, must be satisfied before individuals require and pursue more advanced needs, such as social belonging, esteem, and self-actualization (Bolman & Deal, 2021). McGregor (1960) expanded on Maslow's work by identifying two conflicting sets of managerial assumptions: Theory X and Theory Y (Bolman & Deal, 2021). Theory Y claims that employees have needs that can be aligned to managerial needs, thereby permitting employees to be self-directed (Bolman & Deal, 2021). Theory X assumes employees are lazy, have no ambition, and are resistance to change, thereby requiring managers to use threats, punishments, or conflict to gain compliance (Bolman & Deal, 2021).

Like McGregor, American business theorist, Chris Argyris (1957, 1964), saw a conflict between human personality and management practice (as cited in Bolman & Deal, 2021). Argyris claimed that people have motivational *trends* over time and most organizations treat their employees like infants rather than adults. Within human resource leadership, lack of motivation can cause deficits in production and failure to meet goals.

In public education, teachers and parents claim that increasing emphasis on standardized tests demotivates teachers and turns them into "skill clerks" (Bolman & Deal, 2021, p. 132).

Experimental psychologist Norman Raymond Frederick Maier (1955) posited that "Performance = Ability x Motivation." If employees have both talent and desire, they will do well (Bolman & Deal, 2021). An outdated view of organizational theory claimed employees are mainly motivated by a form of compensation (as cited in Bolman & Deal, 2021, p. 119). However, compensation is only a small part of the equation. Herzberg (1966) argued a "two factor" theory: extrinsic factors such as working conditions, money, and policies, can impact an employee's happiness, but they are not the main sources of motivation (Bolman & Deal, 2021, p. 121). Rather, Herzberg (1966) claimed true motivation is intrinsic to the work itself, including factors such as achievement, recognition, impact, and responsibility (Bolman & Deal, 2021, p. 120-122). Prior to understanding motivation, however, leaders must understand employees' individual and collective needs they bring to the workplace.

The human resource frame relies on the fit between the organization and the employee. When the fit between the individual and the organization is poor, both will suffer (Bolman & Deal, 2021). Similarly, when there is a good fit between an individual and an organization, both will benefit from having their needs met.

Human resource leadership focuses on relational influence rather than authority influence. Perhaps the greatest strength of the human resource frame is the ease of application to K-12 public education. Schools exist to serve others; citizens need schools and schools need citizens. To effectively provide a service, instructionally or otherwise,

teachers must understand the needs of their students. Similarly, administrators, including superintendents, must understand teacher needs so they can provide services to their students effectively. Perhaps no other organizations are as dependent on understanding human needs than public schools.

Celebrating student and teacher successes, recognizing hard work and sacrifice, and creating a positive culture, are effective ways to motivate teachers, correlating with the tenets found in the human resource frame. Human resource leaders strive for individuals to feel empowered. Empowered employees are more likely to take ownership of problems that may inhibit organizational goals. When employees feel invested, they may be motivated to go beyond what is required and allow for the release of untapped potential.

Human resource framework requires leaders to have a deep understanding of both the organization and the individuals to best utilize strengths. Understanding employee needs can be a time-consuming process. One of the weaknesses of the human resource frame is the time required to apply the result. For example, education is changing rapidly, and one of the recent changes has been the increase in turnover and/or teachers leaving the profession. Increased turnover and rapid personnel fluctuations reduce the chance for administrators to analyze and respond to the needs of employees (Bolman & Deal, 2021). Unfortunately, understanding the needs of employees does not solve all organizational problems. Inevitably, organizations will experience some level of conflict. Conflict leads to power struggles, and power struggles will inevitably involve politics.

Political Leadership

Bolman and Deal (2021) contended that political leaders view organizations as "roiling arenas, hosting ongoing contests of individuals and interest groups" (p. 188). Specifically, Bolman and Deal (2021) asserted five assumptions related to the political frame:

- 1) Organizations are simply coalitions made up of many people with different needs and interests;
- 2) Individuals and groups have differences regarding their values, preferences, beliefs, information, and perceptions and changing those perceptions and beliefs occurs very slowly;
- 3) Most decisions involve allocation of resources in some way;
- 4) Due to scarce resources and enduring differences, conflict is inevitable. In turn, power becomes the most important resource; and
- 5) Bargaining and negotiation are central to organizational goals among competing stakeholders jockeying for their own interests. (p. 50)

The political frame is counter to the idea that organizations are restrained by authority, rules, systems of policies, and behavioral norms because those ideas are unrealistic and not practical (Shafritz et al., 2014). Rather, organizations are conglomerates of coalitions represented by various interests and those coalitions have competing values, beliefs, information, and perceptions of reality (Bolman & Deal, 2021). The political frame views the different coalitions as groups that compete for the allocation of scarce resources. Scarce resources and differences between coalitions put conflict at the front and center of organizations, thereby making power the most important asset (Shafritz et al., 2014). Bolman and Deal (2021) claimed that goals and decisions within an organization result from negotiations between coalitions vying for their positions. Therefore, bargaining and negotiation become skills necessary for successful political leaders.

The political frame is not focused on resolving conflict, but rather developing strategies and tactics necessary to manage it. Inevitably, conflict will emerge in organizations, especially when resources are scarce. Bolman and Deal (2021) viewed conflict in three ways: a) vertical; b) horizontal; and c) cultural (p. 202). They claimed that vertical conflict will occur between different levels of authority, "Horizontal conflict will occur between departments or divisions and cultural conflict will develop between individuals with differing values, beliefs, and traditions" (Bolman & Deal, 2021, p. 202). Rather than view conflict as negative, political leadership sees an opportunity to "challenge the status quo" and pique interest, thus spawning innovation and change (Bolman & Deal, 2021, p. 204). However, too much conflict within an organization can inevitably create additional barriers, including struggles to obtain power.

Sources of Power

Power can be viewed from the perspective of the authority (manager) or of the subordinate (employees). As scholar William Gamson noted, managers seek to impart downward power to employees, while employees use lateral power to impact their own self-interests (Bolman & Deal, 2021). Sources of power within organizations may include reward power, coercive power, position power, personal power, and expertise power.

Reward Power. Reward power occurs when a manager can offer money, political support, public praise, or other extrinsic rewards to subordinates. Reward power is more effective when the reward is valued by the subordinate. However, as with any extrinsic motivation, overuse can be counterproductive.

Coercive Power. Coercive power is the ability for a manager to punish or constrain, and while this may be effective, it is only effective in the short term. Coercive

power can often have negative results, such as employees being fearful or alienated, which can lead to low performance (Bolman & Deal, 2021).

Position Power. *Position power*, or legitimate power, is usually associated with an office, and the authority is a direct result of the position.

Personal Power. Personal power refers to the power that one holds because others strive to emulate them in some way due to personal qualities of individuals, such as charisma, energy, creativity, or intelligence. Personal power can lead to loyalty, commitment, and trust. Although it is effective, personal power is not easily obtained. Effective personal power requires multiple sources of influence, including a) charisma; b) specialized training; c) education and experience; and d) possessing jurisdictional authority. Having the ability/opportunity to institute these influences would no doubt lead to being a very successful leader (Bolman & Deal, 2021).

Expertise Power. *Expertise power* occurs when a person has the knowledge or ability to solve specific problems, and includes skills such as persuasion, credibility, and technical knowledge (Bolman & Deal, 2021).

Scholars Clayton Alderfer and L. David Brown claimed power is distributed in two systems, *overbounded* and *underbounded* (as cited in Bolman & Deal, 2021). "In an overbounded system, power is highly concentrated, and everything is tightly regulated. In an underbounded system, power is diffused, and the system is very loosely controlled," which could lead to the rise of coalitions (Bolman & Deal, 2021, p. 200).

Coalitions

Coalitions are defined as alliances of individuals or groups with a shared goal, who work together to achieve said goal. Interest groups, similarly, may be focused on a

single goal or multiple goals, but exist to ensure their goals are achieved (Bolman & Deal, 2021). Public schools include a wide range of coalitions, both internal and external, and can include students, parents, community members, businesses, and teacher/educator associations. Within coalitions, differences among members can cause conflict.

Coalitions can be complex, wherein members have differing values, like most organizations. Successful coalitions can be more successful if members set aside their differences to focus on achieving their goals. Coalitions can only exist if they offer sufficient incentives to keep members unified (Bolman & Deal, 2021).

Political Frame

A strength of the political frame is that goals are not set at the top, but evolve through an ongoing process of negotiation and bargaining (Bolman & Deal, 2021). This process is especially applicable in education. Educational systems do not have a unitary apex; rather, numerous executives—principals and superintendents—exist. Even more complex is the relationship between executive(s) and the school board. The school board, in turn, is elected and accountable to stakeholders, such as citizens and taxpayers. A coalition of stakeholders, including teachers, students, parents, taxpayers, administrators, and board members, all work together to create common goals. Inevitably, conflict can arise when many factions are forced to collaborate. Although the political frame accepts conflict, conflict is not easy to navigate. Success is dependent on the environment and resources for support.

Central to the political frame is the acceptance of conflict within organizations.

The political frame forces leaders to view conflict as a tool, rather than a detriment. The manager-politician, therefore, uses power and conflict as change agents, turning a

negative into a positive. Rather than attempt to *solve* conflict, a political leader *manages* the conflict. Although effective, the ability to use power and conflict to advance the organization requires a leader to set agendas, navigate conflict and power, build coalitions, and be a skilled negotiator. Additionally, if conflict within the organization is poorly managed, destructive power struggles could emerge resulting in chaos. Furthermore, using political leadership as a strategy could result in mixed perceptions of authority, depending on the extent to which values and morals were applied.

Symbolic Leadership

Within symbolic leadership, the *meaning* of what occurs can be more significant than what actually occurs. Interpretations of events are subjective because individuals experience situations with their own perspective. Bolman and Deal (2021) suggested the following five assumptions associated with symbolic leadership:

- 1) What is most important about any event is not what happens but what it means;
- 2) Activity and meanings are loosely coupled; events and actions have multiple interpretations as people experience life differently;
- 3) Facing uncertainty and ambiguity, people create symbols to resolve confusion, find direction, and anchor hope;
- 4) Events and processes are most often more important for what is expressed than for what is produced. Symbols form an array of secular myths, heroes and heroines, rituals, ceremonies, and stories to help people find purpose and passion; and,
- 5) Culture forms the superglue that bonds the organization, unites people, and helps an enterprise accomplish desired ends. (p. 254)

Symbols can be a source of strength, resilience, hope, and faith, which can influence cultures within organizations (Bolman & Deal, 2021). Schein (1992) defined culture as:

A pattern of shared basic assumptions that a group learned as it solves problems of external adaptation and integration, that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (pp. 257-258)

Culture is both a product and a process. As a product, it symbolizes the knowledge of accumulated experiences. As a process, symbols can be recreated and passed from members to members and transferring meaning and emotion (Bolman & Deal, 2021). Through time, organizations develop symbols, beliefs, and values. Leaders who understand the importance of symbols and how symbols can evoke emotion can inspire and shape effective organizations (Bolman & Deal, 2021, p. 258).

Rituals

Sally Falk Moore and Barbara Meyerhoff (1977) defined a *ritual* as a routine that has a statable purpose and alludes to more than it says, and has multiple meanings (as cited in Bolman & Deal, 2021). A ritual can connect individuals and groups to powerful emotions, much deeper than words can capture. Different kinds of rituals can be created to serve multiple purposes, providing structure, and meaning to day-to-day events. Rituals commonly serve as foundations for various ceremonies such as weddings and funerals. Rituals are also established in businesses and organizations in the form of meetings, professional development, and hiring practices. Bolman and Deal (2021) noted that rituals serve four major roles: a) they socialize; b) they stabilize; c) they reassure; and d) they convey messages (p. 255). Within organizations, rituals help provide certainty, consistency, and meaning (Bolman & Deal, 2021).

Metaphors

Metaphors exist within symbolic leadership and serve to make the strange feel familiar. Metaphors can "compress complicated issues into understandable images, influencing our attitudes and actions" (Bolman & Deal, 2021, p. 257).

Humor

Similar to metaphors, humor serves organizations by assisting with a) integration; b) expression of skepticism; c) flexibility; and d) lessening the impact of status differences. Using humor and play can lead to open dialogue and trust within organizations that can foster creativity and innovation (Bolman & Deal, 2021).

Stories

Another form of symbolic leadership that successful leaders use is stories. Stories can grant comfort, direction, reassurance, and hope to many people. They can convey information, morals, and myths with vivid detail and clarity. Stories are deeply rooted in human history and can foster identity and hope (Bolman & Deal, 2021, p. 248). Many religions have depended on storytelling to spread their tenets of faith. Jesus, the Buddha, Mohammed, and other religious figures have used stories to convey their teachings, inspiring and uniting billions of people around the world. Similarly, leaders use storytelling to serve their own interests or the interests of the organizations. Within organizational structures, policies or rules can be intimidating or difficult to understand for stakeholders; however, conveying purpose and vision through the use of storytelling can be effective at controlling the narrative. Leadership consultant Stephen Denning (2005) categorized stories in eight ways: a) sparking action; b) communicating who you are; c) branding the company; d) transmitting values; e) fostering collaboration; f) taming the grapevine; g) sharing knowledge; and h) leading people into the future (as cited in Bolman & Deal, 2021, p. 248).

Myths are described by Bolman and Deal (2021) as collective dreams, operating on a mystical level and serving as the "story behind the story" (p. 43). Myths can explain

and legitimize solidarity and cohesion, communicating unspoken wishes, conflicts, and contradictions. Whether consciously or unconsciously, organizations express myths or sagas and can transform organizations into hallowed and beloved institutions (Bolman & Deal, 2021, p. 243).

The symbolic frame is a crucial leadership model that leaders can use to assist in decision-making and drive the future of their organizations. It is an effective tool to find clarity and cohesion through periods of change, innovation, or crisis. Initiating successful change requires a conversion of mind *and* heart (Bolman & Deal, 2021). Leaders who understand the significance of symbols, and know how to conjure spirit and soul, can utilize emotions as a tool and use them to their advantage.

The symbolic frame focuses on giving meaning to resolve chaotic situations caused by society or the organization. One of the major strengths of the symbolic frame is its ability to inspire others. Using powerful symbols can change an organization and empower employees. Using symbols that are in line with an organization's future can motivate others to align with the vision and mission of the organization. Even if the organization is not truly representative of the symbol, the perception created by the symbol is sometimes enough to cause change. For example, employees who want to increase their status in an organization should not dress for the job they have, but rather dress for the job they strive to achieve. Organizations are no different; they should not use symbols that represent the organization's current state, they should use symbols that represent where they want the organization to go. The impact and influence symbols have on individuals can be a powerful rallying point, and thus affect organizations in a positive way. Additionally, organizations are judged as much on appearance as on outcomes.

Organizations can tell their own story and create or control the narrative around the organization. If they fail to tell their story, others will, and the organization's motivation could be detrimental to their goals.

Symbols serve as powerful tools for leaders. The use of myths, stories, humor, play, theatre, and metaphors can impact an organization's culture. Culture is the glue that holds organizations together and can unite employees and stakeholders to help drive the vision and mission of the organization. Leaders would be greatly served to incorporate symbolic leadership in to the strategic plan of the organization.

Transformational Leadership

Within the past 30 years, leadership theory has evolved to include various aspects of relational power, including understanding the needs and wants of the people within an organization. Relationships between administrators and employees are much different today than in the past. Very few managers rely on their legitimate or coercive power to persuade employees to follow directives (Bass, 1990). Many managers naturally engage in a transaction with their employees: the employees perform their job requirements, and the employees receive compensation for their services. However, such transactional leadership is a recipe for second-rate performance (Bass, 1990). Superior leadership performance, such as *transformational leadership*, occurs when one or more persons engage with others in such a way that leaders and followers raise one another to high levels of motivation and moral integrity (Burns, 1978).

Transforming leadership broadens and raises the interests of employees by generating awareness and acceptance of the mission and purpose of the group (Bass, 1990). Transformational leaders are effective because they are often charismatic and

inspirational to their followers, and they meet the emotional needs of individual employees. Managers who exemplify transformational leadership tendencies are more likely to be seen by their employees as effective and satisfying. Current educational administration programs are not interested in developing students to become managers, but rather *instructional* or *transformational* leaders who are better equipped to transform public schools to become more effective at teaching and learning (DeYoung, 1995).

According to Bass's (1990) model of transformational leadership, a transformational leader places significant emphasis on a) expansion of followers' needs; b) exceeding followers' self-interests; c) elevation of followers' need to increase to a higher Maslow level; d) building confidence in followers; e) elevation of followers' subjective probability of success; and f) elevation of value of designated outcomes for followers.

Place-conscious Leadership (PCL)

Place-conscious leadership (PCL) describes the mutual and ongoing exchanges between leaders and place that shape and reshape one another. When applied to educational contexts, PCL examines the role of superintendents in creating coherent communities, developing strong community relations, and including the community as a critical aspect of change-making (DeFeo & Tran, 2019). DeYoung (1995) illustrated the challenges of a specific county school superintendent within the Central Appalachian region of West Virginia and specifically examined his role as change agent. DeYoung's study presented an interesting dichotomy between the focus of contemporary education and the location of consumption, emphasizing the role of place. Contemporary education

focuses on the preparation of students for urban occupation; however, most products of the schools have rural-based consumption patterns (DeYoung, 1995).

According to DeYoung (1995), Appalachia has long-been associated with familism, traditionalism, and puritanism. When compared to the idea of the "great society," the Appalachian subculture presents key differences, such as expected participation in church and familial institutions, which greatly influences social norms (DeYoung, 1995). Appalachian culture is deeply rooted in autonomy and individualism.

The dominant mountain religious traditions emphasize congregational autonomy, which weakens ties with the outside and reinforces the localistic orientation common to much of the region's institutional structure. Furthermore, the general religious orientation strongly emphasizes direct personal relationships between the individual and his God to such an extent that great social pressure is put upon each individual to establish such a relationship. This stress, coupled with the low educational levels always characteristic of the region, has tended to make (Appalachian) religion more emotional, more fundamentalistic, more personal, and more familistic than the Great Society's religion. (DeYoung, 1995, p. 190)

The Appalachian culture has historically lacked influence from formal institutions, with the only exception being the church. Even within religious institutions, Appalachian churches tend to operate autonomously and with little influence from outsiders. Appalachian subculture is hesitant to be influenced by powers outside of family and church, including schools.

Despite the challenges associated with the subculture of rural Appalachian schools, the local county superintendent in Braxton County, West Virginia managed to lead his district through periods of change and innovation. During the superintendent's tenure, his district was on the forefront of computer-based learning, as well as being the first district in the nation to obtain federal authorization to be a Medicaid provider in the county. The superintendent developed a statewide reputation as an effective and innovative school leader, while also maintaining a level of civic leadership within his

community. By 1995, he was the longest-sitting superintendent in the state, named State Superintendent of the Year, and named Citizen of the Year for his respective county (DeYoung, 1995). The superintendent achieved those accolades while actively creating new initiatives and innovations; he was not simply working for his retirement. His local, state, and national accolades were a recognition of his ability to *transform* his district. The superintendent was able to break down barriers, demolish long-held traditions, and gain support in a fatalistic subculture that, historically, had been reluctant to change. He was able to bridge the gap between the subcultures of Central Appalachia and the national culture of greater America.

One of the reasons for the superintendent's success was his own history and biography; he was a local boy who achieved success in the same environment as his neighbors (DeYoung, 1995). However, superintendents who are *outsiders* can have similar success. Understanding the role of *place* in education and leadership is necessary to obtain the benefits of being a *local*, even for outsiders.

Superintendents who can communicate, relate, and gain trust from their community have an advantage in gaining trust, especially when leading during times of increased uncertainty. Effective communication requires a level of trust between individuals, and developing trust takes time. This combination is especially difficult in Appalachia, where community members are often reluctant to trust formal institutions such as schools. For decades, families have failed to see the value of a contemporary education system that produces students who do not fit rural-based consumption patterns. A lack of trust from families, and frustration from students, can cause students to drop out or disassociate with school due to the disconnect of what they are learning and where

they live. It is an interesting dilemma: schools must prepare students for a global economy, but must also provide skills that can assist them in their current culture. The superintendent from West Virginia was able to understand the culture, relate to the community, and gain trust among stakeholders. Because he gained the trust of the community, he was able to serve as a change agent and impact organizational learning not only within the school, but also in his Appalachian community.

Rural Superintendent

The contemporary rural superintendency is a practice in need of a theory. The need is more urgent considering the unique time and place of the current study. Rural school leadership has been undertheorized, especially during periods of extreme crisis. The focus of place-based leadership has primarily involved insider/outsider constructs, such as the superintendent in West Virginia. Nevertheless, a revisionist model of placebased leadership seeks to understand superintendents in rural communities not only in terms of their own relationship to a respective place, but also their ability to lead with an understanding of the needs, values, and interests of their community they currently serve (McHenry-Sorber & Budge, 2018). McHenry-Sorber and Budge (2018) defined a successful rural superintendent as being contextually responsive to place. An effective and successful rural superintendent can "interact with multiple contexts, including district and community size, organizational culture, community type and geographic location, financial situation, and political climate, shaping and responding to them" while maintaining the core work of the educating students (McHenry-Sorber & Budge, 2018, p. 5).

Superintendent success in rural communities is often obvious due to the recognition of the school being the *heart* of the community. Is the school a center for community events? Does the school provide outreach to families within the community other than for educational purposes? The answer to these questions sheds light in determining the success of school superintendents. To gain trust, Johnson et al. (2009) offered recommendations for leadership practices that consider the community as an essential element of school. They encouraged schools to use their role as a community center as an important community institution while simultaneously valuing the education potential of community places outside of the school (McHenry-Sorber & Budge, 2018).

Through successful leadership, rural schools can serve as an advocate for marginalized populations. According to McHenry-Sorber and Budge (2018), successful superintendents and school leaders should be able to recognize key cultural and economic dynamics at work by developing leadership strategies to see the community through multiple frames. Multi-frame thinking is particularly important during times of increased chaos and crisis, such as in the aftermath of a natural disaster. Superintendents who serve their organization *and* community as place-conscious leaders earn the trust and social capital from their community, thereby increasing the effectiveness of the school system.

The Role of "Place" in Education

During the preindustrial age, the classroom and the community were mutually inclusive. Children learned from their families and communities. Young men and women gained trade skills through apprenticeships and on-job training. However, during the mid-19th century, education was expanded to include more access to all students, with influences from industrialization.

Industrialized education claims the teacher as the dispenser of knowledge, with the transfer of teacher knowledge as the goal. Vander Ark et al. (2020) noted that learning transformed into a formalized system to be delivered, rather than learned in the community, much like "industrial products" produced in batches (p. 1). The product of schools became less about authentic and connected learning and instead focused on measuring proficiency of basic skills, thus sanitizing deeper learning. Increased technologies, such as mobile computing, have paralleled the rise of industrial education. Rather than use creative strategies to solve complex problems, students (and adults) are increasingly dependent on devices to become proficient on grade-level skills. Despite technological advances and the role of industrialization in school systems, the role of place remains strong in some areas, such as rural schools and career and technical education.

Often students' most memorable learning experiences are not associated with teachers' pedagogy or instructional practices, but rather through experiences and relationships. *Place* is more than an area defined by a specific boundary. *Place* is remembered for the connection to an emotion it brings. Places can also provoke anger and concern, such as an area marred by a dangerous condition (Vander Ark et al., 2020). Undoubtedly, the citizens of Eastern and Southeastern Kentucky have strong emotions associated with their *place*, especially after the tragic floods in 2022 that disfigured buildings, separated families, and destroyed schools.

Citizens of Central Appalachia have deep-rooted ties to their *place*. Many times, the families that settled the region in the late 1700s and 1800s are still prominent in their communities in 2022. Regional and social scientists have posited that Appalachia

subculture persists and several values and beliefs found in mountain communities resulted from an earlier agrarian era. Ergood and Kuhre (1993) provided a summary of past research on the subculture of Appalachia:

[W]e find the mountain people described as independent, kin-involved people whose lives are closely bound to their physical environment, whose activities are traditional, and whose beliefs are both fatalistic and religiously fundamentalist. This description has slowly emerged and expanded from the earliest attempts by social scientists to the most recent. (p. 47)

Place gives space meaning and connects culture to personal identity. As such, place and culture can serve as a basis for behavioral norms (Ladson-Billings, 1995). For centuries, humans have used their culture as a starting point for learning and then incorporated education later. Ladson-Billings (1995) contended that education systems try to force culture into education, but schools should use culture as a context and view education through place.

Place-based experiences can offer rich learning for students and communities.

Schools are viewed often as isolated entities that are disconnected from the communities they serve. This is not the case, however, with Vaux High School, located in Philadelphia, Pennsylvania. School officials at Vaux partnered with the School District of Philadelphia, the housing authority, the local teachers' union, and a local non-profit learning community, providing internships for students of Vaux High. The interns provide community services to family and youth for the citizens of Philadelphia. The students experience the community in a service-oriented way, and the community values the contribution of the school (Vander Ark, 2018).

For schools to be truly place-conscious, Gruenewald (2003) argued they must adhere to new standards of achievement, divorced from neoliberal accountability policies that reduce the connection between school and community (McHenry-Sorber & Budge,

2018). Howley et al., (2005) described the term *place-conscious* as a "profound understanding" of the local community (p. 23). McHenry-Sorber and Budge's (2018) work offered six habits of practiced ways of living, with regard to place: a) connectedness; b) development of identity and culture; c) interdependence with the land; d) spirituality; e) ideology and politics; and, f) activism and civic engagement (p. 5). Further, numerous scholars noted place-consciousness as a form of self-knowledge that is vital to shaping communal identity; and those who strive to practice place-consciousness must be "rooted in one's community" and strive to "cherish and cultivate" the place (McHenry-Sorber & Budge, 2018, p. 5).

Perhaps the most notable attribute of place-based education is the amalgamation of school and community. Vander Ark et al. (2020) asserted that place-based education builds community in four ways: a) it creates bonds; b) it personalizes learning; c) it builds social capital; and d) it promotes contribution. Place-based education involves shared experiences that fuse culture, community, place, and learning. Promoting community contribution should be a high priority for school leaders. Some schools treat students as merely participants, preparing them for jobs and careers that do not exist or are distant from their own community. Place-based education helps students make community contributions. New advancements in technologies have allowed students to contribute in ways that have long-term benefits to their community. When students have a sense of connectedness to their community, they are more likely to contribute while in school and upon entering the workforce.

For decades, schools and communities have been disconnected and misaligned with each other, especially in Central Appalachia. Being poor creates challenges for

educational attainment, future earnings, and health. Unlike some urban areas, poverty in Central Appalachia is about context. Schaefer et al. (2016) described this situation in more detail:

Being poor in a relatively well-off community with good infrastructure and schools is different from being poor in a place where poverty rates have been high for generations. The hurdles are even higher in rural areas, where low population density, physical isolation, and the broad spatial distribution of the poor make service delivery and exposure to innovative programs more challenging. (p. 1-2)

Education has generally provided areas such as Central Appalachia with an opportunity for improvement. Politicians have long attempted to advance the economy of Appalachia, which has, unfortunately, aided in continued stigmatization and stereotypes of the region (Blevins, 2017). When policy makers, businesses, researchers, or other dominant groups attempt to define inferior groups, inventions of categories occur inevitably, and ideas of what marks people as belonging to these categories then aid in the negative stereotyping of the inferior group, namely citizens of Central Appalachia (Blevins, 2017).

The stigmatization and stereotypes of Central Appalachia have been exacerbated by policy makers and other dominant groups. However, understanding the economic climate and the relationship to poverty measures is valuable to understand the impact of *place* in education. For the Commonwealth of Kentucky, employment has improved over the past 25 years. In fact, from 1990 to 2014, employment has increased by 26% (Blevins, 2017). However, the rise in employment is not proportional across all business types. Notably, manufacturing, logging, and mining have decreased dramatically since 1990, which greatly impacts Eastern Kentucky. This dramatic decrease resulted in a 6% reduction in wages and salary for those residents in Eastern Kentucky, even though the Commonwealth experienced an 11.4% growth during this same period (Blevins, 2017).

Additionally, due to the decline of mining, logging, and manufacturing industries, employment in Eastern Kentucky dropped nearly 11% (Blevins, 2017). Child poverty rates continue to increase, as well. In some Eastern Kentucky counties, the poverty rate of children under the age of 18 is as high as 55% (Blevins, 2017).

Childhood poverty, educational attainment, and current economic conditions provide a unique challenge for educators in Central Appalachia. In addition to historical barriers in Central Appalachia, school leaders have a new set of challenges brought by the devastation caused by the flood of 2022, which only exacerbates pre-existing difficulties. It is important to note, as well, that pre-pandemic data is more representative of historical trends due to the inflation caused by post-pandemic economics.

Effective Superintendents

A superintendent's role in a public school is complex and varies from community to community, and state to state. Prior to 1850, a superintendent's role was predicated on the need for boards of education to create an executive position, but boards were hesitant to surrender power (Kowalski & Björk, 2005). Over time, the role of public school superintendents has evolved to include multiple leadership and managerial elements. Kowalski and Björk (2005) conceptualized five role characteristics of public school superintendents, including a) teacher-scholar (1850 to early 1900s); b) organizational manager (1900s to 1930); c) democratic leader (1930 to mid-1950s); d) applied social scientist (mid-1950s to mid-1970s); and e) communicator (mid-1970s to present) (Kowalski & Björk, 2005). Practicing school superintendents often serve these roles simultaneously, depending on the issues and contexts of the individual school district.

