

## ABSTRACT

EMORY, JESSICA LEE. The Choice to Educate Students at School During the COVID-19 Pandemic: A Case Study on the North Carolina, Carteret County Public School System's Crisis Response. (Under the direction of Dr. Lisa Bass).

This qualitative case study examined the crisis decision-making processes of district and school-level leaders within Carteret County Public Schools (CCPS) during the COVID-19 pandemic, with the purpose of evaluating whether their leadership response reflected the knowledge, attitudes, and attributes commonly associated with effective crisis management. Guided by the conceptual framework, Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness, the study analyzed six interconnected components of crisis response: the prodromal crisis stage, acute crisis stage, chronic crisis stage, crisis resolution stage, historical socioecological resilience, and overall responsiveness. The study had four research questions that were answered through a combination of semi-structured interviews with district and school leaders, document analysis of district COVID-19 response records, and a reflective researcher journal. Thematic analysis, supported by both deductive and inductive coding in ATLAS.ti, facilitated a comprehensive understanding of the district's adaptive strategies, decision-making processes, and leadership practices during the pandemic.

Findings indicated that CCPS effectively leveraged distributed leadership, collaborative planning, and cross-level stakeholder engagement to maintain instructional continuity and prioritize student well-being during prolonged operational disruption. The district's historical resilience, rooted in prior experiences with hurricanes and community-wide crises, contributed to adaptive capacity and organizational stability. The study concludes that effective crisis response in educational systems is shaped by both situational decision-making and the systems, relationships, and capacities cultivated prior to a crisis event. Implications for policy include the

integration of early-response protocols, leadership capacity-building for long-duration crises, structured resolution processes, and targeted post-crisis wellness initiatives. The findings contribute to the broader understanding of educational crisis leadership and provide a transferable conceptual framework to guide future preparedness, response, and recovery efforts in school systems facing complex, high-impact crises.

© Copyright 2025 by Jessica Lee Emory

All Rights Reserved

The Choice to Educate Students at School During the COVID-19 Pandemic:  
A Case Study on the North Carolina, Carteret County Public School System's Crisis Response

by  
Jessica Lee Emory

A dissertation submitted to the Graduate Faculty of  
North Carolina State University  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Education

Educational Leadership

Raleigh, North Carolina  
2025

APPROVED BY:

---

Dr. Lisa Bass

---

Dr. Jenn Ayscue

---

Dr. Fran Riddick

---

Dr. Gregory Hicks

## DEDICATION

This work was supported by family and friends who continually encouraged me and lifted me up in prayer. To each of you, I am deeply thankful for your enduring presence in my life.

To my mother, Jane, who fielded daily morning phone calls, listened to my tireless worries, and always reminded me that I was capable of completing this work. I hope to carry your legacy of steadfast compassion until my last breath.

For my husband, a stage IV cancer fighter, who cheered me on when you were often too sick to eat or get out of bed and in the middle of treatments and hospital stays – you are my guiding light. I always look to you in my darkest moments and rest in the warmth of your love. When I wanted to quit for the 1,000<sup>th</sup> time, you were the one force that propelled me forward. Our love for each other is the blessing of my life.

To the leaders of Carteret County Public Schools and all school leaders whose love of children undergirds your decisions, especially in times of crisis. Always remember,

“It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat.” — **Theodore Roosevelt**

## **BIOGRAPHY**

Jessica Emory has served as an educator for 24 years in Beverly Public Schools in Massachusetts, in Orange County Public Schools North Carolina, in Wake County Public Schools North Carolina, and in Carteret County Public Schools North Carolina. She received her Bachelors in English, Middle School Education, and Secondary Education from Gordon College. In addition, Jessica earned her Master's degree in School Administration from North Carolina State University. Jessica has previously served as middle school English and science teacher, middle school assistant principal, elementary and middle school principal, and Director of Secondary Education. She is currently enjoying her role as Director of Student Behavior Support and Alternative Intervention with Carteret County Public Schools. Jessica's greatest passion in her work is helping students, particularly those who struggle in school, to realize their full potential and find success in life beyond K-12 education.

## ACKNOWLEDGMENTS

I would like to acknowledge the support of my chair, Dr. Lisa Bass, who never gave up on me, even when I wanted to throw in the towel. Her words of encouragement and guidance helped me see this work to completion.

My committee has been especially supportive of my journey, exercising flexibility in rescheduling meetings when my husband's health journey created conflicts. Thank you for your support. To the entire team in Educational Leadership at North Carolina State University who has played a significant role in steering me through this work.

To Dr. Beth Metcalf, a true leader amongst leaders. You were the one who helped me narrow the scope of this research. Your brilliance was foundational to the creation of the conceptual framework that guides this study. Thank you for always seeing others and looking for opportunities to guide and encourage.

Thank you to the leaders of Carteret County Public Schools. You set the standard for crisis response, and it was your work in the district that first inspired the focus of this research. I am especially grateful to Dr. Jackson and Mr. Paylor, superintendents of CCPS during the time of the studied crisis, who welcomed transparency and research. To Jody McClenny, my direct supervisor for always keeping the work grounded in relevance and making me laugh when I wanted to scream or cry. You exemplify grit. A special thank you to Dr. Anna Brooks, for deeply reading and digesting this work and providing sound and thoughtful feedback. You gave my spirit peace.

To the incredible district and school leaders who took the time out of their busy lives to participate in this research. Your words were inspirational, and your honesty provided leadership changing implications. I would not have a study without you.

Deepest thanks to my amazing family and friends for your love and encouragement which are priceless gifts. To my stepson, Vann, who made me believe I was accomplishing an incredible feat by asking me for status updates and responding with honest shock and awe. I guess writing anything more than 5 pages is significant to an 18-year-old. Thank you for being a source of encouragement and love. To my husband, my rock, the love of my life - thank you for putting up with a year of weekends dedicated to this work and for loving me just the way I am.

Thank you, God, for your never-failing presence in my life. There is not a day that passes when I am not aware that without YOU, I would fall short.

## TABLE OF CONTENTS

LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
<b>Chapter 1: Introduction .....</b>	<b>1</b>
Background and Context.....	1
Statement of the Problem.....	3
Purpose of the Study .....	3
Significance of this Study .....	4
Research Design Overview.....	5
Research Questions .....	6
Definition of Terms.....	6
Limitations of the Study.....	14
Assumptions of the Study .....	15
Chapter Summary .....	16
<b>Chapter 2: Literature Review .....</b>	<b>17</b>
Historical Crises.....	17
The Beginning of Crises in Schools.....	20
Types of School Crises .....	22
Natural-Caused Hazards .....	22
Human-Caused Hazards.....	24
Federal Legislation Impacting Schools.....	28
Leading Schools Through Crisis.....	31
Determining Level of Crisis.....	35
Crisis Response Timelines .....	37
School Crisis Frameworks and Models .....	39
PREPaRE Model.....	40
Fink’s Crisis Life Cycle Model.....	41
Chaos Theory and Complexity Theory .....	43
Dynamic Responsiveness to Crisis Life Cycle Framework.....	44
Resilience Theories .....	48
Conceptual Framework .....	54
Creating a Conceptual Framework .....	55
COVID-19 Crisis and Schools.....	62
COVID-19 and North Carolina Schools.....	66
The COVID-19 Impact on Education.....	72
Carteret County Public Schools as a Premier Choice for Research.....	75
Research Methodologies.....	79
Qualitative Studies .....	79
Quantitative Studies .....	80
Qualitative: Case Study Research .....	80
Summary .....	82
<b>Chapter 3: Research Method .....</b>	<b>85</b>
Introduction.....	85

Site Selection .....	86
Research Method and Design .....	88
Data Collection .....	89
Document Analysis.....	89
Semi-Structured Interviews .....	90
Reflective Journaling .....	91
Integration of Methods.....	92
Population and Sample/Participants .....	93
Materials and Instrumentation .....	95
Interviews.....	95
Interview Guide .....	97
Pilot Interview.....	98
Data Collection and Analysis.....	99
Assumptions.....	102
Limitations .....	103
Ethical Issues Regarding Research Techniques Used .....	107
Summary.....	109
<b>Chapter 4: Discussion of Findings.....</b>	<b>111</b>
Context of the Study .....	114
Data Collection .....	116
Research Participants .....	118
Data Analysis .....	121
Codes.....	121
Key Findings.....	124
Key Findings: Deductive Coding Themes .....	126
Prodromal Crisis Stage: Early Warning Signs and Preparing & Organizing.....	128
Acute Crisis Stage: Acting Quickly, Decisively, and Accurately .....	131
Chronic Crisis Stage: Adjusting & Adapting.....	132
Crisis Resolution Stage: Reflecting and Revising for the Future .....	135
Historical Socioecological Resilience: Adaptability & Flexibility, Diversity of Perspective, and Community Involvement.....	137
Overall Responsiveness: Flexibility, Collaborative, and Self-correcting	139
Key Findings: Inductive Coding Emergent Themes.....	142
Students Matter .....	143
Relationships Matter .....	145
The Mental Well-being of Leaders Matter .....	147
Chapter Summary .....	150
<b>Chapter 5: Summary, Implications, Conclusions .....</b>	<b>152</b>
Summary of the Findings.....	153
Research Question 1 .....	155
Organizing Strategic Re-Opening Committees for the Purpose of Planning: Prodromal Stage.....	156
Choosing a Hybrid Instructional Model – Prodromal Stage.....	159
Doing Whatever Was Needed to Execute District Plans - Responsiveness .....	162

Research Question 1 Summary .....	164
Research Question 2 .....	166
Organized Crisis Response with Clear Short-term Goals – Prodromal Stage ....	167
Research Question 2 Summary .....	170
Research Question 3 .....	171
Theme: Prodromal Crisis .....	172
Prodromal Crisis – Recognition of Warning Signs.....	172
Prodromal Crisis – Preparing and Organizing .....	173
Prodromal Stage Summary .....	175
Theme: Acute Crisis – Acting Quickly, Decisively, and with Accuracy .....	176
Acute Stage Summary.....	177
Theme: Chronic Crisis - Adjusting and Adapting to Evolving Needs.....	177
Chronic Stage Summary .....	178
Theme: Crisis Resolution – Reflecting and Revising Practices for Future Crisis .....	179
Resolution Stage Summary.....	180
Theme: A History of Sociological Resilience .....	181
A History of Sociological Resilience – Adaptability and Flexibility .....	181
A History of Sociological Resilience – Community Involvement and Diversity of Perspectives .....	182
Summary of Sociological Resilience .....	183
Theme: .....	184
Overall Responsiveness – Flexible, Collaborative and Self-Correcting.....	184
Responsiveness Summary.....	185
Research Question 3 Summary .....	185
Research Question 4 .....	188
Theme: Relationships Matter .....	189
Theme: Students’ Well-being Matters .....	191
Theme: The Mental Health of Leaders Matter .....	193
Research Question 4 Summary .....	195
Implications for Practice .....	196
Prodromal Crisis Stage .....	197
Acute Crisis Stage.....	198
Chronic Crisis Stage .....	198
Crisis Resolution Stage.....	199
Historical Socioecological Resilience.....	201
Overall Responsiveness .....	202
Summary of Implications.....	202
Policy and Practice.....	203
Research.....	205
Limitations of the Study.....	206
Scope and Generalizability .....	206
Insider Researcher Positionality .....	206
Potential Bias in Participant Responses .....	207
Impact of Time on Participant Recollection .....	207
Delimitations of the Study .....	208

Focus on a Single District .....	208
Participant Selection .....	208
Time Frame of Inquiry .....	209
Conceptual Framework Alignment.....	209
Data Sources .....	209
Recommendations.....	210
Policy and Practice Recommendations.....	211
Prodromal-stage Protocols.....	212
District-Level Debrief Process.....	212
Post-Crisis Wellness Assessments and Supports.....	213
Future Research .....	213
Reflections and Personal Insights .....	215
Chapter Summary .....	217
Study Conclusion.....	218
<b>References .....</b>	<b>220</b>
<b>Appendices.....</b>	<b>254</b>
Appendix A: Email Recruitment Script.....	255
Appendix B: Phone Recruitment Script.....	256
Appendix C: Adult Non-Exempt Consent Form .....	257
Appendix D: Interview Schedule Template.....	262
Appendix E: Interview Protocol and Interview Questions .....	263
Appendix F: Demographic Questionnaire .....	268
Appendix G: List of Documents Examined.....	269
Appendix H: Codebook .....	270
Appendix I: IRB Approval.....	272
Appendix J: Gatekeeper Permission .....	273
Appendix K: Table 6 – Themes .....	274
Appendix L: Interview Reflection Journal Format.....	275

## LIST OF TABLES

Table 3.1	Summary of Data Collection Methods .....	92
Table 3.2	Interview protocol and conceptual framework .....	98
Table 3.3	Descriptive Codes .....	101
Table 4.1	Data Sources and Research Questions Addressed .....	118
Table 4.2	Interviewee Demographics .....	121
Table 4.3	Deductive Codes .....	122
Table 4.4	In Vivo coding example.....	124
Table 4.5	Inductive coding references - Emergent themes.....	125
Table 4.6	Deductive coding references - Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness .....	126
Table 5.1	Deductive Codes .....	171

## LIST OF FIGURES

Figure 2.1	Model of dynamic responsiveness to crisis life cycle .....	47
Figure 2.2	Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness .....	61
Figure 2.3	North Carolina Public Schools That Opened in August of 2020 Under a Cohort Model.....	70
Figure 2.4	2020-2021 School Year in Review.....	71
Figure 2.5	Comparison of overall student proficiency: State of North Carolina, Southeast Region, and Carteret County Schools.....	78
Figure 4.1	Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness .....	113
Figure 4.2	Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic	127
Figure 4.3	The 15 Themes .....	151

## **AUTHORSHIP STATEMENT**

This dissertation contains no contributions from others, aside from those captured through citations and/or acknowledgements. Jessica Emory is the sole author of this dissertation.

At times, artificial intelligence (AI) tools were utilized to assist in identifying published works relevant to the topics and themes explored in this dissertation. These works were subsequently reviewed, read, and critically considered for their potential inclusion in the study.

## **Chapter 1: Introduction**

### **Background and Context**

On January 9, 2020, the World Health Organization (WHO) announced the emergence of a novel coronavirus in Wuhan, China, which would soon escalate into a global pandemic (AJMC Staff, 2021). Early reports identified the virus as highly transmissible, with the potential to cause severe illness and death. Within weeks, international concern intensified as the first confirmed U.S. case was reported on January 21, 2020. By January 31, the WHO declared a global health emergency in response to the rising international death toll, and the U.S. began implementing public health measures, including restricted travel and preparations for school closures (AJMC Staff, 2021; Decker et al., 2020).

Schools quickly became central to public health conversations as teachers' unions, superintendents, and local leaders sought guidance to protect students and staff. The first school-related closure in the United States occurred in late February 2020, when Snohomish County Schools in Washington State suspended operations for cleaning after a staff member exhibited COVID-like symptoms (Bazzaz & Blethen, 2020). In early March, Northshore School District became the first in the nation to shift 24,000 students to remote learning (AJMC Staff, 2021). Shortly thereafter, the WHO declared COVID-19 a pandemic on March 11, and President Trump declared a national emergency on March 13. By late March, all U.S. public schools had closed, impacting over 55 million children (Decker et al., 2020).

In North Carolina, the first confirmed cases prompted Governor Roy Cooper to declare a state of emergency on March 10, 2020, and mandated statewide school closures beginning March 16 (Thorpe, 2020). Initially intended as a two-week measure, the closure was extended, and on April 24 state leaders announced that all public schools would remain closed for in-

person instruction for the remainder of the 2019–2020 school year (Granados, 2020). During this period, educators rapidly transitioned to remote instruction, supported by a \$1.9 billion bipartisan relief package that provided funding for technology, nutrition programs, and instructional support (Granados, 2020). While North Carolina’s early response reflected national patterns of emergency-driven closures, its subsequent planning for the 2020-2021 school year revealed unique state-level dynamics.

As the federal government delegated reopening authority to individual states, North Carolina developed its own operational framework, balancing centralized guidance with local implementation (Education Week, 2021). Through documents such as the North Carolina Department of Health and Human Services’ *StrongSchoolsNC Public Health Toolkit* (NCDHHS, 2022) and *Lighting Our Way Forward* (BallotPedia, 2021), the state provided a foundation of protocols and instructional models while granting local education agencies (LEAs) discretion in execution. This decentralized approach mirrored national trends but also exposed districts to complex micropolitical pressures, including negotiations with health departments and parents (Grossman et al., 2021; Singer, 2022). The resulting variation in local responses underscored both the challenges and the significance of educational leadership in navigating decision-making under crisis conditions.

While North Carolina’s statewide response provided a framework for navigating the COVID-19 crisis, the ultimate responsibility for interpreting and implementing guidance fell to local education agencies (LEAs). This decentralization highlighted the central role of educational leaders in balancing competing demands: protecting public health, ensuring instructional continuity, and addressing inequities magnified by the pandemic. Research indicates that school reopening decisions were shaped less by public health data than by political, institutional, and

community pressures (Grossman et al., 2021; Singer, 2022). Yet, limited research has examined how these dynamics specifically unfolded within North Carolina, a state that combined centralized planning with localized discretion. This gap underscores the need to explore how educational leaders navigated decision-making during the pandemic, particularly as their choices carried profound implications for students, families, and communities.

### **Statement of the Problem**

During the 2020–2021 academic year, employees of Carteret County Public Schools confronted unprecedented challenges as they were required to redesign long-standing systems and make critical decisions in a rapidly shifting environment. After statewide school closures in March 2020, North Carolina granted local education agencies autonomy to determine reopening strategies, provided they complied with state-issued guidelines. While historical records describe responses to crises such as wars, disease outbreaks, natural disasters, and man-made catastrophes, no modern school system had navigated a pandemic with the scale, duration, and disruption of COVID-19. This extraordinary context placed educational leaders in uncharted territory, compelling them to balance public health concerns with the continuity of learning and the well-being of students, staff, and the broader community.

### **Purpose of the Study**

Using a case study methodology, the purpose of this study is four-fold: (1) to examine the how the Carteret County Public School System responded to the COVID-19 crisis (2) to determine what decision-making processes were used (3) to assess the crisis decision making strategies utilized by Carteret County Public Schools using the conceptual framework, Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness and (4) to determine what learning occurred.

## **Significance of this Study**

During the 2020-2021 academic year, many schools across the United States, including all schools in North Carolina, were provided the option to offer face-to-face instruction through a hybrid plan rather than operating fully virtual or remote. Despite this opportunity, only 38% of schools nationwide and 36% of schools in North Carolina reopened their doors to students in the fall of 2020. Carteret County Public Schools (CCPS), with the support of its Board of Education, was among this minority, implementing a hybrid instructional model that utilized student cohorts for in-person learning. This decision warrants critical examination to understand its impact, evaluate organizational learning, and identify implications for future crisis management within the PreK-12 context.

School leaders are often required to make decisions within a framework of established guidelines or policies, yet the influence of their choices can be direct, indirect, and reciprocal in shaping student achievement (Roach et al., 2011). In CCPS, principals not only facilitate and serve on crisis teams within their schools but, during the summer of 2020, many were paired with district-level leaders to co-lead crisis reopening committees. These committees became central to interpreting evolving state guidance, developing operational protocols, and steering the district's COVID-19 response. Understanding the decision-making processes and leadership strategies that enabled the district to provide in-person instruction is essential for informing future practice.

This study's significance extends beyond CCPS, as its findings have relevance for educational organizations worldwide in preparing for and managing crises of similar magnitude and complexity. By examining the leadership and management decisions made during this unprecedented period, the study contributes to a deeper understanding of effective crisis

leadership, distributed decision-making, and adaptive organizational response in PreK–12 education. The insights gained will assist school systems in building the capacity to protect instructional continuity, safeguard stakeholder well-being, and strengthen institutional resilience in the face of future large-scale disruptions.

### **Research Design Overview**

The research of the Carteret County Public Schools’ response to COVID-19 utilized a qualitative case study methodology. A basic qualitative research study seeks to understand a phenomenon, the processes and perspectives, and the views of the individuals involved (Merriam & Grenier, 2019). Case study, along with ethnography, grounded theory, phenomenology, and narrative research, is an accepted research strategy utilized within the broad expanse of qualitative research (Creswell, 2003). Yin (2018) defined a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” (p. 16). A single case study design was used to study this phenomenon. Data was collected through the collection of historical artifacts and interviews conducted with at least 8 participants to reach data saturation (Fusch & Ness, 2015; Guest et al., 2006).

A total of 12 school administrators and central office level administrators were invited to participate in the interview process, with a minimum of 8 participants needed to reach data saturation. The qualifications used to identify participants for interviews included:

- Employed as a school level or district level administrator in Carteret County Public Schools during the summer of 2020 and the 2020 – 2021 academic year
- Served on at least one of the Carteret County Schools re-opening committees in the summer of 2020

## **Research Questions**

1. How did the leaders in Carteret County Public School System respond to the COVID-19 crisis during the summer of 2020 and through the 2020-21 start of the academic year?
2. What decision-making processes were used by the Carteret County Public School leaders in their response to the COVID-19 crisis during the summer of 2020 and through the 2020-21 academic year?
3. How did the strategies utilized by Carteret County Public Schools leaders during the summer of 2020 and through the 2020-21 academic year align with the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*?
4. What was learned by the leaders of Carteret County Public Schools from their crisis response to COVID -19?

## **Definition of Terms**

Face-to-Face/In-Person Learning: Face-to-face learning, also known as in-person learning, is a traditional mode of education where instruction occurs with both students and teachers physically present in the same location. This method allows for direct interaction and real-time communication between instructors and students, fostering an environment where immediate feedback, social interaction, and collaborative learning can occur (Means et al., 2010; Singh & Thurman, 2019).

Virtual/Remote Learning: Virtual learning, also known as remote learning or online learning, is an educational approach where instruction and learning occur through digital platforms, allowing students and teachers to interact virtually rather than in a physical classroom.

This method leverages technology, such as video conferencing, online forums, and digital learning management systems, to facilitate education (Moore et al., 2011, Singh & Thurman, 2019).

Cohort: In educational settings, a cohort often refers to a group of students who start a program or course together and progress through it simultaneously (Merriam-Webster, 2024).

District/Public School Unit (PSU): A PSU is a local governing body within a bounded geographic area, legally constituted under state authority, that operates local PreK-12 public schools. PSUs possess administrative control and direction of schools, with powers that may include taxation, policy development, and eminent domain. They are typically governed by an elected body of local school board members, responsible for ensuring compliance with state and federal regulations, allocating resources, and overseeing instructional programs and student support services (Campbell & Fullan, 2019; Ford & Ihrke, 2020).

Local Education Agency (LEA): An LEA is a local governing body within a bounded geographic area, legally constituted under state authority, that operates public elementary and secondary schools. LEAs hold administrative control and direction over schools, ensuring compliance with state and federal regulations, managing resource allocation, and overseeing instructional programs and support services. They are typically governed by an elected local school board and may also hold powers related to taxation and policy development (Campbell & Fullan, 2019; Ford & Ihrke, 2020; U.S. Department of Education, n.d.).

Hybrid Learning/Blended Learning: Hybrid learning, or blended learning, combines in-person and remote instruction, a model adopted during the COVID-19 pandemic to ensure educational continuity while adhering to health guidelines. This approach accommodated families with varying comfort levels in returning to physical classrooms. Hybrid learning

involves integrating face-to-face teaching with online components, allowing students to alternate between in-person and virtual participation. Schools employed various scheduling models, such as alternating days or weeks for different student groups/cohorts or divided the day between in-person and remote learning (Hybrid Learning Environments, n.d.; Singh et al., 2021).