Superintendents face complex, multi-faceted problems on a day-to-day basis. Demographics, size of district, political climate, and culture of community and place are just a few of the variables superintendents must consider. These circumstances, coupled with implementing mandated educational reforms, require superintendents to have adaptable leadership skills and use various approaches to leading school districts (Björk, 1993).

Superintendent effectiveness, or success, can be defined formally through evaluations and informally based on stakeholder perception. Defining success for a superintendent is as varied as the roles they perform, such as a) teacher-scholar; b) organizational manager; c) democratic leader; d) applied social scientist; and e) communicator (Kowalski & Björk, 2005).

Formally, superintendents in Kentucky are evaluated using standards. According to 2010 state law, KRS 156.557 requires Kentucky school boards to perform an evaluation of the district superintendent every year (Definitions, 2010). Boards of education in Kentucky evaluate superintendents using seven explicit standards from various forms of leadership: a) strategic; b) instructional; c) cultural; d) human resource; e) managerial; f) collaborative; and g) influential (KSBA, 2019). Achieving success within each informal role or on every formal standard is an impossible expectation, however (Sheppard et al., 2009). Although boards of education are compelled to use the standards to evaluate superintendents, defining success is more complex than a simple evaluation system.

School districts exist to foster learning, and superintendents serve those schools to ensure teaching and learning practices are effective. Communities depend on schools to

develop students' intellectual and social skills, which can then be transferred with them into the nation's workplaces (Collinson & Cook, 2006). The school superintendent's role has shifted from the traditional emphasis on managerial aspects to instructional leader, focusing on issues that emphasize teaching and learning (Schechter, 2015). Educational administration programs today show little interest in preparing education students to become *managers* and instead guide them to become *instructional leaders* (DeYoung, 1995). According to a study by Cooper and Boyd (1987), superintendents that are active *instructional managers* produce instructionally effective schools. The results of the study show that superintendents who focused more on instruction and curriculum activities, and had more involvement in the monitoring and implementation of those activities, produced highly effective schools (Cooper & Boyd, 1987).

Superintendent success has also been seen in terms of their ability to lead through periods of change and innovation. Education is constantly evolving, and failing to adapt to changes can have a detrimental impact on student learning. Louis (1994, 2006) claimed that a superintendent's capacity to innovate and reform relies on one's ability to foster collective processing and one's understanding and application of knowledge about teaching and learning. Due to the rapid changes in society, economy, and within the school system, the school district must become, in a dual sense, a *learning school*. A learning school strives to promote the learning processes of students, teachers, and staff as an organizational unit that must learn and innovate together. Superintendents must be deliberate in the use of individual, group, and system learning to embed new thinking and practices that continuously renew and transform the organization (Collinson & Cook, 2006). When superintendents foster a climate of innovation and continuous learning, they

encourage the flexibly to adapt to social, economic, and cultural developments (Huber, 2004).

Therefore, to innovate and keep pace with environmental, political, and social change, superintendents must establish structures, processes, and practices that facilitate the continuous and collective learning of all members within the organization (Schechter, 2015). Based on the literature reviewed, superintendent success can be defined by one's ability to create an effective learning organization, which assists the district in two major ways: effectively facilitating change/innovation and creating instructionally effective schools. Successful school districts and successful superintendents aim to create opportunities for collective learning by establishing professional learning communities that positively impact teaching and learning (Sheppard et al., 2009). Sheppard et al. (2009) claimed that superintendents create professional learning communities that foster collective learning by understanding five components:

- 1) A school district superintendent who has an in-depth understanding of the emerging empirical evidence and developing theories related to educational administration, leadership, and organizational change can facilitate collaborative leadership and organizational learning in a school district;
- 2) Leading a shift to collaborative leadership and organizational learning involves considerable risk and is dependent on the existence of mutual respect and trust between constituents and the formal leader;
- 3) Structural changes, when combined with clearly defined rules of engagement, facilitate cultural change;
- 4) School districts must share a collective moral commitment to each child's learning success and must share a common vision of teaching and learning that will help achieve that commitment;
- 5) School district leaders must think systemically and strategically and enlist leaders from multiple sources to collaboratively engage in strategic thinking and adaptive learning. (p. 123-124)

Specifically, the second component involves aspects that most align with previous literature related to superintendent success. Creating learning organizations is essential to superintendent success. However, creating organizational learning is highly dependent on

the establishment of professional learning communities. Superintendents who deliberately foster organizational learning in their districts stand much greater chance to generate success not only for themselves, but for employees and students (Collinson & Cook, 2006).

Building capacity is central to creating a school culture, and thus employees that are equipped to lead. Informal leaders, although not always explicitly designated, take on responsibilities of leadership. For example, head custodians, and lead administrative assistants all have leadership roles within their respective departments. Teachers have long shown leadership in their classrooms or schools by implementing and innovating with instruments, instruction, assessments, mentoring, or organizing various school events (Collinson & Cook, 2006). Only recently were teachers explicitly recognized as leaders due to the prevailing belief in a leadership model that held a one-person image of leader, usually a principal or superintendent. Preskill and Torres (1999) posited, "Instead of this individualistic and nonsystemic worldview, . . . the new and emerging model calls for an integrated, pluralistic approach to leadership" (p. 161). School systems have transitioned from an autocratic, centralized model of leadership to one that is pluralistic. Most notably, however, Collinson and Cook (2006) claimed pluralistic leadership models "will not succeed if the organization's leadership is indifferent or hostile to establishing learning processes and systems" (p. 140).

Organizational learning, by definition, embeds new thinking and practices that transform the organization in ways that support the shared vision (Collinson & Cook, 2006). Organizational learning and transformation (or change) are mutually inclusive. Success, therefore, is directly related to the ability of the superintendent to transform and

to adapt to a variety of challenges. Organizational learning processes that support change and innovation are dependent on the ability of the superintendent to create a shared vision and to communicate the vision to the various stakeholders within the district.

In times of relative calm, organizational learning should be at the top of superintendents' priorities for reasons previously stated. However, during periods of increased chaos and crisis, superintendents and other school leaders must prioritize and focus on immediate challenges. During extreme situations, such as a financial crisis or natural disasters, school leaders must be able to pivot and prioritize based on the unique set of circumstances. During times of crisis, superintendent success is often defined by how they react to emergent situations. Leaders are frequently judged as successful or unsuccessful not based on their years of academic success, but by small fragments of time during extreme situations.

Bolman and Deal (2021) argued that in times of crisis, leadership is expected from people in high places, and success can be determined if leaders provide it or fail to provide it. However, it is misleading to think that leadership only comes from people in prominent positions. This centralized viewpoint is asking too much from too few. It relegates others to assume a passive role and forces those at the top to take on more responsibility than they are able to produce (Oshry, 1995). The chaotic environment in a 21st century school requires organizations to be flexible, efficient, and fast, which necessitates leadership internally in an organization (Barnes & Kriger, 1986; Kanter, 1983). Successful superintendents can help themselves prepare for crisis events by building internal leadership capacity through organizational learning. Nonetheless, leaders must prepare themselves for crisis events. Porterfield and Carnes (2014) argued

that "there are two types of school leaders in this world: those who have faced a crisis and those who are about to" (p. 120).

Superintendent Success in Times of Crisis

Crisis management research deals with major catastrophes such as pandemics, terrorist attacks, school shootings, and natural disasters that caused significant pain and suffering. These studies evaluate factors designed to minimize the negative effects of a crisis. Crisis management research often breaks down the events into phases to allow the researcher to devise remedies. However, a lack of formal preparation for leaders to deal with crises remains a concern (Ginsberg & Multon, 2011).

Effectiveness of leaders during times of crisis is largely dependent on the relationships leaders have built over time. Porterfield and Carnes (2014) claimed that relationships with staff, parents, neighbors, business partners, and the community should be the "currency with which you draw" (p. 1). Practice and planning are critical to effective crisis management. However, not all critical incidents can be anticipated, just as the superintendents in this study have experienced. No planning could prepare the superintendents in this study for the devastation their communities experienced.

Therefore, successful school leaders during times of crisis must be creative, flexible, and ready to improvise. Porterfield and Carnes (2014) suggested that successful leadership during crisis incidents can be divided into three parts: a) crisis preparation and management; b) crisis communication; and c) crisis support.

Crisis Preparation and Management

Porterfield and Carnes (2014) described crisis preparation and management as the actionable steps and/or resources used to ensure the safety and well-being of staff and students. Examples of resources used in crisis preparation and management include:

- Regulations that delineate internal chain of command and duties in a crisis;
- Protocols for school evacuation, lockdown, shelter-in-place, and student-parent reunification;
- An internal school security team;
- A district community-relations officer and communication team;
- School resource officers from the local police department; and
- A strong working relationship with local public safety officials. (Porterfield & Carnes, 2014, p. 121)

Crisis Communication

Crisis communication is a significant aspect of successfully navigating extreme circumstances. Successful school leaders must be able to effectively communicate to stakeholders the events of the incident, and any statements must be timely and accurate. Secondly, successful school leaders must be able to clearly explain what the school and district are doing in response to the critical incident (Porterfield & Carnes, 2014). Grant (2004) concurred, emphasizing communication not only with the board, but with the community at large, and informing them of the rationale behind decisions. In the end, community members look to school leaders for a meaningful understanding of a crisis event because it is difficult for them to see the larger picture. In any critical event, "leaders are challenged to present a compelling story that describes what the crisis is about; what is at stake, what are its causes, what can be done" (Boin et al., 2005, p. 13). If superintendents fail to communicate, decisions are not understood or respected.

Crisis Support

During crisis events, those involved likely experience *fight or flight* responses fueled by adrenaline. However, if the crisis lasts for an extended period, as was the case with the Eastern Kentucky floods, emotional damage to self and others inevitably occur. Building relief in emergency plans for self and others help students and staff deal with the aftermath of the event. School counselors, psychologists, and social workers are invaluable resources to provide support for stakeholders, and empowering them add to the success of navigating a crisis event (Porterfield & Carnes, 2014).

The research noted that maintaining staff morale to keep organizations working efficiently and effectively, despite difficult situations, remains a top priority. Little attention, however, has been given to how leaders are affected when managing an organization through difficult times. Due to the centralized tendencies of school leadership, morale and effectiveness of leaders during difficult times cannot be overstated. School leaders and those dealing with crisis situations must take care of themselves during stressful times.

Summary

Highly effective, successful superintendents seize opportunities to lead in times of crisis, no matter how catastrophic the event. Although no template exists to follow in times of crisis, successful superintendents must rely on detailed planning, effective communication, and on-time support to help their stakeholders. The results of the current study add to the literature by providing insight into how school leaders make decisions during critical incidents. Because superintendency is a unique position of leadership, experiential knowledge is invaluable. Learning from others' experiences during periods

of crisis can assist novice superintendents to successfully lead their districts during extreme circumstances.

CHAPTER THREE

METHODOLGY

Introduction

This chapter discusses the research design, research setting and context, underlying rationale, data collections process, analysis, and role of the researcher in the study. A review of literature suggested that the preponderance of recent scholarship on multi-frame thinking uses quantitative survey research methods rather than qualitative, in-depth, semi-structured interviews. In addition, the review of literature also indicated that there is a paucity of studies on rural, Appalachian school district superintendents' use of multi-frame leadership during extreme crises. This qualitative, exploratory study of rural school district superintendents' leadership during the catastrophic flood of 2022 in Appalachian region of Kentucky used in-depth, semi structured interviews. This methodological approach was appropriate in this unique time and place and facilitated understanding the nature of superintendents' leadership during an unprecedented natural disaster. Findings from this study add to the knowledge base in the field of how superintendents enact their crisis leadership role.

Purpose of the Study

The purpose of this study was to understand leadership strategies, specifically the use of framing and reframing of superintendents during periods of extreme natural disaster in the Appalachian region of Eastern Kentucky. The specific research questions that guided the study include:

1) How do superintendents use multi-frame thinking while working within their districts during periods of uncertainty and change, particularly during and after a natural disaster?

2) Are there similarities in how rural school district superintendents use multiframe thinking during periods of uncertainty and change, particularly during and after a natural disaster?

Research Design

The research design for this study was determined by the need to understand the nature of rural superintendents leadership in the context and an unprecedented natural disaster in the Appalachian region of Eastern Kentucky, and understand their capacity to use a multi-frame leadership approach during these uncommonly challenging circumstances. This study is situated in a culturally distinct, Appalachian region of Eastern Kentucky that historically has resisted intrusion by *outsiders*. These circumstances created a unique opportunity in which an *insider*, using qualitative research-methods, may have better access to study participants as well as understand their perspectives and lived experiences as school district superintendents. The qualitative approach used in this study was appropriate to the setting and enabled the researcher to gain a deeper understanding of their use of multi-frame leadership during this crisis.

Qualitative Design

This qualitative study was exploratory and descriptive in nature and fit the circumstances that were unique in time and place. It focused on investigating school district superintendents' use of a multi-frame approach to leadership during a natural disaster. Although their experiences may have differed in the contextual realities in their respective school districts, they shared a common need to meet unprecedented challenges of a natural disaster. Giving these superintendents the opportunity to tell their own stories in their own words about their experiences was central to the selection of a research design and methods.

Qualitative researchers need to be storytellers. They build their cases and engage their audience through scientific documentation of their observations and experiences (Wolcott, 1994). Qualitative research attempts to understand the processes that influence and connect people, situations, and events, and is best used in instances wherein the belief of the researcher is based on the researcher's own experiences (Maxwell, 2013). Qualitative methodology is pervasive in the study of human affairs and therefore has "established a firm foothold in the educational research community," and is best for exploratory research with small samples, involving complex issues and topics (Roe, 2018).

Merriam (2009) posited that, "Qualitative researchers conducting a qualitative study would be interested in a) how people interpret their experiences; b) how they construct their worlds; and c) what meaning they attribute to their experiences" (p. 23). Similarly, Maxwell (2013) suggested that qualitative research is comprised of four main components: a) research relationships between researcher and subject, as a partner in the production of knowledge; b) the selection of the setting, individuals, and other types of data; c) how will the researcher gather the data in analytic or interpretive procedures; and d) data analysis, making sense of the data.

In conducting a study, qualitative researchers leverage their own experience and consider the context of their research when conducting a research study. Data is gathered through the experiences of individuals or groups to explore and understand human behavior in a "natural setting" from the viewpoint of the participants (Nardi, 2018). Eisner (1998) outlined key components of qualitative research, including: a) studies are field focused and includes experiences of people and researchers will observe, interview,

record, describe, interpret in non-manipulative situations; b) studies use "self" as an instrument and are attuned to the perceptivity of self in context of the setting; c) studies are interpretive and *meaning* matters—strategies are important to the observation in order to understanding meaning of each situation and subject; d) studies in education use "expressive language" and include an empathetic nature; e) studies pay close attention to the details of situation, individual, event, and objects when gathering data; and f) studies are most believable due to coherence, insight, and instrumental utility—judgment plays a role in the success of the research.

The qualitative research design used in this study provided an opportunity for the researcher to explore, understand, and explain how school district superintendents used multi-frame thinking in meeting the challenges presented by a catastrophic flood in Eastern Kentucky. Using a semi-structured interview technique enabled the researcher to record stories and capture "multiple perceptions of the phenomenon as experienced by different people, and then determine what is common to these perceptions and reactions" (Fraenkel et al., 2019, pp. 387-388). Flick (2000) noted that qualitative research occurs in the world to explain or explore a social phenomenon. In this regard, qualitative studies abstain from providing a concept before the research begins—the hypothesis is developed during the research process (Flick, 2000). Flick (2000) further noted that conducting a qualitative study provides a holistic description, viewing the world in terms of people, situations, and events.

Maxwell (2013) asserted that "the strengths of qualitative research derive significantly from this process orientation toward the world, and the inductive approach, focus on specific situations or people, and emphasis on descriptions rather than numbers

that this requires" (p. 30). The strength of qualitative data is the ability to provide deep understanding and detail that can be obtained through direct quotations and careful descriptions of people, situations, and events (Applewhite, 2018). In this regard, qualitative research is considered to be aligned with epistemological constructivism, as explained by Maxwell (2013):

Our understanding of this world is inevitably our construction, rather than a purely objective perception of reality, and no such construction can claim absolute truth . . . From this perspective, every theory, model, or conclusion (including the model of qualitative research design) is necessarily a simplified and incomplete attempt to grasp something about a complex reality. (p. 43)

A relativist ontology assumes that the phenomenon studied has multiple realities and can be explored or reconstructed through human interactions between the researcher and the participant (Kivunja & Kuyini, 2017).

Qualitative research is considered basic research in that it is focused on how meaning is constructed, how people make sense of their lives and their worlds—the primary goal of qualitative research is to uncover and interpret these meanings (Merriam, 2009). The selection of a qualitative research design for this study was not only appropriate to its context, but also aligned with its purpose: to describe, understand, and interpret the lived experiences of superintendents during the unprecedented natural disaster of the flood of 2022 in Eastern Kentucky, and their use of multi-frame thinking in leading their districts (Merriam, 2009).

Qualitative Interviews

Qualitative, semi-structured interviews were staged and conducted to serve the researcher's goal of producing knowledge (Brinkmann, 2013). Specifically, the goal of the qualitative interviews was to obtain the participant's descriptions of how superintendents used multi-frame thinking during periods of extreme crisis. This

qualitative study was meant to provide first-order understanding through concrete description of leadership practices during and after the flooding event. Semi-structured interviews were conducted on an individual basis, with one interviewer and one interviewee. Given the traumatic nature of the flooding event, it was anticipated that the interviewees might be hesitant to discuss some aspects of their work, however, semi-structured interviews facilitated their telling their own stories in their own words. This approach helped to establish trust between the researcher and superintendents that facilitated their talking candidly about events and issues and consequently they elicited rich descriptions and insights into the nature of their leadership (Brinkmann, 2013).

The researcher conducted experience-focused, semi-structured interviews in hopes of mutual discovery, understanding, and explanation (Brinkmann, 2013). The interviews were semi-structured to incorporate both open-ended and theoretically related questions. Interview questions were aligned with the researcher's purpose of obtaining knowledge about events experienced by the interviewees (Brinkmann, 2013). In this regard, questions were designed to elicit data about experiences of each participant during and after the flood that may be explained using multi-frame thinking and transformational leadership (Galletta, 2013).

Semi-structured interviews were particularly appropriate for this study because interviewing "gives up access to the observation of others. Through interviewing we can learn about places we have not been and could not go and about settings in which we have not lived" (Weiss, 1994, p. 1). Scholars have suggested that interviews may enable the collection of additional information that may be missed in observation or in survey research. For interviewing to be particularly useful, the researcher must ask about specific

events and actions, rather than posing questions that garner generalizations or abstract thoughts. Asking respondents to describe a specific event or sequence of events taps into "episodic memory" (Maxwell, 2013). Tulving (2002) argued that,

In this memory system, information is organized by sequencing in time and connection in space, rather than abstractly in terms of semantic relationships . . . this memory system makes possible mental "time travel" uniquely allowing one to re-experience, through autonoetic awareness, one's own previous experiences. (p. 5)

Flick (2000) applied this distinction to qualitative interviewing that aligns with Weiss (1994), who provided guidance for interviewing that was consistent with the idea of episodic memory. Weiss (1994) noted that asking a question in present tense elicits a generalized account, and when respondents provide such an account, their description expresses a theory about what is most typical, rather than a concrete description of a single event.

The nature of the research study requires the use of episodic memory, which is focused on a particular phenomenon, specific to time and place, thus eliciting a concrete description of the event. Gathering data through interviews is conducive to a naturalist methodology and a "balanced axiology will assume that the outcomes of the research will reflect the values of the researcher, trying to present a balanced report of the findings" (Kivunja & Kuyini, 2017, pp. 33-34). More specifically, in the current study, the researcher utilized receptive interviewing, which empowers interviewees and enables them to a "have a large measure of control in the way in which they answer the relatively few and relatively open questions they are asked" (Brinkmann, 2013, p. 31). Receptive interviewing allowed the interviewees to use episodic memory in a natural manner to extract concrete descriptions.

Research Setting

The current study can be described using three criteria. First, the areas within the study were classified by the NCES and the U.S. Census as *rural*. Second, the chosen geographically defined area was Appalachia, using the ARC-designated boundaries. Third, participant selection criteria was defined as being a superintendent serving in a rural school district that was impacted by the devastating flooding event that occurred in Eastern Kentucky July 22-July 30, 2022. The selection criteria allowed for a multi-site study, focusing on school districts and areas that received the greatest amount of flooding. Definitions of each of these three contexts that circumscribed selection of study participants are discussed in the following sections.

Rural Areas in the United States

The current study used the U.S. Census classification of *rural* due to the census being the United States' leading source of data about the nation's people and economy. The U.S. Census classification of *rural* categorizes the counties as either *completely rural* or *mostly rural*. The U.S. Census Bureau classification of *urban-rural* is a delineation of geographic areas, identifying both the urban and rural areas of the nation (U.S. Census, 2023). Only 22% of counties in the United States are considered completely rural. Densely populated *downtowns* and sparsely populated areas are easy to identify; however, it can be ambiguous to determine where an urban area begins or ends. The U.S. Census Bureau (2023) classified specific areas as *mostly urban* if it is a densely developed territory, and encompasses commercial, residential, and other nonresidential land uses; and each urban area must possess 2,000 housing units or at least 5,000 people. Rural areas include forests, mountains, and sparsely populated territories with single-

family homes that are more distant from other homes. Rural areas lack the manmade structures of an urban setting and instead are closer to natural surroundings. The rural characteristics are vital to the context of the current study. The lack of manmade resources and structures are crucial to understand the context of the lives of rural citizens. Although vast territories lack the plentiful resources of urban settings, most of the nation's school children live in rural areas and attend rural schools. Unfortunately, however, these areas, especially schools, are often understudied when compared to schools in urban areas.

In addition to the U.S. Census rural classifications, the school districts in this study are in areas that fell under three subcategorizations of what was considered *rural*, as defined by NCES. The current study used the NCES definition of *rural* due to the influence of the NCES in education policy, politics, funding, and research. The NCES definition of *rural* includes three key definitions, using locale codes in the classification system. The local codes include *rural-fringe*, *rural-distant*, and *rural-remote* (NCES, n.d.). Rural-fringe territories are defined as less than or equal to five miles from an urbanized area and is less than or equal to two and a half miles from an urban cluster (NCES, n.d.). Rural-distant school systems are defined as a territory that is more than five miles but less than or equal to 25 miles from an urbanized area. Additionally, the territory is more than two and a half miles but less than or equal to 10 miles from an urban cluster (NCES, n.d.). Rural-remote areas are defined as a territory that is more than 25 miles from an urbanized area and is more than 10 miles from an urban cluster (NCES, n.d.). Of the three counties examined, only one county had an area that is considered to be an

urban cluster. Urban clusters are areas with more than 2,500 residents, but less than 50,000. Notably, there can be numerous urban clusters within a rural county.

Rural Counties in Kentucky

The school districts selected for this study were based on the operational definition of *rural* and were limited to those that experienced the devastation caused by a 1,000-year flooding event between the dates of July 25 2022 and July 30, 2022. The following counties are classified as *rural*, as defined by the U.S. Census (2023) and NCES (n.d.): Adair, Bath, Bell, Breathitt, Carter, Casey, Clay, Clinton, Cumberland, Elliott, Estill, Fleming, Floyd, Garrard, Green, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe.

Appalachia Region of the United States

The researcher defined the boundary of the study as being within the Appalachia region in the United States. The Appalachian region includes 423 counties across 13 states (ARC, n.d.). The following states have counties located in the Appalachian region: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia (ARC, n.d.).

Appalachia Region of Kentucky

An additional context important to the study is that the studied counties fall within the Appalachian region of Kentucky. This includes mostly rural areas in some of the nation's poorest counties. The Central Appalachian region of Kentucky includes 54

counties. The following Kentucky counties are within the geographical region, as defined by the ARC: Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Hart, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Magoffin, Martin, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe (ARC, n.d.).

Rural, Appalachian School Districts in Kentucky

The 54 rural county school districts located in the Central Appalachian region of Kentucky include: Adair County Schools, Bath County Schools, Bell County Schools, Boyd County Schools, Breathitt County Schools, Carter County Schools, Casey County Schools, Clark County Schools, Clay County Schools, Clinton County Schools, Cumberland County Schools, Edmonson County Schools, Elliott County Schools, Estill County Schools, Fleming County Schools, Floyd County Schools, Garrard County Schools, Green County Schools, Greenup County Schools, Harlan County Schools, Hart County Schools, Jackson County Schools, Johnson County Schools, Knott County Schools, Knox County Schools, Laurel County Schools, Lawrence County Schools, Lee County Schools, Leslie County Schools, Letcher County Schools, Lewis County Schools, Lincoln County Schools, McCreary County Schools, Madison County Schools, Magoffin County Schools, Martin County Schools, Menifee County Schools, Metcalfe County Schools, Monroe County Schools, Montgomery County Schools, Morgan County Schools, Nicholas County Schools, Owsley County Schools, Perry County Schools, Pike County Schools, Powell County Schools, Pulaski County Schools, Robertson County

Schools, Rockcastle County Schools, Rowan County Schools, Russell County Schools, Wayne County Schools, Whitley County Schools, and Wolfe County Schools.

School Districts Affected by the Flood of July 2022

According to the National Weather Service (n.d.), the counties that received the most catastrophic damage from the flood occurring between July 25-July 30, 2022 included Perry, Clay, Owsley, Knott, and Letcher counties. These five counties are designated as *rural* and fall within the Central Appalachian Region of Kentucky (Appendix A).

Selection of Participants

A purposive sample, including participants who had the superintendent certification and were currently serving as a superintendent in a public school within a rural area in the Appalachian region of Kentucky, were selected for the current study. Purposive sampling also included those most affected by the devastation caused by the flood. According to the National Weather Service (n.d.), the counties that received the most catastrophic damage included Clay, Breathitt, Perry, Knott, and Letcher counties. Although these school districts are all different, they share cultural, demographic, geographic, and economic characteristics. The selection criteria gave the sample unit homogeneity, which could provide transferability to other rural, Appalachian populations that have experienced a significant natural disaster or traumatic event (Gerring, 2004).

Five superintendents from five county school districts were contacted for this study. Three superintendents from three county school districts responded and were interviewed for this study. The three superintendents, as well as the county school districts, were given pseudonyms to mask identities.

An introductory email was sent to superintendents serving at schools that fit the selection criteria (Appendix A). One superintendent responded to the initial recruitment email flyer. For the other participants, a snowball sampling method was used wherein the researcher relied on mutual, professional contacts to facilitate participant recruitment (Fraenkel et al., 2019). The researcher confirmed the superintendent contacts were within the geographical boundaries of Appalachia, were considered rural, and were directly impacted by the events of the flood. The researcher reviewed the email flyers previously sent and verified that they were the same individuals who were referred by the first participant. After the first participant contacted the other superintendents, they contacted the researcher via email to schedule the interviews. Therefore, two independent lines of snowball sampling were generated to secure interview times and dates. After completing the second and third interview, the researcher asked superintendents to forward the participant recruitment flyer to the other two remaining superintendents in the defined geographical and demographical constraints within Appalachia. Unfortunately, this snowball technique that relied on the last two superintendents did not result in additional participant interviews.

Using snowball sampling, the researcher was able to secure three interviews with superintendents who were most impacted by the flooding event. The three school districts that served as the sites and had the most loss of life, the most students displaced, and the most devastation to infrastructure experienced by any school district in Eastern Kentucky. The rural, Appalachian school districts used in this study include "Pioneer Gap Schools," "Hill Valley Schools," and "Coal Mountain Schools." Pseudonyms were used for the school districts.

Interview Procedures

The semi-structured interviews had the same open-ended questions, only varying, dependent on the superintendent's willingness and detail when answering the questions. The semi-structured interview questions were intended for open dialogue between the researcher and the interviewee about the flooding events, the superintendents' leadership practices, and the use of multi-frame thinking (Appendix B). The researcher protected the privacy of the individuals by assigning them a pseudonym for each district and participant. The researcher masked all identifiable information and anonymity was accomplished. They were additionally informed that they could stop the interview at any time. The participants received a copy of the informed consent, the researcher reviewed the document with them, and then explained the sections before the interview began. Additionally, the researcher obtained a signed letter of collaboration for each school district. The researcher followed the protocols as directed by the University of Kentucky's Institutional Review Board (IRB) approval of the study (Appendix C). The methodologies and human subject research protocols were rigorously followed to ensure proper quality assurance for this study. The interview data were stored in a safe location on a hard drive, which further ensured data safety.

Data Collection Procedures

The only superintendent to respond to the email flier happened to be from one of the most impacted areas in Eastern Kentucky. After interviewing the first superintendent, a snowball sampling technique was used to obtain additional respondents (Fraenkel et al., 2019). The process involved asking one superintendent for a referral to other superintendents. A total of three superintendents were included in the study. The initial

superintendent contacted her colleagues and two responded to the email within seven days. Semi-structured interviews ranged from 39 minutes to 49 minutes. The researcher responded to superintendents by setting up a calendar invitation, which included the researcher's *Zoom* account link and more meeting information. The researcher entered each conference session 10 minutes before the scheduled time. When the participants entered the meeting, the researcher verified that the audio was working clearly. After confirmation, the researcher began the interviews by introducing himself, including information about his current role as a school administrator, and his families' decadeslong ties to Appalachia. This detail was included to get the conversation started.

The researcher reviewed the informed consent document and the participants then consented to participate in the study. After the review and introductions, the researcher began asking questions in order, using the interview protocol (Appendix B). The respondents provided answers to the questions and the researcher asked follow-up questions focused on leadership practices and multi-frame thinking. The researcher listened to the responses and took notes as appropriate.

Each participant in the study served as a superintendent of school system that met the selection criteria of the study, including serving during the events of the flood. The interview was recorded and saved on a hard drive. The video recording was deleted at the conclusion of the study.

The qualitative data for the study included the recorded responses to the interview questions and transcriptions of the semi-structured interviews via the *Zoom* application. The audio recordings were stored on a hard drive for quality control and confidentiality purposes. The audio files were uploaded to Trint.com. Trint.com is a transcription

software used by businesses and institutions and is highly regarded among researchers for their data security and encryption.

Later, the researcher listened to the audio recording and cross-referenced the transcription for errors. The participants were asked the same questions. Their responses varied, depending on their willingness to answer questions related to the flooding event, specifically relating to leadership practices and the use of multi-frame thinking.

Interview-Respondent Interactions

Interview-respondent interactions were based not from stable or coherent standpoints, but from multiple viewpoints between the interviewer and interviewee. These viewpoints include structured and historically grounded hierarchies and roles within society, including the contexts specific to this study (Warren, 2001). Viewpoints from the interactions are influenced by the social positions that emerge from the interview itself through discussion and dialogue (Warren, 2001). Inherently, the viewpoint of the researcher is influenced by the commonalities that exists between the interviewer and interviewee, including similar backgrounds, career choices, and cultures. The commonalities of the researcher's family background reach in the colonial roots of the founding of the nation and settling of this region of Appalachia, included being a school district administrator and a member of the community. These historical, personal, religious, and professional qualities enabled the researcher at once relate to and elicit rich data from interactions with study participants.

Researcher Positionality

The term *positionality* both describes people's world view and the positions they adopt about a research task and its social or political context (Holmes, 2020).

Positionality includes both fixed aspects such as gender, race, nationality, and fluid aspects such as personal life-history and experiences. These aspects can influence how research is conducted, its outcomes, and results (Coghlan & Brydon-Miller, 2014). The researcher acknowledged that the social-historical-political influences in his own life are not separate from the social-historical-political influences experienced by the study participants (Holmes, 2020). The researcher further acknowledged the shared cultural and social experiences between interviewer and respondent and the potential influence the shared experiences have on the results of the study. Rather than try to eliminate the positionality of the researcher, the researcher took a *reflexive* approach to disclose the shared social and cultural belief system between interviewer and respondent (Holmes, 2020).

Although the researcher was not directly involved in the trauma of the flooding event, nor did he previously discuss the events with any of the subjects, he acknowledged that there are preconceptions of Appalachian culture that potentially influenced the study. The preconceptions were related to the social, political, familial, religious, and societal aspects of Appalachia, and they did not include preconceptions regarding multi-frame thinking, transformational leadership, crisis management, or Bolman and Deal's (2021) leadership frames. The researcher disclosed to the participants that he was a life-long resident of Central Appalachia, and shared many cultural and societal aspects of Appalachia with them. The shared Appalachian cultural experiences between the interviewer and respondent served to build trust and provide opportunity for rich dialogue and discussions.

Insider-Outsider Perspective

Insider-outsider perspective is epistemologically significant because the researcher's position has a direct impact on the knowledge that is co-created, and it is an important consideration because researchers have an active role in the description and presentation of potentially marginalized voices (Hayfield & Huxley, 2015). Hayfield and Huxley (2015) defined an *insider* as a researcher who personally belongs to the group to which their participants also belong. The researcher was a life-long citizen of Appalachia and although not directly impacted by the flood, the researcher had many commonalities with the participants. Due to the shared context between the researcher and respondents, the researcher was able to gather rich and deep data. However, there are a number of challenges presented to insider research, one of which is that the researcher was careful not to make assumptions of shared understanding and took precautions to take-forgranted its content (Hayfield & Huxley, 2015).

Although the researcher may be considered an insider due to commonalities associated with the Appalachian culture and educational context, he was not directly involved in the flooding event. Consequently, interacting with study participants was from the perspective of an *outsider*. The researcher was able to draw conclusions and make observations that an insider to the flooding event could not make. The researcher asked "naïve questions" about the flood, potentially noticing features than an insider to the flood may overlook (Hayfiled & Huxley, 2015). Therefore, the researcher participated both as an insider to the culture of Appalachia and as an outsider to the flooding event. The researcher addressed the interactions in an ethical way to ensure that the research

was culturally sensitive and enhanced the lives of the participants (Hayfield & Huxley, 2015).

Data Analysis

Data collected using semi-structured interviews were transcribed and then analyzed. The researcher utilized analysis software, *Dedoose*, to facilitate identification of categories and themes within the interview transcriptions. Analysis procedures consisted of two coding cycles. The first-cycle coding included two tiers of coding. Tier I involved inductive codes that emerged organically from the data. Tier II involved deductive, *a priori* codes from Bolman and Deal's (2021) *Leadership Frames* and Bass's (1990) Model of Transformational Leadership. The resulting first-cycle codes from Tier I and Tier II were combined and collapsed into nine pattern codes. The researcher used the nine pattern codes to recode the transcripts, which served as the second-cycle coding method.

First-cycle Coding: Tier I

Initially, the researcher read each interview once without assigning codes. The researcher read the interview transcripts a second time using a structural coding technique. Structural coding initially categorizes data to compare similarities, differences, and relationships to emerge without preconceptions (Saldaña, 2021). Structural coding allowed the researcher to apply tentative labels to selected units of the interview transcriptions that represented a larger segment of data (Saldaña, 2021). The tentative codes represented and summarized the most significant parts of sentences or phrases in each interview transcript. The first coding cycle produced 20 temporary codes, including change management, collaboration, leadership, crisis management, organization serve

human needs, resources, faith, hope, human needs, perspective, mountain values, relationship value, equity, family, unity, politics, perception, storytelling, equity, and communication. The researcher read through each transcript a third time, using a constant comparative method that ensured the temporary codes accurately represented the phrases and sentences used by the participant (Saldaña, 2021). After the third reading, the researcher identified many similar codes that were combined and collapsed into broader themes. The nine overarching themes that represented first-cycle coding included: anchor of hope and faith, fostering collaboration, crisis management, division of labor, perspective, mountain context/values, organizations exist to serve human needs, scarce resources, and relationship focused.

First-cycle Coding: Tier II

The first-cycle coding, Tier II, included a deductive methodology with specific *a priori* frameworks for analysis. The frameworks include Bolman and Deal's (2021) *Leadership Frames* and Bass's (1990) *Model of Transformational Leadership*. Bolman and Deal (2021) identified four leadership frames as a strategy for solving complex issues. Each interview transcript was coded using specific characteristics of structural leadership, human resource leadership, political leadership, and symbolic leadership.

The researcher considered Bolman and Deal's (2021) six assumptions of the structural frame when assigning deductive codes:

- 1) Organizations exist to achieve established goals and objectives and devise strategies to reach those goals;
- 2) Organizations increase efficiency and enhance performance through specialization and appropriate division of labor;
- 3) Suitable forms of coordination and control ensure that diverse efforts of individuals and units mesh;
- 4) Organizations work best when rationality prevails over personal agendas and extraneous pressures;

- 5) Effective structure fits an organization's current circumstances (including its strategy, technology, workforce, and environment); and
- 6) When performance suffers from structural flaws, the remedy is problem solving and restructuring. (p. 50)

Similarly, the researcher assigned deductive codes using Bolman and Deal's (2021) four assumptions of the human resource frame:

- 1) Organizations exist to serve the human needs rather than the converse;
- 2) People and organizations need each other. Organizations need ideas, energy, and talent; people need careers, salaries, and opportunities;
- 3) When the fit between individual and system is poor, one or both suffer. Individuals are exploited or exploit the organization—or both become victims; and
- 4) A good fit will benefit both. Individuals find meaningful and satisfying work, and organizations get the talent and energy they need to succeed. (p. 121)

The researcher then assigned deductive codes using Bolman and Deal's (2021) five assumptions of the political frame:

- 1) Organizations are simply coalitions made up of many people with different needs and interests;
- 2) Individuals and groups have differences regarding their values, preferences, beliefs, information, and perceptions and changing those perceptions and beliefs occurs very slowly;
- 3) Most decisions involve allocation of resources in some way;
- 4) Due to scarce resources and enduring differences, conflict is inevitable. In turn, power becomes the most important resource; and
- 5) Bargaining and negotiation are central to organizational goals among competing stakeholders jockeying for their own interests. (p. 50)

Next, the researcher assigned deductive codes using Bolman and Deal's (2021) five assumptions of symbolic leadership:

- 1) What is most important about any event is not what happens but what it means;
- 2) Activity and meanings are loosely coupled; events and actions have multiple interpretations as people experience life differently;
- 3) Facing uncertainty and ambiguity, people create symbols to resolve confusion, find direction, and anchor hope;
- 4) Events and processes are most often more important for what is expressed than for what is produced. Symbols form an array of secular myths, heroes and heroines, rituals, ceremonies, and stories to help people find purpose and passion; and,

5) Culture forms the superglue that bonds the organization, unites people, and helps an enterprise accomplish desired ends. (p. 254)

When assigning deductive codes for transformational leadership, the researcher used Bass's (1990) *Model of Transformational Leadership*. Specifically, the researcher used the following model characteristics: a) expansion of followers' needs; b) exceeding followers' self-interests; c) elevation of followers' need to increase to a higher Maslow level; d) building confidence in followers; e) elevation of followers' subjective probability of success; and f) elevation of value of designated outcomes for followers (Bass, 1990).

Second-cycle Coding

After the researcher completed Tier I and Tier II first-cycle coding, the data were themed into nine pattern codes: a) symbolic leadership; b) fostering collaboration; c) crisis management; d) structural leadership; e) multi-frame thinking; f) mountain values; g) human resource leadership; h) political leadership; and i) transformational leadership. The transcripts were recoded using the nine pattern codes. The resulting nine pattern codes are used to organize the narrative presented in Chapter Four.

Code Landscaping

Code landscaping integrates textual and visual methods to perceive the data at a macro and micro level (Saldaña, 2021). Code landscaping is based on the visual technique of *tagging*, wherein the most frequently used word or phrases in a text appear larger than the others; and, as the frequency of specific words or phrases decreases, so does its visual size (Saldaña, 2021). A *word cloud*, a form of code landscaping, was used in this research to qualitatively show the major themes in the interview data across all cases. The major themes are shown through a thematic word cloud. In this study, the code

cloud was generated with *Dedoose*, a web application program used in qualitative, quantitative, and mixed methods research. The themes noted in Figure 3.1 were used to organize the narratives for presentation of data in Chapter Four.

Figure 3.1

Code Landscape of Major Themes



Validity and Reliability

The concept of *validity and reliability* is described by a wide range of terms in qualitative studies. Researchers have failed to define a single, fixed, or universal concept for validity and reliability in qualitative methodologies, rather having conceptualized a contingent definition based on "processes and intentions of particular research methodologies and projects" (Golafshani, 2003, p. 602). However, the traditional, inherent assumptions of qualitative and quantitative inquiry include the four design tests of validity and reliability, which include: a) construct validity; b) internal validity; c) external validity; and d) reliability (Yin, 2014). The tests of validity and reliability place

certain assumptions on the research design. These assumptions must be satisfied in order to construct a reliable and valid qualitative study.

Validity in qualitative research is defined as the "appropriateness of the tools, processes, and data" (Leung, 2015, p. 325). Validity in qualitative research is achieved by ensuring the following: a) the research question is appropriate for the desired outcome; b) the choice of methodology is appropriate for answering the research question; c) the design is valid for the methodology; d) the data analysis is appropriate; and e) the results and conclusions are valid for the sample and context (Leung, 2015). The qualitative research design, methodology, analysis, and results for this study not only were appropriate to its context but also aligned with its purpose: to describe, understand, and interpret the lived experiences of superintendents during the unprecedented natural disaster of the flood of 2022 in Eastern Kentucky, and their use of multi-frame thinking in leading their districts (Merriam, 2009). The exploratory nature of this study required the use of in-depth, semi structured interviews. Such a methodological approach was appropriate in this unique time and place, and facilitated understanding the nature of superintendents' leadership during an unprecedented natural disaster. The researcher further ensured the validity of the study by utilizing the use of coding as a data analysis strategy. Inductive, deductive, and pattern coding were appropriate due to the exploratory nature of the study, as was the use of semi-structured interviews (Saldaña, 2021). Specifically, the use of a priori framework as a deductive coding technique ensured the validity of the study because the frameworks directly address the research questions. The qualitative approach, methodology, and analysis used in this study were valid and

appropriate to the setting and enabled the researcher to gain a deeper understanding of the participants' use of multi-frame leadership during this crisis.

Reliability in quantitative methods is defined as the ability to exactly replicate the study's processes and results (Leung, 2015). However, in qualitative studies, the definition of reliability is much different. Due to the constructivist nature of this study, the essence of reliability lies with consistency (Leung, 2015). To enhance reliability, Silverman (2017) claimed that qualitative researchers should be mindful of similarities and differences by constantly comparing the data and adhering to consistent data collections methods. To ensure the reliability and consistency of the current study, the researcher followed the same interview protocol for each participant and implemented a constant comparative methodology, as discussed by Saldaña (2021).

Construct validity refers to the need to construct operational, valid measurements that correspond to the reality and the phenomena studied. Internal validity considers the cause and effect between variables. External validity refers to the generalizability and the ability to replicate the study (Yin, 2014). The test of reliability considers the processes, procedures and protocols for the reliable replication of the study and the ability for a similar study to produce similar findings.

Researchers have often developed, generated, or adopted what they consider to be more appropriate terms, such as *quality*, *credibility*, and *trustworthiness* (Golafshani, 2003). Specifically, to ensure reliability and validity in a qualitative study, the researcher must ensure the credibility and trustworthiness of the design, procedures, and protocol (Seale, 1999). Rather than focus on replication, the qualitative researcher must understand the inability of the data to be generalizable or replicated given the varying

social constructs fundamental to social science. Therefore, qualitative researchers can ensure credibility and trustworthiness through rigorous data collection and analysis procedures. Using rigorous data collection methodologies, such as in-depth interviews and multiple cycles of coding strategies including inductive coding, deductive coding and pattern coding, allowed the researcher to elicit credible findings in this study.

Additionally, the researcher sought member checking to ensure trustworthiness within the study. The researcher invited superintendents to review and comment on the accuracy of the researcher's descriptive narratives on their respective school districts. Unfortunately, none of the superintendents responded.

Role of the Researcher

The researcher planned and designed this study while completing doctoral coursework in the College of Education at the University of Kentucky. As a lifelong resident of Appalachia, the researcher had a devotion and intrigue to the area that served as the impetus behind the study. Traditionally, educational leadership has been studied and examined in urban contexts, and mostly in large school districts. Consequently, of particular interest to the researcher, was the specific context of rural school districts located in the Appalachian region of the United States. Even more unique was the specific time and place in which this study was conducted: the once in a thousand-year flood. During this study, the researcher made every effort to remain objective within and throughout all stages of this study, specifically by using the constant-comparative approach of data analysis (Charmaz, 2006).

Research Ethics

The researcher coded all interview data to ensure the anonymity of participants. All participants, including those directly or indirectly involved in the study, as well as school district names, were given pseudonyms to mask their identities. No personal or identifying information was disclosed, as this data was strictly for research purposes and analysis. The information collected for this study will not be used or shared for future studies, even if the identifiable information has been removed. The researcher used trint.com for interview transcriptions, which is ISO/IEC 27001 certified for data security. The researcher used *Dedoose*, a qualitative data analysis software program, which has advanced encryption and is also certified by ISO/IEC 27001. The audio recordings were stored on a hard drive for quality control and confidentiality purposes and will be destroyed after the dissertation has been accepted by the University of Kentucky.

Video recordings were not analyzed as part of this study because the researcher has not been trained to analyze facial or behavioral data. Only audio recordings were used in this study. The audio recordings will be destroyed after the University of Kentucky has accepted the dissertation.

Study Limitations

This study is limited to a specific geographical boundary. Consequently, the study will not be generalizable to other settings or populations. Given the unusually small sample size, the findings are unique in time and place. However, findings from this study may be used to gain insight into conducting research studies or anticipating observing leadership behavior in similar contexts, such as rural or Appalachian, and/or in the context of a crisis incident (Morrow, 2005).

This study explored how school superintendents frame situations and how circumstances encourage them to use different leadership techniques during periods of change, specifically during a crisis event. Therefore, the study focused on the participants' own experiences rather than the perceptions of external stakeholders, which also may be limited. Additionally, this study did not seek to determine the effectiveness of school superintendents, but explored the phenomenon of leadership within a specific context that was unique in both time and space. Lastly, the researcher invited the superintendents to review their respective descriptive narratives, but the superintendents did not respond.

Summary

The purpose of this exploratory research study was to examine the leadership practices of superintendents in rural Central Appalachia during a period of extreme natural disaster. This exploratory study allowed for data to be collected and analyzed through first- and second-cycle coding methods, using a constant comparative method as discussed by Saldaña (2021). The first-cycle coding method involved a two-tiered structure including inductive and deductive techniques. The second-cycle coding method used nine combined and collapsed pattern codes from first-cycle coding to recode the transcriptions for a final time. The occurrences of each pattern code for each school is shown in Figure 4.3. The researcher exhausted efforts to reduce threats to internal and external validity by adhering to interview protocol and asking questions that were crucial to addressing the research questions.

Chapter Four presents descriptive narratives of each school district and a summary of findings. Chapter Five reviews, analyzes, and discusses study findings using

literature and leadership theories presented in Chapter Two. Themes emerging from the data and consequent analysis are used to answer research questions.

Copyright © Steven Moses 2024

CHAPTER FOUR

FINDINGS

Introduction

This exploratory, qualitative study examined how rural, Appalachian public school superintendents led in the context of a natural disaster in Eastern Kentucky. The researcher conducted in-depth, semi-structured interviews with three rural school district superintendents who served during the catastrophic flood event in Eastern Kentucky between July 25 and July 30, 2022. These rural school districts met the parameters of *rural*, as defined by the NCES (n.d.), or were labeled *mostly rural* by the U.S. Census Bureau (2023), and were within the region of Central Appalachia by the ARC (n.d.).

The findings were reported for the three school districts, on a case by case basis. The findings begin with the name of each school district—"Pioneer Gap" is first, followed by "Coal Mountain," and then "Hill Valley." Following the name of each school district, a brief description of the school district is presented, including demographic information. The next section includes news articles related to the flooding event within the confines of each district to provide a rich, contextual understanding of events. Following this context-setting narrative, data are organized by predominant themes that emerged in each school district case: human resource leadership, structural leadership, symbolic leadership, political leadership, fostering collaboration, crisis management, mountain values, transformational leadership, and multi-frame thinking. All three interviews included at least one occurrence of each theme (Figure 4.3). However, Pioneer Gap did not include a discussion of mountain values theme because the occurrence was minimal. Generally, the thematic occurrences are presented using direct

quotations and/or paraphrased excerpts from the interview transcript, and are included within the major themes of the study: human resource leadership, structural leadership, symbolic leadership, political leadership, fostering collaboration, crisis management, mountain values, transformational leadership, and multi-frame thinking.

Pioneer Gap Schools

A brief description of Pioneer Gap Schools is included in the following sections, along with information regarding specific demographics of the district. The district description is followed by a narrative portrayal of the flood within the Pioneer Gap community, and then a discussion of the salient themes found in this study.

District Description

"Pioneer Gap Schools" is a rural, remote school district located within the Central Appalachian region of Eastern Kentucky (NCES, n.d.). The county covers approximately 337 square miles in Eastern Kentucky. The topography of the land is mostly mountainous, with numerous peaks around 3,000 feet. There are large rivers within the county and thousands of streams and creeks. Several pioneers of early Kentucky surveyed the area, coming from neighboring Virginia and North Carolina. One of the most notable pioneers was Daniel Boone, who first explored the area round 1750.

There are approximately 20,000 residents within the district's boundaries, and the area has a rich history of coal and limestone production. The population density is roughly 63 people per square mile. Demographically, the county is currently 97% White, and approximately 28% of the population live below the poverty line, with a median household income of \$38,466.00 (U.S. Census, 2023). Pioneer Gap Schools has a student population of approximately 2,500 students.

The Flood at Pioneer Gap

Pioneer Gap Schools is the largest school district in the county, and it was one of the hardest hit communities in the region during the July 2022 floods. "Superintendent Smith" from Pioneer Gap Schools was interviewed in late July 2023. Less than one week from the date of the interview, *WYMT Mountain News* published an article detailing the continued struggles of the community (Hatter, 2023). On July 23, 2023, a community gathering was held at a local memorial park to honor those who were lost, those who survived. and those who continued to struggle. An attendee at the gathering said that, at one point after the flood, she was not sure if the community would survive at all. She recalled, "Days after the flood, I walked back through the street, and I had no hope. If you can honestly say that an individual has lost hope, I lost hope" (Hatter, 2023).

Days after the event, local news agencies reported the horror the community experienced from the tragic event. Like most events in the community, the local school district was at the heart of the tragedy, "A married couple, both employees of [Pioneer Gap Schools], died when their truck was swept off a bridge, just across from the school's driveway" (Adams, 2022). A third victim from the county died from an apparent heart attack while trying to escape the flood near her home. *The Mountain Eagle* reported:

Dozens of others were rescued from the trees, rooftops, cars, and flooded rooms as the river and its tributaries swelled to historic proportions. Across Eastern Kentucky, 37 people lost their lives in the flooding July 28 and hundreds, perhaps thousands, were left without homes. The day of the flooding, 23,000 people were left without electricity. The largest outage was in the [Pioneer Gap] community, where 7,000 lost power. As of Tuesday evening, a little more than 200 remained without power. Many homes remain without water. (Adams, 2022)

Mountain people have notoriously been self-reliant, a common *mountain value* in Eastern Kentucky. Self-reliance is a part of everyday life in Central Appalachia, and during a crisis event, it is no different. As the days after the floods continued, the citizens

of the community took it upon themselves to save those in danger. Numerous volunteers used their own jon boats and kayaks to save those who were stranded. Citizens risked their lives to save each other, often swimming over swollen creeks to save people caught in the flood (Adams, 2022). Heroically, residents did not wait until rescue squad members arrived to begin helping others; they simply took it upon themselves to save their neighbors. Many of the rescues occurred close to or on school property. A local attorney in Pioneer Gap is one example of one of these volunteer rescuers:

A local attorney, with other volunteers, rescued 17 people and nine pets Thursday morning, first in a jon boat and kayak, and then in a Bass Tracker. Six people were plucked off a porch near the school board's central office, and he picked up another five—three children and their grandparents—in the bass boat. Still more were picked from the second stories of their homes. (Adams, 2022)

The water came fast, and the timing of the event made the situation more dire, occurring before most residents were awake. The county judge was awoken at 4:30 a.m. by the sound of rushing water near his home:

When he looked outside, a river was rushing past his house, fed by runoff from the mountains. He had no cell phone signal, and did not have a county radio. One road out was blocked by water. Another had trees come crashing down as he watched and they were washed under the steps of an apartment he owns near his home. (Adams, 2022)

After the county judge was able to leave his property, he attempted to get to the county garage, but he could not make it past Pioneer Gap Central High School due to flooding from the Kentucky River.

It was a gut-wrenching scene and he tried to step across the guard rail to throw a rope [to stranded people]. Truck drivers whose rigs were stopped in the road tied him to the railing with a strap from a flatbed truck and together they were able to get a rope [to the stranded men. The rescuer] tied the rope around his waist, grabbed the [stranded man] around the waist and he and the truckers pulled them to shore. [The rescuer] said for the last 30 feet, both men were under water as the current forced them down. (Adams, 2022)

Thankfully, by afternoon, rescuers arrived from all different parts of Kentucky.

Those that came were a mix of professional and non-professional people, with a combination of inflatable Navy SEAL style boats, jon boats, kayaks, bass boats, and jet skis. Some of the rescue boats were unable to reach those in danger because the current was too swift. The local paper reported, "Overhead, Blackhawk helicopters from the Kentucky National Guard and Tennessee National Guard, and smaller helicopters from air ambulance companies and the Kentucky State Police circled overhead, searching for victims" (Adams, 2022).

The heroism shown by the locals within the community saved countless lives. The outpouring of support did not stop within the boundaries of the county.

People [came] from all across Kentucky, from Tennessee, Ohio, West Virginia, Virginia, Minnesota, South Carolina, Oregon, and possibly other states to help, bringing clothes, water, cleaning supplies and personal items. Tractor-trailers [arrived], loaded with relief supplies, and on hand to unload them were whole families from here in the county who were not hit by the flood waters and [who] volunteered to help their neighbors. (Adams, 2022)

Stories of self-reliance and ingenuity spread across the county. A local power company contractor left an excavator at a work site that was near a stranded victim. A local county official, along with the help of neighbors, commandeered the excavator. The neighbors knew how to operate the rig, and together they started building a make-shift bridge to replace the one that had been washed away, so they could reach the stranded flood victim. A citizen recalled, "The people in the community, not me, built a freakin' bridge in two and half hours . . . The citizens took it upon themselves. It was their idea" (Adams, 2022). After the bridge was complete, the neighbors took the power company's excavator to additional flood sites to clear mudslides and continue to help those in need.

One of the neighbors also assisted in a rescue that included five others. The citizens formed a human chain in neck-deep water to reach a trailer that was about to be

washed away in the flood. The neighbor stated, "You can't let your neighbor die . . . She didn't want to go, but I said, 'come on, or I'll take you by the hair.' She came then. I'm lucky. I lost my vehicle and 75 feet of my yard, but we got our neighbors out and we were blessed to do that" (Adams, 2022).

Local citizens, county officials, and school officials all showed heroism during the flood. One county official was especially thankful for Pioneer Gap Schools for their contribution to the flood relief. "The Pioneer Gap Board of Education provided much needed space for the relief effort and served as emergency operations center for the entire county," he recalled (Adams, 2022). The stories shared about the flood were miraculous. Mountain values such as self-reliance, self-sacrifice, and similar themes were evident throughout the flooding event. Superintendent Smith of Pioneer Gap Schools shared similar mountain values as her fellow citizens; however, different themes were more prevalent during her interview. The most salient themes were human resource leadership, leadership framing as a strategy, and structural leadership.

Human Resource Leadership

In her interview, it was clear that Superintendent Smith firmly believed that organizations exist to serve human needs rather than the converse. Smith was genuinely concerned about her employees' well-being, especially while she led through periods of crisis: "We had a natural disaster and we weathered that. And so you add that on top of COVID, and our students [were] really struggling. And our adults [were also] struggling. The flood [hugely affected] our adults." The morning after the flood, she made it a priority to check on her staff. She stated, "By Friday morning, I could get out and get to

see my schools and check on some of my employees." Smith made her employees' wellbeing a top priority.

The devastation was difficult for Smith to put into words, especially since her county was one of the hardest hit areas in Eastern Kentucky. She was focused on the needs of her community, her employees, and students. "The flood was so devastating to all parts of our county, that we spent weeks first trying to just ensure that our employees and students were safe, and that they had a place to stay, and that they had a roof over their head, and food in their stomach." She noted that the needs of her employees have always been at the forefront of most decisions she makes, especially during periods of crisis.

When asked about the most important decisions she made during and after the flood, Smith again related back to the needs of her employees and her students:

Getting them back to school [was] the most important [thing]. How [do you] do that? [How do you time] it so that it [wouldn't be] too soon . . . and then I [thought about] putting people first. At the end of the day, it wasn't about buildings. [It wasn't] about the loss or the finances. [It was] about our people.

Even when faced with massive decisions, Superintendent Smith seemed to frame challenges using the needs of her people as a primary focus. She wanted to get the students and teachers back to school for many reasons. However, she was mainly focused on their basic needs first. "It was important to get them back in school, number one, so that we could see that every day they were fed, and that their immediate needs were met. They needed to be back in school to have a sense of normalcy."

Smith knew that if her students and employees were at school, she could make sure they were cared for during that time. No matter how desperately she wanted a return to normalcy, however, Smith was cognizant of the emotional needs of her employees and

considered their needs before making the decision to return. Numerous times throughout the interview she stated, "you make decisions based on their health and safety."

It was clear she valued the needs of her employees and often viewed problems or issues through the lens of employee needs. This was even more clear during the flooding event, where basic needs of physical well-being and safety were "pre-potent" (Bolman & Deal, 2021). She recalled, "So, the immediacy and the needs of my staff and students came first, and we started there, just trying to help people, look at their homes, get the immediate needs met with food, water, clothing, shelter."

Smith often referred to her employees as "her people," indicating a genuine regard for their well-being. Teachers, staff, and students were regarded as "family," and the uncertainty of the natural disaster only strengthened her focus on the needs of her people. She stated, "It was about taking care of your people. It had to be. We had to put their immediate needs first. Their emotional health, their physical health and safety."