Flexibility and adaptability were essential elements of hybrid learning, enabling schools to shift between in-person and remote formats depending on local health conditions. This adaptability was critical in maintaining educational continuity as COVID-19 transmission rates fluctuated (Lieberman, 2020). The model also required extensive technology integration, with schools utilizing video conferencing, learning management systems, and digital resources to support both synchronous and asynchronous learning (Ulla & Perales, 2022). Ultimately, hybrid learning emerged as a crucial strategy during the pandemic, balancing the benefits of in-person instruction with the flexibility and safety of remote learning (Lieberman, 2020).

Crisis: A crisis is generally defined as a difficult or dangerous time that requires an immediate solution. It is triggered by an event or situation that causes the vulnerability of individuals and is characterized by instability and the potential for significant negative outcomes that can become critical when an individual's emotional and/or physical needs are greater than the resources that are available (Caplan, 1964; Slaikeu, 1990). The term originates from the Greek word *krisis*, meaning a turning point in a disease, where the situation could improve or worsen. (Merriam-Webster, 2019). In broader terms, a crisis can refer to any critical incident involving threats to people, property, or the environment, and it often requires urgent intervention to prevent further harm (Cambridge Dictionary, 2024).

School Crisis: In the context of schools, crises are defined as "any incident that has a dramatic and potentially traumatizing impact on school-aged children or school personnel" (Rees

& Seaton, 2011, p. 76) and as incidents that "impact the stability of a safe school" (Reeves et al., 2010, p. 8). Therefore, a school crisis is an emergency that affects individuals in a school, including students, staff, and their families.

School Crisis Team: A crisis team is a group of professionals assembled to manage and respond to crises in an organization or community. These teams are essential for addressing emergency situations by implementing strategic crisis management plans and providing support to those impacted (Law Insider, 2024). School crisis teams typically consist of various professionals, including teachers, administrators, mental health experts, and sometimes external professionals like law enforcement or medical personnel (Brock et al., 2001). Crisis teams are essential for effective crisis management, providing immediate intervention through structured responses to emergencies and ongoing support services, which help mitigate the negative impact on individuals and organizations (U.S. Department of Health and Human Services, 2003). Their primary responsibilities include detecting early signs of crises, assessing the situation, and effectively communicating with stakeholders to minimize the impact of the crisis (Office for Victims of Crime, 2003).

In schools, crisis teams play a vital role in maintaining safety, providing emotional support, and ensuring that education continues during and after a crisis. They manage everything from addressing crises like the death of a community member to natural disasters, working across functional areas like operations, logistics, and communications to ensure a coordinated response (Brock et al., 2001; Office for Victims of Crime, 2003). Their goal is to minimize disruption and support the community's recovery as quickly as possible.

School Board/Board of Education: A school board is a governing body responsible for overseeing public schools within a specific district. It sets policies, goals, and standards that

shape the district's educational framework (National School Boards Association, n.d.). School boards typically consist of elected or appointed members from the community, serving four-year terms. These members represent the community's interests and ensure that the educational needs of students are met. School boards are tasked with responsibilities such as establishing a clear vision, approving budgets, and hiring and evaluating the superintendent, who manages the district's daily operations (Brodinsky, 1977; Powers, 2017; Resnick & Bryant, 2010).

Additionally, school boards play a crucial role in interpreting government mandates and implementing policies related to curriculum, student welfare, and school operations. They serve as the community's voice in public education, ensuring that local values are reflected in the schools. School boards are accountable for school performance and make decisions that directly impact student learning and achievement, maintaining the quality and effectiveness of public education while acting as advocates for students and parents (Down Home NC, 2022; Houston & Bryant, 1997).

Central Office: The central office of a school district, sometimes referred to as central services, serves as the administrative hub, overseeing the district's operations, policies, and educational goals. It ensures compliance with federal, state, and local regulations while implementing directives from the school board and state authorities (Chapter 115C – Article 5, n.d.). The central office is responsible for managing key operational areas, including procurement of resources, budgeting, transportation, and facilities maintenance, ensuring that the district's infrastructure supports educational activities (Superville, 2023). It also plays a critical role in developing and implementing district-wide educational policies, including curriculum standards and professional development programs for teachers (Hightower, 2002).

In addition to operational management, the central office provides leadership and strategic direction, aiming to improve teaching and learning district wide. It supports school principals and teachers by offering resources, guidance, and technical assistance while facilitating communication with the broader community, including parents and local organizations. The office is also involved in setting learning goals, evaluating teaching practices, and driving continuous improvement across the district (Corcoran et al., 2001). Overall, the central office balances administrative duties with the mission of enhancing student achievement.

Assistant Principal: An assistant principal supports the school principal in the administrative and instructional leadership of the school, contributing to the creation and maintenance of a safe, orderly, and academically focused learning environment. Assistant principals typically oversee student discipline, attendance, school safety, and daily logistical operations, ensuring the effective implementation of school policies and procedures (Marshall & Hooley, 2006). In their role, they collaborate closely with the principal to uphold the school's vision and support the achievement of instructional goals, serving as key members of the school's leadership team (Hausman et al., 2002).

Assistant principals also play a critical role in instructional leadership by supporting teacher evaluation and professional development initiatives, promoting data-informed instructional practices, and fostering a culture of continuous improvement. They engage with parents, students, and community stakeholders, contributing to a positive school climate and communication. Additionally, they are often tasked with leading school committees, coordinating testing and assessment protocols, and assisting in crisis response and school management functions (Barnett et al., 2012). Through these responsibilities, assistant principals

act as both operational managers and instructional leaders, contributing significantly to the overall effectiveness of the school.

School Principal: A school principal serves as the educational leader and administrative head of a school, responsible for overseeing daily operations and ensuring a safe, productive learning environment. They shape the educational experience by setting the school's vision and goals, developing curriculum standards, and assessing student performance to foster academic excellence (Schwartz & Riser-Kositsky, 2023). Principals provide visionary leadership, align school practices with district policies, oversee programs and activities that support student learning while ensuring compliance with legal and regulatory standards. They also manage daily administrative tasks, including budgeting, hiring, and supervising staff (Cuban, 1988).

Along with administrative duties, principals oversee curriculum development, ensuring it meets educational standards, and maintain a safe learning environment through enforcing discipline and crisis management. They act as a liaison between the school and the broader community, fostering communication with parents and stakeholders and building partnerships with local organizations (Duncan & Seguin, 2002). Furthermore, they promote continuous improvement by supporting the professional development of teachers and staff, helping to create a positive and effective educational environment.

Central Office/Services Director: A central office director serves as a senior-level administrator within a school district's central office, responsible for overseeing specific operational, instructional, or support service areas across multiple schools. These directors are charged with translating district-wide goals into actionable strategies, ensuring coherence and alignment across departments such as curriculum and instruction, student services, human resources, finance, or facilities management (Honig, 2012). Central office directors collaborate

with principals and other school-based leaders to support instructional improvement, policy implementation, and equitable access to educational resources.

In their leadership role, central office directors contribute to the strategic planning and continuous improvement efforts of the district. They monitor compliance with state and federal mandates, manage specialized programs, and support data-informed decision-making at the district and school levels (Supovitz, 2006). Central office directors also provide technical assistance, professional development, and policy guidance to school leaders, facilitating a systemic approach to improving teaching and learning. Through their district-wide purview and specialized expertise, they help build the capacity of schools to respond effectively to both day-to-day operations and long-term challenges, including crisis management, educational equity, and organizational change (Honig et al., 2010).

School Superintendent: A school superintendent serves as the chief executive officer of a school district, overseeing day-to-day operations, managing personnel, and ensuring the effective implementation of board policies. They play a critical role in aligning resources and staff with district goals to enhance student achievement and fiscal responsibility. Superintendents also act as public representatives for the district, engaging with the community and building relationships with stakeholders to support educational initiatives (North Carolina School Boards Association, 2024; Stanford Graduate School of Education, 2022).

Effective collaboration with the school board is essential for superintendents, as they work closely with board members to balance leadership roles and responsibilities. This collaboration helps build strong leadership teams, ensuring the success of the district and its students (Balch & Adamson, 2018; North Carolina School Boards Association, 2024).

Synchronous and Asynchronous Learning: Synchronous and asynchronous learning represent two types of online instruction. Synchronous learning involves real-time interaction between instructors and students, often facilitated through video conferencing platforms, live chats, or virtual classrooms. This format mirrors traditional face-to-face instruction by allowing immediate feedback and dynamic classroom discussions (Hrastinski, 2008). In contrast, asynchronous learning occurs without real-time interaction, enabling students to access course materials, engage in discussion boards, or submit assignments at their own pace within a defined timeframe. This approach provides greater flexibility and autonomy (Watts, 2016). Both modalities have distinct pedagogical advantages and limitations, and their implementation should be aligned with instructional goals, learner needs, and technological infrastructure. Understanding the differences between synchronous and asynchronous formats is critical when evaluating remote learning strategies, especially in times of crisis when rapid shifts in instructional delivery are necessary.

### **Limitations of the Study**

This study concentrated on a rural, coastal public school district in the southeastern United States. The findings should not be generalized to other countries, states, or districts due to the specific contextual factors and unique characteristics of the study area.

One limitation of this study is the potential for participant bias, as the researcher is an employee of the same school district being studied, having served as a principal during the pandemic and now holding a central office position as a director. To mitigate this issue, participants were given the option to participate voluntarily and were interviewed outside of regular work hours to minimize any perceived obligation to participate. Special attention was paid to addressing any feelings of coercion or undue influence.

Another limitation is the possible influence of the passage of time on the accuracy of participant recollections, as the study took place over four years after the start of the 2020–2021 school year. To mitigate this limitation, interview questions were carefully designed to prompt participants to recall specific events and decisions documented in historical records, thereby enhancing the reliability of their responses and ensuring that the data accurately reflects the decision-making processes during the pandemic. Additionally, document analysis took place utilizing meeting minutes and planning documents from committee meetings to both prompt the participants and cross reference with question responses during the interview process.

### **Assumptions of the Study**

The following assumptions are recognized for this research study:

1. Participant responses capture individual experiences and personal reactions to their involvement in the crisis response, reflecting the unique perspectives and insights gained from their participation in the committees and their work in the schools and district as they implemented committee protocols and directives.
2. It is assumed that participants provided responses that are reasonably accurate and truthful, contributing to the reliability and validity of the data collected for the study.
3. Acknowledging that participant responses are not fixed and may evolve over time, it is understood that ongoing engagement in leadership roles, professional work, relationships, and community activities may have influenced their perceptions of the decision-making processes that took place in the summer of 2020.
4. Participant responses may represent diverse experiences within Carteret County Public Schools, recognizing the varied roles and perspectives of those involved. The

number of participants included in this study is considered sufficient and appropriate to fulfill the requirements for rigorous and valid research.

5. It is assumed that Carteret County Public Schools' response to the COVID-19 pandemic was largely appropriate, resulting in more positive than negative outcomes, although this assumption will be explored through the research findings.
6. Understanding the crisis response of Carteret County Public Schools is deemed valuable for school leaders, district administration, and the socio-ecological community, as insights gained from this study could inform future crisis management and contribute to the development of more resilient educational practices.

### **Chapter Summary**

This case study investigates the decision-making processes of a specific public school system during the COVID-19 pandemic, a crisis that fundamentally disrupted educational systems worldwide. As both a nation and a global community, we continue to evaluate the outcomes of the pandemic-era decisions and to develop frameworks that can mitigate the negative impacts of future large-scale disruptions. This research seeks to contribute to that effort by analyzing the leadership approaches, decision-making structures, and operational strategies employed by the district, with particular attention to the knowledge, attitudes, and attributes associated with effective crisis response. By examining these elements in a real-world context, the research aims to generate insights that not only deepen understanding of crisis leadership in PreK-12 education but also inform the development of resilient, adaptive, and sustainable practices for future crises.

## Chapter 2: Literature Review

### Historical Crises

Crises have impacted this world as far back as historical records detail and have become an integral part of daily life, with new incidents or developments in ongoing situations occurring constantly. Whether scientific, financial, environmental, political, terrorist-related, or natural, it is evident that everyone is affected by some form of crisis, both major and minor. Regardless of whether a crisis arises naturally or is human-induced, improper management can lead to more severe and enduring consequences than the initial event itself. Some crises are limited in their breadth and scope while others are seemingly borderless, crossing towns, states, and countries. Consider the following examples:

- Around 1920 the first human-to-human transmission of HIV happened in the Democratic Republic of Congo. However, it was not until the 1980s that HIV/AIDS became a global pandemic. By 2018 about 32 million people worldwide had died of HIV/AIDS and related illnesses, with 37 million people living with HIV, and 24.5 of them receiving active treatment. In the U.S., East Africa, and South Africa, AIDS cases have been on the decline in the last 15-20 years. However, in 50 countries around the world the infection rate has increased, including those in Eastern Europe, Central Asia, and Russia, where it has increased 27% between 2010 and 2018. (Cichocki, 2020; The New Humanitarian, 2020).
- In September and October of 1983, seven people living in the Chicago metropolitan area died from poisoned Tylenol capsules. No suspect was ever charged or convicted of the poisoning deaths. Johnson & Johnson, the makers of Tylenol, worked to prevent additional deaths by warning the public through a public relations campaign,

recalling their product, partnering with the Chicago Police Department and the FBI during the investigation, working with the Food and Drug Administration to reform packaging in over-the-counter medications, and supporting the federal government in the passing of anti-tampering laws. This crisis is considered a landmark case for effective handling of a disaster. Johnson & Johnson responded to the situation so well that they became the standard for crisis management. According to Mitroff and Anagnos, “the modern field of CM [Crisis Management] is generally acknowledged to have started with the Tylenol poisonings” (2000, p. 3).

- On January 28, 1986, seventy-three seconds after lift-off, the space shuttle Challenger was destroyed in an explosion fifty thousand feet above the Kennedy Space Center. Seven astronauts were killed as the shuttle broke apart and fell into the ocean. The shuttle had to be replaced at a cost of over two billion dollars, the launch of many military and commercial satellites was delayed, and the American space program came to a halt. The accident had a profound impact on the National Aeronautics and Space Administration (NASA) as well. The agency's credibility and its reputation for flawless execution of complex technological tasks were lost, along with the Challenger (Heimann, 1993).
- On August 29, 2005, Hurricane Katrina made landfall just east of New Orleans. The storm surge from the hurricane breached the levee system and flooded 70% of the occupied housing units. Over 135,000 residents remained in the city and surrounding parishes despite the mandatory evacuation order. Those trapped after the flooding had to be evacuated by emergency personnel. An estimated 71.5% of the housing units were damaged and it took over six weeks to drain the flood water. Damaged roads

and buildings resulted in some residents permanently relocating to other areas in the state and other states in the country. The rebuilding and recovery took years (Fussell, 2015).

- On April 20, 2010, the British Petroleum (BP) *Deepwater Horizon* drilling rig exploded while stationed off the coast of Louisiana, killing 11 crew members and spilling more than 200 million gallons of crude oil into the Gulf of Mexico. The *Deepwater Horizon* Oil Spill (DHOS) is the largest oil spill in United States history causing significant long-term damage to the ecosystem, impacting both the tourism and fishing industries, and having a negative impact on the physical and mental well-being of residents, clean-up workers, and volunteers (Peres et al., 2016).
- On September 28, 2018, a magnitude 7.5 earthquake and subsequent tsunami hit the Indonesian province of Central Sulawesi, Indonesia killing more than 4,000 and injuring over 10,000 people. The tsunami caused a mudslide which destroyed more than 70,000 homes. Thousands of survivors were forced to live in tents and makeshift shelters while waiting for aid relief. The economic damage exceeded one billion dollars. According to reports the death toll may have been significantly impacted due to a delayed early warning system which was stalled in lack of funding and bureaucracy (Cyranoski, 2007).
- On May 7, 2021, the Colonial Pipeline which supplies 45% of the fuel used on the east coast of the United States was shut down due to a cyber hacking attack from a Russian based hacker group known as DarkSide. The Colonial Pipeline CEO paid the ransom of 4.4 million dollars to quickly restore service. The pipeline pumps 2.5 million barrels of gasoline, diesel, jet fuel, and heating oil from Texas refineries to

hubs in Atlanta, Washington DC, and New York. The six-day shutdown caused fuel prices to rise and fuel shortages in many southeastern cities in the United States.

Some businesses and schools closed for several days because employees were unable to get the fuel needed for their vehicles (Jones, 2022).

### **The Beginning of Crises in Schools**

Schools are not immune to crises and have faced a wide range of critical incidents (Tortorici & Johnson, 2004). School crises can take many forms, and while natural caused hazards like floods, hurricanes, wildfires, and earthquakes are commonly associated with emergencies, schools are also vulnerable to human caused hazards like infectious diseases and terrorist threats (U.S. Department of Education, 2008). The first reported crisis in American schools occurred in 1764 when nine students and the headmaster of a school in Greencastle, Pennsylvania were killed by a Native American tribe, the Delaware. During the French and Indian War, the Delaware tribe were allies with the French and used this relationship to mutually fight against the settlers. The massacre of 1764 was notable and still commemorated to this day (Zach, 2014).

School-based crisis intervention largely grew out of a response to school disasters, most of which were fire related. The first recorded fire-related disaster was in a New York school on March 4, 1851. A false fire alarm in Greenwich Avenue School led to a chaotic and disorganized evacuation. In attempt to escape, 40 children were killed, and many others were injured. The students had not been trained in fire drills and were not aware of escape routes which are designed to prevent injury and death. This incident highlighted the need for schools to practice fire drills and to train their students to quickly and safely exit the school building. As word

spread around the country, teachers and schools began implementing drills and mapping out fire routes (Goloway, 2002).

However, fire drills and safety plans were not a standard practice for schools across the United States until many years later. In the time it took for each state to establish fire code and fire emergency procedures, additional loss of life occurred due to school fires. The largest reported number of deaths occurred in Collinwood, Ohio on March 4, 1908 when 172 children and two teachers died in a fire at Lakeview Elementary School (Fearing, 2008). This fire was caused by overheating pipes in the ceiling which then ignited the wooden roof joists. Students became trapped on the third floor, with many jumping into the arms of their parents below, who lived locally and rushed to the scene. No fire drills had been practiced at the Lakeview School and no safety standards were in place. In 1958, Chicago's Our Lady of Angels School had a fire which killed 92 children and three nuns. An additional 77 children and nuns were seriously injured with some jumping from windows while others were pushed. Sadly, individuals were also trampled as they groped for exits. Critics of this tragic event pointed out that no safety plan was in place and if there had been one, lives could have been saved (Hensler, 2023).

Today, most states have passed legislation which requires schools to complete a monthly fire drill and have escape routes posted in all rooms utilized by staff and students. Working in conjunction with the local Fire Marshall, schools must also adhere to fire codes indicating that all doors to exit the building must be unlocked from the inside, hallways and egresses remain free from fire hazards, all equipment and materials installed meet inspection and safety guidelines, as well as adherence to flammability standards for furniture and decorations (G.S. 115C-525, n.d.).

## **Types of School Crises**

Crisis events can be categorized as either human- caused hazards or natural hazards and the school responses to each can differ, thus broadening both the preventative and reactive action steps detailed in a school crisis plan. Districts and schools need to know what types of crises can affect a school so that responses can be crafted to best mitigate the impact.

### **Natural-Caused Hazards**

Natural- caused hazards that can cause school crises include earthquakes, flooding, landslides, mudflows, drought, torrential rains, hurricanes, tornados, wildfires, and spread of illness or disease (Siegel, 2019). Some examples of these include:

- The 1918 influenza pandemic, often referred to as the Spanish flu, had a global impact resulting in the deaths of an estimated 675,000 Americans and over 20 million people worldwide. During this period, many cities opted to close schools as part of community mitigation strategies to curb the spread of the virus. These closures varied in length, with some lasting weeks or even months. However, a few cities, such as New York City, Chicago, and New Haven, chose to keep their schools open, believing that schools could better manage hygiene and health inspections than children staying at home (Taubenberger & Morens, 2006).
- Hurricane Katrina, which struck on August 29, 2005, had a catastrophic impact on New Orleans with 986 deaths directly attributed to the storm resulting from drowning and injury. The storm caused severe damage, destroying 110 out of 126 public school buildings in the city. As a result, the state took control of nearly all urban schools, transitioning them to independent charter schools, which led to the creation of the first all-charter school district in the U.S. (Neff, n.d.). This transformation also aimed

to address the pre-existing issues of low performance in the public school system. The reconstruction of the school system was a long-term effort, with the final restoration of school facilities completed nearly two decades later, in 2023 (Beabout, 2007; Sprung, 2008).

- On May 11, 2011 an EF-5 tornado rampaged through Joplin, Missouri, completely destroying the district's only high school and partially damaging four others, leaving around 4,000 students without a school to attend. The district suffered 150 million dollars in property damage (Smith & Sutter, 2013). Nearly two years later May 20, 2013, an EF-5 tornado in Moore, Oklahoma, destroyed two elementary schools. At Plaza Elementary School, seven students were killed as they crouched at a wall that fell on them (Ramseyer et al., 2019). These devastating tornadoes provided significant lessons for schools in terms of disaster preparedness and response emphasizing the critical need for storm shelters in schools, safe room construction, and reinforced building codes to protect students during extreme weather events (Federal Emergency Management Agency, 2023).
- The wildfires in Maui, which occurred in August 2023, had a devastating impact on the community, including the education system. The fires, fueled by dry conditions and strong winds, destroyed much of the area causing significant damage to schools and displacing nearly 3,000 students. The destruction forced families and education officials to find alternative ways to continue education, such as relocating students to other schools on the island or setting up makeshift classrooms in nearby areas. The reopening of surviving schools posed challenges, including concerns over air quality and the emotional impact on students and staff. The fires highlighted challenges, such

as housing shortages and the need for ongoing support in the recovery process as well as mental health support for those affected (Blad & McFarlane, 2023).

### **Human-Caused Hazards**

Human-caused hazards that can cause school crises encompass a range of incidents, including alcohol-related fatalities, self-injurious behavior, school homicides, racial or ethnic conflicts, and community violence (Cornell & Sheras, 1998). According to Barclay, arson attacks, hostage situations, violence in schools perpetrated by students or parents, potentially involving guns or knives, and civil disturbances outside the school that spill over into school life should also be included in the definition (2004).

- The Bath School disaster, the deadliest school massacre in U.S. history, occurred on May 18, 1927, in Bath Township, Michigan, when a disgruntled farmer and school board treasurer, detonated explosives he had secretly planted in Bath Consolidated School. The carefully planned attack killed 45 people, including 38 children, and injured at least 58 others. After the initial explosion at the school, additional explosives were detonated, killing the school board treasurer and several others, including the school superintendent (Putnam, 2016).
- The Rusk County school tragedy, also known as the New London School Explosion, is considered one of the deadliest school disasters in U.S. history. It occurred on March 18, 1937, at the New London School in Rusk County, Texas. The explosion was caused by a natural gas leak. The school had recently installed a gas heating system and, to cut costs, had tapped into a residual gas line. Gas accumulated in a crawl space and was ignited from a spark. The explosion was so powerful it lifted the roof off the building and caused the walls to collapse, trapping students inside. The

tragedy resulted in the deaths of more than 295 students and teachers and injured many others (Jackson, 1998). This disaster led to significant changes in safety regulations regarding natural gas, including a law requiring malodorant (the distinctive rotten-egg smell) be added to natural gas making it easier to detect leaks (Campbell, 1997).