Unfortunately for Superintendent Smith, the health and safety of her employees were in question during and after the flood. She recalled, firsthand, one of the most tragic stories of the flood, reiterating previous news reports: "Of course, immediately we go to our people. I lost a janitor and her husband in the flood. They were trying to get to work the morning of the flood and were swept away in flood waters." Smith was visibly upset after this statement, echoing her deep sentiment for "her people" and her school family.

It is clear that Smith wanted her employees to care for each other the way she cared about them—she said she leads by example.

When you put your people first and they see that, they see that as a school district. My employees were delivering food side-by-side to people who couldn't get to it. My employees and my students were the ones who [were] actually putting the

food in the back of your car when you pulled up and needed it, and to be there and to be a part of that, to be on site, and be there with them [was really special].

Smith was at the center of the recovery effort and even established the Pioneer Gap Board of Education to serve as the command center for the entire county. There were not many buildings in the county that could physically host a command center, but Smith saw it as an opportunity to help her community. The needs of her employees, students, and staff outweighed any potential costs. Others followed her lead. When asked about how many employees volunteered their time to assist her in the flood relief, she estimated 84% of her staff responded to her request. She stated, "I think I [had] about 475 employee's total. And I think out of those, I'd say 400 volunteered at some point. I'd say the other 75 had such devastating loss that they were taking care of their own."

Smith often stated it was difficult to know where to start when a disaster of this magnitude occurs. However, she again framed the situation beginning with the needs of her people, stating, "You have to start somewhere, we'll always start with our people. They matter most. And then we looked at what to do with our facilities." The facilities in her district suffered catastrophic damage, but it was the needs of her people that mattered most to her.

After the flood, Smith again focused on the numerous needs of her employees and students. Although there were several issues that needed to be addressed, she again valued human resource leadership by making sure her staff and students had the mental health resources they needed to begin the school year. Smith explained,

Once we started school, we were able to bring in some extra guidance counselors. We [partnered] with Kentucky River Community Daycare and another mental health facility, and they brought in extra counselors. [We were] able to work with those people to help meet the health and safety needs of our staff and students first and foremost. Their mental health [was] important. If people aren't in a good place, they're not going to be worried about math, science, and reading. And so

that had become the immediate need, and [to get] them the resources they needed, [as well].

Smith was proud of the services her district was able to provide to the community, but she noted that the work is not finished. One year after the flooding event, she continued to approach leadership from a human resource perspective. "So we still have a lot of needs. A lot of families [still have] houses that are inhabitable, but they're still working to get them back. We still have 65 families in our county living in temporary trailers right now. It's been a very difficult time."

During the interview, Smith stated several times that she appreciated the help from people all over the country, including Kentucky:

The kindness of strangers, you know, people from all over Kentucky, Tennessee, Ohio, all over the United States, coming in and volunteering their time. They spent money . . . everything from toilet paper and food to library books. We [were] blessed with some great donations and some great partners to help us through this.

Smith viewed her staff and students as members of an extended family, making daily decisions with the needs of "her people" in mind. She said, "When my people hurt, everybody [pulled together and tried] to make the best of a situation." Perspective was important for Superintendent Smith, and she took measures to think through difficult situations.

Multi-frame Thinking

Smith used perspective to make many decisions during the flood. She was drawn to some leadership frames more than others, but she was mainly drawn to human resource leadership. Smith immediately changed the focus of her leadership when the flood occurred. She stated, "It wasn't about education at this time. It was about taking

care of your people. It had to be. We had to put their immediate needs first: their emotional health, their physical health and safety." Smith further noted,

I had probably 70 employees that lost their homes or cars, or had property damage. And then, countless students and families. We still have 65 families in our county living in temporary trailers right now. During the flood, and even now, when I make decisions, these are things that I think about.

Smith seemed to value having perspective when dealing with employees, but also dealing with students. At times during the interview, she framed situations using her own experiences. Smith was born and raised in the Pioneer Gap community and viewed some situations through the lens of her own struggles as a student:

I come from a poor home, grew up hard, but I realized that most of our teachers don't have that perspective. That's where our kids are coming from in Eastern Kentucky. And you have to be able to relate to that. And if a teacher can't relate to that, or doesn't try to view an issue with perspective, then there's a problem.

Leadership framing was a strategy she used daily in her encounter. During periods of extreme crisis was no different. During the flood, she was able to use multiple *lenses* to better frame situations to increase perspective. Smith did not suffer the kind of property loss that some of her fellow community members, employees, or students did. She recalled, "It was overwhelming. I was actually blocked in where I live. I live on a hill, so I had no personal damage." Regardless of her own situation, Smith valued gaining the perspective of her employees and stakeholders who were suffering.

When asked about making decisions, Superintendent Smith valued empathetic leadership, stating, "I think perspective is key because if you don't understand what your own people are going through, how are you going to make decisions for them?" Through the crisis, Smith was required to rapidly shift or reframe events in order to provide appropriate and effective leadership.

Structural Leadership

During the flood, the priority for Superintendent Smith was to make sure the basic needs of her people were met. After she ensured her employees and students were safe, she began to frame issues in a more pragmatic way. Smith established a command center for the county at Pioneer Gap High School. The high school was the one of the largest buildings in the community, and, miraculously, it was not severely damaged by the flood. She recalled,

Our high school was the actual emergency management center for the entire county. So our county government and emergency management, FEMA, were housed at the high school, [even] the National Guard [was stationed there] at one point. The Red Cross, you name it. We all gathered at the high school and it became a supply and donation site with a draft room where our employees worked tirelessly.

Smith, along with local, state, and federal leaders established a rigid flood relief "system" with a clear hierarchy. Although there were several leaders from federal, state, and local agencies, Smith had the most influence with the "boots on ground." The National Guard, Red Cross, and the Federal Emergency Management Agency (FEMA) had crisis management expertise, but Smith had control of the most important resource: her people. She had hundreds of employees ready to assist with the relief effort, and she was their leader. She stated, "I had to contact my board members and we just started with our people. I put a plan in place. I wanted our principals to lead their staff, and the staff to lead the student volunteers."

Some tasks became overwhelming for Smith. No one had experience working with federal agencies such as FEMA. FEMA was going to pay 75% of the recovery costs, but getting the money and providing documentation to the agency was a complex task.

Additionally, she was often frustrated with the bureaucratic inefficiencies of federal and

state agencies, noting, "It's a red tape nightmare. Individuals are still struggling to this day."

Most notably, however, Smith realized her office staff lacked the skills to manage the FEMA funds. Recognizing this problem, Smith needed to find a solution, so she "problem solved." She needed to improve performance and streamline the process of securing federal funds and find an effective structure that fit the current circumstance. She quickly allocated funds to hire a consultant company, specializing in FEMA finances and operations. She recalled,

We hired a consultant company that [helped us manage our] FEMA paperwork. In the event of a natural disaster, the federal government looks at picking up 75% of the cost of the recovery. The state government looks at 13%, and then locals 12% of the overall costs. So this group [worked] with us to get all of that cost covered. By doing that, by donations, by working closely with claimants to make sure that all our t's [were] crossed and our i's [were] dotted [we were able to manage the funds more effectively].

Smith was able to recognize a problem and then find the resources to provide a solution. Without hiring this company, the district's federal funding could have been in jeopardy because she lacked the number of employees to work through the funding issues. She stated,

[It was] some of the best money we've spent. They [were] a godsend because they have handled [the finances]. At first, we had to handle that internally, and deal with all [the other things] we were dealing with. It was too much. I [didn't] have enough people on staff to do all the work that [the consultants were] doing and [also] deal with the school staff members.

The hierarchical structures were not limited to Pioneer Gap Schools. Smith often benefited from top-down communication from the Kentucky Department of Education.

Just as her people looked to her for leadership, she was also searching for guidance.

There certainly was no blueprint. She welcomed input from her superiors at the state level. Communication from the state commissioner of education provided her and other

district leaders with clarity of expectations, roles, and lines of authority. She stated, "Our state commissioner of education had weekly meetings with the superintendents. At the beginning, we had daily meetings. We were all in the same place at the same time. It was easy to stay in communication. Communication is key."

After Smith was able to secure federal funding and she had a mechanism in place to do so, she focused her leadership on cleanup efforts. She said, "Immediately we had to think about getting [the building] cleaned, dried. What to do with school? And so we contacted Servpro, [a damage restoration, cleaning, and construction company]. We had Servpro onsite within a few days and got them started [cleaning]." Superintendent Smith utilized the volunteer force in the cleanup efforts, but rationality eventually prevailed. Like her dilemma with FEMA finances, she needed specialists to do the job.

Fostering Collaboration

Collaboration was a major theme for Smith during her interview. She clearly developed a culture of collaboration at Pioneer Gap Schools, and she fostered collaboration extensively during the flooding event. She recalled,

We're small town, and many students' families work for the county government and for emergency services for the county. They all helped put *us* first. I've always thought we were partners. I never felt like I was alone and always felt like I had a great relationship with other officials in the county. From day one, our county judge said, 'You tell me what you need fixed, and we'll help with those needs. We'll do everything we can to help you get back to school.' So, we worked well together. We had daily meetings. We were all in the same place at the same time, most of the time. It was easy to stay in communication. I think I've learned that in any kind of natural disaster, communication and collaboration is key.

Smith had formed professional relationships with local officials prior to the flooding event and those relationships helped foster the collaboration efforts as well. She said, "I'll call the county judge any time I have a road issue. I've got his cell phone number. He

calls me frequently. We work well together, and so that helped us a lot." Local, state, and federal officials all worked together to help the community.

The Pioneer Gap Schools served as the command center for the agencies to be able to work together during the flooding event. During the interview, Smith said,

Our high school was the actual emergency management center for the entire county. So our county government and emergency management, FEMA, were housed at the high school. The National Guard at one point, Red Cross, you name it. We all gathered at the high school, and it became a supply and donation site, with a draft room where our employees worked tirelessly.

The collaboration between Pioneer Gap Schools and state, local and federal officials continued. During the interview, she stated, "I think the state and federal government brought in the trailers, and we have two different sites here in the county. We still have about 65 families from our district living in trailers."

During the crisis, Smith reached out to many officials, both local and state. An especially beneficial collaboration involved the commissioner of education. There were no "road maps" to navigate a natural disaster, but Smith and her neighboring superintendents requested to speak with superintendents in Western Kentucky that recently dealt with an outbreak of tornadoes in the area. In the interview, she noted:

I sat in on those webcasts and listened to what they were dealing with, how they were managing. Their families and communities lost a lot, but their schools didn't have a lot of damage. And so they were managing people. We met weekly with the commissioner [of education] and talked about our needs and the help we needed, and we brainstormed ideas for what to do next. So that was a big help, having heard some of the [same] things that I had gone through, and then doing this ourselves. Communication and collaboration is the key.

The community of Pioneer Gap came together to help each other. Smith was particularly pleased with the collaboration and participation of the students in her schools, as well. She noted,

Our students pulled through by working the supply side, which was backbreaking work. Students unloaded trucks, unloaded cars for people, [took] food out; [they did] everything they could possibly do, from working at homes]to] helping each person they could possibly help. Our football team got together and went to all their families' and coaches' homes. [They] just really pulled together. Our students and employees were the backbone of all the hard labor that occurred for several weeks.

The flood indirectly or directly affected most everyone in the Pioneer Gap community. Smith realized that if her school was going to recover from the devastation, it was going to require fostering collaboration from all stakeholders. She recalled that everyone was "in this together." She said, "Our community serves the same kids we do, and that's what it's about. I think it's important for everybody to know we're all human; we're all in the same situation; and we all can pull together and make the best of a bad situation."

Crisis Management

Although not as salient as other leadership strategies, having a crisis management plan in place is important and often overlooked by school leaders. Smith mentioned a lack of a "road map" several times throughout the interview. No one could have completely prepared for a one in a 1,000-year flood two weeks before the start of school. However, Smith felt it was important to form relationships with emergency management officials and prepare as much as possible. She stated,

I think a superintendent needs to know who the emergency managers are in their county. What is the emergency plan for the county government? Knowing and collaborating with those officials is important so that if this happens in your district, whether it's small or large, you know who to go to; you know who to contact. I don't think I ever thought about that before the flood. Fortunately, I [knew] who those people [were] because [I was] in a small town. Had I not been in a small town, it might have been more difficult.

Fortunately, Smith had established relationships and had numerous ways to contact local officials in the event of a crisis event.

However, some superintendents may not have the luxury of living in a small, rural community and knowing all the helpers. She was naïve about the resources available nationwide for disaster relief, but it was something she quickly learned. She said,

I didn't realize because I've never dealt with a natural disaster, but there are many groups that all they do is disaster recovery. The Cajun Navy, the Mercy Sheriffs, they travel from natural disaster to natural disaster, providing assistance. Team Rubicon is another example. They're military veterans who volunteer their time and put resources together to help. These guys tore down damaged homes, shoveled out mud, and [did] anything or everything we asked them to do. All of these different groups are out there. I didn't know at the time that there's so many people who are willing to help families that have experienced natural disasters, and communities that have experienced disaster, and they have the experience and expertise to help.

In hindsight, it would have benefited Smith to be aware of the resources available, not only from government agencies, but from volunteer organizations, such as those she mentioned.

Transformational Leadership

Smith was concerned about her employee's needs during the flood. She started with the most basic of needs. "We started just trying to help people look at their homes, get their immediate needs met with food, water, clothing, shelter." She understood that she had to ensure those basic needs were met before she could move up Maslow's hierarchy (1947, as cited in Bolman & Deal, 2021). The vision and mission of Pioneer Gap Schools during the flood changed, and instead focused on meeting basic needs. She recalled, "It was about taking care of your people. It had to be. We had to put people's immediate needs first. Their emotional health, their physical health, and their safety."

According to Smith, Pioneer Gap Schools has always focused on the needs of their students. The needs of students may change over time, but Superintendent Smith

was willing to adapt. When asked if the mission and vision of the school changed, she stated,

I don't know that it has changed because I feel like we've always put kids first. I think the needs of our kids have changed, but the kids have always been the focus for us. What they need, how to help them, whether it be a physical, mental, or educational. I think that's always been our mission. But the needs of our children have changed. And so we've had to meet those needs. We knew coming back from COVID that they would have not just academic gaps, but also behavior and social learning gaps.

Additionally, Smith knew how to inspire others. She took care of her employee's emotional needs, especially during periods of extreme crisis. She helped with donations, worked in the draft room, delivered food, water, and necessities, and worked to clean her schools. It was important to her and she also knew it could be a transformative experience if everyone worked together. She recalled, "I think just being there with them, and working next to them, and, you know, crying with them—being a part of it—I think they see what you value." She conveyed this message again:

You have to know what they're going through. And you can't forget community and family now, and if you don't relate to them and try to make a decision for them, you'll not be supported. You can't get support because it won't be the right decision, without understanding them. You have to know your employees and your community.

Smith values motivation, but to be able to motivate others, a leader must know their employees' struggles and experiences. She said, "Even if it didn't happen to you, you have to work alongside them to see what they're really going through. You have to talk to them, and not just talk, but you have to listen. You must spend time in the situation with them so that you can get perspective."

Smith valued her employees, students, and community, and their well-being was her top priority. She explained, "It's not about the loss or the finances. It's about our people and putting them first. I had to make the decision whether to pay them or not

because they weren't working. Making decisions how to handle that, how to do that, to put your people first, is the most important thing." Smith put people first, understood their struggles, and met their basic needs. She was an inspirational leader in her community. Her willingness to serve alongside them and experience their struggles helped to build confidence in her followers, thereby strengthening her ability to lead.

Symbolic Leadership

Throughout the interview, Superintendent Smith used stories to convey her own thoughts regarding the flood. "There were numerous stories of heroism, tragedy, rescues, and miracles," she noted. Smith experienced a range of emotions during the flood and some of those emotions came back during the interview. She described the flood as a "rollercoaster of emotions," and often told stories to convey the wide range of emotions she and others felt during this time:

My own instructional facilitator, the dean of students, and some principals were at the [Kentucky Association of School Administrators (KASA)] conference in Louisville on the night of the flood, and he started getting calls from home that his family was trapped in his house. He was four hours away and they were calling him for help. And his mother lives next door. She's 85, and he [headed] home and I [started] trying to get people to her. They couldn't get to his mother. So he [drove] home thinking that his mother [was] dead. When the water receded, one of his friends, another employee of Pioneer Schools who had a bass boat, [took the] boat over to her house. [He thought he was] going to find her body. He [knocked] on the door and eventually [pushed] the door in and [yelled] his mother's name. "Momma, are you here?" And she said, "Yes, I'm right here. What are you doing here?" An 85-year-old woman sitting in her rocking chair was patiently waiting for somebody to rescue her. The water had been over her head and she made it through the worst part. She got up and they got her out by boat, and took her to the hospital, and had her checked out. She was fine. And, luckily, about six, eight weeks ago, she got back in her house. They had to completely rebuild her house, but with some help from different groups, she's back in her house and living independently.

Smith's story was symbolic of the wide range of emotions felt by everyone in the community during the flood.

However, Smith mentioned her faith frequently throughout the interview and credited her faith with quelling the "emotional rollercoaster" she felt during the crisis.

Referring to the aforementioned story, she stated,

Yes. It's a miracle. Those miracles keep you going. They give you hope. You know, I told you I'm a Christian, but I saw God every day. The kindness of strangers, people from all over Kentucky, Tennessee, Ohio, all over the United States [came] in and [volunteered] their time. They spent money on everything from toilet paper and food to library books. We [were] blessed with some great donations and some great partners to help us through this.

Religious symbols are often used in Appalachia and serve to unite communities. The tribal nature of mountain communities are strengthened by the unity of religious beliefs. Common religious values bring cohesiveness, clarity, and direction in the presence of confusion, chaos, and mystery. Smith referenced her religious beliefs often throughout the interview. Christian affiliation in mountain communities provide scripts for celebrating successes but also for facing calamity. Smith relied on her faith not only to help unify her community and "her people," but also to frame daily challenges.

In addition to the flooding event and the COVID-19 pandemic, Smith recalled another crisis event that directly involved her religious beliefs and the religious beliefs of her community:

I had a personal crisis before COVID, and before the flood, that was difficult. It started with a group out of Utah and they fight against religious observations, or religious anything in schools. And somehow they caught wind that my football locker room had scripture posted on the walls and started sending me mail and threatening lawsuits, and making a huge ordeal of our Bible verses in the locker room. And when I had to investigate, what I found is that the adults posted it. And I'm not opposed to that. Let me say, I'm a Christian, born and raised, and I think kids need it, but, I also believe we have to follow the law. So I had to investigate and deal with the fact that adults had posted it and not students—it wasn't a student-initiated situation. They [group from Utah] used that [posting scripture] as a headline [to change perception]. And I got hate mail from all over the world, even from Christians questioning my faith and those that questioned why we [posted scripture]. So I learned real quick. That [posting scripture was] probably my biggest, personal obstacle, outside of the flood and COVID, because I'm a

devout Christian. I believe in it, but had to follow the law and people all over the world who don't know me locally, let me say this, because I'm born and raised here, people know my name, my family, I was supported; [the community] got it. They understood. They were very, very supportive and very kind, which is a good thing, but to make national headlines and for the [group from Utah] to use a school district to further their cause was probably something I never prepared for. But I learned a lot and have since done a lot better with that kind of situation.

For Smith, this situation was a school issue that became very personal because of her religious beliefs. She clearly struggled between following the law, dealing with national and local public perception, and her own religious convictions. However, she knew she had the support of her community due to the shared values between her and her community. Smith is deep rooted in the community, often worshiping alongside community members at church. The shared values between her and her community served as a form of "protection" from factions outside her community that attempted to taint the public perception of Pioneer Gap Schools. The perception of her work is important to Smith, especially to those she serves.

She also viewed news coverage as a chance to tell the nation about the compassion of Pioneer Gap. Regarding the media coverage of the flood, she recalls,

There were news cameras and reporters and people here every day, all day long, wanting to talk because of the enormity of [the crisis]. I tried my best to [honor] those requests because I felt it was important that the people here [knew] about all the work [we did] to provide for them. I also felt like it's important for people around the state and around the nation to understand the enormity of the loss. Those people need to know that our families [were] still suffering and that people [were] still having a hard time, because help is out there.

Smith is proud of the work she and her employees did during the flood. She also understands the importance of perception, noting, "The community can see what you value by what you do." She continued, "I think just being there with them and working next to them and crying with them [helps them] see what you value."

It was important to her for the community to see the work and the sacrifice her school made for the community during unprecedented crisis. She stated,

I think it [was] important that the public [saw] our story, because I think it [needed] to be reassuring to our parents. They [needed] to know that we put our students and employees first, and that their safety and health [was] the most important. It is important to tell your district's story and my community has lived it. And if there are some people who didn't live it, and it helps someone in the future go through a similar situation, I think that's important, as well.

Superintendent Smith used the opportunity to tell her story to advocate for her community, once again. Perception was important to her, but she wanted to use the media to continue to serve the needs of her employees:

Getting information [about where and how to get supplies] to our families, in the community, from the beginning was hard because radio stations were down, cell phone towers were down. And the lack of communication in and of itself made it difficult. But I wanted to make sure my people knew where to come and get hot meals and how to get help.

Smith clearly understood that there are multiple forms of reality, and telling her district's story was an important aspect of her leadership style. Controlling the narrative using unifying values and principles served to strengthen the connection to her community. When faced with severe calamity, she was able to speak a language that was powerful and a source of comfort for her employees and community members. Pioneer Gap School District, Superintendent Smith, and the Pioneer Gap community share common values, and communicating those values through religious references and modeling only strengthened the ties to her stakeholders.

Political Leadership

At the beginning of the flood, several resources within the county were depleted, including numerous school buildings and materials within those schools. The scarcity of resources became specific to building structure and space. Smith recalls,

Three of my schools were completely lost. The buildings were destroyed, damaged to the point of non-repair. Three schools had 6 to 8 feet of water in them. Another school had feet of water in the gym. My central offices were destroyed and [so were] a couple football fields and an alternative facility. I had eight different facilities that had flood damage.

The lack of buildings to educate students became a serious concern, especially considering her goal of starting school in the coming weeks after the floods. Time and space were both in short supply. Smith had to move quickly with a plan. She recalled,

Fortunately, we used every possible space from libraries to closets to the cafeteria. I had to bring the middle school [students] on campus with an elementary school. I had to put my largest elementary school on campus with my high school because that's the only place that fit. And we were able to section off a whole wing of the building where they didn't intermingle with high school kids. But we were able to have school by moving those three schools around. I put an elementary school on campus with a middle school and we used every available space, from white rooms and locker rooms to libraries and storage space.

Even in normal working conditions, workspace allocation can be a source of conflict in organizations, especially in schools. The student body may fluctuate from year to year, but building new facilities and classrooms does not happen often. Space is almost always limited in schools and teachers tend to be protective over their workspaces. Smith had to decide "who gets what," thereby increasing the potential for conflict. She understood the potential, but was able to navigate using political leadership. Agreement and harmony are easier to achieve when everyone shares similar values, beliefs, and cultural ways. Coupled with the shared symbolism of the local Christian community, the natural disaster served as a unifier and eased the conflict typically associated with scarce resources.

Political dynamics can be sordid and destructive, but they can also serve as a vehicle for achieving noble purposes (Bolman & Deal, 2021). As the flood was reported across the state and nation, donations and resources came pouring into the Pioneer Gap

community. The potential problem of scarcity of resources ultimately turned into a distribution and processing challenge, which could only be solved with structure and teamwork.

Mountain Values

As with many citizens of Eastern Kentucky, Smith has a long history with the area and has a love for her home. She states, "I was born and raised right here in Pioneer Gap, lifelong resident, and have spent my career here in Pioneer Gap". Smith had the choice to leave the area, but instead chose to stay at Pioneer Gap, just as many of her fellow community members chose to do. As such, she has a deep connection to the people and community of Pioneer Gap.

Coal Mountain Schools

The following sections include a brief description of Coal Mountain Schools, with information regarding specific demographics of the county. The district description is followed by a narrative portrayal of the flood within the Coal Mountain community and concludes with a discussion of the major themes found in the study.

District Description

"Coal Mountain School District" is a rural, remote school district located in the heart of the Eastern Kentucky coalfield within Central Appalachia (NCES, n.d.). The county covers approximately 339 square miles in Eastern Kentucky. The land in the Coal Mountain community is mostly mountainous, with numerous steep ridges and narrow valleys. Several creeks and streams are present in the county, with two major rivers running within its borders. The county is famous for feudal battles between family factions occurring in the late 1800s. There are approximately 23,000 residents within its

boundaries and the district has a rich history of coal production, providing pockets of wealth starting in the early 1900s. The population density is roughly 83 people per square mile. Currently, the county is 96% White, and approximately 27% of the population lives below the poverty line, with a median household income of \$45,300.00. (U.S. Census, 2023). Coal Mountain Schools has a student population of approximately 3,593 students.

The Flood in Coal Mountain

Residents of Coal Mountain woke up to water gushing into their homes on the morning of July 25, 2022. For some residents in Coal Mountain, it was like waking up in a nightmare. A local news agency reported, "The flooding was so intense that water picked up homes and moved it, while many residents were still inside" (Vanderhoff, 2022). As the water rose around their homes, residents were hoping and praying for the best. One resident recalled, "I slept like two and a half hours on that sofa and there was stuff hitting all around me, all around my trailer. I mean, it was a' knocking, a' rocking, and a' reeling. But I just felt at ease, so it had to be a God" (Vanderhoff, 2022). The resident woke up the next morning to neighbors knocking and banging on her walls, but they couldn't get her out because the back porch was washed completely away and the front porch caved in—she had to be rescued through the window (Vanderhoff, 2022).

Residents were forced to wade in waist-deep water to wake their family members during the night of July 25, 2022. One said, "My oldest son actually went completely submerged. He was completely underwater. How he pulled himself up is just a miracle" (Vanderhoff, 2022). Most of the residents had no idea what to do because the water had come so fast. A Coal Mountain resident recalled,

There was at least nine people standing in my living room watching in panic . . . My brother and sister-in-law had already watched everything they own go down.

Their house was under. My brother-in-law's house was under. And we're in one room, just looking at each other and hoping and praying. And that's the only thing we could do, was lean on each other. (Staley, 2022)

For some residents, the reality is the flood only exacerbated existing economic problems in Central Appalachia. A local resident stated,

We all know someone that's got flooded, or someone's kin to us that's been flooded. We know people that we have lost in our community. It's just been a total devastation. We need more help down here. We need more jobs down here for these people to stay in the community, to build this community [back] up because this community has been falling apart and it has for a while. We don't need another gas station. We need homes and we need businesses, big businesses, factory jobs for these people down here. (Staley, 2022)

For the community of Coal Mountain, the only way to improve its economy and break the generational cycle of poverty has been through education. Unfortunately, some of the county's most damaged structures were to school facilities. A local creek crested its banks and flood waters destroyed a K-12 school in the Coal Mountain school district. Since the flood, students of the K-12 school were forced to attend classes at a neighboring elementary school, resulting in more than an hour-long, one-way bus ride for children living in the furthest reaches of the county (Childress, 2023). Parents have been anxious to get their children back into their own building and administrators at Coal Mountain Schools have been working to make it happen. In a recent Board of Education meeting, administration did their best to explain the upcoming construction schedule. The district's chief financial officer said.

The [Coal Mountain School District] will have to pay for the \$15 million reconstruction project up front and then hopefully be reimbursed for the project by the Federal Emergency Management Agency—but only if the district complies with stringent federal guidelines. Following those guidelines, waiting for certain levels of approval, and having to change contractors has made progress relatively slow going. (Childress, 2023)

Rebuilding the K-12 school in Coal Mountain School District is only a part of the \$50 million the district must spend to rebuild and renovate other school facilities in the district. The district's chief financial officer wanted to make sure they would get reimbursed for the massive expenditures. He told the community, "I'm using your money, taxpayer dollars, \$50 million of it. I want to make sure when I spend that \$50 million, we're going to get our \$50 million back" (Childress, 2023).

Many schools in Coal Mountain district were damaged by the flood; however, one school was completed wiped off its foundation. A local news agency reported on the devastation: "Officers with Kentucky Fish and Wildlife have navigated the area to check on people and deliver simple items like food and water. The flooding in the community spared nothing in its path—not homes, not cars, not even an elementary school" (Philpott, 2022). The severe devastation affected employees who loved the building due to its rich history and significance to the community. An employee at the elementary school recalled, "Seeing the pictures of my office and [seeing] those walls knocked down . . . and actually being able to see the gym through all those walls, it's hard to believe. A look inside the school is heartbreaking" (Philpott, 2022). Additionally, she said, "This school isn't just a fixture in the community, it's history. That school has been in this community since the original building was a WPA building, so there is actually a wall behind the school that is the [same] sandstone from the original building. So it means a lot to us that it's been in the community that long. Our grandparents went here" (Philpott, 2022). The residents of the community of Coal Mountain have generational ties to the area and to the schools. Many residents have lived on the same land or were educated in the same schools as their grandparents and great-grandparents.

Residents in Coal Mountain and other Eastern Kentucky communities have a love for their land that not even a flood can take away. Many residents lost most, if not all, of the property they owned, including the homes sitting on generational land. A resident of the county refused to leave the area she had called home for her entire life. She stated, "I loved living in the brick house my grandfather once owned, nestled against a steep hill near Troublesome Creek, but it was badly damaged by flooding" (Estep, 2022). The Coal Mountain resident continued, "I pushed through chest-deep water inside the house to escape out a bedroom window, grabbing onto tree branches and then climbing the hill in the dark with my boyfriend. The house isn't fit to live in, but I don't want to leave this land" (Estep, 2022). FEMA and other agencies have provided trailers and other temporary housing in the county, but some residents were not interested in using them. People had varied reasons for camping, including wanting to be close to home while continuing to try to clean and salvage items. "Some just can't face leaving their home" (Estep, 2022). The conditions for the residents were difficult. They "cooked on a gas grill, used hanging camp showers to clean up, and burned tiki torches to try to keep bugs at bay. Their clothes [stayed] damp in the humidity" (Estep, 2022).

No matter how challenging the circumstances, and regardless of the damage to structure, their land was *their* land. Many residents of Coal Mountain had lived in the county for their entire lives, and their familial ties to the county and the region pre-date 1790. The land was of great value to the residents of Central Appalachia, regardless of what sat on it. Many Coal Mountain flood victims preferred to stay in tents and temporary shelters on their family-owned land than move to FEMA trailers or temporary housing provided by government agencies.

Human Resource Leadership

As "Superintendent Jones" led Coal Mountain schools through one of the worst natural disasters to ever occur in Kentucky, he was hyper-focused on the needs of his employees. Some employees lost their homes. In fact, Jones said, "we had two principals that lost everything they had." He continued, "We reached out to several of the teachers at an elementary school. They had lost their houses. So, we wanted to make sure that they had everything they needed to be able to come to work, come to school if they needed food, or if they needed somebody to help them get through the devastation."

He said, "We just all came together and provided what needed to be provided for our students and staff." In his interview, it was clear he valued the needs of his employees and that he navigated the devastation by using human resource leadership. The mission and vision of the district always existed to serve and provide for the students and community. Superintendent Jones believed that organizations need people, and the community needed the organization. He said,

Truthfully, the school system could have very easily just said, "well, we're going to call off school, and whenever you all get this fixed, we'll go back to school." But the [Coal Mountain School District] was actually a vital part of the of the efforts to get people and employees back on their feet, providing the goods that the people [needed].

Jones realized that his employees were hurting, emotionally and mentally. Some had lost loved ones in the flood and he realized they had needs that his organization needed to fulfill. He stated,

We had staff members that lost family members. I had a teacher that lost her father in the flood. And we just wanted to make sure that they had everything they needed. If it was mental health [or] somebody to talk to, a mental health advisor or anything, we just wanted to make sure that all their needs were being met so that we could help our employees.

Consistent with core human resource assumptions, Jones understood the importance of the school district fulfilling the needs of his employees and community, including basic needs. He offered elementary school facilities to the community to serve as a temporary shelter. He recalled,

I turned an elementary school into a temporary shelter that weekend. We housed over a hundred people. I think at one time it got up to 128 people. Then we put the cots together, we fed them. The community came together and provided meals. People [worked] around the clock to make sure that the needs were met for the people and employees that lost their homes.

The needs of the community and his employees were varied. He provided access to mental health services to those who lost loved ones; he provided shelter in the elementary schools in his district; he provided food, water, and even clothes. He said, "People were coming in and they didn't have shoes; they didn't have clothes. They had lost everything. So while some school employees were distributing clothes, I was setting up a distribution center. We had no idea that would even be something we could do."

The school system became a community-wide distribution center of food, water, shelter and clothes for residents, employees, and students. It did not matter what the need was, Jones and his staff were determined to provide it. He noted, "And that's what it was about. We wanted to make sure that they were comfortable, as comfortable as they could be, and [we tried] to meet their needs in any way that we could." The needs in the community and of his employees varied greatly. Jones was always aware and willing to provide whatever was needed, including essentials from baby formula to pet food. He recalled,

Formula for babies—that was a huge need in our community and even with our employees. At times people wanted that. Something that people were asking for that no one thought anything about was animal food. That was kind of something that I don't think anybody really thought about. Who's going to feed the dogs? So, in our cafeteria or in the gymnasium at one of our elementary schools, we had

several hundred pounds of dog food and people would come in asking for dog food. It was important to them.

Jones led by example and his focus on employee and community needs inspired his employees to help in various ways. He had numerous teachers and staff volunteer for hundreds of hours. He said, "We have 600 employees and I'd say 300 of them were, at some point, actively involved in the flood relief. All central offices were heavily involved. Our whole central staff was at the elementary schools. All the principals were involved to some extent, too." Jones was clearly proud of the efforts of his staff to help care for the needs of the community. He noted, "I don't think there was ever a day that we had less than 100 volunteers at each elementary school. We were there from sun up to sun down, and we did that for two weeks."

Jones framed the challenges associated with the flood in a way that his organization's focus changed from primarily providing educational services to focus on the urgent needs of the community and his employees. As he said, the school system did not have to take such a fundamental role in the flood relief efforts, providing for the basic needs of the community and his employees. However, the mission and vision of the school temporarily changed to accommodate the situation. Jones knew that the "prepotent" needs for physical well-being, including emotional and mental well-being, had to be satisfied first before teachers and students could focus on learning.

Multi-frame Thinking

Superintendent Jones's experience through the flood caused him to frame situations and circumstances in a variety of ways using human resource leadership, political leadership, symbolic leadership, and structural leadership. However, in the days, weeks, and months following the flood, he reflected on his experience using many

different perspectives. "I think it showed us, if anything, [that] we could have been too narrowly focused on educating kids, teaching their ABCs and 1,2,3s. But the flood taught us that when we talk about *community* and *service*, [it] means a lot more than bringing kids here at 8:00 and sending them home at 3:00." The flood changed Jones's perspective on education. Since the flood, he views education and school in a more holistic way than before the flood. It was clear that Coal Mountain Schools meant a great deal to the community, but experiencing the devastation of a natural disaster opened his eyes to the impact schools can have, in ways other than academics. Jones always knew schools serve students in more ways than just educational, but the flood made it even more clear.

Jones was forced to think creatively and systematically, which was beyond anything he could have predicted. He had to change his perspective from educational leader to crisis manager and distribution center manager, among other roles and responsibilities. There was no one to rely on for expertise, therefore Jones was forced to view issues from many different perspectives:

There was no formal background in flooding crisis management. We didn't have a flood expert. I think now we're all experts on flooding and displacements and distributing meals and food. The World Kitchen [humanitarian aid] came in, they started cooking the meals, and people asked, "how do you all know how to do all this stuff?" We didn't know. It was just all hands on deck and we figured it out. We had to think outside the box and view issues from many different angles.

Jones views situations in a different context now. He noted that when students were upset, he tried to find out the reason behind it. Not surprisingly, the flood still haunted many of his students. He stated, "They lost their school and even some family members. It was a traumatic experience. There were times last year [when] it would rain hard outside, and kids would look out the windows and cry, you know? So, yeah. It's been a traumatic experience for our students and staff."

Given the evolving circumstances of this natural disaster, Jones reframed events that enabled him to provide effective leadership during this crisis. Some perspectives were clear and straightforward, and others were more enigmatic. However, when framing and reframing, he was able to deepen his appreciation for his people and the understanding of their challenges.

Structural Leadership

Jones focused on providing his community and his employees with basic needs due to the devastation of the flood. It was during this time he had to create systems and division of labor within his organization and in collaboration with other agencies to distribute the resources. Despite not having a plethora of experience in distribution, he quickly divided the work among his employees and/or volunteers. He recalled,

At one of our elementary schools, which is about two and a half or three miles away from the district offices, we created a distribution center. That's really how it all got started. So we got our staff together here at the office. Our principals and administration began managing the teachers, volunteers, and students. We got as many cooks in our district as we could. And we just wanted to start fixing some hot meals for our students and their families. Man, it just exploded.

Jones and his staff also had to allocate work at his elementary schools, particularly the ones that would serve as temporary shelters for displaced community members. He was forced into coordinating diverse efforts after delegating responsibilities to volunteers, staff, and even other agencies. Jones said, "There were tons of people that were displaced. One of my principals was manning that ship at the elementary school and we basically turned that school, the gym, and the cafeteria, the office space into almost like a refugee camp, in terms of what it was like."

Jones knew his employees and most (if not all) the volunteers personally and coordinated their efforts to fit the current needs. Thousands of pounds of various

materials were donated and hauled to the elementary schools. "Next thing we knew, we had 10 to 15 30-foot tractor trailers pull in per day at the elementary school. So, then the problem became, 'how do we even get [these donations] off [the delivery trucks]?' Because there were no crates, so we had to go get some heavy equipment." Private agencies, such as local coal companies would bring him equipment to use to clean mud and move debris. Some of his employees could operate the machinery while some were better at organization. He had to divide the labor to fit the need no matter how foreign the skills seemed. He stated, "Coal companies would let us use their skid steers and their forklifts, and it turned into a full-blown warehouse distribution center. We had hundreds of pieces of equipment there and someone had to operate them."

Fostering Collaboration

Once again, the community utilized schools to serve as centers for flood relief and Coal Mountain Schools offered its facilities to house emergency officials. Jones recalled, "We got together and met at one of the elementary schools. It was a lot of community leaders, school administrators, local officials, and we just kind of formed a plan together." The initial plan was to make sure the basic needs of the community were met.

After the initial relief efforts were completed, the focus of school leadership shifted to fostering collaboration between school administrators. Jones had to find a location for the students to be housed while the schools were renovated and cleaned. Jones had to foster collaboration between principals and staff so students could share facilities, as cramped as they were. The elementary school that was destroyed had about 300 students. Additionally, there was a K-12 school that also suffered catastrophic damage to its structure that had to be relocated, as well. Fortunately for Jones, an old

elementary school building was being used as a storage facility and was able to house students from both the elementary and the K-12 school. Essentially, he had two elementary schools, two middle schools, and one high school operating in an old elementary school building located in the county. Jones had to focus on fostering collaboration between the administrators, teachers, and staff, but the schools were able to work together successfully. He recalled,

Actually, right now, we have the elementary school and a K-12 school working together in the same building. They are both housed in an old elementary school together because of the flood and I am happy to report that learning never ceased. The teachers and staff provided high-quality instruction this previous year and the data would prove that.

It was clear Jones was proud of his staff. He was able to foster collaboration between the administrators, teachers, staff, and students, all while sharing a single building between two elementary schools, two middle schools, and one high school. They were all able to score high to high-average on 2023 state accountability measures, despite the difficult circumstances.

Jones worked with several officials during the flooding event. His facilities served as make-shift distribution centers for food, water, and clothing. The community relied on his leadership, and he often credited the success of the relief efforts with fostering collaboration: "We're a team. That's the school system: I mean, administrators, the teachers, and the county officials, city officials. Something needed to be done. We just got together and rolled our sleeves up and got to work. It's one big team. Everybody worked together and did what was best for the community."

Jones fostered collaboration among his staff, county officials and city officials.

However, he was able to inspire his students to assist, as well. Jones recalled, "Our basketball teams and football teams were going out to houses, shoveling mud, and

helping clean up. The students were helping to do what was needed to be done in the communities."

It wasn't just students from Coal Mountain Schools that helped the community, however. The Coal Mountain School District is the largest school district in the county. The other school district is an independent school district and it is significantly smaller than Coal Mountain. The independent school is considered the "city" school and Coal Mountain is the "county" school. As with many rural towns, there are heated athletic and competitive rivalries between the small city school and the larger county school. However, during the flooding event, both school superintendents came together and put resources toward the flood relief efforts, including students. Jones recalled,

Even the city school did the same thing as our teams, and they didn't have to. Those teachers showed up to the work and there was no [rivalry]. They showed up and said, "let's go, let's get this thing done." We had a football team that pulled in about three buses to help. I think it was [Louisville's] Trinity High School's baseball team came down to help and University of Kentucky's cheerleaders. It's crazy. I just can't put it into words the amount of teamwork [that occurred].

Jones fostered collaboration throughout the flooding event and inspired his employees, students, and community members to join him in his efforts to provide for his community, even putting rivalries aside. He continued to work collaboratively with the board of education to find a location for the elementary school destroyed by the flood. He acknowledged that trying to get consensus for the next location of the elementary school required collaboration among board members. He said, "We're getting close to the board agreeing on a location for a site for the new elementary school, but we're not there yet."

Crisis Management

Themes of crisis management co-occurred with structural leadership at many points during the interview of Superintendent Jones. There are many similarities between

structural leadership and crisis management, especially regarding the systems required to be able to distribute large quantities of items. This is especially true if the crisis involved destruction of personal property on a large scale. When community members and employees lost their personal belongings, such as shoes and clothes, they turned to the schools for assistance. Jones recalled being surprised about what they would have to provide: "People were coming in and they didn't have shoes. They didn't have clothes. They had lost everything. So while our staff was [helping with that] at the elementary school, which is about two and a half or three miles away, we were setting up a distribution center."

Jones reiterated his astonishment at the volume of resources that were delivered to the elementary to be given to community members. One of the aspects of crisis management, especially when the crisis directly impacts schools and children, is the outpouring of support and the amount of donations received. Therefore, school leaders must consider distribution centers and efficient spaces to open to the community, should they need it.

Thankfully, Coal Mountain Schools had employees who were able to operate heavy machinery and/or had the space to accommodate the volume of resources donated from people all across the nation. Jones mentioned repeatedly during the interview regarding crisis management that it is important to "expect the unexpected." He said, "Be ready for people to help and large amounts of donations, which we were so grateful for."

Transformational Leadership

Jones was a transformational leader because he valued the needs of his employees and community and he inspired others. It was clear he valued the needs of his employees,

and his staff joined him in valuing others as a result. He stated, "Our school staff fed [the flood victims]. The community and school came together and provided meals for the people." Although crisis situations can bring people together, Jones had long ago established trust within his community. He stated, "People say natural disasters bring people together, and I think there are times that happens. There's no question about that. But the relationships were already there. I think the community and school were together way before the flood." Jones inspired others to serve alongside him because he built relationships with people in his community. He also had relationships with other leaders in the community. He stated,

The mayor, the county judge, the state representative . . . We text these guys all the time. It's that kind of relationship to where if they need us, they can call us. If we need them, we call them. And it's not formal. If you need to talk to the judge executive, you just schedule a meeting and it might happen, it may not. And so again, I go back to the relationship we had the week before the flood and the weeks before that. We didn't have to come together; we were all ready to go.

The established relationships Jones formed with local and state leaders gave him the ability to do what was needed and make positive change in his community.

Symbolic Leadership

Jones's faith permeated a large part of his leadership style. He often spoke of his faith throughout the interview. When asked why he became a superintendent, he gave the credit to his faith:

I was a principal at an elementary school in the district, and I was in my bedroom praying, and I felt the Lord guided me to start taking classes to become a superintendent. And then, that same week, the previous superintendent and some other officials and administrators approached me and told me that I should apply. So that's the reason I pursued it.

Throughout the interview, Jones referred to church and the efforts of the local churches during the flooding event:

Churches were actually a vital part of the flood efforts. We see again, I think togetherness was already there between the school, churches, and community officials. It was just strengthened by the fact that we all had something to work towards. There was no [one saying,] "Well, my church is going to do this," or "My church is going to do that." It wasn't anything like that. It was churches working together, religious organizations coming together, pastors, county officials, city officials, and our school system, and I think it speaks kind of highly of the school system. And I know people have the expectation that schools and churches should work together in crisis situations.

The board members and other school leaders were eager to work with churches in the local community. In addition to being a vital resource, collaboration with churches served as a symbolic act due to the deeply religious tendencies of the community. It was clear that Jones wanted to lead his community by sharing a common belief system that could connect to individuals on a spiritual level, more than words or rational thinking could capture. He told a story to convey the deep connection between Coal Mountain Schools and the community:

To put it to put it in perspective, one of our board members at that time was actively involved with [distribution for] the displaced folks, [along] with school employees. [He] was staying at a church that he attends here in the county and his pastor [happened to be] the state representative. So they were running a homeless shelter out of [the church's] sanctuary. They put out cots and people were staying there continuously. We served as the distribution center and we provided food to that church every day. We [also] had the Three Forks Baptist Association here in the county. That was just tremendous. They provided a shower unit, a mobile shower unit, they brought in a mobile washer dryer unit. We had pastors showing up, and they would just bring trailers and drop off all kinds of supplies, and would distribute it to the community.

Referencing his faith served as a source of comfort to his community. From the beginning of the interview, it was clear Jones used his belief system as a common language for his stakeholders. He leveraged his belief system to evoke a spirit and soul that served to unite his stakeholders and the community. However, this leadership strategy was only going to be effective if the community's cultural and belief patterns aligned with his—and they were absolutely aligned.

Jones understood the value of social media, as well. He used social media as a way to communicate a narrative and influence perspective, but also in ways to generate needed resources. Facebook served as a way to communicate the school's needs to the community. He said, "There wasn't much of a lack of communication or resources because, whatever we needed, all I had to do was get on Facebook and say, 'Hey, we're running low on this,' and the next thing I knew, here it came." Whatever resources the school needed, Superintendent Jones would advertise the needs to the community via social media and they would be fulfilled. Using social media this way served to fulfill the needs of the community and employees, but it also communicated the values of Jones and his staff. Sending the requests for items allowed Jones to also control the narrative that his school was willing to help the community in any way possible. The stakeholders and community members were able to see for themselves the work of his teachers, which reflected on him, as well. The teachers did not help with the flood relief efforts because of the promise of compensation, rather, they did it to give back to the community. He stated,

It's these people that will show up in times like these, and they don't ask, "how am I getting paid for this," or "how are we get compensated for this." It was just like, we're here; we got to make this thing work. And [those are] the people [who are] teaching our kids every day. [Those are] the people [who] are the principals in the buildings [and] the Central Office administrators. Sometimes those administrators take dings. We're in a small community. You know how that goes. [Those are] the people [who] make the most money. [Those are] the people [who] take the criticism, but now the community sees them in a different light. We are proud to share our story so the community [can] see our staff involvement.

Jones also saw the value of sharing Coal Mountain's story beyond the boundaries of the state:

[The story] got told for us quite a bit. National news like *CNN* and *Good Morning America* all came and interviewed us. *Good Morning America* has been here now three or four times. Just recently, about a month ago, [actress] Jennifer Garner

was here with *Save the Children*. They spotlighted the efforts of the reconstruction. She's been here now two or three times since the flood. We've been able to go through trainings at some of the conferences and people have told the story. I've been able to speak and do some keynotes related to the media coverage. *Facebook* was vital during that time frame. We were doing some live streams to let people know how to get resources. We were on the local committee, the restoration committee involved at that time with all the officials, local, statewide, and FEMA. [There were] plenty of pipelines for our story to get out there. Most of the time, we don't want other people telling our story, but in that situation, during that time, the media was absolutely our friend.

For Jones, the media coverage was an opportunity to share his values and the values of his school district. He framed situations using symbolic leadership differently, depending on the audience. Strategically, when speaking with people in person it was clear he used his personal belief system as a script to help his stakeholders and employees face the calamity of the flood. However, when communicating using social media and national news outlets, Jones wanted to communicate the "brand" of his district—to serve others and to fulfill the needs of his embattled community, whatever they may be.

Political Leadership

Jones often referred to scarce resources throughout the interview. However, the flood disaster was not the focus of the discussion when referencing scarce resources.

Rather, the focus was on the existing barriers the school faced due to geographic, socioeconomic, political, and educational deficits. Even in the context of the flood, Jones was cognizant of the long-term deficits and scarce resources associated with Central Appalachia, especially reduced finances:

From a finance [perspective], here in Eastern Kentucky, we are fighting an uphill battle. We're constantly facing the battle of decreased enrollment. I think the greatest challenge is keeping up with other districts and trying to meet the needs of our students with [fewer] resources than other districts. Across the state, districts have many more resources, especially financial resources. If you look at the central part of the state and more urban areas, [like] Lexington, Louisville, Bowling Green, those districts are just inundated with money and resources and opportunities for their students. And as you branch out into the western part and

the eastern part of the state, it's not the same. We face different challenges. Often times over the course of being superintendent, we've struggled to purchase even some of the things that we need. For example, staying on bus purchasing cycles and things like that. It's a struggle to provide the same opportunity for our kids here in Eastern Kentucky as they do in the centra' part of the state.

Jones use of the political frame was less salient than other leadership frames, especially within the context of the flood. Rather, he tended to view the financial situation in his county through a political lens. Jones was frustrated with recent policy that caused his district to lose a tremendous amount of revenue:

The state legislation removed the tax values for unmined minerals. And basically, we sit in coal country here and the [Coal Mountain] community has long been established in the coal industry. It provided tons of jobs, resources, and boosted the local economy. And when they removed the tax value, it basically took the value of the coal that is yet to be mined, to basically nothing. In one fell swoop, we lost over \$1 million in tax revenue in one year. I think that was about six or seven years ago and we still don't get money for unmanned minerals now. So that was a great challenge. In order to maintain the same amount of revenue, you got to look at your local citizens that are still here and say, "You've got to pay substantially more property tax just so that we can have the same revenue that we've always had." In the first year of the tax removal, for instance, we were going to have to raise our property taxes by 32%. And you just can't do that. Our median income here in Eastern Kentucky is low and you just can't ask people to pay 32% more in property taxes. They don't understand why it's needed.

Jones viewed scarce resources through the lens of public policy. He focused largely on the policy recently implemented by the Kentucky State Legislature as the source of a \$1 million loss per year for the district. In addition to a loss of unmined mineral tax, Jones faced another loss of revenue in the form of property taxes. He recalled,

Property tax revenue has significantly decreased in my time here. I would say our tax base is probably 35% to 40% less than what it was when I first started here. Again, if you look at some central Kentucky districts, they've probably increased in that amount over that timeframe. So they're getting more and more revenue, whereas we're getting less and less, yet we're challenged with meeting those same needs for our students.

Political leadership and scarce resources in the context of the flood primarily impacted facilities and lack of space to house students and their families. Finding buildings to house them was difficult to navigate. Jones recalled, "We had about 600 kids that didn't have a school. Our K-12 school has about 320 kids, and our elementary school had about 260. So you had about 600 kids that that didn't have a space to learn." In terms of scarce resources in the context of the flood, finding a new plot of land for the new elementary school proved to be difficult. Some board members advocated for the elementary school to be built at certain sites and others disagreed. Jones said, "The most challenging [thing was] finding a new site for the elementary school, which was destroyed by the flood. [We were] consolidating a couple schools in the south end of the county, and [we were] getting close to finding a piece of land, or the board agreeing on a site, but we're not there yet."

Jones again referenced finances as the scarcest of resources and mentioned the staggering amount of money needed to build, clean, and renovate the schools with damaged facilities:

If you drive by where the elementary school is now, it's a grassy piece of land. The building is completely gone. And luckily, with the K-12 school, we were able to maintain the structure, but to put the money to the magnitude, it was it was \$3 million to clean out the debris in the K-12 school. Three million dollars. And it's a \$15 million project right now [for the] rebuild. We've estimated with FEMA our damages are about \$50 million.

Even with the financial challenges and lack of tax revenue, Jones managed to use political leadership to find solutions to both the flood issue and the school's loss of tax revenue:

With the help of the governor, legislators, and a [Coal Mountain] citizen, we were able to secure property in the district on higher ground. The legislators and the governor provided funding for the fiscal court and the city to make sure that the infrastructure was there to build houses. I think phase three will include 450

houses on this location. There's a housing crisis anyway, even before the flood, but the flood made things much worse. About 450 houses will help our district with increased tax revenue, help our communities, help our students and most importantly, help the people who lost their homes.

Mountain Values

Like most of his community and school, Jones loves his home. He has generational ties to the area and his family has been in the county for at least a hundred years. He called Coal Mountain "home" and said, "It's beautiful. It's where I wanted to raise my family and serve the people of [Coal Mountain]." After the flood, Jones wanted the students of Coal Mountain to be able to stay close to home and be successful:

I had the opportunity to live in other places. But even before I had kids, even before the wife and the family, I still chose to come back here. I think a lot of that [is due to] family, church, home, friends. And if we all moved, what's left? I rarely ever say this, but it's not fair. If everybody [who goes away] to get an education leaves, then you can't expect to grow or to prosper. If all we're doing is producing a society where we educate our kids and send them off, [then we can't grow]. If this is *home*, we [should] make it where people want to come back. That's the goal. We want our students to come back and live here in [Coal Mountain to help it] grow and prosper.

Another poignant mountain value mentioned throughout the interview is pride.

Jones spoke about the communities in his district, particularly a small community that was hit hard by the flood. He stated, "They're very prideful. They know what they are. They're small. They're unique. [They're a] very at-risk population and always has been. But they take great pride in being what they are." Specifically, the residents of the small community represented an important mountain value in Central Appalachia: self-reliance. He stated, "If something needs to be done, we just roll up our sleeves and do it ourselves."

Hill Valley Schools

The following sections include a brief demographic description of Hill Valley Schools. The district description is followed by an explanation of the flooding event within the community of Hill Valley, and concludes with a discussion of the major themes found in the study.

District Description

"Hill Valley School District" is a rural, remote school district located in the mountains of Eastern Kentucky within the Central Appalachia region (NCES, n.d.). The county covers approximately 351 square miles in Eastern Kentucky. Hill Valley's school district sits inland of sharp, winding ridges and a network of intersecting creeks, branches, and hollows that trickle, drain, and flow through narrow valleys. The Hill Valley area has a rich history of pioneer settlements beginning in the late 1700s, with long hunters migrating north of the Cumberland Gap from Virginia and North Carolina. There are approximately 13,800 residents living in the county. Coal mining was a driving force of the economy until the early 2000s, when mining became more regulated by state and federal authorities. The population density is roughly 40 people per square mile. Currently, the county is 98% White, and approximately 29% of the population lives below the poverty line, with a median household income of \$38,000.00. (U.S. Census, 2023). Hill Valley Schools has a student population of approximately 2,596 students.

The Flood in Hill Valley

The Hill Valley community and surrounding county in Eastern Kentucky lost more lives during the flood than any other community or county—there were 21 deaths in

the county, including four children who were swept away from their parents' grips and 17 adults (Johnson, 2022).

The children's home flooded Thursday, prompting the parents to get onto their roof. They managed to get to a tree and . . . held the children a few hours before a big tide came and washed them all away at the same time. The mother and father were stranded in a tree for eight hours before anyone got there to help. The parents were found alive, but the children were not (Miller, 2022).

The flood took another young student's life after he had been helping with cleanup efforts around Hill Valley. *WLWT* (2022) reported,

A local high school student spent three days helping flood victims clean up after the flooding . . . The 18-year-old went to school in Hill Valley, so he knew a lot of people who lost their homes and livelihood to the flooding. *WLEX* reported that the student worked for days helping the victims. Days later, he started not feeling right, and his arms felt numb. Things got progressively worse, and he was airlifted to [University of Kentucky hospital] after he had stopped breathing. Days later, he was pronounced dead.

In addition to numerous deaths in the county, including children, several structures, homes, and schools were completely destroyed. The *Courier Journal* reported, "After more than seven inches of rain fell within 24 hours in the region—damaging countless homes and businesses along with three local schools—the community has an unfathomable amount of work ahead" (Johnson, 2022).

Governor Andy Beshear held a press conference to address the recent floods, expressing his concern that the number of dead could increase over the coming days. He said, "We pray that we don't have too many more, but we are going to be searching for a while, given some of them have been found miles away from where they were swept away" (Johnson, 2022). The center where Governor Beshear addressed the crowd had been turned into a temporary shelter with about 30 cots on the floor for those adults and children who lost everything.

The flood occurred at a dangerous time when most people were sleeping. A local funeral service employee stated, "It was swift, it was quick, and it was devastating" (Johnson, 2022). As the family of one victim made arrangements in the funeral home's conference room, the funeral home employee considered how her community suffered: "It's been very hectic . . . It's very hard to call them and tell them we have their family member and help them decide how to have a funeral" (Johnson, 2022). Many people lost their homes and all their personal possessions, but "getting closure for the family is the main goal," she said (Johnson, 2022). The funeral home employee and her family focused on their faith to help get them through the tough times. She noted, "I appreciate what everyone's doing. It'll take a while, but we'll get back, if not for that man up above" (Johnson, 2022).

A local pastor used his church to serve his community. His congregation served more than 7,000 meals in two days. The pastor was busy providing for his community and congregation and it was difficult for him to do it all. He explained, "I know several [families] who lost everything—all that was left was the foundation. I've already presided over one funeral and could have another three to take part in before this week ends. The visitations are being cut short so the community can get through them all" (Johnson, 2022).

The devastation has been particularly difficult for local schools. The *Courier Journal* reported, "One of the four children confirmed to have been killed—all of whom were siblings—had been set to go into the second grade in the [Hill Valley] school district." (Johnson, 2022). According to school administrators, there was no way school could start before Labor Day. The school administrator stated, "Many staff members lost

their homes, and three of the local schools were damaged, with an elementary school taking the worst of it. Plus, the county's damaged infrastructure will make getting some students to school another challenge" (Johnson, 2022).