- The Chowchilla bus kidnapping occurred on July 15, 1976, in Chowchilla, California, when three armed men hijacked a school bus carrying 26 children, ages 5 to 14, and their bus driver. The kidnapers, drove the bus to a remote area where they transferred the hostages into two vans. The children and driver were then taken to a rock quarry in Livermore, about 100 miles away, and forced into a buried moving van. The kidnapers intended to demand a \$5 million ransom but were thwarted when a 14-year-old student, managed to dig his way out after 16 hours underground (Yan, 2023). All hostages survived, though many suffered psychological trauma. The incident, one of the largest mass kidnappings in U.S. history, had a profound impact on the victims and the community. The students suffered long-term negative effects due to a lack of counseling or emotional support provided by the school. This led to advocacy around emotional support/first aid following a trauma (Heath et al., 2007).
- The Paducah, Kentucky, school shooting occurred on December 1, 1997, at Heath High School when a 14-year-old student opened fire on a morning prayer group, killing three students and wounding five others. The student had brought multiple firearms to the school but used only a .22-caliber pistol (Loller, 2022). This tragic event was part of a series of high-profile school shootings in the late 1990s, including the Columbine massacre, that underscored the growing crisis of school violence in the

United States. It highlighted the urgent need for improved school safety measures, mental health support, and a deeper understanding of the factors contributing to youth violence (Cowan & Rossen, 2013).

- The Columbine High School shooting, which occurred on April 20, 1999, in Littleton, Colorado, was a pivotal event in American history. Perpetrated by two students, the attack resulted in the deaths of 12 students and one teacher, with 21 others injured, before the attackers committed suicide (CNN, 2013). The incident, lasting less than an hour, exposed significant flaws in emergency response protocols and led to widespread changes in school safety measures, including the implementation of lockdown drills and increased security. The tragedy sparked national debates on gun control, youth violence, and mental health, profoundly impacting school policies and the public's perception of school safety (Blad, 2024; Heath et al., 2007). Columbine remains a reference point in discussions about preventing school shootings and addressing the root causes of such violence. Most significantly, it changed the way law enforcement thinks and reacts to crisis. Instead of waiting to enter a building and negotiating with the shooter, police now focus on immobilizing the shooter as quickly as possible (Cowan & Rossen, 2013).
- On December 14, 2012, Sandy Hook Elementary School in Newtown, Connecticut became the scene of the second deadliest school-based shooting massacre in US history. Twenty first grade children and six school staff were shot and killed in the space of 12 minutes. The shooting rampage was ended when law enforcement responded, causing the shooter to drop his assault rifle and commit suicide with a handgun. Many identify this event as a tipping point in the national conversation on

gun control and school safety (Shultz et al., 2013). Out of this tragedy Sandy Hook Promise was established as a non-profit organization dedicated to reducing gun violence through a four-pronged strategy. This approach involves building a nationwide network of parents, educators, and organizations; coordinating community-level awareness and education efforts; developing and providing mental health and wellness programs; and advocating for policies at both state and federal levels (Sandy Hook Promise, 2019).

- The Uvalde school shooting occurred on May 24, 2022, at Robb Elementary School in Uvalde, Texas, when the 18-year-old school shooter, armed with an AR-15 style rifle, entered the school and killed 19 students and two teachers. Despite the presence of law enforcement within minutes, the gunman remained in a classroom for over an hour before being killed by a Border Patrol tactical unit (Jacobo & El-Bawab, 2022). The incident, which also left over a dozen others injured, drew widespread criticism of the delayed police response and sparked renewed debates over gun control, school safety, and law enforcement protocols (Coronado et al., 2024).

Crises, whether natural or human-caused, profoundly impact schools, affecting students, families, staff, and the broader community. While high-profile events often spur national debates and highlight the need for improved school safety practices and crisis preparedness, it's important to recognize the devastating impact that the death of students can have on the school environment and community (Donohue et al., 1998; Roth, 2015). Although these major incidents capture national headlines and increase media attention, schools also face lower profile yet potentially devastating crises daily, such as accidents and illnesses, which can be equally disruptive and tragic. The unexpected loss of a classmate due to an accident, illness, or suicide

can be profoundly distressing, as it is not anticipated for young students to pass away (Dyregrov et al., 1999). The way a school and district responds to crisis, whether large or small scale, significantly influences the overall recovery of the community (Brock et al., 2001; Roth, 2015). An effective response can unexpectedly foster trust among staff and students and encourage resilience (Roth & Fernandez, 2018). It is crucial to facilitate a return to normalcy while also accommodating grief responses and crisis reactions.

### **Federal Legislation Impacting Schools**

Federal legislation significantly impacts public schools by establishing guidelines, providing funding, and setting standards to ensure equitable access for students to a quality education. Although the primary responsibility for education policy lies with the state and local governments, federal laws play a crucial role in shaping the educational landscape. At the federal level, several agencies are involved in aspects of school crisis response, including the U.S. Department of Education (ED), the U.S. Department of Justice (USDOJ), the U.S. Department of Health and Human Services (USDHHS), the FBI, FEMA, the Office of Safe and Healthy Students, the Office of Elementary and Secondary Education, and the Readiness & Emergency Management for Schools (Dwyer et al., 1998).

While primarily focused on funding and educational equality, the Elementary and Secondary Education Act (ESEA) of 1965 laid the groundwork for federal involvement in education, including aspects related to school environments and safety. The Educational Amendments of 1972, which included Title IX, focused on gender equality and addressed discrimination and harassment in educational settings, which indirectly impacted school safety. The Safe and Drug Free Schools and Communities Act (SDFSCA) of 1986, was one of the earliest laws specifically addressing school safety that provided federal funding for programs

aimed at preventing violence and drug use in schools. By the 1990s, additional acts were passed that made it illegal to possess a firearm in a school zone [Gun-Free School Zones Act of 1990], emphasized violence prevention [Improving America's Schools Act of 1994], and increased the presence of law enforcement officers in schools [The Omnibus Crime Control and Safe Streets Act of 1993] through the Community Oriented Policing (U.S. Congressional Research Service, 2022).

In 2001, the No Child Left Behind (NCLB) law required that violence prevention programs in schools follow established principles of effectiveness and be supported by scientifically validated research that proves their ability to decrease violence and illegal drug use (Sprague & Walker, 2022). NCLB specifically required schools to have a safety plan and report on school safety data. In response to the September 11 attacks, The US Patriot Act of 2001 was passed, and it included measures for school emergency preparedness, emphasizing the need for schools to develop and implement comprehensive emergency management plans. The School Safety and Security Act of 2002 provided funding for safety measures, such as the installation of metal detectors, surveillance cameras, and the hiring of school resource officers. Although focused on preventing child exploitation and abuse, The PROTECT Act of 2003 also had implications for school safety, particularly in addressing the protection of children within educational environments. In January 2003, the U.S. Department of Education (ED) released the Practical Information on Crisis Planning Guide (U.S. Department of Education, 2007) and a companion document titled A Guide to School Vulnerability Assessments: Key Principles for Safe Schools (U.S. Department of Education, 2008).

In March 2011, President Barack Obama issued Presidential Policy Directive 8, focusing on national preparedness and encompassing five mission areas: prevention, protection,

mitigation, response, and recovery (U.S. Department of Homeland Security, 2018). In 2013, the Department of Education, along with the U.S. Departments of Health and Human Services, Homeland Security, Justice, the FBI, and FEMA, provided guidelines for School Emergency Operations Plans (EOPs). The Federal Emergency Management Agency (FEMA) recommends that school crisis management align with the National Incident Management System (NIMS) for effective crisis response (Federal Emergency Management Agency, 2019b). In 2015 the Every Student Succeeds Act (ESSA) replaced NCLB and included provisions for improving school climate and safety. It authorized funding for programs that promote a safe and supportive learning environment. The STOP School Violence Act of 2018 was passed in response to the Parkland, Florida school shooting. This act provides funding to improve school security, including training for school personnel and students, development of threat assessment and crisis intervention teams, and the installation of anonymous reporting systems. The American Rescue Plan Act of 2021 included funding for schools to support safe reopening during the COVID-19 pandemic, emphasizing the importance of both physical and mental health in the context of school safety (Federal Emergency Management Agency, 2019b).

Over time, federal legislation has increasingly emphasized the importance of proactive measures such as violence prevention programs, emergency preparedness, and mental health support. More recent legislative efforts have recognized the importance of addressing mental health as a component of school safety, reflecting a more holistic approach to creating a safe learning environment for students and staff. Several of the federal laws encourage collaboration between schools, law enforcement, and community organizations, as well as flexibility for schools to tailor safety measures to their specific needs. Overall, the evolution of federal legislation surrounding school safety and crisis response demonstrates a growing awareness of

the complex factors that contribute to a safe educational environment. While federal involvement is limited by the Tenth Amendment, which reserves most educational authority to the states, these laws ensure a baseline for standards of practice across the nation providing consistency in the use of best practices for school crisis prevention and intervention.

### **Leading Schools Through Crisis**

“By failing to prepare, you are preparing to fail” (Williams, 1919, p. 80). Comprehensive school Crisis Response Plans, also known as School Emergency Operations Plan (School EOP) and Emergency Management Plans (U.S. Department of Education, 2006, 2013) are vital for safeguarding the physical and psychological well-being of the school community. The plan ensures a coordinated response to emergencies takes place while complying with legal requirements and minimizing potential damages and loss. These plans are foundational to creating a safe and supportive school environment (Brock et al., 2016).

One of the most significant challenges with school crisis preparedness is that people are often reluctant to plan for infrequent and unpredictable disasters. This can often result in Crisis Response Plans lying untouched for years with outdated implementation steps by the time the plan is needed (Klingman, 1987). School leaders must advocate for school preparedness to ensure an effective response can be achieved, with well-planned and up to date protocols protecting all stakeholders.

A school leader should embody several qualities to be highly effective in their educational community, especially when handling a school crisis. Decisiveness and problem-solving are key and include analyzing the situation quickly, identifying the best course of action, and implementing decisions effectively (Marzano et al., 2005). A school leader who remains composed can think more clearly and provide a steady presence for staff and students, helping to

reduce pain and maintain order. This calmness can also enhance the leader's credibility and instill confidence in their abilities to manage the situation effectively (Leithwood et al., 2004). Clear and effective communication is vital to be able to respond quickly and accurately with staff, students, parents, emergency responders, and the community. Providing timely updates and clear instructions helps prevent misinformation and ensure that everyone knows what actions to take (Smith & Riley, 2012). Empathetic leaders with high levels of emotional intelligence better understand and address the emotional needs of their stakeholders. They can provide the necessary support, demonstrate compassion, and help the school community better cope with the stress and trauma associated with the crisis, which strengthens the community's resilience (Goleman, 1995). Because crises are often unpredictable leaders are required to adapt quickly to changing circumstances. An effective leader must be flexible and willing to change plans as needed (Fullan, 2007). A collaborative environment fostered by a school leader can ensure everyone works together effectively and efficiently. Crisis response often requires a coordinated response with a team of individuals (DuFour & Eaker, 1998). It all starts with preparedness. Leaders who prioritize planning and training can better anticipate crises and have protocols in place to handle them. This proactive approach includes regular drills, reviewing of crisis plans, and ensuring everyone knows their roles and responsibilities (Reeves, 2006).

A good school crisis plan is comprehensive and includes several key components that ensure the safety and well-being of students, staff, and visitors during emergencies. The essential components are as follows:

1. **Risk Assessment and Prevention:** Identifying the potential risks and hazards that could impact the school such as natural disasters, violent incidents, medical emergencies, and technological threats (Federal Emergency Management Agency,

- 2019a). Implementing strategies to reduce or eliminate risks, which includes building security upgrades, safety training, and bullying prevention programs (U.S. Department of Education, 2013).
2. **Emergency Procedures:** Creating evacuation plans with a clear outline for safely evacuating the building in the event of fires, chemical spills, or other emergencies (Federal Emergency Management Agency, 2019a). Defined protocols for securing the building during internal or external threats, ensuring that student and staff remain safe (U.S. Department of Education, 2013). Establishing guidelines for remaining indoors during situations like severe weather or hazardous material incidents, including instructions on securing and sealing the building to maintain a safe environment is essential (Federal Emergency Management Agency, 2019b).
  3. **Roles and Responsibilities:** Designating a crisis response team consisting of administrators, teachers, resource officers, and other staff members who will lead the response efforts during an emergency (Barclay, 2004; Brock et al., 2001; Brock et al., 2013; Brock et al., 2002). A study conducted by Rees and Seaton (2011) identified 29 separate roles of crisis responders that helped schools intervene with a crisis. The top three roles were counselor, social worker/social services, and principal, teacher, and other teaching staff. Clearly outlining the roles and responsibilities of each team member, including who will manage communications, first aid, student accounting, and coordination with emergency services is necessary (U.S. Department of Education, 2013).
  4. **Communication Plans:** Developing protocols for communicating with staff and students during an emergency, including the use of intercom systems, two-way

- radios, and digital alerts (Federal Emergency Management Agency, 2019b). Establish procedures for communicating with parents, media, and the community, ensuring timely and accurate information dissemination (Trump, 2011).
5. **Training and Drills:** Providing ongoing training for staff and students on emergency procedures, crisis response roles, and safety protocols (U.S. Department of Education, 2013). Regularly conducting drills for various scenarios, such as fire, lockdown, and evacuation, to ensure everyone is familiar with procedures and can act quickly during a real crisis (Federal Emergency Management Agency, 2019b). Research indicates that many schools have a plan but lack confidence in using the plan (Allen et al., 2002).
  6. **Recovery and Continuity Plans:** Including plans for providing first aid, reuniting students with their families, and ensuring the emotional well-being of all involved immediately after a crisis (Brock et al., 2002). Outlining steps for returning to normal operations, addressing building repairs, resuming educational activities, and offering ongoing psychological support to students and staff affected by the crisis (U.S. Department of Education, 2013). According to James and Gilliland (2013), it is important for demobilizing the School Crisis Response Team in a way that “allows the SCRT to integrate the experience into their lives and go back to their regular jobs” (p. 522).
  7. **Review and Improvement:** Scheduling regular reviews and updates of the crisis plan to ensure it remains current and effective, considering new threats, lessons learned from drills, and changes in school layout or personnel (Trump, 2011). Gathering feedback from staff, students, and emergency responders after drills and actual

incidents to identify areas for improvement and ensure continuous enhancement of the crisis plan (Federal Emergency Management Agency, 2019b). Crisis team closure is aided through debriefing (Brock et al., 2013; Roth, 2015). Further, it is recommended that an after-action report be completed to help document the crisis event and what happened (James & Gilliland, 2013), which will also help with district data collection, analysis, and reflection.

These components work together to ensure a comprehensive, well-prepared approach to handling school crises, minimizing harm, and supporting recovery. The American Red Cross (2018) acknowledges that, “being prepared may not prevent a disaster but it will give you confidence to meet the challenge” (American Red Cross, 2018, para. 1).

### **Determining Level of Crisis**

Crises vary in size, scope, and impact and the amount of response needed can shift depending on the situation (Brock et al., 2016; Merriam & Ntseane, 2008). Schools must first assess the situation by determining the facts and estimating the potential school impact (Brock et al., 2002). When determining the appropriate level of response following a crisis, four key variables should be considered: predictability, consequences, duration, and intensity (Brock et al., 2016). The level of school crisis response cannot be determined solely by the type of crisis, whether it is natural or human-caused, because each organization, building, and student may react differently. The perceived severity of a crisis can vary, making it subjective. It is essential to assess and classify the response level needed using well-researched variables to support objective, unbiased decisions.

Both under-responding and over-responding can have unintended negative impacts. Under-responding may lead to students and staff needs not being met, while over-responding

may increase threat perceptions and inefficiently use resources (Brock et al., 2016). According to Brock et al. (2001) and further expanded upon by Brock et al. (2013), the four levels of crisis response for schools are as follows:

- **Minimal Response:** This level involves minor incidents that can be managed by the school's existing resources without external assistance. These are typically low impact events that do not significantly disrupt the school day or pose serious threats to safety. Examples are minor student injuries or a classroom where several students may get the stomach bug.
- **Building-Level Response:** At this level, the crisis affects a larger portion of the school but can still be managed within the school's resources, although it may require employing several staff members in response and using emergency protocols. This response may involve a temporary lockdown, evacuation, or a shelter-in-place. Examples are a student with a more significant injury requiring emergency medical services or having to close a hallway due to a water leak, causing students to be relocated in the building.
- **District-Level Response:** This response is necessary when a crisis impacts multiple schools within the district or when a single school's crisis exceeds its capacity to respond effectively. The district's resources are then mobilized to provide additional support, including district crisis teams or emergency management coordinators. Examples are a fire in the woods the back up to three schools or a police chase through a school district of an armed suspect.
- **Regional-Level Response:** This is the highest level of crisis response and is used when the crisis is widespread, affecting a region or multiple school districts. It

involves coordination with external agencies such as local law enforcement, fire departments, public health officials, and possibly state or federal resources. This level of response is activated for large-scale disasters, pandemics, or significant threats that have widespread implications. Examples are a hurricane that has caused widespread damage or a power outage that lasts more than a few hours.

These levels of response are designed to provide a structured and scalable approach to crisis management, allowing schools and districts to adapt their actions based on the severity and scope of the incident. Continuously monitoring the situation is necessary to assess if conditions are changing and if the response level needs to be adjusted. Flexibility is key to effectively managing a dynamic crisis (U.S. Department of Education, 2013). Merriam and Ntseane (2008) note that "crisis is a fluid process that requires a similarly fluid decision-making process" (p. 60).

When determining the level of crisis response in a school, it is important to consider the number of support staff available in both the building and the district. In many situations, the existing support staff and administration within the school may be sufficient to manage the crisis. Additionally, crisis response teams need to be aware of the types of crises that have previously occurred and been studied, as this knowledge can help them anticipate which incidents are most likely to impact their specific organization. Including a catalog of known and potential school crises in the School Crisis Response Plan can help school and district teams assess the likelihood of certain events, such as hurricanes in a southeastern coastal town or tornadoes in the Midwest.

### **Crisis Response Timelines**

School leaders serve a critical function in the effective management of school-based crises, navigating both the immediate disruptions posed by emergencies and the extended processes required for recovery and resilience. In the short term, school administrative

responsiveness is characterized by rapid decision-making, clear communication, and coordinated action to protect the safety and well-being of students and staff. According to the National Education Association (2018), effective crisis response leaders must be prepared to assess unfolding situations in real time, activate crisis response teams, and collaborate with external agencies, often within a matter of minutes or hours. The Virginia Department of Education (n.d.) describes such responses as “time-limited, problem-focused interventions” (p. 6), emphasizing the urgency and purposefulness of short-term crisis mitigation efforts.

Following the initial response phase, school leaders must transition to addressing the long-term implications of the crisis. This includes facilitating emotional recovery, ensuring the continuity of academic instruction, and initiating organizational learning. These efforts often involve the implementation of mental health support, the provision of grief and trauma resources, and the intentional rebuilding of trust within the school community. In the long term, effective leadership also entails reflective practice, continuous assessment, and the revision of crisis management plans to enhance preparedness for future incidents (Brock et al., 2013).

While short-term and long-term crises may differ in duration and intensity, the foundational processes required to manage them effectively often remain consistent. Core elements such as risk assessment, communication planning, stakeholder coordination, and post-crisis evaluation are essential in both scenarios. The distinction lies primarily in the timeline of implementation and the scale of response rather than in the nature of the actions themselves. For instance, the same framework used to respond to an acute incident, such as a weather-related emergency like a snowstorm/snowfall, can be adapted and extended to address prolonged disruptions, such as a public health crisis or systemic trauma following a school shooting. As Grissom and Condon (2021) and the U.S. Department of Education (2010) suggest, the phases of

mitigation, preparedness, response, recovery, and learning are applicable across all types of crises, regardless of their length. This continuity highlights the importance of having flexible, well-rehearsed protocols in place that can be scaled and sustained over time. Thus, effective crisis leadership is not merely about reacting to an immediate threat, but about applying a comprehensive, repeatable process that evolves in accordance with the needs and duration of the crisis.

School crisis leadership extends beyond immediate stabilization efforts and encompasses a continuum of responsibilities that include long-term recovery and organizational learning. By addressing both short-term safety and long-term resilience, school leaders play an essential role in fostering stability, adaptability, and continuous improvement of their educational communities.

### **School Crisis Frameworks and Models**

Unlike theories, frameworks are tailored to the needs and context of a study, allowing for a more focused application of theoretical concepts (Creswell & Poth, 2018; Yin, 2018). A theoretical framework might draw on established theories to identify key variables and their relationships within the context being studied, thereby shaping the research design and guiding data collection and analysis (Merriam & Tisdell, 2016). This is particularly important in case studies, where the goal is to explore complex phenomena in real-world settings, requiring a structured approach to capture and interpret the nuances of the case (Stake, 1995). By providing a clear blueprint for the research, frameworks ensure that the study remains focused and coherent, facilitating the systematic examination of the case. They help researchers make sense of the data within the context of the theoretical concepts being applied, enhancing the study's rigor and the validity of its findings (Baxter & Jack, 2008).

There are many crisis response frameworks and models referenced in the literature on crisis management, each providing different approaches and strategies for handling emergencies. These include the PREPaRE Training Curriculum (Prevent, Reaffirm, Evaluate, Provide, Respond, Examine), Psychological First Aid (PFA), the National Organization for Victim Assistance (NOVA) framework, Critical Incident Stress Management (CISM), Crisis Incident Stress Debriefing (CISD), and the Prevention, Preparedness, Response, and Recovery (PPRR) framework. Additionally, Roberts' Seven-Stage Crisis Intervention Model, the multi-modal BASIC-Ph approach, and the Hybrid Regional Model are widely recognized (Brock et al., 2016; James & Gilliland, 2013; Rees & Seaton, 2011; Tortorici & Johnson, 2004).

### **PREPaRE Model**

The PREPaRE model provides a detailed framework for addressing crises by focusing on preventing and preparing for psychological trauma, reaffirming physical health and safety, evaluating psychological trauma risk, providing interventions, responding to psychological needs, and examining the effectiveness of crisis prevention and intervention strategies (Brock et al., 2016). Poland (1994) proposed a theoretical model with three levels of crisis planning: primary prevention (e.g., programs for conflict resolution, suicide prevention, and gun safety), secondary intervention (e.g., immediate post-crisis evaluations of students), and tertiary intervention (e.g., long-term follow-up for those experiencing trauma or adverse reactions). Many American government organizations advocate for a five-phase emergency management framework to help schools and districts establish or refine their emergency management plans. These phases include Prevention (Phase 1), Protection (Phase 2), Mitigation (Phase 3), Response (Phase 4), and (Phase 5) Recovery (U.S. Department of Homeland Security, 2018). According to

Reeves et al., crisis planning and prevention should align with the M-PHAT acronym: Multi-Phase, Multi-Hazard, Multi-Agency, and Multi-Tiered (2010).

Given the wide range of potential crises, there is a recognized need for a flexible response model that can be adapted to previously unencountered situations (Rees & Seaton, 2011). School Crisis Response Teams (CRTs) implement these crisis frameworks or models within their Crisis Response Plans (CRPs) at both the building and district levels. Even with well-developed School CRPs, a crisis event can result in failure when a conventional approach of reducing the degree of complexity in a crisis to classifying the level of uncertainty, controlling the possible factors and determining causes and effects occurs (Keene, 2000; Robert & Lajtha, 2002). Recognizing that new paradigms are needed to make sense of the complex and uncertain nature of crisis events has led to a growing body of research on complex systems and complexity management (Marion & Bacon, 2000). This research reveals that organizations that can restructure and encourage innovation and creativity using complex thinking outperform those who have taken a traditional, prescribed management approach (Pepper, 2002). In their nature, school crises are dynamic, complex, and often unexpected, therefore it is important to reexamine the approaches to school crisis management. Much of the scholarly research (Boudreaux, 2005; Howell & Miller, 2006; Simola, 2005; Wooten & James, 2008) uses Fink's (1986) Crisis Life Cycle Model to understand the management of crisis in a linear approach.

### **Fink's Crisis Life Cycle Model**

Fink's Crisis Life Cycle Model is a framework developed by Steven Fink in his 1986 book, *Crisis Management: Planning for the Inevitable*. This model outlines the four linear stages a crisis will go through from inception to resolution to recovery: prodromal crisis stage, acute crisis stage, chronic crisis stage, and crisis resolution stage.

- The *prodromal stage* is the pre-crisis stage, where warning signs or indicators suggest that a crisis may be developing. During this stage, there are often signals or symptoms that, if recognized, can alert an organization to potential problems. Effective crisis management at this stage involves monitoring for these signs because it is “much easier and more reliable to take care of the problem before it becomes acute, before it erupts and causes possible complications” (Darling, 1994, p. 6).
- The *acute stage* is when the crisis occurs. It is marked by a triggering event that escalates into a significant issue, demanding immediate attention and response. This stage is often characterized by confusion, rapid decision making, and a high level of stress as the organization tries to manage the immediate impact of the crisis. The duration of this stage can vary, but it typically involves intense efforts to control the situation and minimize the damage (Fink, 1986).
- The *chronic stage* follows the initial response and involves dealing with the aftermath of the initial crisis. This stage can be prolonged, as it encompasses the recovery process, investigation, analysis of the event, and any legal or regulatory fallout. During this stage, organizations focus on rebuilding trust, repairing damage, and implementing changes to prevent future crises (Mitroff, 2005). It is a time for reflection and learning, aiming to restore normalcy while addressing the underlying causes of the crisis (Paraskevas, 2006).
- In the final *resolution stage* is where the crisis is resolved and the organization returns to stability. At this point, the crisis is considered over, and the organization has fully recovered or adapted to the changes brought about by the crisis. The resolution stage involves identifying the lessons learned, implementing new strategies or policies, and

preparing for future challenges based on the experiences gained (Mitroff, 2004).

While Fink's (1986) crisis life cycle model is helpful for understanding the stages and processes of a crisis, not all crises follow the same pattern, even when an organization is prepared. Although a crisis management plan can help reduce some risks and uncertainties, when a crisis escalates and becomes more complex, organizations may need to develop a more comprehensive plan and be ready for the heightened impact that the crisis could bring. A growing body of scholars call for a chaos and complexity perspective on crisis management as crisis are perceived as the norm rather than the exception by managers in most organizations (Murphy, 1996; Robert & Lajtha, 2002; Seeger et al., 1998; Snowden & Boone, 2007).

### **Chaos Theory and Complexity Theory**

Chaos Theory and Complexity Theory are both fields of study that examine how systems behave in unpredictable and intricate ways. While they have distinct focuses, they share common themes and intersect in various aspects of analyzing complex systems. Chaos Theory is a branch of mathematics and physics that studies systems that are highly sensitive to conditions.

Complexity Theory is applied in various fields including biology, economics, sociology, and computer science.

In chaotic systems, small changes in the initial state can lead to vastly different outcomes, making long-term predictions impossible even though the systems follow rules and laws (Gleick, 1987). In Chaos Theory systems are governed by deterministic rules; despite appearing chaotic and the system is sensitive to initial conditions. Many chaotic systems are nonlinear, meaning their output is not directly proportional to their input which contributes to the complexity and unpredictability of the system's behavior. Despite appearing disorderly, chaotic systems possess

an inherent order, reflected in similar patterns that repeat at progressively smaller scales. (Gleick, 1987).

Complexity Theory studies how the relationship between parts gives rise to the collective behaviors of a system and how the system interacts and forms relationships with its environment. It is used to understand complex adaptive systems which are composed of multiple parts that are interconnected and adapt and evolve over time (Mitchell, 2009). In Complexity Theory a complex system can exhibit emergent behavior where new properties emerge from the interactions of the parts. These complex systems are also recognized as being adaptive, meaning they can change and evolve in response to their environment, making them resilient but difficult to predict. In many complex systems, there is no central control, and the behavior of the system emerges from the interaction of its components (Mitchell, 2009).

Chaos Theory and Complexity Theory intersect in their examination of systems that exhibit unpredictable, non-linear, and dynamic behaviors. Both theories are concerned with understanding how small changes can have large, often unforeseen effects on a system, and they both explore systems that are sensitive to initial conditions. Liou (2014) proposed a dynamic crisis life cycle model that integrates major concepts of chaos and complexity theory with Fink's life cycle model. The integration of chaos and complexity theory with Fink's model may help school leaders approach crisis in a more realistic way.

### **Dynamic Responsiveness to Crisis Life Cycle Framework**

The Dynamic Responsiveness to Crisis Life Cycle framework is a model (See Figure 2.1) that integrates chaos and complexity theory and Fink's (1986) Crisis Life Cycle Model by providing a framework for understanding and managing school crisis that are inherently unpredictable and complex. This framework describes how organizations, including schools,

respond to crisis through a series of crisis phases that emphasize flexibility, collaboration, and self-correcting. The key components of the model are:

- **Prodromal Stage:** Liou incorporates the prodromal stage of Fink's Crisis Life Cycle Model, which focuses on recognizing early warning signs and preparing for potential crises. By applying complexity theory, Liou argues that schools must develop the ability to identify subtle signs of impending crises within their dynamic environments and adapt their preparedness strategies accordingly. The system must maintain its structure by dissipating energy. In a crisis, a school might reorganize resources and efforts to manage emerging issues without collapsing. Reflecting chaos theory, this stage emphasizes that the initial conditions can greatly influence how the crisis unfolds. Minor variations can escalate into larger issues (Liou, 2014).
- **Acute Stage:** During the acute stage, Liou integrates chaos theory by acknowledging that a crisis can escalate rapidly, requiring immediate and decisive action. Crisis can reach a state where behavior becomes unpredictable yet confined within certain limits, often leading to recognizable patterns or paths. A bifurcation point is a critical point in the crisis where decisions or changes can lead to vastly different outcomes. It's a moment of choice or turning point where the path forward becomes significantly different depending on the actions taken. He suggests that understanding the chaotic nature of crises helps school leaders anticipate the need for quick, flexible responses that can change as the situation unfolds (Liou, 2014).
- **Chronic Stage:** In the chronic stage, Liou leverages both chaos and complexity theories to discuss the importance of adapting recovery efforts to the unique circumstances of each crisis. He argues that schools must be prepared to manage

long-term recovery in a way that is sensitive to the evolving needs of students and staff, which may change as the system stabilizes, and new information becomes available. Feedback mechanisms are crucial as they allow the organization to adjust its strategies based on the ongoing evaluation of the situation and its effects. This is consistent with the continuous adaptation focus in complexity theory (Liou, 2014).

- Resolution Stage: Finally, Liou aligns with Fink's resolution stage by emphasizing the need for schools to learn from each crisis. By applying complexity theory, he suggests that schools should view crises as opportunities for growth and development, using lessons learned to enhance resilience and improve future crisis management practices. As a crisis resolves the organization evolves to new order following the disruption created by the crisis (Liou, 2014).

At the core of the model is the concept of responsiveness which emphasizes three key traits:

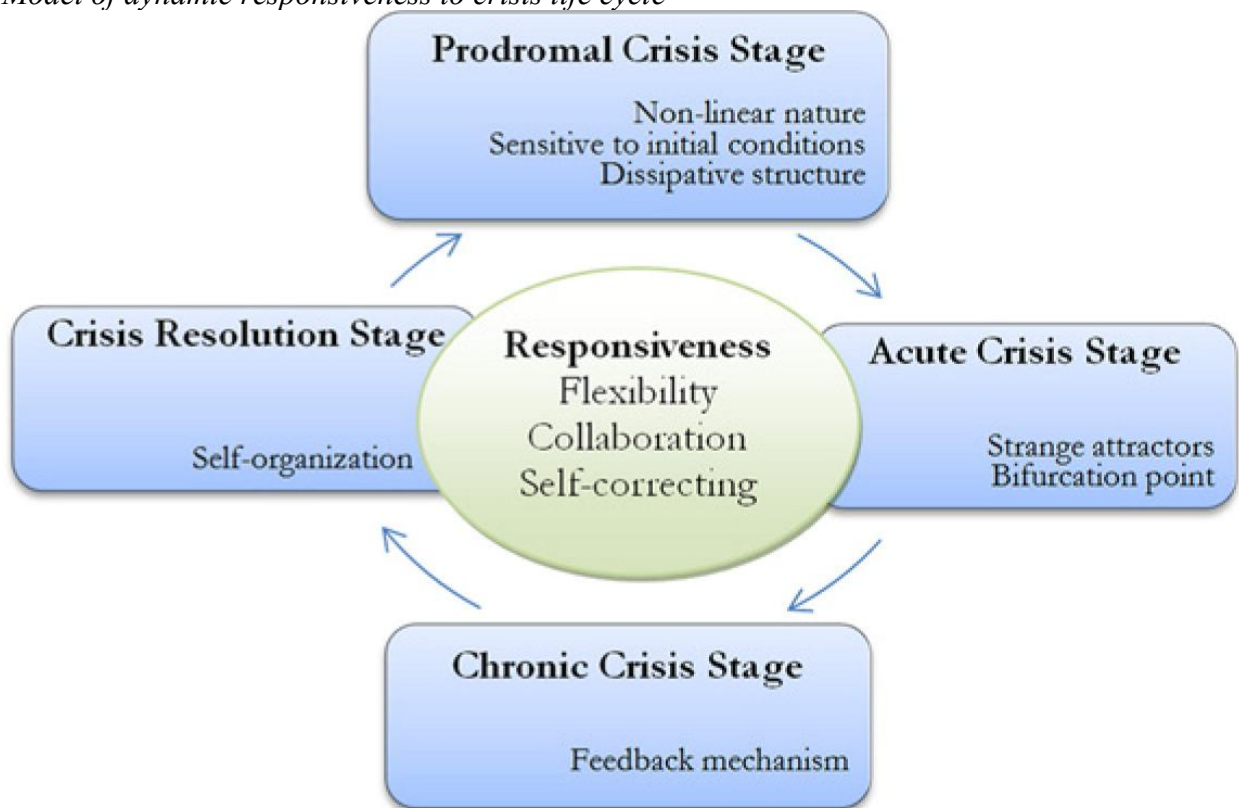
- Flexibility: The ability to adapt strategies and actions based on the evolving nature of the crisis (Liou, 2014).
- Collaboration: Working with various stakeholders, including staff, students, emergency responders, and the community, to effectively manage the crisis (Liou, 2014).
- Self-correcting: The capacity to learn from ongoing experiences and adjust responses dynamically to better handle the crisis as it develops (Liou, 2014).

Liou's Dynamic Crisis Response Model shows that crisis is not a linear process; it is both cyclical and adaptive. As a crisis progresses through each stage, the organization must remain flexible, responsive, and open to collaboration and learning. The model integrates ideas from

chaos and complexity theory to emphasize the need for dynamic and adaptive crisis management strategies. This approach helps organizations, particularly schools, to better prepare for, respond to, and recover from crisis by understanding that crises are complex and unpredictable.

**Figure 2.1**

*Model of dynamic responsiveness to crisis life cycle*



*Note.* From School Crisis Management: A Model of Dynamic Responsiveness to Crisis Life Cycle. (Liou, 2014)

By integrating chaos theory, complexity theory, and Fink's Crisis Life Cycle Model, Liou provides a holistic framework for school crisis management. This framework emphasizes the need for flexibility, adaptability, and continuous learning in response to the unpredictable and complex nature of crises. Liou's approach helps school leaders move beyond static crisis plans,

encouraging them to develop dynamic strategies that can respond effectively to the unique challenges of each crisis. This integration ultimately supports a more comprehensive understanding of crisis management in schools, helping to prepare them for the unexpected and improve their resilience in the face of adversity.

### **Resilience Theories**

Anfara and Mertz (2006) define a theoretical lens "as any empirical or quasi-empirical theory of social and/or psychological processes, at a variety of levels...that can be applied to the understanding of phenomena" (p. 27). Creswell asserts that within case study research, a theoretical perspective may or may not play a part in the study based on the researcher and/or the study (Anfara & Mertz, 2006). However, Yin (2018) states that case study research, more than other qualitative studies, relies on the need of a theoretical lens to help guide the questions posed by the researcher.

Resilience theory is a crucial consideration when studying a school system's response to a crisis because it focuses on the capacity of systems to absorb shocks, adapt, and maintain core functions during and after a disruptive event. In the context of a school system, resilience theory can help explain how schools respond to and recover from crises while continuing to meet educational needs. It emphasizes the importance of adaptability, community involvement, and continuous learning, key factors in strengthening the long-term resilience of schools against future crises (Folke, 2006; Walker et al., 2004).

Resiliency is described as "the ability of an individual, family, or community to withstand and recover from adversity" and as "the capacity of some students to adapt and even thrive despite facing stressors in their lives" (Wolpow et al., 2009, p. 14). An individual's resilience is closely linked to protective factors, which are characteristics, conditions, or behaviors, either

personal or environmental, that lessen the impact of stressful events. These protective factors enhance an individual's capability to avoid risks or hazards and foster social and emotional skills necessary for thriving in all areas of life, both now and in the future (Centers for Disease Control and Prevention, 2018).

Several theories can explain why a school system of employees may be more resilient to crises. These theories often focus on organizational behavior, social dynamics, and systems thinking highlighting how collective actions, culture, and structural factors contribute to resilience. *Organizational Resilience Theory* emphasizes the capacity of organizations, including schools, to withstand, recover from, and adapt to crises. In the context of schools, resilience is built through several key factors: strong leadership, a supportive culture, effective communication, and the ability to learn from past experiences. Strong leadership is crucial for guiding schools through crises, fostering a culture of trust, and encouraging open communication. Effective leaders are decisive, empathetic, and able to motivate staff, which is vital for maintaining stability during uncertain times (Edmondson, 1999; Northouse, 2019).

In Organizational Resilience, a supportive culture enhances resilience by promoting collaboration, flexibility, and continuous improvement. Schools with a culture that values mutual support and innovation are better equipped to respond to and recover from crises. Effective communication within the school community helps manage expectations and reduce uncertainty, while clear and transparent messaging fosters trust and ensures that all stakeholders are informed (Cameron & Quinn, 2011; Coombs, 2015). Additionally, the ability to learn from past experiences and adapt crisis management strategies is essential for improving preparedness and response capabilities. Schools that engage in reflective practices and adapt based on feedback and lessons learned are more resilient to future challenges (Argyris & Schön, 1978; Senge,

2006). By focusing on the elements of leadership, culture, communication, and learning, schools can develop a robust framework for organizational resilience, enabling them to better navigate crises and maintain a stable and supportive learning environment for students and staff (Lengnick-Hall et al., 2011; Weick & Sutcliffe, 2007).

*Social Capital Theory* suggests that the networks, relationships, and trust within an organization significantly enhance its ability to function effectively and respond to crises (Putnam, 2000). In the context of schools, strong social capital characterized by trust, mutual support, and effective communication among employees can increase resilience by enabling staff to collaborate more effectively, share resources, and support each other during challenging times (Bourdieu, 1986; Coleman, 1988). This sense of community and mutual support helps schools manage stress and adversity, making them more capable of handling crises.

High social capital also facilitates efficient communication and rapid mobilization of resources during emergencies. When trust and open communication are established, information can be shared quickly and accurately, reducing confusion and ensuring a coordinated response (Kramer, 1999; Lin, 2001). Moreover, schools with robust social networks, including connections with parents, community members, and local organizations, can draw on a wider pool of resources and support, enhancing their capacity to manage crises and recover more effectively (Woolcock, 2001). By fostering strong relationships and building trust both within the school and with the broader community, schools can enhance their resilience and preparedness for crises. This approach not only improves immediate crisis response but also contributes to a supportive and cohesive environment that promotes long-term stability and success (Putnam et al., 1993; Fukuyama, 1995).

*Complex Adaptive Systems (CAS) Theory* views organizations, including schools, as dynamic systems composed of multiple interacting components that adapt and evolve in response to environmental changes (Holland, 2006). This theory suggests that schools function as networks where employees, students, parents, and the community continuously interact, influencing the system's overall behavior and resilience. In this framework, schools with flexible structures, diverse perspectives, and the ability to self-organize and innovate are better equipped to respond to crises effectively (Cilliers, 1998; Marion & Uhl-Bien, 2001).

A key aspect of CAS theory is its emphasis on decentralization and emergent behavior. In schools, this means decision-making is distributed rather than centralized, allowing staff to act independently and collaboratively in response to immediate challenges. This decentralized approach fosters creativity and rapid adaptation, essential for managing crises where swift and innovative solutions are required (Marion & Uhl-Bien, 2001; Stacey, 1995). Additionally, effective feedback mechanisms within the school community facilitate continuous learning and adaptation, enabling schools to refine strategies in real-time based on evolving needs (Dooley, 1997). By applying CAS theory, schools can enhance their resilience by leveraging the collective intelligence and creativity of their members, supporting a dynamic learning environment that adapts and improves continuously. This approach not only prepares schools to manage crises more effectively but also fosters a culture of responsiveness and empowerment that is crucial for long-term sustainability (Holland, 2006; Stacey, 1995).

*Psychological Safety Theory*, developed by Amy Edmondson, refers to a work environment where individuals feel safe to take interpersonal risks, such as expressing ideas or admitting mistakes, without fear of negative consequences (Edmondson, 1999). In a school setting, psychological safety encourages open communication and collaboration among staff,

which is crucial for effective crisis management and recovery. When employees feel safe to share information and voice concerns, schools can better identify problems early, adapt strategies based on collective input, and respond more effectively to crises (Edmondson & Lei, 2014).

This theory also fosters a supportive environment that enhances overall well-being and reduces stress, as staff members feel valued and included. This, in turn, promotes continuous learning and innovation, as employees are not afraid to admit mistakes or seek help, leading to more effective problem-solving (Carmeli et al., 2009). Moreover, schools with high psychological safety tend to have better student outcomes, as teachers and administrators model openness and trust, creating a positive and inclusive school culture (Van den Bossche et al., 2006).

*Socioecological Resilience Theory* emphasizes the ability of systems, whether ecological or social, to absorb shocks, adapt to changing conditions, and maintain their core functions and structures (Walker et al., 2004). In a school setting, this theory suggests that resilience is strengthened when employees can adapt to crises, collaborating effectively, and utilizing diverse resources to ensure the continuity of the school's operations. This adaptability allows schools to respond dynamically to various challenges, such as changes in educational policy, socio-economic shifts, or health crises, by leveraging the interconnectedness of staff roles, community involvement, and the school's adaptive capacity (Folke, 2006).

Sociological Resilience Theory also highlights the importance of diversity and flexibility within the school system, which contributes to its overall resilience. Schools with a diverse range of staff expertise and perspectives are better equipped to address complex problems and innovate in response to unforeseen circumstances (Berkes & Folke, 1998). For example, teachers with varied backgrounds and experiences can offer different approaches to problem-solving and

support each other in adapting curricula or teaching methods to meet the needs of students in a rapidly changing environment. This diversity not only enhances the school's ability to cope with immediate crises but also builds a stronger foundation for long-term adaptation and sustainability (Carpenter et al., 2001).

Community involvement is another critical aspect of socioecological resilience in schools. Engaging parents, local organizations, and other stakeholders in the school's activities and decision-making processes creates a robust support network that can be mobilized during times of need (Putnam, 2000). This engagement fosters a sense of shared responsibility and collective action, which is essential for navigating crises effectively. When communities are involved, schools can draw on local knowledge, resources, and social capital, enhancing their capacity to adapt and thrive in the face of adversity (Adger, 2003). By integrating these elements, adaptability, diversity, and community involvement, socioecological resilience theory provides a comprehensive framework for understanding how schools can build and sustain resilience in the face of various challenges.

These theories collectively suggest that a school system's resilience to crises is influenced by its ability to adapt to changes, foster strong relationships and communication among employees, create a supportive culture, and maintain flexible structures that allow for innovation and collaboration. By applying these theories, school systems can better understand the factors that contribute to resilience and implement strategies to enhance their capacity to manage and recover from crises. Of the five, Socioecological Resilience Theory is particularly well-suited to explaining the resilience of a school system in a coastal town, especially one that frequently faces natural hazards such as hurricanes, due to its comprehensive focus on the dynamic interplay between social and ecological systems. This theory emphasizes the ability of a

community to absorb shocks, adapt to changing conditions, and maintain its essential functions in the face of disturbances (Walker et al., 2004).

### **Conceptual Framework**

A conceptual framework provides the structure for a research study, defining key concepts, variables, and their relationships, and offering a theoretical foundation for how the research is designed and carried out (Ravitch & Riggan, 2017). It serves as a roadmap that helps organize and focus the research process. While many researchers use existing theories or frameworks, others choose to develop their own when the available options don't fully fit their study.

One reason for creating a new conceptual framework is that existing theories may not address the specific context or complexities of the research problem (Adom et al., 2018). This is especially true in fields that are interdisciplinary or still developing, where there may be limited models that explain the phenomenon being studied (Leshem & Trafford, 2007). Developing a customized framework allows researchers to adapt the framework to fit the aspects of their study, providing flexibility to bring in new ideas or combine different theoretical elements (Creswell & Poth, 2018).

Creating an original conceptual framework can also help advance knowledge by offering fresh ways to understand relationships between variables, pushing research beyond the boundaries of existing models (Maxwell, 2013). This approach can be particularly beneficial in applied research, where the goal is to solve complex, real-world problems that existing theories may not fully address.

## **Creating a Conceptual Framework**

A conceptual framework that integrates Liou's Dynamic Responsiveness to Crisis Life Cycle Model and Socioecological Resilience Theory can provide a comprehensive approach to understanding how schools can effectively manage crises that are unpredictable, complex, and multifaceted. Rooted in chaos and complexity theories, this conceptual framework will emphasize dynamic and adaptive strategies, ensuring that organizations remain resilient through various stages of a crisis. This resilience is achieved through the key traits of flexibility, collaboration, and self-correction, which underpin the responsiveness required to navigate crises (Liou, 2014).

The Dynamic Responsiveness to Crisis Life Cycle Model (Liou, 2014) outlines four critical phases of crisis management: the Prodromal, Acute, Chronic, and Resolution stages. Each phase demands different strategic responses that prioritize adaptability, stakeholder engagement, and continuous learning. In the Prodromal Stage, schools must recognize early warning signs and prepare accordingly by identifying potential disturbances and organizing resources in advance. This phase is crucial for preventing minor disruptions from escalating into larger issues, with complexity theory offering insights into how schools can dissipate energy and maintain structural integrity during preparation (Liou, 2014). During the Acute Stage, flexibility is essential as crises rapidly escalate, and schools must make quick, decisive actions. Chaos theory's concept of bifurcation points plays a key role in this stage, as critical decisions made by school leaders can lead to drastically different outcomes depending on how they manage the situation (Liou, 2014).

In the Chronic Stage, long-term recovery begins, requiring schools to adjust their recovery strategies based on feedback from ongoing evaluations of the situation. This stage

aligns with complexity theory, which stresses that adaptation must be sensitive to the evolving needs of the school community as the system stabilizes (Liou, 2014). Lastly, the Resolution Stage emphasizes the importance of learning from the crisis to build resilience for future challenges. By incorporating the lessons learned during the crisis into their long-term planning, schools strengthen their ability to handle future disruptions, making the system more resilient and adaptable (Liou, 2014).