Hill Valley schools worked hard to help their community, even when many of the staff were the ones being helped. The schools were committed in their recovery efforts. "Many schools have been converted into hubs where supplies can be picked up, with access to hot food and tetanus vaccinations" (Johnson, 2022). Administrators have reached out to their staff and students. Principals worked to figure out how many of their students were displaced, but the region faced a long road ahead. "Of the district's about 2,000 students, 74% are considered economically disadvantaged" (Johnson, 2022). One administrator said at the time, "I thought [that] this year we were on track to have our first normal year in several years, and it doesn't look like that's going to happen because of the flood . . . It's frustrating, disappointing" (Johnson, 2022).

Human Resource Leadership

"Superintendent Miller" was the leader of Hill Valley School District during one of the most devastating natural disasters to ever occur in Kentucky. In his interview for this study, he mentioned the barriers the district faced even before the natural disaster. He said, "It's a rather large county, very rural. A lot of economically disadvantaged folks. In our county, we are 85% free and reduced lunch." Miller noted the challenges of making education a priority in the county. For most of his career, he focused on increasing academic learning in his classroom and later in his schools. During the flooding crisis, however, his perception changed. He had to view the crisis through a completely different lens. He stated, "The entire mission and vision changed from an educational

mode to a survival mode. The district's mission and vision changed from teaching kids to read and do mathematics to providing clothing."

Superintendent Miller knew he had to change his focus in order to provide basic needs to his employees and to his community. He recalled, "People didn't have underwear; they had no clothing. They had nothing. They lost everything. They had had nothing to eat." Miller realized the conditions in his community called for an immediate response to basic needs so his community to survive. Miller's first response was to provide food and water to his employees who were impacted and to others in the community. Miller had a large number of volunteers and employees who wanted to cook for people in the community, so they provided the volunteers with kitchen space in one of their schools, including all the necessary items to provide meals for the community.

After the community's basic needs of food and water were provided, Miller continued up Maslow's (1947, as cited in Bolman & Deal, 2021) hierarchy of needs, focusing on shelter for those whose homes were destroyed. He said,

They had no place to live. We had to have campers brought in for people and employees to live in. We turned the intact schools in our district into temporary housing for folks at night. Many elementary schools were housing folks at night; we had sleeping quarters in the gym, cafeteria . . . that's how it was.

Miller's leadership focus was on the needs of the employees in his school and the needs of the people of his community. His focus on helping others was contagious, and asked his employees to serve alongside him and focus their efforts on the needs of fellow employees and community members. He said,

An elementary school served as one of our main distribution centers. They were housing folks at night and were providing product to those affected. We literally destroyed our schools. We turned them upside down and literally converted them to distribution centers. We took everything out of [the classrooms] and stored [everything we took] and made [the classrooms] distribution centers. It was like a

Walmart distribution center. We had four schools that were true distribution centers.

The employees were motivated by the circumstances of the crisis; however, Miller led the charge to care for his employees and to fill their basic needs. His efforts inspired others to join him.

Miller asked one of his employees to lead the efforts at one of his elementary schools because he had other schools that he needed his focus. The employee responded and exceeded his expectation, and made amazing sacrifices, just like Miller and his staff. He said.

At one elementary school, employees [who were] affected by the flood needed to use showers and restroom facilities. We opened the washer and dryer units, as well. We had temporary trailers on site, and just basic things like that. [This one employee] was in charge of it all. Folks were getting there at 10:00 or 11:00 at night, and she was up there dealing with all of it. There were other folks throughout the district doing the same thing, but she was one of the hardest working ones in the district. I struggle talking about the flood because when I go back to those days, I get emotional. I would love to know how many hours she worked the next 50 days after the flood. I promise you, if you counted the number of days, multiply it by 18; [that would] be close.

Miller became emotional when recalling the sacrifices his employees made during the flood. As he stated, every community was impacted in Hill Valley, even the one he called home. He said, "My community was devastated." Miller was able to reframe his focus to fit the need of his community during the crisis. He had to take care of their basic needs before they could attempt to rebuild.

Multi-frame Thinking

Miller realized there was more than one way to respond to the dilemmas he faced during the flood. He was able to navigate crisis situations beyond narrow, mechanical approaches for understanding his organization and community during a traumatic period. He was reminded of the severity of the crisis by simply driving down the highway. "I was

driving down the highway and there were probably 10 to maybe 15 different agencies, different sheriff's departments, from all over the state searching with cadaver dogs, searching for bodies. I watched a traffic stop one day and watched a sheriff bring a body up the creek bank and load it in a vehicle."

The severity of the crisis caused Miller to think differently than he had in the past. He needed guidance to help him frame challenges that were unique to the events of the flood. He searched for other leaders who had similar experiences in similar contexts. Fortunately, he found one. Through his insurance agent, he was able to reach out to a superintendent in Tennessee who had recently experienced a flooding event like what his school and community were experiencing. He said,

I was able to get in touch with a superintendent in Parker County, Tennessee. And he said, "I really would like to talk to you. I know what you're going through. Eleven months ago, we went through a similar flood. I read the demographics on your school district and it's very similar to ours. It's scary and the flood is so similar. Man, I know what you're going through. I can help. We want to send product; we want to send money. We're going to work on that. But I know where you're at. You've got all you need. But you just need to talk to me. I would like to come and meet with the superintendents that were impacted. I'd like to bring my sheriffs or the sheriff of Parker County, Tennessee, who could work with the sheriffs in your area to communicate to them what they've experienced."

Miller said that he scheduled the meeting to occur two days later, and the Parker County superintendent came. Miller said,

I got all the superintendents here at central office that were impacted. And it turned out his district, Parker County, Tennessee, is identical to [Hill Valley]. They had 14 or 15 fatalities, a few less than we did, but had many more student fatalities. They had 9 or 10 student fatalities in their flood. So, [his presence] was just invaluable because everything started making sense at that time. It changed the whole perspective and allowed us to view situations through a different lens because the same thing happened in Parker County, Tennessee. And since then, I have learned that the same thing happens in other states, like in southern Louisiana. When a catastrophic event occurs, it's the same thing. These folks are probably more prepared down in Louisiana and Florida because they've been through it before, or they're one person removed from knowing somebody that's been through it before so they can know what to do.

The superintendent from Parker County was able to offer advice that allowed Miller to gain additional perspectives from experienced educational leaders who had similar struggles. The perspective he provided was "invaluable" to how he framed and responded to issues related to the flooding event. Miller said, "It changed the game for us," but he was also able to use his own experiences with flooding to help make critical decisions, mainly the decision to secure \$1.2 million dollars to begin cleaning the mud and debris from his schools. He said he lived in a flood-prone area his whole life and knew he had to act immediately. Using the expertise from other superintendents who had similar experiences and contexts, coupled with his own experiences with flooding, he was able to view dilemmas using multiple perspectives.

Although Miller had a tremendous amount to think about, he still had to focus on practical issues, including getting the students back into the building and back in school. He said, "I was thinking about when school was supposed to start. We were set to start on August 7th, and here I am, thinking, this flood's my fault. What am I going to do? It's my fault. We may never be back in school. I looked at these buildings and the damage was insane." In addition to trying to solve problems and lead during a period of crisis, he had intense feelings of guilt. Although he did nothing to cause the crisis or increase its negative impact on his employees, students, and community, he still had an overwhelming sense of guilt. There was no rationale or logical reason to feel like the flood was his fault, other than being exposed to trauma caused by the flood. It was a perspective that seemed to surprise Miller.

Many things changed after the flood, including the focus of the school district, in a good way. He stated, "I think we have grown as a school district, not just myself,

everybody involved." As he recalled, the flood "changed the dynamic of the district." The mission and vision of the district was always related to serving others, specifically the students in the community. However, during the flood, serving others gained a whole new meaning. He said, "The district's mission and vision changed from teaching kids to read and do mathematics to providing clothing." More specifically, he noted, "The entire mission and vision changed to just a survival mode." Miller changed his "perspective of purpose," from educating students and the community to helping his community and students survive.

The flood seemed to have had a lasting impact on Miller as a person and as a leader. It changed his perspective forever. When recalling the near death of his father during the flood, he spoke about the change he experienced. He noted that it was difficult to lose items that were sentimental and valuable to him, but losing material possessions became less and less of an issue. He recalled.

My mom put photo albums down low in the house, and she put pictures and frames up in shelves and when the house was flooded, I lost the photos and many memories of my childhood. That kind of sounds sad, but your photos and albums didn't matter. I mean, we thought those albums meant something, but, you know, my dad was alive, and I was good. I don't have the words to explain, but material things lost a lot of value to me in that flood.

The devastation of the flood changed his perspective on life, which will no doubt impact his future leadership. He said, "Everybody was impacted, and everybody was just thankful to be alive. Material things didn't matter like they used to. People are most important." Miller was able to shift his perspective on events by viewing challenges through multiple lenses, allowing him to provide appropriate leadership, enhancing his ability to meet the compelling demands the flood presented.

Structural Leadership

Miller never thought a flood of this magnitude would ever happen in his community. As he stated, growing up and living in Hill Valley, he had some experience with flooding, but nothing close to the flooding event that occurred between July 25 and July 30, 2022. He did not have a plan or systems in place for a 1 in a 1,000-year natural disaster. He said,

I came to work on Friday and we had missing folks all over the county. Immediately, we had three schools that were devastated. We had a K-8 school with an enrollment of about 460 at that time . . . and our high school [that were both severely damaged]. We have two high schools; one is a K-12 school. But that school was not hit like [Hill Valley High School], which was devastated. It had an enrollment of about 522 at the time the school was devastated. And then [at] our vocational school, our area technology center, water got about 42 inches deep in it, and then in the shop area, the shops got over six-feet deep. So, we're still not back in that school. I was not ready for that. I mean, I had no plan.

Even though he didn't have a plan, Miller was forced to adapt and build structures as the needs arose. He said, "I'm telling you all this because this is what I would communicate to anybody, and school administrators need to think about this. When a catastrophic event occurs, what follows is much tougher to deal with than the event itself, because you have to figure this out, and there will be no perfect plan."

Miller knew to begin with clean-up as soon as possible, he said, "We started the cleanup process on Sunday. [We were] still dealing with fatalities in real time and by Tuesday, I was literally overwhelmed. I couldn't keep up with the telephone. I was getting calls from all over the United States from folks wanting to help. [It was challenging] trying to schedule folks [to help]." The amount of phone calls, emails, mail, and text messages Miller received was overwhelming. He had to create structures to deal with the massive amount of communication and materials coming into his school district. He recalled.

On Thursday, which would have been seven days after the flood, I was at [Hill Valley Central] and feeling pretty rough at that point. I was just overwhelmed with all these people wanting to bring product in. I had to get the distribution center scheduled so that we could get product. My principals were supervising teachers, and teachers were helping, managing, and volunteering. [It was] almost like an assembly line.

At this point, Miller established clear roles and divisions of labor to distribute massive amounts of "product." He and his administrators create an *ad hoc* vertical coordination system and enforced a hierarchical structure to make sure product was organized and distributed efficiently.

Miller was forced to think in a very systematic way such that it enabled him to create structures to manage the situation. With the help of his staff and community, his facilities became hubs of assembly lines receiving, organizing, and moving product to hundreds and even thousands of people over a short period of time. Miller noted that he now had a much better understanding of what to expect should a disaster like this ever occur again. However, there are lessons to be learned from his situation. It is unrealistic for superintendents to create systems and plans for events that occur once in 1,000 years. Miller said.

There needs to be a system in place in all districts so that if I'm sitting in the superintendent seat, having to deal with a crisis, or the next person who sits in this seat has to deal with it, you have a system of folks to reach out to help provide you the guidance to get it taken care of and to get the kids back in session.

Fostering Collaboration

The Hill Valley community worked together to help each other during the flood.

Miller was a lifelong resident of the district and valued the community atmosphere of living in a rural area. He stated, "I know everybody in the county. We live in a county where everybody knows everybody, and we all just came together and worked together."

Any differences that may have existed between community members, leaders, or

employees were put aside to focus on one goal—helping the community. Miller said, "It didn't matter if there had been differences before. Those just kind of went away and everybody worked together just because we had never seen anything [like this], we never experienced anything like this before. We all wanted to work together. It was just true survival mode for everybody."

Although communication was difficult immediately following the flood, Miller first attempted to foster collaboration with his board of education. He noted, "I tried to speak with some board members immediately, at least the ones I could talk to. Of the five board members, two were flooded heavily. Everybody in this county was impacted and it was very difficult to communicate with people, but I had to immediately work with the board." Although Superintendent Miller was unable to communicate with all board members, he was able to collaborate with his chief financial officer and a couple of board members to process a \$1.2 million dollar purchase requisition for cleanup services. After securing the service company, he focused his efforts on local agencies and worked closely with law enforcement. He said, "I met with the sheriffs from all different counties to plan and assist with emergency management."

Miller called upon his employees to work with him during the flood. He was able to inspire many employees to volunteer their time and resources to assist with cleanup, organization, or distribution of product. He estimated about 50% of his staff spent multiple days volunteering their time to help. Not only did Miller foster collaboration within his community and organization, but he was also able to turn followers into leaders. Miller fostered collaboration between local agencies, federal agencies, and

members of his staff. He also empowered others to take initiative and allowed followers to be leaders.

Crisis Management

The flood crisis in Hill Valley was severe. There was massive damage to structures, homes, school facilities, and personal property. Miller stated, "a pretty large percentage of this county lost everything they had." The damage to school facilities was a crisis in and of itself. He said.

I was wearing muck boots. I waded through one of our elementary schools. The mud was 2- to 3-inches deep, everywhere. The water got about 37 inches high in that elementary school. I went to [Hill Valley High School]; it's our central high school, and water [there was] from 24- to 28-inches deep. [It had] two inches of mud caked on everything. Our vocational school, our area technology center, water [there was] about 42 inches deep. The shop area got over six feet deep. It was a lot.

Catastrophic damage to multiple facilities and losing millions of dollars in resources and material would be a crisis in any school district. The facilities and materials can be rebuilt or replaced, but people and students cannot. No county had more flood-related fatalities than Hill Valley. Miller noted that 17 flood-related fatalities were reported, but, he said, "We actually had 18."

In the days following the flood, Miller recalled passing by several areas in the community where agencies were retrieving bodies from nearby creeks and streams. He recalled, "I was driving down the highway and there was probably 10 to maybe 15 different agencies, different sheriff's departments, from all over the state, searching with cadaver dogs, searching for bodies." The small community in Hill Valley where Miller lived had a low number of casualties compared to other areas in Hill Valley. "We only had one fatality in my small community, but it was difficult. A young man was washed off a mobile home and the next area nearest to me had one fatality." Miller became

emotional during the interview when recalling the fatalities. Some images have stayed with him in vivid detail. While working closely with other community officials, he witnessed traumatic scenes. One instance involved him and another community official meeting at the funeral home for unspecified reasons: "We were pulling into the funeral home. The funeral home workers were unloading two body bags out of a Toyota pickup truck, and it was a pretty devastating sight. There was a leg hanging out with mud dripping off it. Horrible, just horrible." Miller saw images that would stay with him for the rest of his life.

During the interview for this study, Miller noted that the crisis took an emotional toll on him, especially if he discussed the fatalities. However, the impact of the flooding crisis on him was most evident when he recalled the fatalities of students in his own district. He said,

We lost three kids, one of which was a second grader at one of our elementary schools. The next one would have been in kindergarten the following month. And there was a younger sibling that was also killed. So, there were three fatalities in one family. It was a very trying time for our school and community, and the next few weeks after were especially hard.

Miller did not suggest a way to manage crisis events when they occur, but he did offer this advice: "When a catastrophic event occurs, what follows is much tougher to deal with than the event itself." In hindsight, the trauma experienced by the crisis event could've been reduced had he prepared for the complexities that followed.

Transformative Leadership

Instances of transformational leadership were not as prominent as other forms of leadership during Superintendent Miller's interview. When there were instances of transformational leadership, it co-occurred with fostering collaboration. Miller was able to build confidence in his employees, potentially inspiring one employee to reach

untapped potential. He allowed her to run the relief efforts at a local elementary school. He spoke of the employee with admiration and respect. He was clearly impressed with her ability to lead during difficult times and discussed her potential for a leadership position in the future.

Symbolic Leadership

Superintendent Miller's use of symbolism as a leadership strategy was less salient than that of the other superintendent participants in this study. He mentioned that he is a "man of faith," but seemed to separate his faith from his work more than the other superintendents. He mentioned faith or spirituality one time in the interview, and even then, he was reluctant to pontificate. He said, "I'm not trying to get religious with you, but God works in mysterious ways and, [as we went thought this crisis,] things just kind of fell into place." Although he didn't use faith as a unifying leadership strategy, he frequently used stories in the interview to convey the tragedy of the flood. When explaining the continued tragedy over a year later, he stated,

We still have a missing person that will probably never be found. [She's] an elderly lady, [and I] heard her son lived in a mobile trailer [nearby], down towards a neighboring county line. The man was about 60 years old, and he had gotten his kids out of the mobile home. He came back to get his mother, who was about 80, and she was in a wheelchair, and both were swept away in the flood. And they found him about three weeks later in another county, 34 miles downstream. And they've never recovered her body.

Miller became emotional at times during the interview, something he said he did not do regularly. It was clear Miller was comfortable telling stories to convey meaning, and he did so effectively. He told the story of his own father's experience, using it symbolically to represent the traumatic events, which had an emotional impact on him during the interview. He said,

I heard my dad was trapped on his house. He lives in an area [that had] never been flooded, but flood-prone water was around his house. And he just turned 87 then. I didn't believe that he could have gotten [up on the roof of] his house, but I started hearing about some of some fatalities. I finally made it home, and my dad was okay. He'd been trapped in his attic. He lives in a large house, and he didn't wake up in time. He couldn't get out. Water was about waist-deep. When he awakened, it was probably knee-deep and soon it got waist-deep. So he went in the attic and was trapped there for five or six hours; [he also] cut his hand really bad. I had to take him to the emergency room that night. Thank God [he was fine]. We were just blessed.

Miller told the story of his own personal struggles he experienced during the flood and was clearly thankful that his father was able to survive the disaster.

Political Leadership

Miller made many important decisions during the flood crisis. The most important decision, in his view, was to secure resources for the district in a timely manner. He recalled, "In making that decision, I was working with our insurance company, and we had a total of [only] \$50,000 in flood insurance." The amount of flood insurance was a fraction of what was needed to clean up the flood damaged facilities. He had to make a major decision regarding resources and relied on his own experiences to help him make the decision:

I live in an area that's flood prone. So, I've dealt with floods all my life. And I know that if you don't react immediately, the longer you wait to clean up flood debris, the worse it gets, and it's exponential. One day could be horrible; just one additional day. I knew it had to be addressed in the immediate, and the more [time that passed], the worse it would become.

Miller was able to rely on his experience to make a quick but major decision.

Communication was almost non-existent in the aftermath of the flood. Cellphone towers were down and many communities within Hill Valley were without electricity.

Miller had to request a large amount of money without the official approval of the board of education. He recalled,

On Friday night, I filled out a purchase requisition to the finance officer here for \$1.2 million. [We did not] have board approval. [I couldn't] talk to the board. I talked to one or two board members. I was a pretty new superintendent and I was spending \$1.2 million on one purchase order. We had a contingency of about \$8 million. I felt like I had the weight of the world on me. I completed the purchase requisition for \$1.2 million to [a damage restoration company called] Servpro. I probably didn't get 30 minutes sleep for the next few days. You know, just questioning that decision because \$1.2 million [is a lot of money]. I mean, in the district, that's every kid in this county's opportunity to have a life.

Miller decided to allocate financial resources on one purchase order to Servpro for 15% of the district's entire budget and contingency. Time and money were in short supply, and potential support from stakeholders could erode if he did not make decisions quickly. Additionally, Miller had to consider competing districts who found themselves in a similar situation regarding a massive cleanup operation. Miller had to act quickly to secure Servpro because he knew other districts would be calling. He said,

The Servpro franchise that I used was out of Lexington, and our insurance company uses them a lot. They were huge in terms of resources, and I knew if I didn't get them, somebody else was going to. So, I knew we had very few opportunities. I was informed of that by my agent. The longer you wait to make this decision, the less likely you are to get somebody that's got the resources to do what you need to do. So that was a big decision that had to be made quickly.

Miller, on the advice of his insurance agent, had to secure the \$1.2 million and jockey for position to gain Servpro's services before competing districts could do the same. The cleanup effort was too massive for one company to clean up three or four school districts.

At the time, Miller had to rely on the advice of his agent and his own experience to make a critical decision. As he reflected, he was pleased with his decision. He said,

Looking back, I do feel 100% good about starting as quickly as we did because we got back in session quicker than some neighboring districts—but not as soon as others. But, you know, we were hit hard. We had more fatalities in [Hill Valley] than any county in the flood. We had 18 fatalities in [Hill Valley] and the next closest total was 10 fatalities. All things considered, we did make it back pretty quickly.

Mountain Values

It was evident in his interview that Miller understood the socio-economic and demographic barriers of his community. He stated, "It's a rather large county, very rural. A lot of economically disadvantaged folks." When planning and organizing the flood relief efforts, he and his staff were always aware that the socio-economic and demographic barriers would be exacerbated by the flood. Hill Valley is a close-knit community that was always willing to help their fellow community members, especially children. He noted that 85% of the district's students qualified for free or reduced fee lunch. He said,

We had 52% of students in this district living with someone other than their biological parents. [We had] kids that were in those disadvantaged homes. Now they have nothing. They didn't have a lot to start with, but after the flood, they have nothing. We had so many people that were living on \$800 a month that lost everything they had, most drawing [supplemental security income (SSI)] . We anticipated the effect would be magnified, and this shows what a close community we were at [Hill Valley].

During the flood, the people of Hill Valley were more than willing to help their fellow neighbors. There was a strong sense of community and unity in Hill Valley. Miller was proud, although not surprised, that his staff worked so hard to help their fellow community members. More than 50% of the Hill Valley staff worked countless hours and days to help their community. Miller said, "Most people in this district probably worked 35 to 40 days in a row organizing, cleaning, and distributing product." One employee impressed Miller with her dedication. He stated, "I'm not trying to give myself credit. I had no choice but to be with my employees and community. I had to." But from the beginning of dealing with the aftermath of the flood, one of his employees impressed him greatly with her dedication. He noted, "She deserves a national award for what she did for us and the community—she started in the morning, maybe at 7:00 each day, some

days at 6:00 a.m., she never left that school before 10:30 or 11:00 at night. She did this for days straight."

The community of Hill Valley is dedicated to its people, but they are also dedicated to their "place." Many community members in Hill Valley had deep roots in Eastern Kentucky, with many families living in the same area for generations. Even when their personal belongings were gone, their houses washed away, they did not want to leave—even if it meant living in tents or temporary housing on their own land. The residents of Hill Valley had a deep devotion to their land. Miller said,

These folks in [Hill Valley], they didn't leave after the flood and even though they didn't have anything or didn't have a home to come back to, they wanted to stay on their land and in their community. We still have folks in temporary housing. It's been reduced. But there's still a lot of work going on in the county and the evidence from the flood is still prevalent throughout the entire county.

Overview of Initial Analysis

The findings from the three interviews were organized and reported in a manner that represented the value of the participants' experiences leading their respective school districts during the catastrophic natural disaster. The preliminary interview data were organized first by theme, and then by case. The semi-structured interviews were transcribed using *trint.com* and were uploaded to a web application, *Dedoose*, which is a widely used qualitative and quantitative data analysis software. Initially, the researcher used an inductive coding method to create 20 temporary codes. The 20 temporary codes had numerous similarities and were collapsed and combined into nine predominant themes: a) anchor of hope and faith; b) collaborative leadership; c) crisis management; d) division of labor; e) perspective; f) mountain context/values; g) organizations exist to serve human needs; h) scarce resources; and i) relationships.

The anchor of hope and faith theme included many instances of superintendents referring to church, religious rituals or spiritual connections to provide a source of calm and unity during the crisis. The *collaborative leadership* theme included superintendents' descriptions of working with and through others, including other agencies and organizations, as well as with employees and stakeholders. The *crisis management* theme included superintendents' explanation of working with emergency management personnel, and disaster details such as death and destruction. The perspective theme included times when superintendents explained the act of viewing situations through more than one "lens" or when they responded to a dilemma or problem in more than one way. The mountain context/values theme included times when superintendents referred to common Appalachian characteristics such as family, distrust, autonomy, independence, individualism, and love of their "place." Themes were labeled as organizations exist to serve human needs when the participants referred to the school providing a service or product needed by employees, stakeholders, or community members. The scarce resource theme included times when superintendents described resources that were limited. The *relationship* theme was used when the superintendents described the way in which two or more people were connected.

After the inductive data analysis was complete, the interview data were recoded using a deductive, *a posteriori* framework from Bolman and Deal's (2021) four organizational leadership frame approach and Bass's (1990) transformational leadership model. The second-tier codes and themes were: a) symbolic leadership; b) structural leadership; c) human resource leadership; d) political leadership; e) multi-frame thinking; and f) transformational leadership.

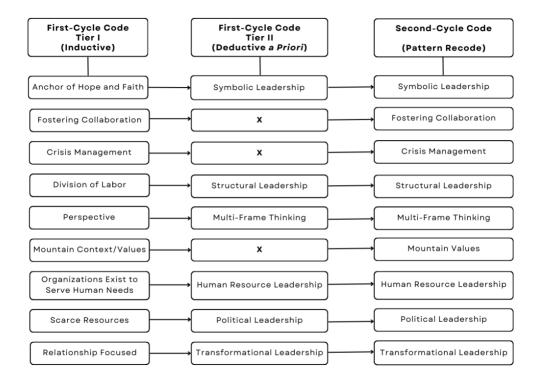
Throughout the deductive, *a posteriori* data analysis and coding process, a constant-comparative approach was used and the codes from each interview transcript were compared on a consistent basis (Charmaz, 2006). There were numerous coinciding themes and patterns between the inductive and deductive coding analysis. Bolman and Deal's (2021) four leadership frames and Bass's (1990) transformational leadership model were given priority, as coding themes and the initial codes were collapsed into *a priori* codes for analysis. The like codes were then merged into a broad set of themes.

Three codes that emerged from the inductive coding process that were identified as being outside of Bolman and Deal's (2021) and Bass's (1990) frameworks were: a) collaborative leadership; b) crisis management; and c) mountain context/values.

The final coding process used pattern coding and included combined themes from the inductive and deductive coding process. The pattern codes used included crisis management, fostering collaboration, human resource leadership, leadership framing, mountain values, political leadership, structural leadership, symbolic leadership, and transformational leadership, as depicted in Figure 4.1.

Figure 4.1

Results of First-cycle and Second-cycle Coding



Data Analysis

This study used *Dedoose* v.9.2.005, a web application for managing, analyzing, and presenting qualitative and mixed method research data. The researcher used the nine pattern codes to produce a final code application chart, as depicted in Figure 4.2. The red color indicates high code frequency, the green color indicates medium code frequency, and the blue color indicates low code frequency. The code application of all interviews are indicated in the "Total" row. The codes receiving the highest application in all interviews were *human resource leadership* (51), *leadership framing* (36), *structural leadership* (29), and *fostering collaboration* (29).

Figure 4.2

Dedoose-generated Code Application Chart

Sodes Media	Crisis Management	Fostering Collaboration	Human Resource Leadership	Leadership Framing	Mountain Values	Political Leadership	Structural Leadership	Symbolic Leadership	Transformational Leadership	Totals
PioneerGapTranscriptSuperintenden	11	11	27	20	2	5	15	11	15	117
HillValleyTranscriptSuperintendentMi	11	8	10	12	7	6	9	4	6	73
CoalMountainTranscriptSuperintend	4	10	14	4	4	5	5	6	4	56
Totals	26	29	51	36	13	16	29	21	25	

Note: Red = high code frequency; Green = medium code frequency; Blue = low code frequency.

The interconnectivity and co-occurrence of the aforementioned themes are shown in Figure 4.3. The data suggest that the most salient thematic co-occurrence are: a) structural leadership and crisis management (12); b) human resource leadership and transformational leadership (10); and c) fostering collaboration and transformational leadership (7). Analysis of the co-occurrences allowed the emergence of interconnected themes to emerge. The data suggested that the three participating superintendents used leadership strategies that overlapped with primary thematic categories, such as mental models or frames, which necessitated further examination.

Figure 4.3

Dedoose-generated Thematic Co-occurrences Chart

Codes	Codes	Crisis Management	Fostering Collaboration	Human Resource Leadership	Leadership Framing	Mountain Values	Political Leadership	Structural Leadership	Symbolic Leadership	Transformational Leadership	Totals
Crisis Management				2	3			12		1	18
Fostering Collaboration				6	3	2	2	2	2	7	24
Human Resource Leadership		2	6		7	1		4	3	10	33
Leadership Framing		3	3	7			2	4	2	3	24
Mountain Values			2	1						1	4
Political Leadership			2		2			1			5
Structural Leadership		12	2	4	4		1				23
Symbolic Leadership			2	3	2					2	9
Transformational Leadership		1	7	10	3	1			2		24
Totals		18	24	33	24	4	5	23	9	24	

Note: Red = high code frequency; Green = medium code frequency; Blue = low code frequency.

Summary

Through the interview data, four overarching leadership strategies were identified that the superintendents used in their leadership during a period of natural disaster (Figure 4.2). These four major themes included: a) leadership framing; b) human resource leadership; c) structural leadership; and d) fostering collaboration. The themes were interconnected, indicating a multi-frame thinking pattern used by rural public-school superintendents in this study.