At the core of this model is the concept of responsiveness, characterized by three traits: flexibility, collaboration, and self-correcting behavior. Flexibility allows schools to adjust their strategies dynamically as crises evolve, ensuring they can manage both immediate and long-term impacts (Liou, 2014). Collaboration involves engaging various stakeholders, including staff, students, community members, and external responders, to develop coordinated responses. Self-correcting behavior enables schools to continuously learn from their experiences and adjust their responses in real-time, ensuring that they become more resilient over time (Liou, 2014).

The integration of Socioecological Resilience Theory is the ability of systems, both social and ecological, to absorb shocks, adapt to changing conditions, and maintain their essential functions and structures (Walker et al., 2004). In schools, resilience is enhanced by promoting adaptability, diversity, and community involvement. Adaptability allows schools to respond flexibly to external disruptions, ensuring the continuity of operations. For example, during a crisis like a pandemic, teachers may adapt their curricula to suit remote learning environments, while administrators shift resources to support digital learning infrastructures (Folke, 2006). Diversity within the school system, such as varied expertise and perspectives among staff, enhances resilience by fostering innovative solutions and problem-solving approaches. This diversity supports dynamic responsiveness, as it provides multiple perspectives on managing

crises (Berkes & Folke, 1998). Community involvement strengthens socioecological resilience by mobilizing local resources, knowledge, and social capital. When schools engage the broader community, they enhance their capacity to navigate crises effectively and draw on a wider support network for recovery (Adger, 2003).

A school system that has a history of being impacted by hurricanes can serve as a prime example of how socioecological resilience is developed and strengthened over time. In coastal regions frequently affected by hurricanes, schools have built resilience through repeated exposure to these crises. Over the years, they have developed robust strategies for early detection and preparedness during the Prodromal Stage, recognizing the seasonal risks of hurricanes (Liou, 2014). These schools often collaborate closely with local emergency services, government agencies, and community stakeholders to coordinate resources and ensure the safety of students and staff. Their ability to anticipate disruptions and implement effective response strategies reflects a high degree of adaptability that has been honed through experience (Walker et al., 2004).

During the Acute Stage of a hurricane, these schools rely on their flexibility to make rapid decisions, such as evacuating buildings or transitioning to remote learning. The chaos and unpredictability of a storm often push school leaders to make critical decisions at bifurcation points, where the wrong choice could exacerbate the situation (Liou, 2014). However, due to their prior experiences with hurricanes, these schools are adept at navigating these challenges, having already built an infrastructure capable of withstanding such crises. Their historical familiarity with hurricanes allows them to implement swift and effective responses, including securing buildings, rerouting transportation, and ensuring students' educational needs are met even in the face of school closures.

In the Chronic Stage, long-term recovery following a hurricane might involve rebuilding infrastructure, addressing psychological impacts on students and staff, and adapting academic schedules to account for lost time (Liou, 2014). Schools with a history of hurricane exposure often have feedback mechanisms in place that allow them to assess the effectiveness of their response and adjust their recovery efforts based on what worked or did not work in past crises (Walker et al., 2004). For example, schools may revisit their emergency response plans and strengthen areas that proved vulnerable, such as improving communication channels with parents or adjusting disaster training programs for staff (Liou, 2014).

Finally, in the Resolution Stage, these schools incorporate the lessons learned from each hurricane into future crisis management strategies. The experience of weathering multiple hurricanes builds a level of self-correcting behavior that ensures continuous improvement and resilience-building (Walker et al., 2004). Schools in these regions are not only better equipped to handle future storms, but they also develop a culture of resilience that permeates all aspects of school life. This culture might include regular emergency drills, community engagement efforts to bolster local support, and even curriculum elements that teach students about disaster preparedness and resilience (Folke, 2006).

In theory, when the COVID-19 pandemic struck, schools with a history of hurricane impact may have been better prepared to manage the crisis compared to those with less experience in handling such large-scale disruptions. Their prior experience with hurricanes had already ingrained a high level of socioecological resilience into their operations (Walker et al., 2004) which could have been foundational in their pandemic response. For instance, these schools have developed strong communication systems, flexible academic models, and collaborative relationships with local authorities and community organizations because of past

hurricane response and recovery. This resilience may have allowed them to more smoothly transition to remote learning during the pandemic, apply rapid decision-making strategies, and adapt to ongoing uncertainties. Moreover, their ability to leverage community involvement during hurricanes may have translated into a well-coordinated response during COVID-19, where parents, local businesses, and government agencies collaborated to support the educational needs of students in a time of crisis (Adger, 2003).

In practice, this conceptual framework could be applied to the responsiveness of schools during the COVID-19 pandemic. In the Prodromal Stage, early warning signs of the pandemic, such as news of the virus spreading globally, led many schools to prepare by transitioning to online learning platforms and enhancing digital infrastructure (Liou, 2014). Schools that recognized the potential for disruption were able to shift resources and begin contingency planning before the virus reached their communities. However, as COVID-19 entered the Acute Stage, the crisis escalated rapidly, forcing schools into alternate reopening plans and the implementation of mitigation and protection protocols. The unpredictable nature of the virus and evolving government regulations demanded flexibility in decision-making. Schools at this stage were making critical choices at bifurcation points: whether to fully close, adopt hybrid learning models, or continue in-person learning with restrictions. Each decision carried significant consequences, and the ability to be flexible, responsive, and quick was essential (Liou, 2014).

In the Chronic Stage, as the initial chaos subsided and schools adjusted to a “new normal,” long-term recovery efforts began. Feedback mechanisms became crucial as schools evaluated the effectiveness of remote learning, identified gaps in student engagement, and adapted their strategies to improve outcomes (Walker et al., 2004). For example, some schools began offering hybrid models of education, combining in-person and online instruction, as they

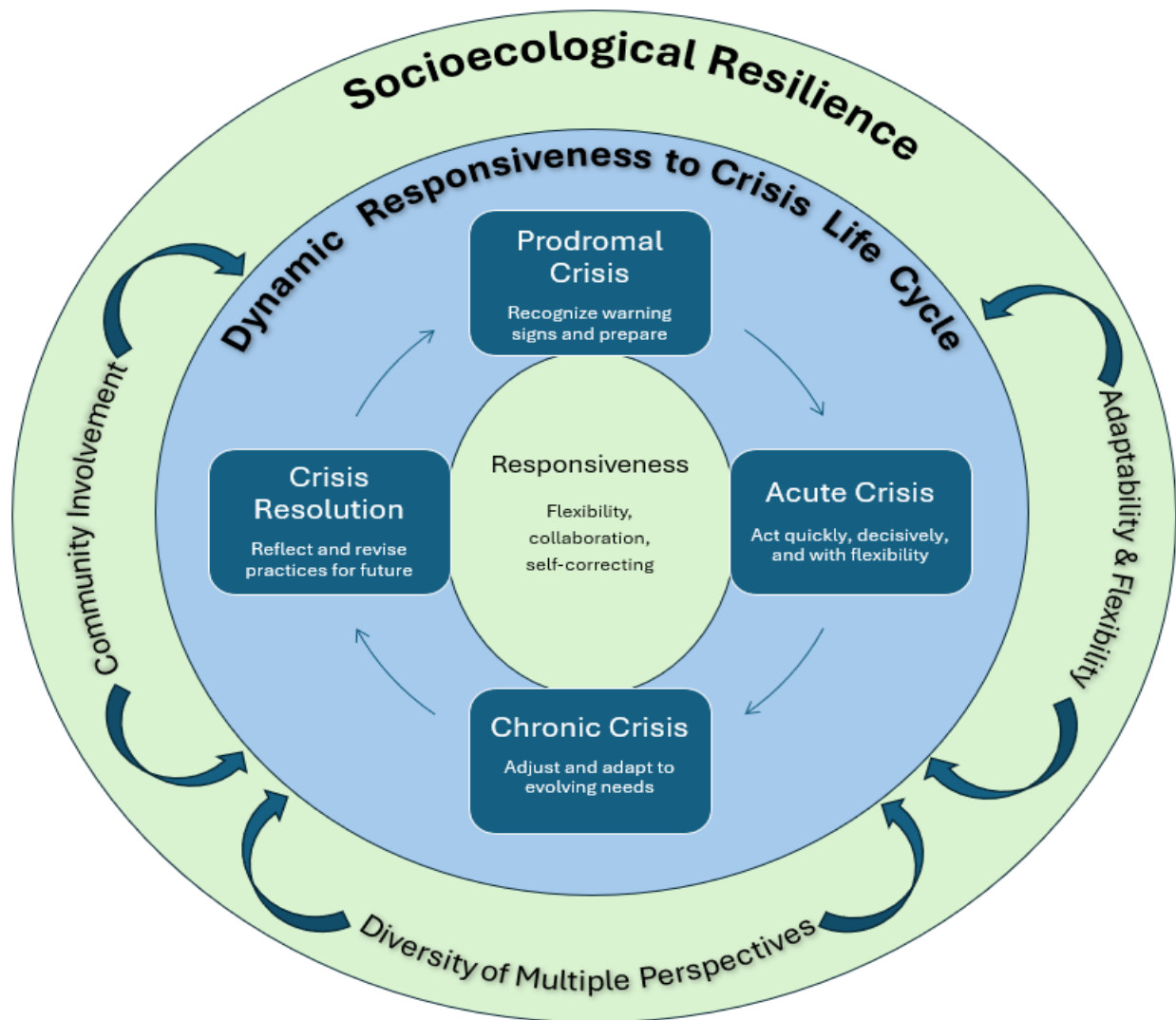
learned more about what worked for different student populations. Schools also adjusted mental health support services and addressed disparities in access to technology, demonstrating the need for continuous adaptation as the crisis evolved (Folke, 2006).

Finally, in the Resolution Stage, as the worst impacts of the pandemic receded, schools began reflecting on the lessons learned. Many schools recognized the need for improved digital infrastructures, more flexible teaching methods, and enhanced collaboration with parents and community members. These insights have been incorporated into future preparedness strategies, enhancing the long-term resilience of the educational system. Schools that embraced a self-correcting mindset were able to transform their crisis management approaches, ensuring they were better prepared for any future disruptions (Walker et al., 2004).

A strong title for this conceptual theory that combines Socioecological Resilience Theory and the Dynamic Responsiveness to Crisis Life Cycle Model could be: “Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness.” This title reflects the adaptive nature of resilience and crisis management, emphasizing the integration of socioecological systems and dynamic responsiveness. It highlights the fusion of flexibility, collaboration, and self-correcting behavior with the principles of resilience, adaptability, and community involvement. A visual representation of this conceptual framework is presented in Figure 2.2.

**Figure 2.2**

*Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*



By applying this conceptual framework to the study of a school system's response to the COVID-19 pandemic, particularly one with prior experience navigating hurricanes, it can illustrate how integrating socioecological resilience with dynamic crisis response models fosters the development of adaptive, resilient school systems. School systems that have faced multiple crises may be more likely to be better prepared for future challenges, as they continuously refine

their strategies, collaborate with key stakeholders, and maintain a flexible, adaptive approach to managing crises.

### **COVID-19 Crisis and Schools**

On January 9, 2020, the World Health Organization (WHO) announced the emergence of a novel coronavirus in Wuhan, China, which would soon lead to a global pandemic. The virus was quickly recognized for its high transmissibility and potential for severe illness. By January 21st, the United States confirmed its first case. In response to rising cases and fatalities, the WHO declared a global health emergency on January 31st, 2020. Soon after, U.S. public health measures, including school closure preparations and virtual education, were initiated to limit exposure and manage the crisis (AJMC Staff, 2021) .

On February 11, 2020, the WHO officially designated the name for the disease responsible for the coronavirus outbreak: “Coronavirus Disease 2019,” abbreviated as COVID-19. As explained by the WHO, "In COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for 'disease'" (Centers for Disease Control, 2023, para. 3). School systems across the nation were on heightened alert, closely monitoring updates from the CDC and observing as countries worldwide implemented restrictions and initiated shutdowns.

The superintendent of Snohomish County Schools in Washington State became the first school official in the United States to act in response to a COVID-19 concern. Responding out of an abundance of caution, he temporarily closed Bethell High School on February 27th and 28<sup>th</sup>, 2020, after an employee who had recently returned from international travel fell ill. This two-day closure was utilized to conduct extensive cleaning of the facility. The affected employee was placed in a 14-day quarantine and later cleared to return to work after testing negative for COVID-19 (Bazzaz & Blethen, 2020).

On March 3, 2020, Dr. Anne Schuchat, Principal Deputy Director of the Centers for Disease Control and Prevention (CDC), informed lawmakers during a Senate committee hearing that while federal agencies provide "guidance" on public health issues such as COVID-19, decisions regarding actions like school closures are ultimately determined at the local level. Schuchat emphasized, "You have this balance between, the earlier you act the more impact it can have in slowing the spread, and the enormous disruption we see with school closures" (Education Week, 2021, para. 6).

The first U.S. school district to announce a closure was Washington State's Northshore School District, which transitioned 24,000 students to remote learning for 14 days beginning on March 5, 2020. Shortly thereafter, on March 11, the WHO officially declared COVID-19 a pandemic. By March 13, President Trump had declared a national emergency and imposed a travel ban on non-U.S. citizens who had visited 26 European countries within the preceding 14 days (AJMC Staff, 2021).

In March 2020, over 55 million school-aged children across the United States were affected by school closures. Initially, school systems shut their doors for a few weeks, sending staff and students home to prevent the spread of COVID-19 within school buildings. By March 10, North Carolina had reported seven confirmed cases of COVID-19, prompting Governor Roy Cooper to declare a state of emergency and mandate the closure of all schools for a minimum of two weeks, beginning on March 16 (Thorpe, 2020). By March 25, the closure of Idaho Public Schools and the Department of Defense Schools marked the complete shutdown of all U.S. public schools (Decker et al., 2020).

Following an initial two-week closure of public schools in response to the COVID-19 outbreak, North Carolina extended the shutdown as the severity of the pandemic became

increasingly evident. On April 24, 2020, Governor Roy Cooper, Superintendent of Public Instruction Mark Johnson, and State Board of Education Chair Eric Davis announced during a press conference that all public schools would remain closed for in-person instruction and would instead continue remote learning through the end of the 2019-2020 academic year.

Superintendent Johnson acknowledged that the state's early response to the crisis was largely reactive but noted that proactive, bipartisan plans were being developed for the 2020-2021 academic school year. He also commended educators for their rapid transition to remote instruction and reassured the public that this modality would not become the "new normal" (Granados, 2020).

The literature examining how states navigated school reopening decisions during the COVID-19 pandemic reveals a complex interplay of political, institutional, and public health factors. While initial school closures in spring 2020 were largely uniform nationwide and driven by emergency declarations like the one made in North Carolina, decision-making regarding reopening for the 2020-2021 academic school year varied widely across states. Singer (2022) observes that although local COVID-19 case rates influenced some decisions, they were not the dominant factor. Instead, state partisanship, the strength of teachers' unions, and district-level demographics played more consistent roles in shaping school operation decisions. North Carolina's response reflects these broader patterns, as the state developed centralized guidance through the Department of Public Instruction (DPI) and the Department of Health and Human Services (NCDHHS), while ultimately delegating implementation decisions to local education agencies (LEAs).

As the federal government delegated school reopening authority to individual states (Education Week, 2021), North Carolina formulated its own operational framework. On June 8,

2020, NCDHHS released its initial guidance for schools, which laid the groundwork for reopening strategies. This was followed by the release of the *StrongSchoolsNC Public Health Toolkit* on July 14, a statewide framework that outlined public health protocols, including mask mandates, social distancing, hygiene practices, and procedures for screening and responding to suspected or confirmed COVID-19 cases (NCDHHS, 2022). At the same time, the DPI published *Lighting Our Way Forward*, a planning guide that provided instructional models and decision-making tools to support school districts in preparing for the 2020-2021 school year (BallotPedia, 2021). Together, these documents created a state-level foundation that balanced health guidance with instructional flexibility.

Consistent with national trends, North Carolina permitted districts to choose among two instructional models: fully remote or hybrid. Districts that opted for hybrid models were required to offer families the option of full-time remote instruction (North Carolina Department of Public Instruction, 2020a). At the start of the 2020-2021 academic school year, approximately 69% of U.S. states allowed local school systems to make such decisions independently (Charles, 2020b). North Carolina's decision to grant LEAs such discretion is emblematic of the decentralized decision-making described in the literature (Singer, 2022), where the flexibility allowed for localized implementation based on unique community needs.

Micropolitical factors also shaped local decisions across the United States. As Grossman et al. (2021) highlight, district leaders frequently navigated negotiations with stakeholders, including health departments, teachers' unions, parent groups, and local officials. North Carolina's experience was no exception. While statewide protocols provided a public health and instructional framework, LEAs were responsible for interpreting and applying these guidelines within their respective communities.

To support its statewide strategy, North Carolina’s legislature passed a \$1.9 billion bipartisan relief package. The funding included \$78 million for school nutrition programs and \$243 million designated for public schools to support remote learning infrastructure and summer bridge programming for students most affected by pandemic-related disruptions (Granados, 2020). These allocations underscored the state’s intent to mitigate inequities and promote continuity of learning. Further reinforcing this state-led approach, Senate Bill 704 required all districts to submit formal academic learning plans for the 2020-2021 academic year (North Carolina General Assembly, 2020).

Despite similarities in structure with other states’ plans, North Carolina’s overall approach to crisis planning during the pandemic was distinctly state-centric. The State Board of Education and DPI did not appear to benchmark other state models or adopt external frameworks. A review of DPI documentation, State Board meeting minutes, and official public records indicates no evidence of cross-state comparisons in the formation of guidance documents or instructional models. Rather, the state’s response was grounded in localized decision-making supported by federal public health recommendations and aligned with its own policy infrastructure and funding strategies (U.S. Department of Education, 2021). In this way, North Carolina’s education system responded to the pandemic through a uniquely internalized process that reflected both national decentralization trends and state-specific priorities.

### **COVID-19 and North Carolina Schools**

Guidance from the North Carolina Department of Health and Human Services (NCDHHS), in conjunction with the *StrongSchoolsNC Public Health Toolkit* and the Department of Public Instruction’s *Lighting Our Way Forward* plan, outlined two primary instructional options for public schools during the 2020-2021 academic year. Districts could either adopt a full

closure model with 100% remote learning or implement a hybrid approach combining in-person and remote instruction. Importantly, districts that selected the hybrid model were still required to offer families the option of full-time remote learning.

Throughout the summer of 2020, North Carolina school districts were tasked with interpreting the operational guidance provided by NCDHHS, the *StrongSchoolsNC Public Health Toolkit*, and *Lighting Our Way Forward* to determine appropriate reopening strategies for the upcoming academic year. Developed by NCDHHS, the *StrongSchoolsNC Public Health Toolkit* offered a detailed set of health and safety requirements for PreK-12 schools. These included mask mandates, physical distancing protocols, hygiene measures such as frequent handwashing and hand sanitizer availability, and daily health screenings for students and staff (NCDHHS, 2022). The screenings involved temperature checks and symptom monitoring, along with protocols for responding to suspected or confirmed COVID-19 cases. These responses included isolation procedures, coordination with local health departments, and contact tracing efforts designed to prevent further spread of the virus.

The toolkit was initially released in June 2020 and was revised several times to reflect new data and public health guidance, including updates in October 2020, July 2021, and February 2022. These revisions focused on areas such as mask usage, testing strategies, and vaccination policies. Over time, updates reduced emphasis on strategies like contact tracing, reflecting the availability of improved public health tools and a deeper understanding of virus transmission in school environments (NCDHHS, 2022). These iterative updates enabled school leaders to adapt their operations in ways that balanced educational goals with public health imperatives.

North Carolina is the ninth-largest public school system in the United States, comprising 115 districts/public school units (PSUs) that operate 2,695 traditional public schools and serve approximately 1,553,334 students (BallotPedia, 2021). The PSUs within the state vary significantly in terms of size, diversity, and geographic location. Carteret County Public Schools, situated on North Carolina's Crystal Coast, serves approximately 8,600 students in grades PreK–12, supported by around 636 teachers and 535 additional staff members. On March 16, 2020, When Governor Roy Cooper mandated the closure of Carteret County's 19 public schools for the remainder of the academic year, the district activated its pre-existing, school-based crisis management teams to adjust their end-of-year plans under the direction of the district. In the summer of 2020, the district expanded on their crisis response model creating strategic reopening committees that utilized the state's guidance provided in June to prepare for the 2020-2021 school year.

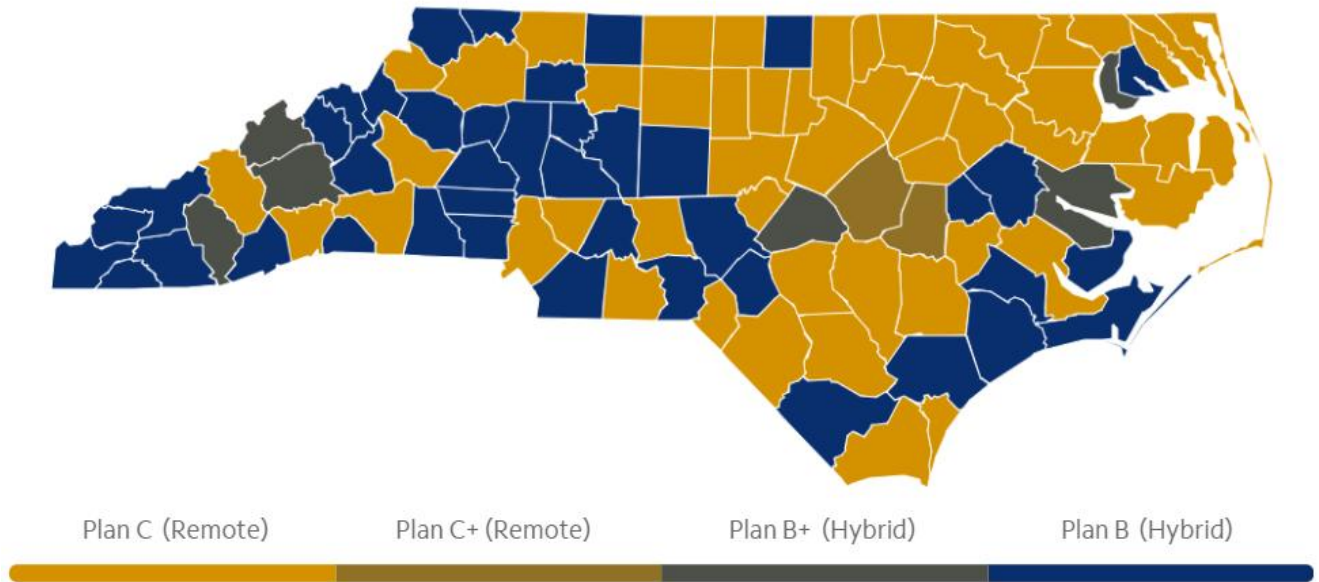
Carteret County's coastal location presents unique challenges, particularly in relation to hurricanes. The district has experienced several school closures due to hurricanes, most recently in 2018 when Hurricane Florence caused a 15-day closure due to widespread devastation. Carteret County Public Schools employs a two-tier crisis management structure, consisting of an executive crisis team at the central office and individual crisis teams at each school, with clearly defined roles and responsibilities (Carteret County Public Schools, 2021). Despite their extensive experience managing hurricane-related disruptions, the COVID-19 pandemic posed an unprecedented challenge due to its duration, which extended beyond a month to conclude the 2019-2020 academic year. Furthermore, the reopening for the 2020-2021 school year was accompanied by stringent guidelines from the North Carolina Department of Health and Human Services (NCDHHS) and the state.