Chapter Five provides a summary of findings, interpretation of the findings, and an in-depth discussion of the four major themes that emerged from a cross-case analysis of all three school districts, as depicted in Figure 4.2. In addition, Chapter Five includes a discussion of the interaction and interconnectivity between the four major themes, as depicted in the thematic co-occurrence chart in Figure 4.3. A discussion of future research and implications for professional practice is also included.

Copyright © Steven Moses 2024

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

Introduction

This exploratory study focused on understanding how rural public-school superintendents in the Appalachian region of Eastern Kentucky used multi-frame thinking as a leadership strategy during a natural disaster. The context of the study was the catastrophic and deadly flooding that occurred between July 25, 2022 and July 30, 2022 in several public districts in Eastern Kentucky. In this chapter, the two research questions that guided the study are answered and discussed.

Each question is first presented and then discussed according to major themes that are relevant. The themes were identified in Chapter Four and include the following related to a superintendent's work responsibilities: a) human resource leadership; b) structural leadership; c) political leadership; d) symbolic leadership; e) transformational leadership; f) collaboration with diverse stakeholders; g) crisis management; and h) leadership framing. Because the study was conducted in a rural Appalachian region, historical values unique to the residents of the region were important elements of this study. Analysis of each of these themes includes a recap of relevant literature, a summary of events, and a discussion that incorporates concepts drawn from appropriate literature and theories. The answer to Question Two includes the same format: a) presentation of relevant themes, concepts, and literature; and b) restatement of data sources and analysis. The answer to each research question incorporates a cross-case analysis that assists in understanding how superintendents in this study used multi-frame thinking to address the unique challenges and uncertainties that arose in their respective school districts during

the disaster. The discussion incorporates a cross-case analysis of the superintendents' use of multi-frame thinking. This chapter also includes a discussion of implications of the finding and recommendation for future research.

Multi-frame Thinking as a Leadership Strategy During Crisis

The first research question that guided this study was: *How do superintendents* use multi-frame thinking while working within their districts during periods of uncertainty and change, particularly during and after a natural disaster? This question was directed towards exploring and understanding more clearly the unique ways in which rural Appalachian superintendents used multi-frame thinking during a severe crisis. Data gathered through this research suggest that the superintendents used multi-frame-thinking in their leadership to a) foster collaboration among stakeholders; b) fulfill the needs of their employees and community members; and c) overcome unique challenges presented by the extreme natural disaster. The preponderance of evidence revealed four major themes relevant to answering the first research question: a) leadership framing; b) human resource leadership; c) structural leadership; and d) fostering collaboration. Each of these themes are reviews and discussed in subsequent sections of this chapter.

Multi-frame Thinking

Using multi-frame thinking as a leadership strategy was a common theme across data collected during the individual interviews with each of the three superintendents. All three were lifelong residents of the community and thus knew individuals as friends, family members, or acquaintances, which allowed them to frame their actions and responses to the natural disaster in relatable and personal terms. Relating to their community members and using perspective to frame the challenges they faced was a

pivotal focus for Superintendent Smith at Pioneer Gap Schools, for instance. Smith came from a poor home with diverse hardships, like many residents in the school district. Hence, she was able to relate to most students in her district. However, even though she knew that not every teacher shared her experiences, she wanted them to "view issues with perspective." Smith framed the disasters through the lens of her own struggles to relate better to her employees and stakeholders. Although she did not suffer extreme property damage or loss of family or close friends, she knew she had to view the flood from the perspective of the victims to help them effectively. During her interview, she stated,

It might not have happened to you, [but] you have to talk to them and spend time in the situation with them so that you can get their perspective. Perspective is key because if you don't understand what your own people are going through, how are you to make decisions for them?

Like Superintendent Smith, Superintendent Miller of Hill Valley Schools relied on his own perspective to frame the unique challenges associated with the flood. Miller had personal experiences with flooding, which he used to help him make critical and time-sensitive decisions. He used his personal perspective to frame the situation so he could make a massive financial decision—submit a purchase requisition to a damage restoration, cleaning, and construction company for \$1.2 million without the approval of the board of education. His decision proved to be beneficial for the district, securing the service before neighboring districts could retain them. Although Miller's personal experience with small flooding helped him make a beneficial decision for the district, the enormity of the flooding event put this crisis in a league of its own. He recognized that he needed a different perspective from more experienced leaders who had been through similar situations. Fortunately, he connected with a superintendent in Tennessee who had recently experienced a similar devastating flood in his district. The superintendent in

Tennessee offered an "invaluable" perspective according to Miller, which allowed him to frame his district's current challenges in new ways. He recalled, "The [superintendent in Tennessee] provided an invaluable perspective because everything started making sense [after talking with him]. It changed my whole perspective and allowed us to view situations through a different lens."

Superintendent Jones from Coal Mountain Schools also lacked expertise when managing a crisis caused by a major flood. Similar to his fellow district leaders, he turned to others to gain perspective and guidance. During his interview, Jones said, "There was no formal preparation in flooding crisis management [during superintendent preparation]. We didn't have a flood expert [in the region]. It was just 'all hands-on deck' and we figured it out. We had to think outside the box and view issues from many different angles." Turning facilities into makeshift distribution centers, organizing product, and distributing thousands of pounds of product was unfamiliar and chaotic. He and his staff had to rely on reframing, creativity, and hard work to get the job done.

The flood also changed the mission of the districts. Superintendent Miller of Hill Valley Schools believed the flood "changed the dynamic of the district." He recalled, "The district's mission and vision changed from teaching kids to read and do mathematics to providing clothing." Similarly, superintendent Jones of Coal Mountain Schools had a change of perspective during and after the flood. He said he now views educational leadership through a different lens—one that focuses on the whole person and his or her individual's needs. He noted, "I think [the flood] showed us that we could have been too narrowly focused on education kids. The flood taught us that when we talk about *community* and *service*, [it] means a lot more."

The three superintendents used multi-frame thinking to gain perspective and to navigate difficult situations they experienced during the unprecedented flood of July 2022. According to Bolman and Deal (2021), leadership frames provide unique images of reality. Some perspectives are clear, while others are puzzling—but learning to apply different perspectives deepens the appreciation and understanding of challenges. Leaders who use multi-frame thinking can view situations from different angles, thus realizing there is more than one way to respond to any problem or dilemma. Through using this strategy, they gain a deeper understanding of the situation at hand (Bolman & Deal, 2021). The three superintendents in this study effectively utilized leadership framing to help them solve complex issues associated with the flood.

Human Resource Leadership

The superintendents' most salient use of multi-frame thinking to reframe events helped them focus on meeting the needs of the people in their districts. According to Superintendent Miller, "Everyone was impacted [by the flood], and everyone [was grateful] to be alive. Material things didn't matter like they used to. People are most important." Education institutions naturally align with the human resource frame because schools exist to serve human needs. However, schools also need people for their ideas, energy, and talent. Schools must be cognizant of the needs of their employees to maximize motivation. Bolman and Deal (2021) claimed that organization with employees who are talented and motivated will see increase in their performance. Motivating people requires understanding of and response to the range of needs employees bring to the workplace.

The Appalachian flood crisis displaced district employees and students, as well as community members. Superintendent Smith of Pioneer Gap Schools focused on addressing immediate needs first. During her interview, she expanded on this idea: "We spent weeks first trying to just ensure that our employees and students were safe and had a place to stay, and that they had a roof over their heads and food in their stomachs." She realized that she had to first view the challenges associated with the flood through the lens of human needs. She explained, "It was about taking care of our people—it had to be. We had to put their immediate needs first—their emotional health, their physical health, and their safety." She continued, "the immediacy and the needs of my staff and my students came first. We'll always start with our people. They matter most. And then we looked at what to do with our facilities."

Superintendent Miller at Hill Valley likewise framed challenges by first viewing them through the human-resource framework. He explained, "Some of our people didn't have underwear. They had nothing. They lost everything." Thus, Miller turned one of the schools in his district into a distribution center during the day and a homeless shelter at night. Eventually, four of his district's schools were transformed into distribution centers for the community. Because he had the ability to view challenges through a human-resource lens, he explained that his district's "mission and vision changed from teaching kids to read and do mathematics to providing clothing."

Similarly, Superintendent Jones at Coal Mountain Schools initially framed the flood through the lens of human resource leadership. When he learned that several teachers in his district lost their homes and all their belongings, he organized resources so they would have "somebody to help them get through the devastation." Jones was aware

of an alternate approach—close the district schools and leave the task of cleanup and community service to emergency personnel. However, he viewed the challenge through the lens of his employee needs: "[We] could have very easily just said we're going to call off school, and whenever [everything gets fixed], we'll go back to school." Instead, he embraced the challenges and focused on the organization's most valuable assets—its people. He also recalled the fatalities associated with the flood: "I had a teacher who lost her father in the flood. And we just wanted to make sure that her family had everything they needed—[including] somebody to talk to—a mental health advisor or anything."

Superintendent Smith knew her employees needed emotional and mental support during this time because a janitor and her husband lost their lives during the flood.

Framing the situation in those terms enabled her to provide for her employees' needs. She recruited additional counselors and partnered with agencies to "meet the health and safety needs" of her staff. She understood that if "people aren't in a good place, they're not going to be worried about math, science, and reading." Furthermore, she knew her most important focus had to be her people. Thus, she used the human resource frame to gain perspective on how to provide her people in ways that would positively impact her leadership practice.

According to Bolman and Deal (2021), when employees feel neglected or oppressed, organizations "sputter because individuals withdraw their efforts or even work against organizational purposes" (p. 135). Smith was vigilant in meeting the needs of her employees, and in return, here relationship with them became stronger. Because she did not neglect the needs of her employees, she was able to build trust with them, which

fortified her role as community and school leader. Smith prioritized their needs, which strengthened the influence relationship between leader and employees.

When leaders fulfill the needs of their employees, it reinforces trust in the relationship. The ability to influence is much easier if employees trust their leaders. For that reason, theorists have made the case that a trusting and motivated workforce is a powerful source of competitive advantage.

Structural Leadership

The unique demands of the flood caused the superintendents to solve complex problems with distribution, organization, and management of product. The superintendent's use of multi-frame thinking including focusing on creating rigid systems of coordination and control to enhance efficiency and performance. Superintendent Miller from Hill Valley had to shift his focus to create an *ad hoc* system of coordination and control to ensure the moving parts between individuals and units meshed (Bolman & Deal, 2021). He recalled, "[I had] to get the distribution center scheduled. My principals were supervising teachers and teachers were helping manage volunteers. [It was] almost like an assembly line."

Similarly, Superintendent Jones had to create efficient structures to manage, organize, and distribute the massive amount of product they had to the people of the community. He stated, "We created a distribution center, so we got our staff together here at the office. Our principals and administration began managing the teachers, volunteers, and students." Superintendent Smith turned the high school into an emergency management center, coordinating with federal, state, and local agencies. Like the other superintendents, she had to manage, organize, and distribute large quantities of food,

clothing, and water, and even create a draft room for her employees to work. Ultimately, she relied on structural thinking to get the job done.

Some of the work required specialized skills related to FEMA relief, and Smith had to re-structure the division of labor in her organization. The employees at Pioneer Gap Schools lacked the skills required to manage the finances and bureaucracy from federal agencies. Therefore, Smith was forced to hire a third party to perform specialized roles related to the flood relief efforts.

Superintendent Miller offered advice to other educational leaders who might find themselves in similar situations in the future: "When a catastrophic event occurs, what follows is much tougher to deal with than the event itself because you have to figure this out and there will be no perfect plan." The lesson Miller presented is clear: be ready to manage and coordinate challenges in ways that may be unfamiliar to your community and be open to others' experiences and expertise as a guide. Again, referring to structural leadership, Miller said, "There needs to be a system in place in all districts so that if I'm sitting in the superintendent seat, having to deal with a crisis, or the next person who sits in this seat has to deal with it, you have a system of folks to reach out to help provide you [with] the guidance to get it taken care of, and to get the kids back in session."

The participating superintendents had to think systematically during the flooding event, especially during the flood relief efforts. They had to "put people in the right roles" and create rigid structures to solve problems (Bolman & Deal, 2021, p. 45).

Viewing these unique challenges through a structural lens allowed the superintendents to help the community receive the assistance they desperately needed. Consistent with the assumptions of the structural frame, the superintendent in all three districts had to

"increase efficiency of tasks, enhance performance through specialization and appropriate division of labor, remedy through problem solving, and find suitable forms of coordination and control that fit to an organization's current circumstances" (Bolman & Deal, 2021, p. 45).

Fostering Collaboration

The concept of fostering collaboration as an autonomous leadership strategy was not anticipated when reviewing the relevant literature on the use of multi-frame thinking during natural disasters. The researcher anticipated collaboration and teamwork to be a product of a more prevailing leadership strategy, such as transformational leadership or human resource leadership. However, fostering collaboration emerged as a prominent theme, independent of other leadership approaches. For example, Superintendent Smith relied heavily on the collaboration between other county officials and community members. Thankfully, she had pre-existing relationships with many of the individuals who would lead alongside her during this time. She said, "I've always thought we were partners. I felt like I had a great relationship with other officials in the county. I've learned that in any kind of natural disaster communication and collaboration is key." As an example of their teamwork, Pioneer Gap Schools served as the center for the flood relief efforts and housed many leaders from varying local, state, and federal agencies. She framed the crisis as a community challenge, stating, "We [were] all in the same situation, and we all [pulled] together and make the best of a bad situation." Superintendent Jones had similar sentiments and explained that leaders in his community met at one of his schools and "formed a plan together." Jones credited the collaborative efforts with a common focus: "Everybody works together and does what's best for the community."

Miller shared a similar strategy and noted his work with local law enforcement. He stated, "I met with the sheriffs from all different counties to plan and assist with emergency management." Miller was the benefactor of "living in a county where everybody knows everybody." If there were differences between individuals in the community, those were put aside to further the flood relief efforts. Miller said, "It didn't matter if there had been differences before. Those just kind of went away and everybody worked together."

Smith sought collaboration with people outside of her own community. Smith was able to communicate with school officials in Western Kentucky, who were involved in a recent natural disaster with tornadoes. She wanted to collaborate and learn from their experiences to help frame her situation. She noted, "I sat in on webcasts and listened [to] what they were dealing with, how they were managing."

On many occasions, schools were (and are currently) joined together because space was limited due to facilities being destroyed. Jones was able to foster collaboration between school leaders and the results were positive. He recalled, "We have the elementary school and a K-12 school working together in the same building, and I am happy to report, learning never ceased." Working with others is essential to leading through a crisis. Collaboration enables the group to see that they have common problems, common goals, and a common perspective on how to address the challenges (Denning, 2011). Especially during crisis situations, working together with others is necessary to achieve desired goals. No individual has the expertise necessary to get everything done and must rely on the experience and expertise of others to get the job done, especially when the challenge involves a catastrophic flooding event (Denning, 2011).

Collaboration has become a critical competency for achieving and sustaining high performance, regardless of the situation. Fortunately, all three participating superintendents had established relationships with other leaders in the community and used the pre-existing relationships to foster even more collaboration. If superintendents are not fortunate to have existing relationships with other leaders in the community, they should exploit every opportunity to bring people together and get them to see their common goals and shared values. Every encounter is an opportunity to build alliances and nurture shared values and purpose (Denning, 2011).

The superintendents all used multi-frame thinking, including the structural frame and human resource frame to address the challenges posed by the flood of July 2022. Themes that emerged from the data that reflected the structural frame included structural leadership, and the human resource frame included human resources leadership and fostering collaboration. Although each frame was distinct, they were not mutually exclusive. In the crisis situation, it was evident that they were intertwined, as required by the complexity, intensity, and immediacy of events unfolding during the flood of July 2022. It is evident from the data that crisis management necessitates the use of multi-frame thinking to address rapidly unfolding events that cover a wide array of needs.

Comparisons Between Rural Superintendents' Use of Multi-frame Thinking

The second research question that guided the current study of superintendent use of multi-frame thinking during periods of extreme crisis was: *Are there similarities in how rural school district superintendents use multi-frame thinking during periods of uncertainty and change, particularly during and after a natural disaster?* This question was directed to exploring and understanding the similarities in the ways in which rural

Appalachian superintendents used multi-frame thinking during a severe crisis. The data from the study suggested there are numerous similarities among rural superintendents and their articulation of each of the four main themes. It was evident that all of the superintendents participating in this study used the following major themes: multi-frame thinking, human resource leadership, structural leadership, and fostering collaboration. Although each superintendent had unique personality traits and characteristics, the commonalities across their articulation of the four main themes was significant.

Comparisons of Multi-frame Thinking

All of the participating superintendents had their own versions of reality, but there were many similarities in how they viewed the challenges associated with the flooding crisis. Leadership effectiveness is linked to the ability of the leader to think and apply a variety of strategies, including multi-frame thinking (Bensimon, 1989). Successful leaders may utilize different frameworks depending on the situation, but they need multiple tools and the wisdom to match frames to various situations (Tan et al., 2015). The value of using multi-frame thinking occurs when leaders can adapt their leadership styles to the context in which they are functioning. Leadership frames are approaches to guide people, which should vary depending on situation, task, or circumstance (Tan et al., 2015). The following examples illustrate this point.

At Pioneer Gap Schools, Superintendent Smith relied on her own experiences to frame challenges, especially as it related to the low socio-economic levels in her community. Most notably, she expected her teachers to use perspective when leading students. Similarly, Superintendent Miller used his own perspective to frame a major financial decision during the flood. He relied on his past experiences to spend a large

percentage of the schools' contingency without first gaining board approval. Framing current situations with past experiences allowed Smith and Miller to make beneficial decisions for their districts.

When superintendents lacked experience or expertise, they reframed their challenges using other's perspectives. Miller and Smith both found it "invaluable" to learn from other superintendents across Kentucky and Tennessee, who experienced similar devastations from natural disasters. The experience of the Tennessee and Kentucky superintendents provided guidance to navigate their own challenges.

Using frames serve multiple functions as a filter for sorting ideas, as a map to aid in navigation, or as a tool for solving problems (Bolman & Deal, 2021). Data suggested all three superintendents intuitively used multi-frame thinking to help solve challenges associated with the flood. These data had nothing to do with learning, however. Because the superintendents used multi-frame thinking effectively, they were able to lead their employees, stakeholders, and community through an unprecedented crisis.

Comparisons of Human Resource Leadership

All of the superintendents interviewed used the human resource frame explicitly to gain perspective on the most important resource in their organization, their people. Bolman and Deal (2021) used the metaphor of a *family* to describe organizations in the human resource frame. The three participating superintendents similarly framed challenges brought about by the flood, viewing their employees and stakeholders as members of their own families. They treated their employees and stakeholders like members of their own family, providing for their physical and emotional needs.

Superintendent Jones, for example, noted that he provided his employees access to mental health professionals to grieve the loss of loved ones due to the flood.

Similarly, Miller viewed many issues through the lens of employee needs. He said, "They had had nothing to eat. They had no place to live. We [had] campers being brought in for places to live." The superintendents in this study believed that their organizations needed the community, and the community needed their organizations (Bolman & Deal, 2021). Every superintendent in this study used one of their schools as a makeshift distribution center, temporary homeless shelter, or flood relief command center. Miller removed all school materials in one of his elementary schools to make room for the massive amount of product to be distributed. Similarly, Jones turned one of his elementary schools into a temporary homeless shelter because of his insistence on fulfilling the needs of his people. Likewise, Smith used her high school building as the flood relief command center for local, state, and federal agencies.

The superintendents sacrificed their efforts, their resources, and their facilities for the good of the community. They understood the needs of their people because they framed the situation in a way that made the choice to invest in people on the most basic level, and strengthen the bond between the individual and the organization, very clear (Bolman & Deal, 2021).

Comparisons of the Structural Frame

In periods of relative normalcy, schools are predisposed to rigid hierarchical structures (Bolman & Deal, 2021). Moeller (1964) posited that teachers have a greater sense of power in systems with clear hierarchical systems. Moeller's (1964) findings were in opposition to the study's original hypothesis, however, when he said,

"Bureaucracy in school system organization induces in teachers a sense of powerlessness to affect school system policy" (p. 145). Establishing a system for procedures is paramount to efficiency and effectiveness in complex organizations such as public schools, during periods of relative normalcy. Bolman and Deal (2021) used the metaphor of a factory or a machine to describe organizations that were framed using the structural model. All three superintendents in this study were forced to frame situations in a structural manner to focus on efficiency and smooth operation, similar to a factory or machine. For example, Jones relied on vertical coordination with formal authority to coordinate the distribution center, putting the principal in charge of the teachers and the teachers in charge of the volunteers. Miller relayed a similar situation. He said, "[I had] to get the distribution center scheduled so that we [could] get product. My principals were supervising teachers and teachers were helping, managing, and volunteering almost like an assembly line," Similarly, Smith relied on a hierarchical structure to ensure efficiency, starting with the board of education, then district and school administrators, followed by the teachers and volunteers, each with their own responsibilities and divisions of labor. Some staff members were assigned to manage the product supply, some we assigned to the donation unit, and others were assigned to the draft room.

The literature showed that, even during periods of relative normalcy, teachers and school staff rely on systems and structures to operate efficiently and effectively. In fact, Moeller's (1964) research suggested that teachers feel more empowerment when highly bureaucratic structures and systems are implemented in schools. The data suggested several similarities in the ways superintendents use the structural frame to diagnose and solve challenges, especially during periods of crisis. The participating superintendents

noted in their interviews that they instituted structures that emphasized top-down management and specialized division of labor, such as receiving and distributing product, to achieve the unique objectives of the district during exceptional circumstances (Bolman & Deal, 2021).

Comparisons of Fostering Collaboration

Although the researcher did not anticipate fostering collaboration as a stand-alone leadership strategy, this theme emerged as salient across all superintendents in the study. Denning (2011) claimed that working together toward mutual, meaningful goals is a powerful source of motivation for people, and "being part of something larger than themselves" is a prevailing source of motivation that can bring people closer together (p. 156). The superintendents in the study focused on working with and through others during the flooding crisis.

Although the events were tragic and the participants were emotional, when they discussed their collaborative efforts with their staff and their community, there was a noticeable sense of pride and fondness in their recollections. For instance, Smith took great pride in the collaborative efforts with her fellow community members. Smith was able to foster collaboration within her school from the top down. She was particularly proud of her students who "pulled through by working the supply side, which was backbreaking work. Students unloaded trucks, unloaded cars for people, [took] food out, [and did] everything they could possibly do."

Similarly, Superintendent Jones was able to foster collaboration within his school to work toward a common goal. He managed to get the administrators, teachers, and cooks to work together to "start fixing some hot meals for our employees." Jones further

stated, "We're a team and that's the school system. It's one big team." Similarly, Miller said, "Even if there were differences between community members before, people were able to put those differences aside and work together."

Denning (2011) suggested that successful organizations carry out their work with shared passion. "The notion that 'if one of us fails, we all fail' pervades the team (p. 156). Failing to work together was not an option for the superintendents or their districts. The stakes were too high. It was evident that these three superintendents fostered collaboration as a way to motivate and bond with their communities, improving the circumstances for everyone.

Thematic Co-occurrences

The data suggested that the most salient thematic co-occurrence are: a) structural leadership and crisis management; b) human resource leadership and transformational leadership; and c) fostering collaboration and transformational leadership. Analysis of the co-occurrences allowed the emergence of interconnected themes to emerge. The data suggested that the three participating superintendents used leadership strategies that overlapped with primary thematic categories, such as mental models or frames, which necessitated further examination.

Structural Leadership and Crisis Management

In the current study, the highest degree of interconnectivity existed between the primary theme of structural leadership and the secondary theme of crisis management. All of the rural superintendents who participated in this study indicated that they used multi-frame thinking, specifically utilizing the structural frame. The occurrence of structural leadership was often accompanied by implementation of crisis management.

The flood crisis required these leaders to make quick judgements, often unilaterally, using a chain of command to make decisions. An unambiguous example of the intersection of crisis management and structural leadership came from Superintendent Smith. She assisted the FEMA leaders, as well as county and state emergency management leaders, in her high school. Although she was not familiar with crisis management techniques previously, she quickly learned from local, state, and federal leaders, and was thrust into position. Her contribution was multi-faceted. She offered her high school to serve as the command center for the emergency management efforts, but she also provided much needed management of employees, and delegated jobs to her staff. Such an example summarized the interconnectivity between crisis management and the transactional nature of structural leadership during periods of extreme crisis.

According to Smith, using structures and systems in tandem with crisis management was an important part of accomplishing her goals in the context of a natural disaster.

Human Resource Leadership and Transformational Leadership

There is a robust interplay between human resource leadership and transformational leadership. Both consider the needs of followers and emphasize the relationship between the leader and follower. Relationship and influence are essential to both human resource leadership and transformational leaders. According to Bolman and Deal (2021), high-performing organizations understand the needs of their followers and stakeholders. To best understand the needs of employees, leaders must foster relationships with their followers. Bell (2011) defined influence as the process of using persuasion to have an impact on other people in the relationship. Influence as persuasion involves *power resources*, such as symbolic interaction, purpose, relationship, and

motivation, among many other things (Bolman & Deal, 2021). Smith simultaneously framed issues, using transformational leadership, human resource leadership, and influence relationships during the flood. Smith said, "When you put your people first and they see that, they see that as a school district. And to be there, to be a part of that, to be on site and be there with them [was really special]." She believed that physically joining her people was a powerful message to her employees. She was able to motivate and influence her employees by working alongside them during the flood relief efforts, which significantly strengthened their relationships and ultimately increased her effectiveness as a leader.

Fostering Collaboration and Transformational Leadership

The theme of transformational leadership intersected with the theme of fostering collaboration several times. There were many examples of such interplay, including an example from Miller, who stated, "Well, I know everybody in the county. We live in a county where everybody knows everybody, and we all just came together and worked together." Miller relied on his relationships with others to work together to achieve the short-term, flood-related goals of the district.

Another example of the interconnectedness between fostering collaboration and transformational leadership was evident in the Pioneer Gap Schools. In her interviews, Superintendent Smith focused on the relationship between her and another county official, and the ability for them to work together during normal conditions, but especially during the flood. Smith said, "[I] call the county judge any time I have a road issue. I've got his cell phone number; he calls me frequently. We work well we together, and so that helped [during the flood]."

The importance of relationships and collaboration between the superintendents, their staff, stakeholders, and other community leaders cannot be overstated. During normal operations, organizations must foster collaboration and focus on relationships between leaders and followers. This is even more important during periods of crisis. Working with and through others, and leveraging relationships, helped the schools to achieve their goals, especially while navigating the challenges associated with a severe natural disaster.

The superintendents in the study used multi-frame thinking—the human resource frame, and the structural frame. More specifically, elements of both frames were intertwined in a way that was unique in time and place and focused on cultivating collaboration similarly during the flood of July 2022. In the crisis situation, they used the themes simultaneously to solve complex challenges associated with the flood. It was evident from the data that the superintendents relied on the interplay of multi-frame thinking, human resource leadership, structural leadership, and collaborative leadership to respond to rapidly unfolding events during and after the natural disaster crisis.

Implications for Leadership Practice

The superintendents who participated in this exploratory study used similar leadership approaches that illustrate their use multi-frame thinking in the context of a natural disaster. It was clear that they used multi-frame thinking to make significant decisions during a time of rapidly changing, chaotic and highly complex circumstances. Insights gained in how their use multi-frame leadership may be used by other school district superintendents to enhance their effectiveness in responding to similar crisis situations. It is evident that the three superintendents who participated in the study relied

heavily on two dimensions of multi-frame thinking, specifically the human resource frame and the structural frame. These strategies may inform and expand the practices of school leaders, who may be challenged by periods of extreme change, chaos, or a natural disaster. Additionally, superintendents in urban areas may benefit from the lessons learned by the superintendents in rural contexts and improve their crisis management strategies.

Although multi-frame thinking is taught in graduate-level educational leadership programs, there is a paucity of research involving leadership framing and re-framing. Consequently, it may be beneficial for graduate programs to offer research informed coursework that may enrich their understanding of the importance and interconnectivity of leadership frames in handling crisis situations. Additionally, professional organizations and state superintendent associations may be interested in offering professional development opportunities for superintendents and other educational leaders on the topic of multi-frame thinking and collaborative leadership among their employees and stakeholders. Multi-frame thinking is a powerful tool to approach difficult circumstances, often offering leaders more than one way to respond to any problem or challenge (Bolman & Deal, 2021). Leaders often use multi-frame thinking intuitively, without much reflection. However, superintendents may benefit from understanding their use of mental models (i.e., multi-frame thinking) if given the opportunity to reflect on their experiences. In this regard aspiring and veteran school district superintendents may benefit from study findings and reflect on their own experiences (Stake, 1978).

Recommendations for Future Research

This study showed that the use of multi-frame thinking as a leadership strategy was beneficial to superintendents to achieve the goals of the district, especially during a severe natural disaster. The complexities of the crisis and the accompanying chaos required the participants of the study to view challenges from multiple perspectives. It is important to offer a cautionary note in that the specific contexts of this study may differ from those in which similar studies may be conducted. However, the potential for conducting future research in the contexts of extreme natural disasters may prove insightful and contribute to the knowledge base in the field. For example, it may be interesting to conduct exploratory case studies of multi-frame thinking in different contexts including forest fires, hurricanes, and tornados. In addition, future research may include exploration of multi-frame thinking in large, urban, or suburban districts during periods of relative normalcy, or within districts that have different socio-economic characteristics than those used in the current study.