As illustrated in Figure 2.3, only 36% of North Carolina’s public-school units (PSUs), 42 of 115, adopted a hybrid model that provided students with weekly access to face-to-face instruction when schools reopened in August 2020 (Charles, 2020b). National data presented in Figure 2.4 further reveals that 62% of U.S. public schools remained closed at the start of the 2020–2021 school year, with only 38% offering students access to in-person instruction (The Business Intelligence Platform for School and Community Life, 2022). Carteret County Public Schools, identified with a pink star in Figure 2.3, was amongst the minority in North Carolina, opening under a Plan B hybrid model; offering families the option of choosing to have their children attend school in a cohort, present in the building two days a week and virtual the remainder or virtual for the entire week. The various model options were as follows:

- Plan C (Remote): Also referred to as full remote learning, Plan C required all schools to operate entirely online, with no students or staff permitted in school buildings. Instruction was asynchronous/not live.
- Plane C + (Remote): This plan functioned as an enhanced remote option. While providing fully online instruction, like Plan C, it included additional synchronous/live teaching components,
- Plan B (Hybrid): This plan combined in-person and remote learning that was asynchronous/not live, with structured safety measures, including six-foot distancing, outlined in state guidance. Districts implementing Plan B often employed rotation schedules (e.g., alternating days or weeks) to reduce building density while maintaining classroom instruction.
- Plan B + (Hybrid): This variant of hybrid learning integrated remote instruction that was synchronous/live.

**Figure 2.3**

*North Carolina Public Schools That Opened in August of 2020 Under a Cohort Model*

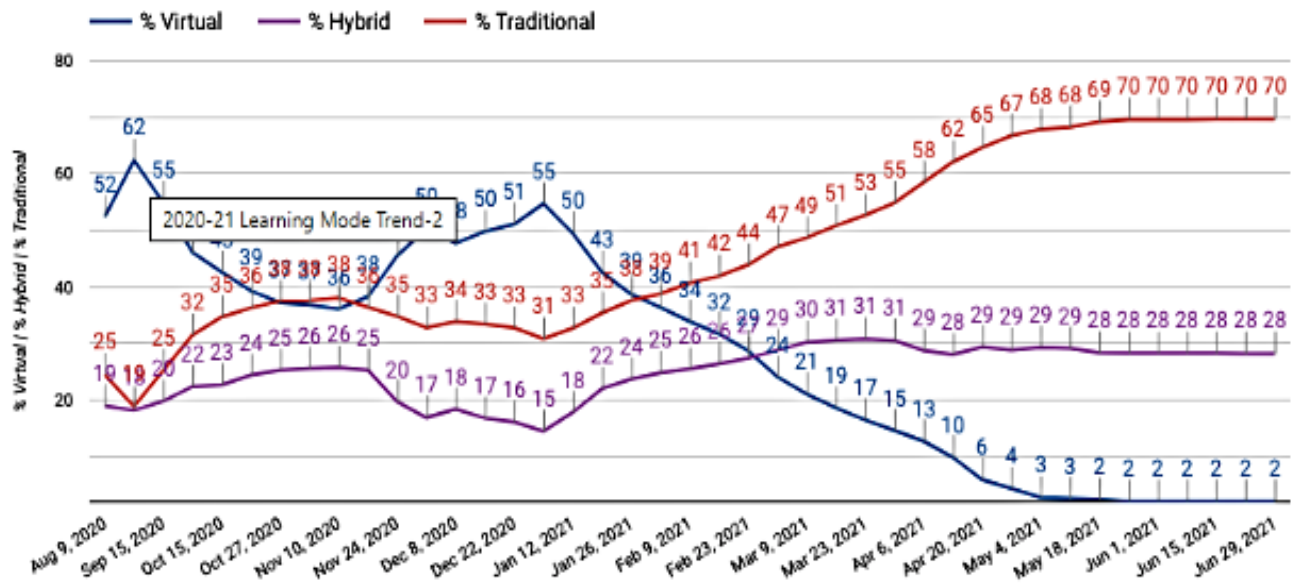


*Note.* From Charles (2020b). District-By-District: Explore Map of Public School Reopening Plans Across N.C. Spectrum Local News. <https://spectrumlocalnews.com>

Figure 2.4 presents a line graph depicting the instructional models implemented by schools nationwide during the 2020-2021 academic year. The blue line represents the percentage of schools operating under a fully virtual model, the purple line indicates those utilizing a hybrid model, and the red line reflects schools opening under a traditional, fully in-person format. The trend lines illustrate an academic year that began predominantly in a virtual format, with a gradual shift toward hybrid and traditional models over time. A notable spike in virtual instruction occurred around the winter holiday period, likely corresponding to heightened public health concerns from a spike in COVID-19 cases, before schools transitioned back toward predominantly traditional formats in the latter months of the year, with a small proportion maintaining hybrid operations through the conclusion of the academic year.

**Figure 2.4**

*2020-2021 School Year in Review*



*Note.* From the Business Intelligence Platform for School and Community Life (2022).

The shifts in instructional models reflected in Figure 2.4 carry important implications for student learning outcomes, particularly given longstanding research indicating notable performance disparities between virtual and traditional learning environments (Morgan, 2015).

A substantial body of research, established prior to the COVID-19 pandemic, consistently demonstrates that students in virtual instructional settings significantly underperform compared to their counterparts in traditional, face-to-face learning environments (Morgan, 2015). While Means et al. (2010) suggested that online learning had a modest positive impact on student outcomes, only seven of the 196 studies they analyzed focused specifically on the K-12 learning environment. This limited scope raises concerns about the generalizability of their findings to younger learners.

Further evidence from a study conducted by researchers at Stanford University analyzed the performance of students in eight full-time public virtual charter schools in Pennsylvania

between 2007 and 2010. The study concluded that, in every instance, students in traditional schools outperformed those enrolled in virtual schools (Barth, 2013). Similarly, studies of student achievement in Ohio and Minnesota revealed that students in virtual schools performed poorly compared to their peers in traditional educational settings (Barth, 2013).

One of the most pressing concerns raised by this body of research is the inequity that virtual education can exacerbate, particularly for disadvantaged students. Toch (2010) argues that successful educational programs for disadvantaged students rely heavily on high levels of teacher-student interaction, as well as increased classroom support and opportunities for learning throughout the school environment. Virtual schools, by their nature, cannot offer the same degree of interaction and support proven to be effective for these students. The conclusion drawn from this research is clear: face-to-face instruction is consistently more effective than virtual learning, particularly for disadvantaged populations (Toch, 2010).

### **The COVID-19 Impact on Education**

The COVID-19 pandemic disrupted traditional schooling worldwide, forcing educational leaders to make high-stakes decisions under conditions of uncertainty. Principals were called upon to manage the simultaneous demands of instructional continuity, stakeholder safety, and social-emotional well-being, all while navigating public health guidance and rapidly changing district or state policies. Using Smith and Riley's (2012) crisis response framework, a recent qualitative study of 173 principals in a southern U.S. state, likely North Carolina, identified four core components of school leaders' decision-making: (1) gathering information, (2) engaging in decisive action, (3) prioritizing the well-being of others, and (4) maintaining open communication. These domains became especially relevant as principals worked to transition

their schools to online learning, mitigate growing equity concerns, and adapt to continuously evolving expectations (Jackson et al., 2022)

Emerging literature highlights that many states, including North Carolina, embraced decentralized governance, allowing local education agencies to choose between remote, hybrid, or in-person learning modalities. While states like North Carolina provided statewide frameworks, such as *Lighting Our Way Forward* and the *StrongSchoolsNC Public Health Toolkit*, they largely left implementation to the discretion of district and school leaders (North Carolina Department of Public Instruction, 2020; NCDHHS, 2022). Singer (2022) and Grossman et al. (2021) emphasize that local decision-making during the pandemic was influenced not just by health data but also by political climate, community feedback, and institutional constraints. Principals often had to make decisions in the absence of precedence, balancing directives from the state with the unique needs of their communities.

One of the most profound challenges faced by school leaders was the impact of remote learning on students' academic performance and mental health. Research consistently shows that virtual instruction was less effective than face-to-face learning, particularly for students with limited access to technology and quiet study environments. Beltekin and Kuyulu (2020) found that students experienced reduced learning efficiency due to technical issues, while Kilincel et al. (2020) and Elmer et al. (2020) reported that isolation, disrupted routines, and anxiety severely affected adolescents' mental health. Gender and socioeconomic factors further shaped these outcomes. Female students faced heightened psychological distress (Ali et al., 2012), and students from low-income households were more likely to lack access to devices, internet, and adequate learning spaces, conditions that widened the achievement gap (Roberts et al., 2005).

As students returned to in-person learning, these inequities became even more pronounced. Nelson et al. (2021) noted a decline in student well-being and significant learning gaps, particularly in math, where Santibañez and Guarino (2020) observed that middle school students experienced the greatest setbacks both academically and emotionally. School leaders recognized the long-term implications of these disruptions and adjusted their priorities accordingly. For example, the qualitative study referenced earlier found that school principals made equity-focused decisions by delivering internet hotspots, offering alternative instruction plans for students with disabilities, and providing food assistance to families in need (Jackson et al., 2022). These leaders balanced policy compliance with ethical leadership, sometimes bending or adapting district mandates to meet individual student needs.

Additionally, emotional intelligence emerged as a crucial leadership trait during the pandemic. Principals demonstrated empathy, compassion, and flexibility, recognizing that sustaining staff morale and student engagement required a shift away from rigid accountability toward holistic well-being (Beauchamp et al., 2021; Goleman, 1998). The decision-making process often involved stakeholder consultation, shared leadership, and transparent communication about rationale and implementation. This collaborative approach helped build trust and fostered a sense of collective ownership, even when decisions, such as school reopening or mask enforcement, were contentious.

Collectively, the literature reveals that principals' decision-making during COVID-19 was shaped by a confluence of crisis leadership skills, contextual knowledge, and ethical responsibility. These decisions were further complicated by the lasting academic and socio-emotional impacts of remote learning. As the limitations of virtual education became more apparent, leaders were increasingly tasked with addressing learning loss, student disengagement,

and trauma. The experience underscores the importance of preparing school leaders to make informed, compassionate, and resilient decisions, not only in times of crisis but also in planning for future disruptions. Ultimately, understanding how leaders navigated these challenges can inform more responsive leadership practices and policy structures that prioritize both academic achievement and student well-being.

### **Carteret County Public Schools as a Premier Choice for Research**

Carteret County Public Schools presents a compelling case for studying crisis response during the COVID-19 pandemic, given its unique combination of circumstances and strategic adaptations. The district's hybrid instructional model, implemented during the 2020-2021 academic year, offers a rich context for examining how educational institutions balanced public health concerns with the imperative of maintaining academic continuity and social emotional well-being of staff and students. This model split students into two cohorts for in-person instruction, with Cohort A attending Mondays and Tuesdays, and Cohort B on Thursdays and Fridays, while a third cohort (C) opted for fully virtual learning (Charles, 2020b). By splitting students into cohorts for in-person and virtual learning, Carteret County employed a nuanced approach to managing the crisis, allowing for the analysis of decision-making processes that prioritized both safety and education (Charles, 2020b). This adaptive response is an essential aspect of resilience research, particularly in exploring how school systems can remain operational under challenging circumstances.

Furthermore, Carteret County's coastal location and its history of successfully dealing with natural disasters, such as hurricanes, position it as an ideal subject for research on crisis response and resilience. Just prior to the COVID-19 pandemic, the North Carolina coast was devastated by Hurricane Florence. While only a Category 1 hurricane when it made landfall on

September 14, 2018, and despite its relatively low wind speeds, Florence caused catastrophic flooding due to its slow movement and heavy rainfall. The storm devastated coastal and eastern regions of the state, causing widespread damage to homes, infrastructure, and schools. Public schools in coastal areas faced extended closures, ranging from two to five weeks. The severe flooding, structural damage, and road closures delayed the return to classes, impacting students and school operations for months.

Carteret County Public Schools exhibited effective crisis management during Hurricane Florence through the implementation of comprehensive planning measures both prior to and immediately following the storm. This proactive approach facilitated a shorter duration of school closures for staff and students compared to neighboring public school systems. While all schools in the region closed on September 11, 2018, in anticipation of the hurricane, many remained closed for an extended period. In contrast, Carteret County schools, despite extensive community and school damage, reopened more quickly, thereby reducing instructional disruption and supporting a faster return to normal operations. This outcome underscores the critical role of strategic, pre-emptive crisis planning in mitigating the long-term educational impact of natural disasters.

- Brunswick County Public Schools: reopened October 8<sup>th</sup>
- Carteret County Public Schools: reopened October 2<sup>nd</sup>
- Craven County Public Schools: reopened October 8<sup>th</sup>
- Jones County Public Schools: reopened October 15<sup>th</sup>
- Onslow County Public Schools: reopened October 8<sup>th</sup>
- Pender County Public Schools: reopened October 15<sup>th</sup>

As Walker et al. (2004) argue, resilience theory emphasizes the ability of systems to absorb disturbances and adapt to new conditions while maintaining core functions. Carteret County's prior experiences with disaster preparedness and recovery provided an institutional foundation that likely informed its response to the COVID-19 pandemic. This case study would offer insights into how prior crisis management experiences influence responses to novel crises and how schools can leverage past learning to address emerging challenges.

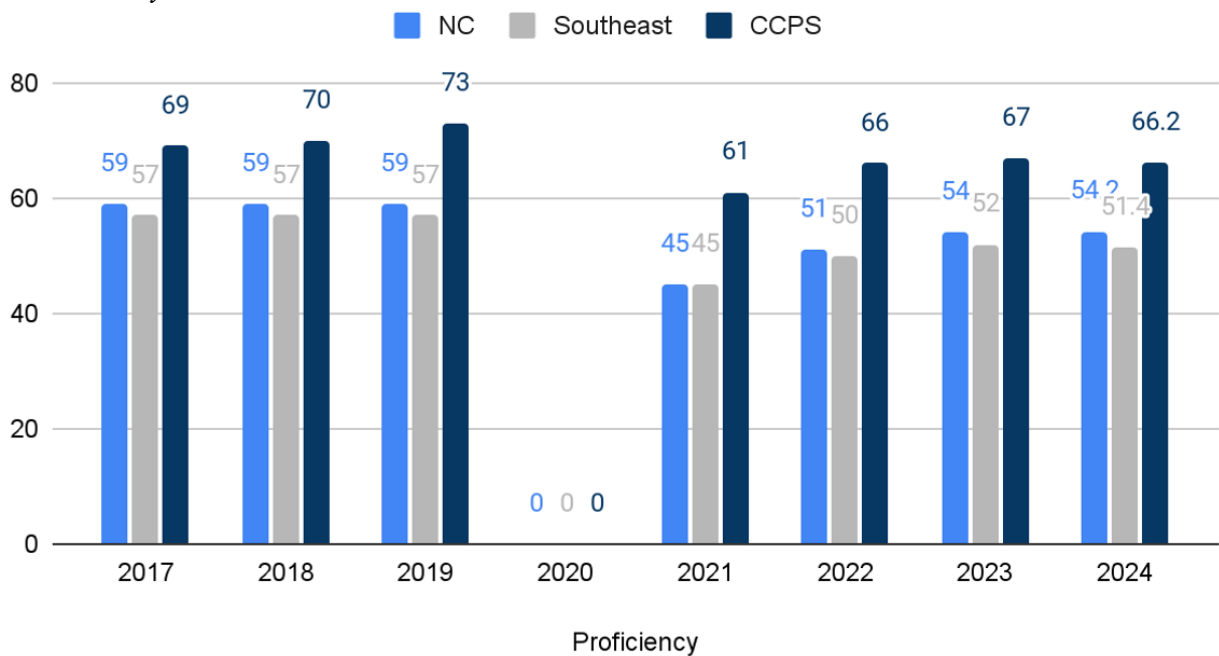
Another key factor supporting Carteret County as a research subject is its demonstrated commitment to community and stakeholder engagement during crises. The district works closely with the Board of Education and local stakeholders, fostering a collaborative decision-making process that reflects the principles of Socioecological Resilience Theory, which underscores the importance of community involvement in building resilient systems (Folke, 2006). This collaborative approach provides a model for understanding how schools can enhance their crisis management strategies through collective action and shared responsibility.

When considering a school district for this research, the academic performance data of all schools in the southeastern region was analyzed, with particular attention to Carteret County Public Schools. Notably, following the COVID-19 pandemic, Carteret County demonstrated high academic performance relative to other districts in North Carolina, showing significant gains in key areas such as math and reading. Statewide reports revealed that recovery was most pronounced in middle and high school math, as well as early-grade reading (NC DPI, 2023). The district excelled in meeting and exceeding state growth expectations in certain subjects, showcasing its resilience in addressing pandemic-related learning gaps (EducationNC, 2022b). Despite facing challenges similar to other districts across the state, Carteret County effectively mitigated some of the impacts of COVID-19 and advanced students academically during and

after the pandemic. Furthermore, the district’s post-pandemic academic performance underscores its capacity to recover from disruptions and offers an opportunity to explore the factors contributing to its educational resilience. The bar graph in Figure 2.5 compares Carteret County Public Schools’ proficiency scores to those of the 115 districts in North Carolina and the nine districts in the southeastern region.

**Figure 2.5**

*Comparison of overall student proficiency: State of North Carolina, Southeast Region, and Carteret County Schools*



*Note:* McClenny, J. (2024, October 1). *Limitless Learners Update*. Monthly Board of Education Public Meeting, Carteret County Schools Board of Education, Board Room.

Overall, Carteret County’s multifaceted response to the COVID-19 pandemic, marked by adaptability, a foundation of resilience from prior crises, strong community engagement, and effective educational recovery, makes it a valuable case for studying the intersection of crisis management and resilience in educational settings.

## **Research Methodologies**

In dissertation research, both qualitative and quantitative methodologies are employed depending on the research goals. Qualitative and quantitative methodologies differ in their approaches to research. Qualitative research is exploratory and aims to understand individuals' experiences, behaviors, and the meanings they ascribe to their environments. It involves methods such as case studies, interviews, and ethnographies, relying on non-numerical data and emphasizing rich, detailed descriptions (Creswell & Poth, 2018). In contrast, quantitative research focuses on quantifying variables, testing hypotheses, and analyzing numerical data using statistical methods. It seeks to establish relationships and generalize findings through experimental, correlational, or survey research designs (Shadish et al., 2002).

### **Qualitative Studies**

- Case Study: In-depth analysis of a single case or multiple cases within their real-life context (Yin, 2018).
- Phenomenology: Explores lived experiences of individuals to understand the essence of a phenomenon (Moustakas, 1994).
- Ethnography: Examines cultural practices within a group through immersion and observation (Creswell & Poth, 2018).
- Grounded Theory: Develops a theory based on data collected from participants, often through iterative processes (Charmaz, 2014).
- Narrative Research: Focuses on individual stories to explore life experiences and meaning (Riessman, 2008).

## **Quantitative Studies**

- **Experimental Research:** Tests causal relationships by manipulating variables and using control groups (Campbell & Stanley, 1963).
- **Survey Research:** Collects numerical data through questionnaires or interviews to identify patterns and relationships (Fowler, 2014).
- **Correlational Research:** Examines the relationship between two or more variables without manipulation (Cohen et al., 2017).
- **Quasi-Experimental:** Similar to experimental, but lacks random assignment (Shadish et al., 2002).
- **Descriptive Research:** Focuses on collecting detailed descriptions and summaries of variables without testing causal relationships (Shaughnessy et al., 2015).

A researcher's choice of methodology, qualitative or quantitative, depends on the research question, objectives, and the type of data required. Qualitative methodologies are selected when the aim is to explore complex phenomena, understand experiences, or interpret meanings in a naturalistic setting. Conversely, quantitative methodologies are chosen when the goal is to test hypotheses, measure variables, or establish relationships through numerical data and statistical analysis. The researcher also considers the context, subject matter, and availability of resources when selecting a specific subtype (Creswell & Poth, 2018).

### **Qualitative: Case Study Research**

Qualitative research, as outlined by Merriam and Grenier (2019), is based on the idea that meaning is socially constructed through interactions between individuals and their world. The researcher serves as the primary instrument for data collection and analysis, working inductively to understand experiences and produce descriptive results. Merriam and Grenier identify four

key traits of qualitative research: the researcher makes sense of individuals' experiences, the researcher is the instrument, the process is inductive, and the results are descriptive.

Case study research is a qualitative methodology that involves an in-depth investigation of a specific instance, or "case," within its real-world context. According to Berg (1998), case studies help clarify how situations function by gathering rich details about individuals, groups, social settings, and events. They are particularly useful for exploring "how" and "why" questions when researchers have limited control over the subject of study (Yin, 1994). A case can be defined as a system with boundaries, such as a person, event, or organization (Elger, 2010; Stake, 1995). For this research, the case is the COVID-19 pandemic, with a focus on school administrators from one school system and their experiences during the crisis.

Carteret County Public Schools was selected as the focus for this research because it is a coastal school system frequently exposed to hurricanes which suggests that resilience is enhanced through the adaptive capacities of the community and the school district over time through exposure to environmental hazards associated with hurricane response and recovery. These capacities include the ability of school staff and community members to collaborate effectively, share knowledge and resources, and maintain the school's functionality despite repeated disruptions.

Situated along the coast and routinely impacted by hurricanes, the school system has had repeated opportunities to cultivate strong social capital, defined as the collective knowledge, experience, trust, and interconnected communication networks within the community. This repeated exposure to severe weather events has likely strengthened the district's capacity to self-organize and mount effective crisis responses. By fostering these networks and nurturing robust community relationships, schools are better positioned to disseminate critical information,

engage stakeholders proactively, and facilitate collaborative problem-solving. Such capacities are particularly essential in hurricane-prone regions, where preparedness, rapid mobilization, and the ability to adapt and learn from each event are vital for mitigating future risks and enhancing long-term resilience (Adger, 2003; Reams & Irving, 2019).

Case studies provide rich, context-specific insights into how organizations like schools build resilience, adapt, and improve over time (Walker et al., 2004). By using this approach, the research examines how a school system responded to the pandemic, focusing on the dynamic aspects of crisis response, including adaptability and continuous learning (Creswell & Poth, 2018; Gunderson & Holling, 2002; Stake, 1995). Additionally, case studies provide rich, context-specific insights into how various factors, such as organizational culture and external support, influence crisis response (Creswell & Poth, 2018; Stake, 1995). The dynamic nature of crisis response is captured through this approach, highlighting the importance of flexibility and continuous learning in effective crisis management (Gunderson & Holling, 2002). By examining the evolving nature of crises, the Responsiveness Life Cycle Framework offers valuable perspectives on resilience and responsiveness, which can inform better crisis management practices in diverse organizational settings.

### **Summary**

This chapter provides a comprehensive examination of crisis management within educational settings, contextualizing both global and school-specific crises. It begins by exploring the evolution of crisis response, examining significant national crises and their implications for schools. Federal legislation is reviewed, highlighting the role of policy in shaping school crisis preparedness and response strategies (U.S. Department of Education, 2013).

Further, the chapter delves into the development and implementation of school crisis response plans, explaining how schools determine appropriate response levels based on the nature of the crisis. Various crisis frameworks are explored, particularly the Dynamic Responsiveness to Crisis Life Cycle Framework, which emphasizes adaptability and flexibility in crisis management allowing a system to manage crises effectively.

The chapter also examines theoretical perspectives, including Socioecological Resilience Theory, which highlights the importance of interconnectedness between social and ecological systems in fostering resilience through community engagement and adaptive strategies (Folke, 2006; Walker et al., 2004). This theory is especially relevant for schools in coastal areas facing recurrent natural disasters like hurricanes, where continuous learning and "learning by doing" enhance resilience (Gunderson & Holling, 2002). By integrating community resources and fostering shared responsibility, these schools more often build environments that can adapt to future crises while ensuring educational continuity and safety for all stakeholders.