The theme of fostering collaboration and its importance in multi-frame thinking emerged from a constant-comparative data analysis (Charmaz, 2006). Fostering collaboration as a leadership practice or as a leadership frame may be a promising line of inquiry, particularly to educational leadership, and findings may also suggest practical application to urban and suburban contexts. For example, larger, urban district superintendents in future may be informed by the experiences of rural, Appalachian superintendents in terms of how they led during periods of natural disasters or extreme crisis.

Additionally, future studies may include survey research to identify how school district superintendents may use multi-frame thinking in non-crisis contexts. Future researchers may also consider using a multi-methods approach by conducting an initial survey followed by in-depth interviews that go deeper into how they use-multi-frame thinking in their own leadership practice. Furthermore, future research may include using quantitative research methods on large samples of school district superintendents and include the use of demographic indicators such as educational level, age, or years of experience when exploring the use of multi-frame thinking. Lastly, application of multi-frame thinking are often intertwined, and several themes may be interconnected, and these interrelated themes may be of interest in future research, adding to the literature in the field of educational leadership.

Conclusions

This research study examined the use of multi-frame thinking of rural superintendents in the Appalachia region of Eastern Kentucky during periods of an extreme natural disaster. The superintendents in this study were unequivocally committed to responding to the needs of their employees, communities, and stakeholders. They used multi-frame thinking to develop structures and systems to facilitate solutions and fulfill the numerous needs of "their people."

Relying on multiple perspectives, the superintendents in this study emphasized human needs and structural solutions that required intense collaboration based on long-standing relationships in the community. The experiences of the superintendents in this study, although emotional to recall, increased the understanding of their roles as leaders that includes serving as structural designers, human caregivers, and collaborative leaders.

Their experiences in addressing the challenges of leading their districts during an extreme crisis event contributed to the understanding the inter-relational nature of their responsibilities as a practitioner.

Copyright © Steven Moses 2024

APPENDIX A

RURAL APPALACHIAN SCHOOL DISTRICTS IN KENTUCKY IMPACTED BY THE FLOOD

Appendix A is a list of Kentucky school systems defined as *rural* by both the NCES and the U.S. Census Bureau, designated as Appalachian by the Appalachian Regional Commission (ARC) and received the most rainfall during the flooding event between July 25, 2022 and July 30, 2022 (National Weather Service, n.d.).

- Clay County Schools
- Breathitt County Schools
- Perry County Schools
- Knott County Schools
- Letcher County Schools

APPENDIX B

SUPERINTENDENT INTERVIEW PROTOCOL

Interview protocol and semi-structured interview questions.

I. Introduction

Hello, my name is Steven J. Moses and I'm a long-time resident of Williamsburg, Whitley County, Kentucky, and I am an assistant principal at Williamsburg Independent School. I'm also a doctoral student at the University of Kentucky, and am conducting my dissertation research on how rural superintendents in Central Appalachia led their school districts during and after the recent flood. I believe findings from this study would benefit our field particularly regarding helping aspiring and veteran school district leaders understand how to effectively lead and engage with their communities devastating, natural disasters. The researcher will utilize Zoom to conduct the interviews via audio recordings. Upon completion of the interview, the researcher will upload the interview to trint.com which will transcribe the audio file. Finally, the researcher will utilize Dedoose, which will identify and categorize the transcriptions for further analysis.

II. Interview Questions & Protocol

I will begin the interview by asking some non-threatening, introductory questions to get the conversation flowing. On the following page, you will find my layperson's opening introduction to the conducting of the interview.

III.Opening

First, I want to thank you for taking the time to meet with me today to participate in my study of how rural superintendents in Eastern Kentucky lead their school districts superintendent during and after the flooding event in late July 2022. Before we get

started, I'd appreciate your confirming to being interviewed for this study and that you received and signed a consent form. It's important that you know that what we discuss is fully confidential and is protected from disclosure per the Institutional Review Board (IRB) of the University of Kentucky. Your name or your school district will not be mentioned in any part of my dissertation research study and the information that I will collect will be coded to maintain confidentiality. The recording of today's interview will be destroyed after 1 year from the date of dissertation completion, which I anticipate will be in August 2024.

IV. Interview Questions

- 1) How long have you been a school superintendent?
- 2) Why did you decide the become a superintendent?
- 3) What has been your most challenging experience during your tenure as Superintendent?
- 4) Tell me about the unique challenges associated with the flooding event that occurred in late July 2022.
- Tell me about the needs of your community and school during and after the flooding event.
- 6) Can you tell me how you worked with local communities that were impacted by the flood? (Probe: How were you able to communicate your values to the community?)
- 7) How many school employees volunteered their time to assist with flood relief? (Probe: Why do you think so many gave so much/so little of their time?).

- 8) With the many challenges presented during that time, how did you know where to start?
- 9) How were you able to coordinate to ensure school could begin? (Probe: How did the school employees work together?)
- 10) How did the vision and mission of the district change during this time? (Probe: mission and vision pre-flood v. during and after the flood).
- 11) During this time of scarce resources, can you tell me how did you advocate for your students?
- 12) How did your relationships with other community leaders help you advocate for your students?
- 13) What was the most important decision you made during and after the flooding event? (Probe: How did you determine allocation of resources?)
- 14) Immediately following the flood, how were you able to tell your district's story to the public?
- 15) How important is perspective in determining how to lead and make decisions?

 (Probe: Tell me about how perspective influenced your decision-making during and after the flood?)
- 16) Additional questions will be asked as needed or as they come up in conversation.

V. Closing

Thank you for sharing your experience in leading rural school districts in Central Appalachia and Eastern Kentucky during this natural disaster. I appreciate your candor

and know that I appreciate your leadership and continued efforts to restore and improve schools impacted by the flood.

APPENDIX C

IRB APPROVAL LETTER



EXEMPTION CERTIFICATION

IRB Number: 83858

Steven Moses, PhD in Educational Leadership

Educational Leadership Studies PI phone #: 6065212910

PI email: sjmo237@uky.edu

FROM:

Chairperson/Vice Chairperson Nonmedical Institutional Review Board (IRB)

SUBJECT: Approval for Exemption Certification

2/21/2023

On 2/20/2023, it was determined that your project entitled "Multi-Frame Thinking as a Leadership Strategy of Rural School Superintendents During Periods of Severe Crisis" meets federal criteria to qualify as an exempt study.

Because the study has been certified as exempt, you will not be required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or full review.

The Office of Research Integrity will hold your exemption application for six years. Before the end of the sixth year, you will be notified that your file will be closed and the application destroyed. If your project is still ongoing, you will need to contact the Office of Research Integrity upon receipt of that letter and follow the instructions for completing a new exemption application. It is, therefore, important that you keep your address current with the Office of Research Integrity.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" available in the online Office of Research Integrity's IRB Survival Handbook. Additional information regarding IRB review, federal regulations, and institutional policies may be found through QRI's web site. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

see blue. 405 Kinkead Hall | Lexington, KY 40506-0057 | P: 859-257-9428 | F: 859-257-8995 | www.research.uky.edu/ori/

Section 1 Page 1 of 1

APPENDIX D

PARTICIPANT EMAIL FLYER



RESEARCH STUDY ON RURAL SCHOOL SUPERINTENDENTS' LEADERSHIP AND USE OF MULTI-FRAME THINKING DURING PERIODS OF CRISIS

Participant Email Flyer

Dear Superintendent,

Your experience and insights as a public-school superintendent will assist the educational profession learn about successful school leadership in the context of an extreme crisis incident. The purpose of this study is to help veteran and future educational leaders understand how successful superintendents use multi-frame thinking to lead their districts during a period of crisis, particularly during and after a natural disaster. This study will explore how superintendents may use multi-frame thinking as a leadership strategy through the lens of Bolman and Deal's Four Leadership Frames during periods of extreme change (Bolman and Deal, 2021).

To participate in the study, you may contact Steven J. Moses by email at sjmo237@uky.edu or by phone at 606-521-2910. Mr. Moses resides in Williamsburg, Whitley County, Kentucky and has been a resident of Central Appalachia for his entire life.

This research consists of a semi-structured interview on Zoom (UK encrypted account) and lasts from 45 minutes to 1 hour in duration.

Who is conducting this research?

Steven J. Moses, a PhD candidate at the University of Kentucky is the principal researcher, working under the direction of Dr. Lars Björk. He is a current Assistant Principal/Dean at Williamsburg Independent Schools and PhD candidate working towards the completion of his doctoral degree.

What are the risks of agreeing to participate?

As the researcher will be anonymously coding all interview data, there are no known or foreseen risks. No personal or identifying information will be disclosed as this interview is strictly for research purposes and analysis.

APPENDIX E

INFORMED CONSENT FORM



Consent to Participate in a Research Study

Dear participant,

I am contacting you as the principal investigator for this project from the Department of Educational Leadership Studies at the University of Kentucky.

Why am I being asked to be a part of this research?

Your knowledge, experience, and skill as a public-school superintendent will help the educational community learn about successful school leadership during times of extreme crisis. The purpose of this research is to explore how superintendents in Central Appalachia managed and lead through times of crisis, particularly during and after a natural disaster. You are invited to take part in this study and although you may not get personal benefit from taking part in this research study, your responses may help us understand more about superintendent leadership, particularly in context of Central Appalachia during periods of extreme hardship. Some volunteers experience satisfaction from knowing they have participated and contributed to the knowledge base within educational leadership, providing benefit to future leaders. If you decide to participate, it will take between 45 minutes and 1 hour for the interview.

Study size

The researcher plans to enroll between 3-6 participants for this study.

Who is conducting the research?

Steven J. Moses, a PhD candidate at the University of Kentucky is the principal researcher, working under the direction of Dr. Lars Björk. Steven Moses or Lars Björk may be contacted at sjmo237@uky.edu or lars.bjork@uky.edu.

What are the risks of agreeing to participate?

As the researcher will be anonymously coding all interview transcription data, there are no known or foreseen risks. No personal or identifying information will be disclosed as this interview is strictly for research purpose and analysis. The researcher will use trint.com for interview transcriptions which is ISO/IEC 27001 certified for data security and will use Dedoose, which is a qualitative data analysis software program which has advanced encryption and is also certified by ISO/IEC 27001.

Zoom records both video and audio. However, video recordings will not be used. Audio recordings will be destroyed after the University of Kentucky has accepted the dissertation. At your convenience at any time, you may skip any question that you do not prefer to answer or discuss. Your information collected for this study will NOT be used or shared for future studies, even if we remove the identifiable information.

Data safeguarding

We will make every effort to safeguard your data, but as with anything online, we cannot guarantee the security of data obtained via the Internet. Third-party applications used in this study may have Terms of Service and Privacy policies outside of the control of the University of Kentucky.

Confidentiality statement

We will keep confidential all research records that identify you to the extend allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or tell authorities if you pose a danger to yourself or others. We may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from the University of Kentucky.

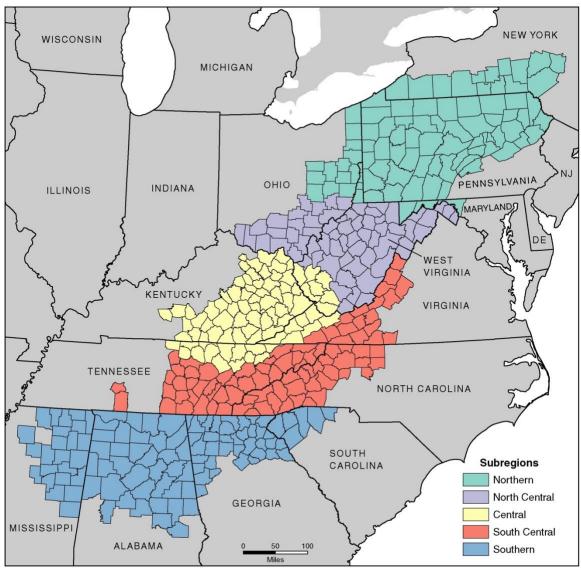
Other information

You may end this interview at any time, at your discretion and the interview will be stopped immediately and the recording will be destroyed. If you have further questions about the study, you may contact the principal investigator, Steven J. Moses at 606-521-2910.

If you have any concerns or questions about your rights as a volunteer in this research, please contact the staff at the University of Kentucky Office of Research Integrity (ORI) within the business hours of 8am and 5 pm EST, Monday through Friday at 859-257-9428 or toll free at 1-866-400-9428.

APPENDIX F

MAP OF APPALACHIAN SUBREGIONS



Map by: Appalachian Regional Commission, November 2009.

REFERENCES

- Adams, S. (2022, August 3). The flood of 2022. *The Mountain Eagle*.

 https://www.themountaineagle.com/articles/the-flood-of2022/#:~:text=Across%20eastern%20Kentucky%2C%2037%20people,County%2
 C%20where%207%2C000%20lost%20power.
- Appalachian Regional Commission (ARC). (n.d.). *Research and data*. https://www.arc.gov/research/RegionalDataandResearch.asp
- Applewhite, L. R. (2018). Teachers' and principals' perspectives on leadership during

 International Baccalaureate school-wide transformation (Publication No.

 10975447) [Doctoral dissertation, Concordia University]. ProQuest Dissertations and Theses Global.
- Barnes, L. B., & Kriger, M. P. (1986). The hidden side of organizational leadership.

 Sloan Management Review, 28(1), 15-25. https://doi.org/10.1016/0024-6301%2887%2990177-4
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, *18*(3), 19-31. https://doi.org/10.1016/0090-2616(90)90061-S
- Bell, M. P. (2011). *Diversity in organizations*. South-Western College Publications.
- Bensimon, E. M. (1989). The meaning of "good presidential leadership": A frame analysis. *Review of Higher Education*, 12(2), 107-123. https://doi.org/10.1353/rhe.1989.0024
- Bensimon, E. M., & Birnbaum, R., & Neuman, A. (1989). *Making sense of administrative leadership: The "L" word in higher education*. Jossey-Bass.

- Bishop, P. (2010). Multi-site case study. In Mills, A. J., Durepos, G., & Wiebe, E. (Eds.), *Encyclopedia of case study research* (Vol. 2, pp. 587-590). Sage Publications Inc.
- Björk, L. (1993). Effective schools—effective superintendents: The emerging instructional leadership role. *Journal of School Leadership*, *3*(3), 246-59. https://doi.org/10.1177/105268469300300303
- Blevins, J. A. (2017). The exploration of teacher efficacy and influences of context at two rural Appalachian high schools [Unpublished doctoral dissertation]. University of Kentucky. https://doi.org/10.13023/ETD.2017.283
- Boin, A., Hart, P., Stern, E., & Sundelius, B. (2005). *The politics of crisis management:*Public leadership under pressure. Cambridge University Press.

 https://doi.org/10.1017/CBO9780511490880
- Bolman, L. G., & Deal, T. E. (2021). Reframing organizations: Artistry, choice, and leadership (7th ed.). Jossey-Bass.
- Brinkmann, S. (2013). *Qualitative interviewing: Understanding qualitative research*.

 Oxford University Press.
- Burns, J. M. (1978). Leadership. Harper & Row.
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Sage.
- Childress, R. (2023, September 24). Eastern Kentucky school ravaged by 2022 flood likely won't reopen until next year. *Lexington Herald Leader*. https://www.kentucky.com/news/state/kentucky/article279565279.html
- Coghlan, D., & Brydon-Miller, M. (2014). Positionality. In D. Coghlan & M. Brydon-Miller (eds.), *The Sage encyclopedia of action research* (pp. 627-628). Sage.

- Collinson, V., & Cook, T. F. (2006). Organizational learning improving learning, teaching, and leading in school systems. Sage.
- Cooper, B. S., & Boyd, W. L. (1987). The evolution of training for school administrators.

 In Murphy, J., & Hallinger, P. (Eds.), *Approaches to administrative training in education* (pp. 3-27). State University of New York Press.
- DeFeo, D. J., & Tran, T. C. (2019). Recruiting, hiring, and training Alaska's rural teachers: How superintendents practice place-conscious leadership. *Journal of Research in Rural Education*, *35*(2), 1-17. https://jrre.psu.edu/sites/default/files/2019-06/35-2.pdf
- Definitions -- Statewide framework for teaching -- District personnel evaluation system -- Summative evaluations -- Appeals -- Prohibition against disclosure of confidential information -- Limits on reporting of evaluation results, Kentucky Statute 156.557 (2010). https://apps.legislature.ky.gov/law/statutes/statute.aspx?id=45613
- Denning, S. (2011). The leader's guide to storytelling: Mastering the art and discipline of business narrative. Jossey-Bass.
- Denham, S. A. (2016). Does a culture of Appalachia truly exist? *Journal of Transcultural Nursing*, 27(2), 94-102. https://doi.org/10.1177/1043659615579712
- DeYoung, A. J. (1995). Bridging multiple worlds: The school superintendent as change agent in a rural and poor school district. *Journal of Research in Rural Education*, 11(3), 187. https://jrre.psu.edu/sites/default/files/2019-08/11-3_6.pdf
- Dunford, R. W., & Palmer, I. C. (1995). Claims about frames: Practitioners' assessment of the utility of reframing. *Journal of Management Education*, *19*(1), 96-105. https://doi.org/10.1177/105256299501900109

- Eisner, E. W. (1998). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. Merrill.
- Ergood, B., & Kuhre, B. E. (1993). *Appalachia: Social context, past and present* (3rd ed.). Kendall Hunt Pub. Co.
- Estep, B. (2022, August 25). Tents, sheds become makeshift homes in EKy. as residents seek long-term housing after floods. *The Lexington Herald Leader*. https://www.kentucky.com/news/state/kentucky/article264850759.html
- Fayol, H. (1949). *General and industrial management* (C. Storrs, Trans.). Pitman. (Original work published 1916).
- Flick, U. (2000). Episodic interviewing. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative* researching with text, image, and sound (pp. 75-92). Sage.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate* research in education. McGraw Hill Education.
- Galletta, A. (2013). Mastering the semi-structured interview and beyond: From research design to analysis and publication. New York University Press.
- Gerring, J. (2004). What is a case study and what is it good for? *The American Political Science Review*, 98(2), 341-354. https://doi.org/10.1017/S0003055404001182
- Ginsberg, R., & Multon, K. D. (2011). Leading through a fiscal nightmare: The impact on principals and superintendents. *The Phi Delta Kappan*, 92(8), 42-47. https://doi.org/10.1177/003172171109200809
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4), 597-606. https://doi.org/10.46743/2160-3715/2003.1870

- Grant, M. M. (2004). A study of effective superintendents and how critical incidents contributed to their success (Publication No. 3145205) [Doctoral dissertation, University of Southern California]. ProQuest Dissertations Publishing. https://www.proquest.com/dissertations-theses/study-effective-superintendents-how-critical/docview/305126869/se-2
- Gruenewald, D. A. (2003). Foundations of place: A multidisciplinary framework for place-conscious education. *American Educational Research Journal*, 40(3), 619-654. https://doi.org/10.3102/00028312040003619
- Hatter, E. (2023, July 28). Hard hit Letcher County communities continue to bounce back. *WYMT Mountain News*. https://www.wymt.com/2023/07/28/hard-hit-letcher-county-communities-continue-bounce-back/
- Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research in Psychology*, *12*(2), 91-106. https://doi.org/10.1080/14780887.2014.918224
- Herzberg, F. (1966). Work and the nature of man. World.

 Howley, A., Pendarvis, E. D., & Woodrum, A. (2005). The rural school principalship: Promises and challenges. AEL.
- Holmes, A. (2020). Researcher positionality—a consideration of its influence and place in qualitative research—a new research guide. *Shanlax International Journal of Education*, 8(4), 1-10.
- Huber, S. G. (2004). School leadership and leadership development: Adjusting leadership theories and development programs to values and the core purpose of school.

- Journal of Educational Administration, 42(6), 669-684. https://doi.org/10.1108/09578230410563665
- Huggins, K. S., Klar, H. W., Hammonds, H. L. & Buskey, F. C. (2016). Supporting leadership development: An examination of high school principals' efforts to develop leaders' personal capacities. *Journal on Research on Leadership Education*, 11(2), 200-221. https://doi.org/10.1177/1942775116658636
- Johnson, J., Shope, S., & Roush, J. (2009). Toward a responsive model for educational leadership in rural Appalachia: Merging theory and practice. *Education Leadership Review*, 10(2), 3-10. https://files.eric.ed.gov/fulltext/EJ1070319.pdf
- Johnson, K. (2022, August 3). With damaged schools and at least 17 deaths, Knott

 County rebuilds after a 'whirlwind' week. *The Courier Journal*.

 https://www.yahoo.com/news/damaged-schools-least-17-deaths-154021556.html
- Kanter, R. M. (1983). *The change masters: Innovations for productivity in the American corporation*. Simon & Schuster.
- Kentucky School Board Association (KSBA). (2019, October 3). Kentucky School

 Advocate superintendent evaluation system. *Kentucky School Board Association*.
 - https://www.ksba.org/KentuckySchoolAdvocateSuperintendentevaluationsystem. aspx
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26-41. https://doi.org/10.5430/ijhe.v6n5p26
- Koontz, H., & Weihrich, H. (2010). Essentials of management. McGraw-Hill.

- Kowalski, T. J., & Björk, L. G. (2005). Role expectations of the district superintendent: Implications for deregulating preparation and licensing. *Journal of Thought*, 40(2), 73-96. http://www.jstor.org/stable/42589826
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory into Practice*, *34*(3), 159-165.

 https://culturallyresponsiveteaching.weebly.com/uploads/1/8/1/5/18153535/__lad son-billings_1995.pdf
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research.

 Journal of Family Medicine and Primary Care, 4(3), 324-327.

 https://doi.org/10.4103/2249-4863.161306
- Louis, K. S. (1994). Beyond "managed change": Rethinking how schools improve. School Effectiveness and School Improvement, 5(1), 2-24. https://doi.org/10.1080/0924345940050102
- Louis, K. S. (2006). Changing the culture of schools: Professional community, organizational learning, and trust. *Journal of School Leadership*, *16*(5), 477-489. https://doi.org/10.1177/105268460601600502
- Luker, K. (2008). Salsa dancing into the social sciences: Research in an age of info-glut.

 Harvard University Press.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage Publications, Inc.
- McGregor, D. (1960). The human side of enterprise. McGraw-Hill.
- McHenry-Sorber, E., & Budge, K. (2018). Revisiting the rural superintendency:

 Rethinking guiding theories for contemporary practice. *Journal of Research in*

- Rural Education, 33(3), 1-15. https://jrre.psu.edu/sites/default/files/2019-08/33-3.pdf
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Miles, M. B., Huberman, A.M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Miller, J. R. . (2022, July 29). At least 19 killed in Kentucky floods, including children: Officials. *New York Post*. https://nypost.com/2022/07/29/at-least-15-killed-in-historic-flooding-in-kentucky-gov/
- Moeller, G. H. (1964). Bureaucracy and teachers' sense of power. *The School Review*, 72(2), 137-157. http://www.jstor.org.ezproxy.uky.edu/stable/1083937
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, *52*(2), 250-260. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.250
- Nardi, P. M. (2018). *Doing survey research: A guide to quantitative methods* (4th ed.).

 Routledge. https://doi.org/10.4324/9781315172231
- National Center for Education Statistics (NCES). (n.d.). *Education across America:*Cities, suburbs, towns, and rural areas. Annual Reports and Information Staff

 (Annual Reports). https://nces.ed.gov/surveys/ruraled/districts.asp
- National Weather Service. (n.d.). *Historic July 26th-July30th, 2022 Eastern Kentucky flooding*. https://www.weather.gov/jkl/July2022Flooding
- Oshry, B. (1995). Seeing systems: Unlocking the mysteries of organizational life. Berrett-Koehler.

- Philpott, A. (2022, August 2). Its gutting: Robinson Elementary in Perry Co. severely damaged by flooding. *WKYT News*. https://www.wkyt.com/2022/08/03/itsgutting-robinson-elementary-perry-co-severely-damaged-by-flooding/
- Porterfield, K., & Carnes, M. (2014). Why school communication matters: Strategies from PR professionals (2nd ed.). Rowman & Littlefield Publishers.
- Preskill, H., & Torres, R. T. (1999). Evaluative inquiry for learning in organizations.

 Sage.
- Roe, M. F. (2018). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. *Journal of Educational Research*, 111(3), 384. https://doi.org/10.1080/00220671.2017.1362220
- Rost, J. C. (1991). *Leadership for the twenty-first century*. Praeger Publishers.
- Saldaña, J. (2021). Coding manual for qualitative researcher (4th ed.). Sage.
- Schaefer, A., Mattingly, M., & Johnson, K. (2016, February 23). *Child poverty higher* and more persistent in rural America. University of New Hampshire. Carsey School of Public Policy. https://carsey.unh.edu/publication/rural-child-poverty-higher
- Schechter, C. (2015). Collective learning from success as perceived by school superintendents (2011). *Journal of School Leadership*, 25(3), 489-520. https://doi.org/10.1177/105268461502500307
- Schein, E. H. (1992). Organizational culture and leadership (2nd ed). Jossey-Bass.
- Seale, C. (1999). Quality in qualitative research. *Qualitative Inquiry*, 5(4), 465-478.
- Shafritz, J. M., Ott, D. J., & Jang, Y. S. (2014). *Classics of organization theory* (8th ed.). Cengage Learning.

- Sheppard, B., Brown, J., & Dibbon, D. (2009). *School district leadership matters*.

 Springer. https://doi.org/10.1007/978-1-4020-9747-8
- Silverman, D. (2017). A very short, fairly interesting, and reasonably cheap book about qualitative research (2nd ed.). SAGE.
- Stake, R. E. (1978). The case study method in social inquiry. *Educational Researcher*, 7(2), 5-8. https://doi.org/10.2307/1174340
- Staley, T. (2022, August 9). As the president visits Kentucky after flooding, residents send a message of resilience and frustration. *The Daily Yonder*. https://dailyyonder.com/as-the-president-visits-kentucky-after-flooding-residents-send-a-message-of-resiliance-and-frustration/2022/08/09/
- Tan, M., Hee, T. F., & Piaw, C. Y. (2015). A qualitative analysis of the leadership style of a vice-chancellor in a private university in Malaysia. *SAGE Open*, *5*(1). 1-11. https://doi.org/10.1177/2158244015577665
- Thornberg, R., & Keane, E. (2022). Designing grounded theory studies. In The SAGE
 Handbook of Qualitative Research Design (Vol. 2, pp. 452-466). SAGE
 Publications Ltd, https://doi.org/10.4135/9781529770278
- Tracy, S. J. (2020). Qualitative research methods: Collecting evidence, crafting analysis, Communicating Impact. Wiley-Blackwell.
- Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology*, 53(1), 1-25.
 - https://doi.org/10.1146/annurev.psych.53.100901.135114

- United States Census Bureau. (2023, September 26). *Urban and rural*.

 https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html
- Vander Ark, T. (2018, November 27). The progressive schools of Philadelphia. *Getting Smart*. https://www.gettingsmart.com/2018/11/27/the-progressive-schools-of-philadelphia/
- Vander Ark, T., Liebtag, E., & McClennen, N. (2020). *The power of place: Authentic learning through place-based education*. Association for Supervision & Curriculum Development (ASCD).
- Vanderhoff, M. (2022, August 4). Perry County survivors retell moments of the eastern Kentucky flooding. *WLKY News*. https://www.wlky.com/article/perry-county-families-flood-eastern-kentucky/40801195
- Warren, C. A. B. (2001). 4 qualitative interviewing. In J. F. Gubrium & J. A. Holstein (Eds.) *Handbook of interview research* (pp. 83-102). SAGE Publications, Inc. https://doi.org/10.4135/9781412973588
- Weiss, R. S. (1994). Learning from strangers: The art and method of qualitative interviewing. Free Press.
- WLWT Digital Staff. (2022, August 10). Teen dies days after volunteering to help Eastern Kentucky flood victims. *WLWT News*.

 https://www.wlwt.com/article/eastern-kentucky-flooding-teen-death-aaron-crawford/40849121
- Wolcott, H. F. (1994). Transforming qualitative data: description, analysis, and interpretation. Sage Publications.

Yin, R. (2014). Case study research: Design and methods. (5th ed.). Sage.

Yin, R. K. (2018). Case study research and applications: Design and methods. Sage.

VITA

Steven Jay Moses

Williamsburg, Kentucky

PROFESSIONAL EXPERIENCE

2020-Present	Williamsburg City School, Dean of Students

2008-2020 Williamsburg City School, Teaching Faculty

EDUCATION

2016-2024 University of Kentucky, Lexington, KY

- PhD in Education Science Educational Leadership
- 2016-2019 University of Kentucky, Lexington, KY
 - Graduate Certificate in Executive Educational Leadership
 - Certification Superintendent
- 2010-2012 Union College, Barbourville, KY
 - Education Specialist Educational Leadership
 - Certification Principal
- 2008-2010 University of the Cumberlands, Williamsburg, KY
 - Master of Arts in Teaching
 - Certification Teaching (K-12 Learning and Behavioral Disorders)
- 2005-2007 Eastern Kentucky University, Richmond, KY
 - Master of Public Administration
- 2001-2005 University of the Cumberlands, Williamsburg, KY
 - Bachelor of Science Political Science