The integration of the Dynamic Responsiveness to Crisis Life Cycle Framework and Socioecological Resilience Theory offers a comprehensive and nuanced perspective on crisis management. Together, these frameworks inform the processes necessary for developing effective crisis response plans that not only address immediate needs but also strengthen and sustain school system resilience over time. Drawing from both perspectives, this study employed a conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, to guide the analysis of a school district's response to the COVID-19 pandemic.

The chapter also outlines the research methodology, providing the rationale for selecting a qualitative approach over alternative designs. This study employed a case study methodology,

selected for its capacity to generate rich, context-specific insights into how organizations, particularly school systems and their leaders, develop resilience, adapt to evolving conditions, and engage in continuous improvement over time (Walker et al., 2004). The case examined focused on one school district's response to the COVID-19 pandemic, with particular attention to adaptability, collaborative decision-making, and sustained learning throughout the crisis (Creswell & Poth, 2018; Gunderson & Holling, 2002; Stake, 1995).

## **Chapter 3: Research Method**

### **Introduction**

An effective response to a crisis in educational settings is essential, as it directly influences the physical safety, psychological well-being, and educational continuity of students, staff, and the broader school community. Empirical research indicates that schools equipped with comprehensive and clearly articulated emergency protocols are more likely to mitigate the consequences of crises such as natural disasters, violent incidents, or other emergencies. These preparations can significantly reduce the risk of injury and mortality (Graham et al., 2006). However, the impact of effective crisis response extends beyond the immediate preservation of physical safety. Schools that implement robust crisis management frameworks are also better positioned to support the psychological recovery of their stakeholders, thereby minimizing the long-term emotional and mental health effects associated with traumatic events (Brock et al., 2016).

In addition to promoting physical and emotional safety, well-executed crisis response efforts are instrumental in minimizing disruptions to the instructional process. Institutions that are prepared for emergencies are more capable of resuming normal operations promptly, which is critical for preserving academic continuity and mitigating adverse effects on student learning outcomes (Hobfoll et al., 2007). Furthermore, successful crisis management fosters a culture of preparedness and trust within the school community. When schools respond effectively to emergencies, they demonstrate their commitment to safety and stability, thereby enhancing stakeholder confidence. This trust not only reinforces relationships among students, families, and school personnel but also contributes to broader community resilience, improving collective capacity to withstand and recover from future crises (Reeves et al., 2010).

The prevalence and impact of crises on educational institutions continue to grow, underscoring the importance of sustained attention to school-based emergency preparedness. For instance, the Federal Emergency Management Agency (2019a) reported that nearly 27% of all U.S. public schools were in counties that experienced a federally declared natural disaster within the preceding two decades. Additionally, data from the National Weather Service (2018) revealed that between 1998 and 2018, approximately 9% of all documented tornadoes in the United States occurred during school hours, posing considerable threats to the safety of students and staff. The COVID-19 pandemic further emphasized the vulnerability of educational systems to large-scale disruptions. At the height of school closures in 2020, the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2021) estimated that more than 1.6 billion learners, over 90% of the world's student population, were impacted by the shutdown of schools. In the United States, the National Center for Education Statistics (NCES) reported that during the 2020-2021 academic year, 62% of public schools provided full-time remote instruction, while only 38% offered in-person learning (Irwin et al., 2022). These figures highlight the scale of disruption and the necessity for school leaders to be equipped with the skills, knowledge, and systems required to lead through crises effectively.

### **Site Selection**

The Carteret County Public School System's crisis response to the COVID-19 pandemic warrants scholarly investigation due to its distinctive approach among North Carolina's public school units (PSUs). Specifically, Carteret County is one of 42 out of 115 PSUs in the state that adopted a hybrid cohort model allowing students to participate in face-to-face instruction on a weekly basis upon reopening in August 2020 (Charles, 2020a). Worldwide, data from the 2020–2021 academic year indicate that 67% of public schools remained closed at the beginning of the

school year, with only 33% offering access to in-person instruction (The Business Intelligence Platform for School and Community Life, 2022). Furthermore, subsequent student performance data suggest that students in Carteret County Public Schools consistently outperformed peers in many other districts across the state. This pattern points to a potential connection between the district's instructional delivery model and student outcomes during both the crisis and the recovery period.

To address the research objectives, this study employed a qualitative case study methodology to explore the experiences and perceptions of district-level leadership within Carteret County Public Schools during the COVID-19 crisis for reasons noted in the description of research methodologies above. A qualitative case study design situates me as the researcher to capture and report on the details that address the stated research questions. The selection of this district is both intentional and informed by professional and personal engagement with the context. Having served as a public-school administrator for over 15 years, and as a principal within Carteret County Public Schools since 2017, I possess direct experiential knowledge of crisis leadership, including during the recovery periods following Hurricanes Florence (2018) and Dorian (2019), and more recently, throughout the COVID-19 pandemic (2020–2021). My active participation on the district's crisis response committee during the pandemic reopening phase further positions me to engage meaningfully with the research context.

In addition, my residency in Carteret County provides lived insight into the broader environmental and community-based challenges frequently encountered by school systems in coastal regions, particularly those related to hurricanes and flooding. These professional and experiential perspectives informed my creation of the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, as the guiding

theoretical framework for this study. This lens facilitates a multidimensional analysis of how social systems (e.g., school leadership, community networks) and ecological contexts (e.g., geographic vulnerability, environmental disruptions) interact to influence a school district's capacity for resilience during crisis conditions.

### **Research Method and Design**

Bogdan and Biklen (2007) conceptualize a case study as an “in-depth examination of a specific context, individual, set of documents, or a particular event” (p. 54). Within this methodological tradition, Stake (1995) identifies the “intrinsic case study” as one in which the researcher selects the case not to represent other cases or to illustrate a particular trait or problem, but rather because of an inherent interest in the case itself and its unique attributes (p. 4). Stake further distinguishes case study research from sampling-based methodologies, underscoring that the purpose is not to achieve generalizability but to develop a nuanced and contextually grounded understanding of the particular case under investigation.

The present study employs an intrinsic case study design due to the distinctiveness of the selected setting and its relevance to the research problem. The case is deliberately chosen in accordance with what Patton (2002) terms “purposeful sampling”, which involves the intentional selection of information-rich cases that illuminate the central phenomena of interest (p. 46). This sampling strategy enables a comprehensive exploration of the selected context, providing insight into complex, real-world conditions that are directly aligned with the aims of the study. By focusing on a case of particular interest, the research facilitates a deeper understanding of leadership decision-making in crisis response, as experienced within a unique educational setting.

## **Data Collection**

This study employed three qualitative data collection methods: document analysis, semi-structured interviews, and reflective journaling. Using multiple methods allowed for data triangulation, strengthening the credibility and depth of findings (Merriam & Tisdell, 2016; Yin, 2018). Each method is described in detail in the sections that follow.

### **Document Analysis**

Document analysis is a systematic procedure for reviewing and interpreting documents to elicit meaning, gain understanding, and develop empirical knowledge (Bowen, 2009). Within qualitative research, documents serve as a valuable source of evidence because they provide insights into organizational processes, policies, and cultural practices that may not emerge through interviews or observations alone (Merriam & Tisdell, 2016). When used alongside other methods, document analysis enhances contextual understanding and allows researchers to cross-check participants' accounts with organizational records (Yin, 2018).

For this study, document analysis focused on district-level materials that captured Carteret County Public Schools' response to the COVID-19 pandemic. The following documents were reviewed:

- **Reopening Plans:** District-authored plans that outlined operational procedures, instructional models, and public health protocols for the 2020-2021 academic year. These plans provided direct evidence of how state guidelines were interpreted and localized.
- **Internal Communications:** Memos, newsletters, and district-level correspondence that conveyed evolving directives to principals, staff, and families. These documents

revealed both the decision-making timeline and how leadership framed messages during the crisis.

- Meeting Records: Minutes and agendas from school board meetings, strategic reopening committees, and central office planning sessions. These records shed light on the deliberative processes, leadership structures, and stakeholder input that shaped district-level responses.

The analysis of these documents established a foundational context for the study. Specifically, they clarified the district's planning trajectory, identified key decision-making structures, and informed the purposeful selection of interview participants who played substantive roles in the reopening process.

### **Semi-Structured Interviews**

The second phase of data collection involved semi-structured interviews with nine Carteret County Public Schools principals, assistant principals, and central office staff. These individuals were purposefully selected because of their direct involvement in the district's COVID-19 response. Each had been appointed by district leadership to serve as facilitators or participants on one of seven strategic reopening committees, which were tasked with planning and implementing reopening strategies for the 2020-2021 academic year.

The semi-structured format allowed for consistency across interviews while maintaining flexibility for participants to elaborate on experiences in their own words (Kvale & Brinkmann, 2015). This approach produced rich, experiential accounts of the district's crisis leadership, organizational challenges, and decision-making processes during a period of extraordinary uncertainty.

## **Reflective Journaling**

The third method of data collection involved the use of reflective journaling, which was conducted within one hour following each interview and guided by a structured format (see Appendix L). Reflective journaling is widely recognized as a valuable practice in qualitative research because it not only promotes researcher reflexivity but also generates supplementary data that enhances the interpretive process (Ortlipp, 2008; Saldaña & Omasta, 2022). Reflexivity requires researchers to remain critically aware of their assumptions, positionality, and interpretive frameworks while analyzing participants' accounts, thus strengthening the credibility of the study.

In this study, reflective journaling fulfilled several important functions. It created an immediate space for documenting first impressions, emotional undertones, and nonverbal cues that might otherwise be absent from transcripts. For instance, when one administrator described the “weight” of making reopening decisions and the “incredible responsibility” felt by committee leaders, the researcher noted the heightened emotional impact and the persistent concern for doing what was best for students. These reflections enabled the early identification of In Vivo codes, themes drawn directly from participants' words. Phrases such as “uncharted territory” and “holding it together for my staff” appeared across multiple interviews and recording them in the journal sensitized the researcher to recurring patterns during initial coding. Journaling also provided a means of capturing observations about body language, tone, and emotional reactions expressed during interviews. These contextual details underscored the intensity of participants' experiences and added depth to the meaning of their statements, thereby enriching both the coding process and the interpretive analysis.

The process of documenting these reflections immediately after interviews proved critical for preserving the authenticity of participants’ expressions and for deepening the researcher’s engagement with the data. As Tracy (2010) notes, such practices contribute to “rich rigor” by ensuring that analytic insights are grounded in both participants’ voices and the researcher’s situated observations. In this way, reflective journaling functioned as more than a record of the researcher’s thoughts; it became an integral analytic tool that bridged data collection and interpretation. Table 3.1 summarizes the three qualitative data collection methods used in this study with their purpose and contribution to the findings.

**Table 3.1**

*Summary of Data Collection Methods*

Data Collection Method	Primary Sources	Purpose	Contribution to Study
Document Analysis	Reopening plans, internal communications, meeting records	Provide context, identify decision-making structures, inform participant selection	Illuminates planning processes and organizational responses
Semi-Structured Interviews	Principals, assistant principals, central office staff	Capture experiential insights on crisis leadership and decision-making	Provides rich, first-hand accounts of leadership during crisis
Reflective Journaling	Researcher reflections recorded after each interview	Support reflexivity, document impressions, highlight emerging patterns	Adds depth to interpretation by capturing researcher perspective

**Integration of Methods**

Together, document analysis, semi-structured interviews, and reflective journaling created a multilayered dataset consistent with case study methodology. This triangulation of

sources enabled a more comprehensive understanding of Carteret County Public Schools' crisis response, strengthening the credibility and transferability of findings (Yin, 2018).

### **Population and Sample/Participants**

Drawing from the work of Marshall and Rossman (1999), this study employed sampling techniques aligned with elite and key-informant interviewing methodologies to identify participants who possess specialized knowledge and critical insights relevant to the research focus. Marshall and Rossman (1999) define elite interviewing as the practice of engaging individuals within an organization or community who are considered “influential, prominent, or highly informed in their respective domains” (p. 113). These individuals are intentionally selected for their ability to offer deep, experience-based perspectives that contribute significantly to understanding the central phenomenon under investigation.

Similarly, LeCompte and Preissle (1993) introduce the concept of key-informant interviewing, which involves identifying individuals who “hold unique knowledge, occupy positions of status, or exhibit effective communication skills that facilitate the transfer of critical information” (p. 166). Key informants are typically situated in roles that afford them access to privileged observations or data not readily available through other sources. In the context of this study, these informants are instrumental in providing an in-depth understanding of the crisis response strategies employed within Carteret County Public Schools during the COVID-19 pandemic.

The use of elite and key-informant interview strategies allows for the collection of contextually rich, detailed data from participants who are uniquely positioned to inform the research questions. As Morse (1991) and Rubin and Rubin (2011) emphasize, such participants offer not only descriptive information but also interpretive insights that are essential for

capturing the complexity of organizational decision-making processes, particularly during times of crisis.

Institutional approval for this research was granted by the North Carolina State University Institutional Review Board (IRB) in January 2025. Following IRB approval, a review of internal Carteret County Public Schools documentation related to the district's COVID-19 response was conducted to identify individuals who participated in or significantly contributed to the planning and implementation of the reopening strategies in 2020. From this review, a purposive list of potential participants was generated based on their documented involvement and alignment with the selection criteria for elite or key informant status.

Each prospective participant received an individualized recruitment message via email or telephone, depending on their current affiliation with the school district and availability of contact information. The communication included a clear explanation of the study's purpose, the nature of their expected participation, and an estimated time commitment of approximately one hour for the interview. Participants were informed of all confidentiality protocols during initial contact and again prior to the interview session. Informed consent was obtained digitally, including consent for video and audio recording.

To ensure participant anonymity, all identifying information was removed during data analysis and reporting. Participants were assigned pseudonyms such as "Marsh Landing," "Shelly Banks," and so forth, in all transcriptions and written materials. Furthermore, all video recordings and digital files were stored securely and will be deleted upon completion of the dissertation and in accordance with institutional guidelines for research data retention. These measures ensure compliance with ethical research standards while safeguarding participant privacy and data integrity.

## **Materials and Instrumentation**

### **Interviews**

Patton (2002) identifies three primary types of qualitative interviews: the informal conversational interview, the general interview guide approach, and the standardized open-ended interview. These formats are not mutually exclusive and may be adapted or combined to suit the needs of a particular research context. Additionally, Patton categorizes interview questions by type, including those focused on experiences and behaviors, opinions and values, feelings, knowledge, sensory input, and demographic or background information. These types inform both the structure and content of interview instruments used in qualitative inquiry.

For the purposes of this study, a hybrid interview format was employed, blending elements of the informal conversational interview and the general interview guide approach. This combination fostered authenticity in the interaction between interviewer and interviewee, which was central to the research design. By meeting face-to-face, the interviews maintained a natural, relational quality that might have been diminished in a virtual setting. As a result, the conversations were far from robotic; they were responsive, personal, and grounded in the interviewees' own chosen settings and schedules. Locations varied widely, including coffee shops, participants' homes, a public park, and even a horse stable, which added to the informality and authenticity of the exchanges.

Across the nine interviews, which ranged in length from 38 to 96 minutes, participants were consistently open and forthcoming. While their willingness to participate was expected given their voluntary consent, the depth of their engagement and the amount of time they offered was notable. It was evident that participants wanted their reflections and experiences captured in this research, and their contributions carried a striking emotional weight. Nearly five years after

the initial impact of COVID-19, the toll of their leadership experiences remained fresh, often surfacing unexpectedly in their narratives. This emotional dimension underscored the significance of the decisions they made and the burdens they carried during the crisis.

There were, at times, minor gaps in memory, particularly regarding logistical details such as the frequency of committee meetings or the specific composition of committees. In these instances, district documents were used during interviews to frame and clarify questions, allowing participants to reconcile their recollections with official records. This triangulation of sources not only addressed memory limitations but also reinforced the accuracy of the data collected. Overall, the researcher walked away from each interview feeling the experience was both positive and deeply meaningful. While some participants were succinct, others were especially chatty, and the variation in response length reflected the unique personalities and communication styles of the interviewees. Together, these interviews generated a rich, nuanced dataset that illuminated the human and organizational dimensions of crisis leadership in Carteret County Public Schools.

The choice to conduct interviews face-to-face was especially important for establishing trust and capturing authentic, nuanced accounts. The conversational flow, shaped by the participants' chosen settings and comfort levels, enabled the researcher to observe tone, pauses, and nonverbal expressions that added depth to the spoken narratives. These contextual elements, paired with the willingness of participants to share openly and emotionally, enhanced the richness of the data and strengthened the credibility of the study. In this way, the interview process aligned with qualitative principles of rigor by producing data that was both contextually grounded and reflective of the participants' lived realities.

## Interview Guide

The conceptual framework guiding this study, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, serves as an analytical lens through which the crisis response of Carteret County Public Schools was examined. This framework is appropriate for evaluating a school system's response to the COVID-19 pandemic within a coastal community that has previously navigated natural disasters, such as hurricanes and flooding. The integration of historical socioecological resilience, emphasizing the interconnectedness of individuals within the community, diversity of perspectives, and adaptability & flexibility, highlights the ability of a system to be more responsive with timely decision-making and stakeholder collaboration thus providing a comprehensive model for understanding how this school system adapted under the conditions of sustained disruption created by COVID-19.

School districts with prior experience managing crises may demonstrate greater institutional adaptability, as repeated exposure to adversity necessitates ongoing refinement of strategies, stakeholder collaboration, and the cultivation of organizational learning. The application of this integrated conceptual framework allows for the identification of specific leadership practices and systemic conditions that either support or hinder effective crisis response. Each component of the framework is essential; the absence or underperformance of any one element, be it structural adaptability, stakeholder coordination, or real-time responsiveness, has the potential to compromise the overall effectiveness of the crisis response and may limit a district's capacity to respond to future emergencies and their overall resilience. In alignment with the conceptual framework guiding this study, the interview questions were intentionally developed to reflect and correspond with each of its core

components as outlined in Table 3.2. Additionally, the interview guide (Appendix E) reflects the intentionality of connecting the questions to the conceptual framework.

- Prodromal Crisis: recognition of warning signs, preparing, organizing
- Acute Crisis: acting quickly, decisively, and with accuracy
- Chronic Crisis: adjusting and adapting to evolving needs
- Crisis Resolution: reflecting and revising practices for future crisis
- Historical Socioecological Resilience: adaptability, flexibility, diversity of perspectives, community involvement
- Overall Responsiveness: flexible, collaborative, and self-correcting

**Table 3.2**

*Interview protocol and conceptual framework*

Framework Component	Questions
Prodromal Crisis (PC)	3, 4, 5
Acute Crisis (AC)	6, 7, 8, 9, 10, 11, 13
Chronic Crisis (CC)	12, 15, 16, 17, 18
Crisis Resolution (CR)	18, 21
Historical Sociological Resilience (HSR)	6, 19, 20,
Overall Responsiveness (OR)	4, 6, 10, 11, 16

**Pilot Interview**

Pilot interviewing is a valuable step in qualitative research as it allows the researcher to test and refine both the interview protocol and the logistics of data collection. In this study, a pilot interview was conducted with a colleague of the researcher who also served on a school reopening committee. With the participant’s consent, the interview was treated as both a pilot and the first official interview. This process provided an opportunity to evaluate the clarity and

sequencing of questions, the feasibility of the interview schedule, and the effectiveness of the technological setup. As van Teijlingen and Hundley (2001) note, “a pilot study is crucial for identifying potential problems and areas of improvement before committing to the main research” (p. 1). By piloting the protocol with a knowledgeable participant, the researcher was able to anticipate potential challenges and confirm that the interview questions were clear and appropriate for the study’s focus.

The pilot interview also revealed practical challenges related to technology. Conducted at a coffee shop, the session was interrupted by an unstable wireless internet connection, which temporarily disrupted the Zoom platform used to record audio and video and provide the transcription. The researcher responded by connecting to a personal phone hotspot, a solution that later informed the creation of a backup plan for subsequent interviews. This plan included carrying additional power sources and preparing alternative recording methods to ensure data integrity. At the conclusion of the pilot, the participant was invited to provide feedback on the questions and interview process. Although no suggestions were offered, the opportunity for reflection reinforced the importance of seeking participant perspectives in refining the research design. Overall, the pilot interview served as both a methodological test and a practical rehearsal, ultimately strengthening the reliability and preparedness of the data collection process.

### **Data Collection and Analysis**

Miles and Huberman (1994) conceptualize qualitative data analysis as comprising three interrelated and iterative components: data reduction, data display, and conclusion drawing and verification. These components are not discrete steps but rather operate concurrently throughout the research process. Data reduction involves the systematic process of selecting, focusing, simplifying, abstracting, and transforming raw data as it appears in field notes, transcripts, or

other sources. This ongoing process sharpens the focus of analysis by organizing and distilling the data in a manner that supports the drawing and verification of conclusions (Miles et al., 2014).

Within the context of this study, data reduction began at the initial stage of inquiry, wherein the research focus was refined to examine a public-school system's responses to crisis, specifically through a case study of Carteret County Public Schools during the COVID-19 pandemic. This early narrowing of scope constitutes the first layer of data reduction, shaping the trajectory of subsequent data collection and analysis (Creswell & Poth, 2018; Merriam & Tisdell, 2016). As the study progressed, data reduction continued through iterative engagement with interview transcripts, reflective journal entries, and supporting documentation, allowing emergent patterns and thematic categories to guide the evolving interpretation of findings.

Data display, the second analytic component identified by Miles et al. (2014), entailed the systematic organization of information into visual and textual formats such as matrices, diagrams, and tables that facilitate the interpretation of complex data. These displays aid in recognizing relationships, trends, and variations across data sources. Conclusion drawing and verification involves the development of interpretive meaning from the data and the subsequent testing of these interpretations for validity and coherence. Triangulation across interviews, reflective journals, and document analysis strengthens the trustworthiness of findings (Stake, 1995; Yin, 2018).

To facilitate the analysis process, this study employed ATLAS.ti, a qualitative data analysis software program. This software functions both as an organizational tool, enabling the systematic categorization of interviews, and as a visual platform for mapping relationships between emerging codes and themes. Interviews were transcribed using the Zoom application,

downloaded and cleaned by OtterAi, after which transcripts were imported into ATLAS.ti for formal coding. In addition to digital analysis, transcripts were printed and compiled into a physical notebook. Preliminary manual coding was conducted by reading, annotating, and highlighting significant passages, providing an initial layer of thematic insight that informed the digital coding process.

Following transcription and initial review of the interview data and reflective journal entries, a structured coding process was undertaken. An initial “start list” of codes was developed, informed by the study’s research questions, conceptual framework and interview protocol, as recommended by Miles and Huberman (1994). These descriptive codes, listed in table 3.3, served as an analytic framework for organizing the data into conceptual categories. The coding process remained iterative and adaptive, allowing for the emergence of inductive themes and subcodes as new patterns and insights arose (Hatch, 2002). Attention was given to identifying similarities and differences across participants’ narratives, uncovering both convergent and divergent perspectives related to crisis leadership, decision-making, and organizational resilience.

**Table 3.3**

*Descriptive Codes*

<b>Code</b>	<b>Sub-codes</b>
Prodromal Crisis (PC)	Recognizing warning signs, preparing, organizing
Acute Crisis (AC)	Act quickly, decisively, and with accuracy
Chronic Crisis (CC)	Adjust and adapt to evolving needs
Crisis Resolution(CR)	Reflect and revise practices for future crisis
Historical Socioecological Resilience (HSR)	Adaptability flexibility, diversity of perspectives, Community involvement
Overall Responsiveness (OR)	Flexible, collaborative, self-correcting

This layered approach to data analysis, encompassing both deductive and inductive coding, cross-validation through triangulation, and ongoing reflexivity via journaling, enhanced the depth and credibility of the findings. Beginning with deductive codes aligned to the six aspects of the conceptual framework (prodromal crisis stage, acute crisis stage, chronic crisis stage, crisis resolution stage, historical resilience, and overall responsiveness), the codes were systematically applied to the transcripts and journal entries. This process generated a collection of quotations within each category, which then served as the foundation for further analysis. By examining patterns and points of convergence across these coded segments, themes naturally emerged within each of the six framework dimensions. The resulting thematic synthesis was used to address the central research questions and contributed to the broader understanding of school leadership practices during the large-scale educational disruptions caused by COVID-19.

### **Assumptions**

Assumptions in a case study can significantly influence the research process by shaping the research design, data collection, and interpretation of findings. If not critically examined, these assumptions can introduce biases, limit the depth of analysis, and potentially compromise the study's validity and reliability (Creswell & Poth, 2018; Yin, 2018). For instance, assumptions about participants' shared experiences may lead to biased data collection or misinterpretation of results (Merriam & Tisdell, 2016). Therefore, acknowledging and addressing assumptions is crucial for ensuring the robustness and ethical soundness of a case study. The following assumptions are recognized for this research study:

1. Participant responses capture individual experiences and personal reactions to their involvement in the crisis response committees, reflecting the unique perspectives and insights gained from their participation.

2. It is assumed that participants provided responses that are reasonably accurate and truthful, contributing to the reliability and validity of the data collected for the study.
3. Acknowledging that participant responses are not fixed and may evolve over time, it is understood that ongoing engagement in leadership roles, professional work, relationships, and community activities may have influenced their perceptions of the decision-making processes that took place in the summer of 2020.
4. Participant responses may represent diverse experiences within Carteret County Public Schools, recognizing the varied roles and perspectives of those involved. The number of participants included in this study is considered sufficient and appropriate to fulfill the requirements for rigorous and valid research.
5. It is assumed that Carteret County Public Schools' response to the COVID-19 pandemic was largely appropriate, resulting in more positive than negative outcomes, although this assumption was further explored through the research findings.
6. Understanding the crisis response of Carteret County Public Schools is deemed valuable for school leaders, district administration, and the socio-ecological community, as insights gained from this study could inform future crisis management and contribute to the development of more resilient educational practices.

### **Limitations**

This study concentrated on a rural, coastal public school district in the southeastern United States. The findings should not be generalized to other countries, states, or districts due to the specific contextual factors and unique characteristics of the study area. The following limitations are recognized:

1. **Potential Bias in Participant Responses:** One limitation of this study is the potential for participant bias, as the researcher is an employee of the same school district being studied, having served as a principal during the pandemic and now holding a central office position as a director. To mitigate this issue, participants were given the option to participate voluntarily and were interviewed outside of regular work hours to minimize any perceived obligation to participate. Special attention was paid to addressing any feelings of coercion or undue influence.
2. **Impact of Time on Participant Recollection:** Another limitation is the possible influence of the passage of time on the accuracy of participant recollections, as the study took place over four years after the start of the 2020-2021 school year. To mitigate this limitation, interview questions were carefully designed to prompt participants to recall specific events and decisions documented in historical records, thereby enhancing the reliability of their responses and ensuring that the data accurately reflected the decision-making processes during the pandemic.
3. **Technology-Related Challenges:** A further limitation of this study involved challenges with technology, including battery life, wireless connectivity, and the use of digital platforms such as Zoom. These issues first became evident during the pilot interview, which also served as interview #1. Prior to the start of that session, the participant was informed that the researcher would be using the scheduled time to refine the interview process. During this pilot, the Wi-Fi at the coffee shop proved unstable, requiring the researcher to rely on a personal phone hotspot. This experience highlighted the need for a technology contingency plan, which was subsequently developed to include the use of mobile hotspots, recording through the Zoom app on

a phone should the laptop fail, and carrying charged battery packs capable of powering both laptop and phone.

These measures proved effective when two later interview locations experienced intermittent wireless connectivity that briefly disrupted Zoom's audio, video, and transcription functions. In those cases, the researcher paused to re-establish the connection before resuming. While these interruptions were minor and did not compromise the completeness of the data collected, they underscore the importance of anticipating and planning for technological disruptions in research. Strategies such as conducting a trial run of the interview protocol, ensuring familiarity with the chosen platforms, and maintaining access to backup devices or power sources can help minimize the impact of such challenges. In this study, the pilot interview was particularly valuable in identifying potential risks and informing preparations that ultimately supported the smooth execution of data collection.

Delyser (2001) notes that studying a community or situation of which the researcher is already a part can pose unique challenges, as it can be "difficult to gain an objective perspective when one is embedded in the context being studied" (p. 441). Kitchin and Tate (2000) also caution that "insider researchers may overlook important questions or issues due to their inability to detach themselves from the situation and fully evaluate the circumstances" (p. 29). However, Glesne (1999) suggests that by approaching such research with a heightened awareness of these potential biases and challenges, it is possible to conduct successful insider research. Acknowledging these difficulties allows the researcher to implement strategies that mitigate bias and enhance the validity of the findings.

As Neisser (1981) observed, human memory is inherently reconstructive, meaning that individuals often fill in gaps or reinterpret past events through the lens of their current perspectives. This can lead to inaccuracies or unintentional distortions, particularly when recalling complex, emotionally charged situations such as the COVID-19 pandemic. Similarly, Bradburn et al. (2004) caution that recall bias becomes more pronounced as the time between the event and the recollection increases, with memories becoming less precise and more susceptible to influence from intervening experiences. To address this challenge, interview protocols were designed to anchor participants' recollections to documented events, such as district communications, meeting records, and state-issued guidance. This strategy, supported by Schwarz and Sudman (1994), has been shown to improve recall accuracy by providing contextual cues that help respondents retrieve specific details from long-term memory.

Technology limitations also reflect a broader challenge in qualitative research, as data collection increasingly depends on digital platforms. Creswell and Poth (2018) note that researchers must ensure they are competent in using chosen technologies and prepared for unexpected disruptions. Pauses in recording, unstable connections, or software failures can compromise data quality if not addressed promptly. By practicing with the software, conducting a mock interview, and preparing backup solutions such as mobile hotspots, researchers can reduce the likelihood of compromised data collection and strengthen the dependability of the study.

Taken together, these three limitations, participant bias, recall overtime, and technology-related challenges, presented potential threats to the study's validity. However, each was anticipated and addressed through deliberate strategies, including voluntary participation and timing of interviews, the use of archival documents to support memory recall, and technological

contingency planning. There were no other limitations that arose and the measures taken helped ensure that the data collected were as accurate, authentic, and trustworthy as possible given the study's context.

### **Ethical Issues Regarding Research Techniques Used**

This study is situated within the framework of insider research, a methodological approach in which the researcher maintains an established role within the community or organization under investigation. As Glesne (1999) notes, insider research offers distinct advantages, including facilitated access to participants and contextual data, enhanced understanding of the organizational culture, and efficiencies in data collection due to the researcher's preexisting familiarity with the setting. Additionally, the findings may hold practical significance for the researcher's professional context, increasing the likelihood of research utilization. However, insider research also presents methodological and ethical complexities, including challenges related to maintaining objectivity, navigating dual roles, and managing the acquisition of sensitive or potentially disruptive information, what Glesne refers to as "dangerous knowledge" (p. 43).

In my role as a long-standing educator and current district director within Carteret County Public Schools, I have cultivated professional relationships with many of the individuals eligible to participate in this study, including school principals and central office personnel. These relationships, while beneficial for recruitment and rapport-building, also raise ethical considerations. For instance, interviews may elicit confidential or sensitive information pertaining to leadership styles, decision-making practices, or organizational tensions. The potential disclosure of such information exemplifies the ethical risk of encountering "dangerous knowledge" that may influence interpersonal dynamics or professional reputations.

Moreover, the dual role of researcher and colleague could have influenced participants' willingness to speak candidly. Those no longer employed by the district could have felt more comfortable sharing critical reflections, unencumbered by the risk of professional repercussions. In contrast, participants currently serving within the district may have expressed hesitancy or self-censorship, particularly considering my former role as a school principal and current director appointment. These dynamics necessitated careful attention to an ethical protocol and transparency throughout the research process.

To address these concerns, each interview began with a detailed explanation of the study's purpose, the voluntary nature of participation, and the measures in place to ensure confidentiality. These assurances were reinforced both verbally and in the written informed consent process (see Appendix B). Participants were explicitly informed that pseudonyms will be used in all reporting and that identifying details were removed to protect their anonymity. These practices were implemented to uphold ethical research standards and to create a safe environment in which participants felt empowered to share their experiences authentically.

In addition to these ethical safeguards, I employed member-checking and peer debriefing strategies to enhance the study's credibility. A dissertation reader, a former CCPS administrator and current director who had chaired one of the district's seven reopening committees, served as both a participant and a critical friend. Her interview, initially conducted as a pilot, met all criteria for inclusion and remained in the final data set of nine. In her capacity as reader, she reviewed my materials for evidence of insider-researcher bias and provided targeted feedback on both my positionality and my coding decisions. Our reflective exchanges further illuminated the grief process experienced by many CCPS leaders during the COVID-19 pandemic, a theme that became evident upon revisiting participant transcripts and later informed a recommendation for

future research in Chapter 5. Her role as a critical friend allowed me to pressure-test interpretations, interrogate assumptions, and strengthen the overall trustworthiness of the study.

### **Summary**

This chapter has presented a comprehensive overview of the methodological framework that guided this study. A rationale was provided for the selection of a qualitative case study design, which was deemed appropriate for exploring the complex, context-dependent nature of crisis response within a single public school district. The selection of participants was informed by the work of Cross and Billingsley and was guided by purposive sampling strategies. Participants were drawn from Carteret County Public Schools, where the researcher holds a professional appointment, allowing for access to individuals with direct involvement in the district's COVID-19 crisis response.

The data collection methods employed in this study included document analysis, semi-structured face-to-face interviews, and the use of a reflective researcher journal. These multiple sources of evidence facilitated triangulation and enhanced the depth and credibility of the findings. Analytical procedures were described in detail, including the iterative process of coding and theme identification which began manually by-hand and then through the use of ATLAS.ti qualitative data analysis software. This process involved both deductive coding, informed by the study's conceptual framework, and inductive coding, which allowed themes to emerge organically from the data, the participant's words.

Issues of trustworthiness were addressed through strategies aimed at enhancing credibility, transferability, dependability, and confirmability. These included member-checking, peer debriefing, reflexivity through journaling, and maintaining an audit trail of analytical decisions. Attention was also given to the limitation posed by the passage of time between the

events of the 2020-2021 school year and the interviews conducted for this study, recognizing that delayed recollection can influence the accuracy and detail of participants' memories. To address this, interview protocols incorporated prompts tied to contemporaneous documentation and district records, supporting participants in reconstructing events and decision-making processes with greater accuracy and reliability. Focused effort was made to address the limitations of the study, including those related to researcher subjectivity and the complexities inherent in insider research. Finally, the chapter acknowledged potential biases and outlined the steps taken to mitigate their influence on the research process and findings.

## Chapter 4: Discussion of Findings

The purpose of this study was to examine the crisis decision-making processes employed by district and school-level leaders in Carteret County Public Schools during the COVID-19 pandemic. Specifically, the study sought to determine whether the leadership response during this period demonstrates knowledge, attitudes, and attributes associated with effective crisis management, influenced by socioecological resilience. By exploring leadership practices in a real-world crisis setting, this research aimed to contribute to the broader understanding of adaptive crisis leadership and institutional resilience within PreK-12 educational systems. The study was guided by the following research questions:

1. How did the leaders in Carteret County Public Schools respond to the COVID-19 crisis during the summer of 2020 and throughout the 2020-2021 academic year?
2. What decision-making processes were employed by Carteret County Public Schools leaders in their response to the COVID-19 crisis during this time period?
3. How did the strategies utilized by Carteret County Public Schools leaders align with the conceptual framework *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*?
4. What lessons were learned by Carteret County Public Schools leaders as a result of their crisis response to the COVID-19 pandemic?

Leadership in educational settings frequently involves navigating decision-making within the boundaries of existing policy frameworks. However, during large-scale disruptions such as a public health crisis, educational leaders must also exhibit adaptability and collaboration while working with various stakeholders. As noted by Roach et al. (2011), school and district leaders can have direct, indirect, and reciprocal impacts on student outcomes, particularly during times

of uncertainty. In Carteret County Public Schools, principals serve as integral members of site-based crisis teams and, during the summer of 2020, many were paired with district-level administrators to lead the district's coordinated crisis response to COVID-19. These individuals were entrusted with making critical operational decisions under rapidly evolving conditions.

Understanding the decision-making strategies, leadership attributes, and contextual influences that shaped Carteret County's choice to provide in-person instruction through a hybrid plan during the 2020-2021 school year is essential. This case offers an opportunity to examine how crisis leadership was operationalized at the district level and to identify key lessons that may inform future crisis response planning in PreK-12 education. Given the global impact of the COVID-19 pandemic, the findings from this study have the potential to contribute to both scholarly discourse and practitioner knowledge on educational crisis leadership.

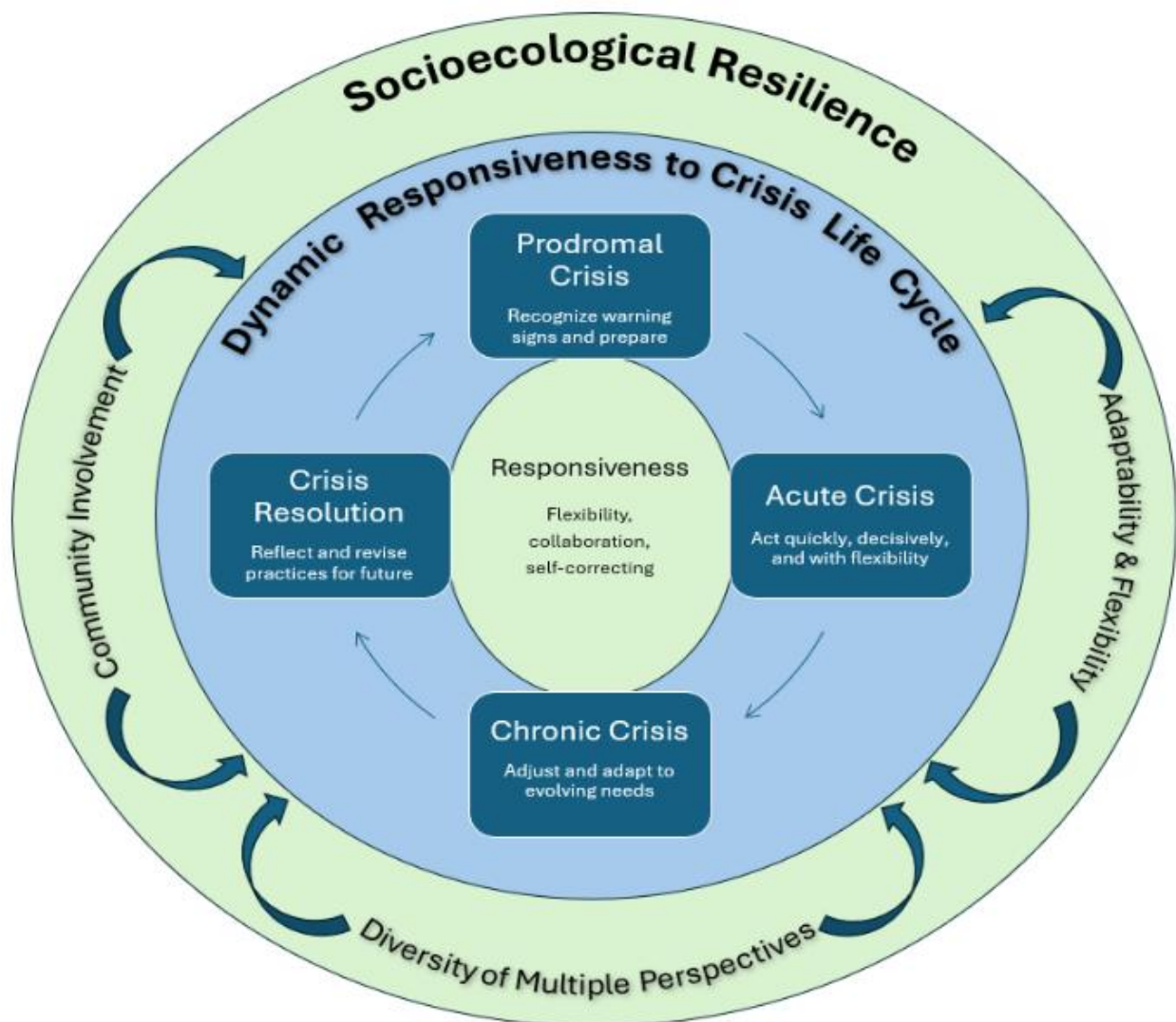
This chapter presents the findings derived from the analysis of district documentation, participant interviews, and the researcher's reflective journal. The chapter begins by outlining the study's setting and providing contextual background on the participants. Data are presented both thematically, reflecting commonalities across participants, and through selected individual narratives that illustrate key themes. The analysis is framed using the conceptual model Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness, presented in Figure 4.1, which draws on the concept of socioecological resilience and its influence on a community's capacity to plan for and respond to crisis events using a dynamic responsiveness model.

The thematic findings are first discussed in relation to the conceptual framework, highlighting where alignment occurs. Subsequently, additional themes that emerged independently of the framework but that demonstrate strong cross-participant relevance are

presented. These findings are critical in advancing understanding of leadership behavior in crisis contexts and in extending the theoretical boundaries of crisis response models in education. The chapter concludes with a synthesis of findings in relation to the study's guiding research questions.

**Figure 4.1**

*Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*



## Context of the Study

Carteret County Public Schools (CCPS) is a mid-sized public school district located in rural coastal North Carolina, serving approximately 8,000 students across 19 schools, including elementary, middle, and high school campuses. The district employs around 630 full-time equivalent teachers and over 500 additional staff members, maintaining a student–teacher ratio of approximately 13.5:1 (Carteret County Public Schools, n.d.). Geographically, Carteret County encompasses both mainland and barrier island communities, stretching from Cedar Island, including Beaufort, Morehead City, Atlantic Beach, Emerald Isle, Newport, Broad Creek, and ending in Cedar Point. This region forms part of the state's southeastern Crystal Coast. The district's location makes it uniquely vulnerable to environmental hazards, particularly hurricanes and coastal flooding. Over the past decade, major weather events such as Hurricanes Florence in 2018 and Dorian in 2019 have significantly disrupted schooling and highlighted the need for resilient crisis response structures (North Carolina Department of Public Safety, 2019).

Demographically, the district serves a predominantly White student population, with approximately 77% of students identifying as White, followed by Hispanic/Latino students (10.6%), Black/African American students (5.9%), and 5.9% multiracial students (U.S. News & World Report, n.d.-a). The county overall reflects a moderate socioeconomic profile, with a median household income of \$57,194 and a child poverty rate of 39.6%, figures that are slightly above and below the North Carolina averages, respectively (North Carolina Department of Health and Human Services [NCDHHS], 2021; North Carolina Department of Public Instruction, n.d.).

Carteret County Public Schools (CCPS) consistently outperforms the North Carolina state average on key academic measures. According to recent state assessment data, 64% of CCPS

students demonstrate proficiency in mathematics compared to the statewide average of 51%, while 61% of CCPS students meet proficiency benchmarks in reading versus the state's 50%. These results place the district in the top 10% of public-school systems in North Carolina, reflecting strong overall performance in core academic areas (Public School Review, n.d.; U.S. News & World Report, n.d.-a). Dual enrollment and Advanced Placement participation rates are notably strong within the district, with 47% of graduates earned early college credit, surpassing the statewide average of 36% (myFutureNC, 2024). Notably, Croatan High School has been recognized by U.S. News & World Report as a Silver Medal recipient, and its students historically outperform state and national ACT averages (U.S. News & World Report, n.d.-b).

Longitudinal data from the Education Recovery Scorecard provides further evidence of CCPS's relative academic strength. In 2024, the district's average mathematics performance for grades 3-8 was 0.94 grade levels above the 2019 national baseline, compared to -0.24 for the state and 0.15 for similar districts. Reading scores were also higher, with CCPS averaging 0.41 above the baseline, compared to -0.59 statewide and -0.54 in peer districts. While all districts experienced some decline in performance relative to pre-pandemic levels, CCPS's decreases in both math (-0.23) and reading (-0.88) were smaller than those recorded for the state and for demographically comparable districts, suggesting a stronger academic recovery trajectory (Education Recovery Scorecard, 2025).

Overall, CCPS's performance profile reflects a district with sustained academic strength, robust college readiness indicators, and comparatively resilient recovery from the disruptions of the COVID-19 pandemic. These outcomes align with the district's reputation for maintaining high academic expectations, as evidenced by its position among the top-performing school systems in North Carolina. The combination of high proficiency rates, strong dual enrollment

and AP participation, smaller pandemic-related learning losses, and notable school-level distinctions underscores CCPS's capacity to support student achievement and adapt effectively to statewide challenges (Education Recovery Scorecard, 2025; myFutureNC, 2024; Public School Review, n.d.; U.S. News & World Report, n.d.-a, n.d.-b).

The district's position relative to other local education agencies (LEAs) in the region is shaped by its geographic isolation, bordered by the Atlantic Ocean and adjacent rural coastal counties. Carteret County is situated along North Carolina's Crystal Coast, a stretch of approximately 85 miles that includes beaches, small coastal communities, and protected shoreline. The Cape Lookout National Seashore, for example, preserves 56 miles of undeveloped barrier islands, including the Core Banks and Shackleford Banks (National Park Service, n.d.). According to the most recent data published by Carteret County's Planning & Development department, approximately 47% of the county's total land area, equivalent to 166,120 acres, is located within a Special Flood Hazard Area (Carteret County Planning & Development, n.d.). This geographic reality further compounds the challenges of maintaining continuity of instruction during crises, as access to resources, transportation, and emergency infrastructure can be more limited compared to urban or inland districts (Federal Emergency Management Agency, 2019a). Given its frequent exposure to hurricanes and other severe weather events, Carteret County has developed a reputation for proactive and collaborative emergency planning, an approach that became particularly relevant during the COVID-19 pandemic.

### **Data Collection**

Multiple forms of data were collected to inform this study, including district-level documentation, semi-structured interviews, and reflective journaling. Documents related to Carteret County Public Schools' Strategic Re-entry Plan were obtained from a district-

maintained Google Shared Drive. These materials included committee overview documents, meeting agendas, and discussion notes generated by each of the seven re-entry committees. While these documents offered insight into the organizational structure and procedural timelines of the planning process, their utility for in-depth analysis was limited. The most informative document was the re-entry plan overview, which listed the names of committee participants and timeline of the expected work. This document was used to identify the school administrators and district directors that were invited to participate in the interview phase of the study.

Most of the available agendas in the shared drive documented meetings held during a concentrated two-week period in July of 2020, outlining specific action steps and task assignments. However, because the committees ceased formal operations following the plan's submission to the North Carolina Department of Public Instruction on July 20 and a shift in efforts from planning to school implementation of the plan occurred, the primary source of rich, contextual data came from interviews with committee facilitators. These individuals not only participated in the development of the district's re-entry strategy but were also responsible for its implementation within their respective schools. As such, they provided critical insights into both the planning and execution phases of the district's crisis response. Reflective journals were completed immediately following each interview, allowing the researcher to critically examine participant responses. This process facilitated the early identification of themes aligned with the study's conceptual framework, as well as the emergence of previously unrecognized but relevant themes connected to the experiences of the committee facilitators revealed through their words in In Vivo coding.

Triangulation of the three data sources yielded a comprehensive understanding of CCPS's crisis response to COVID-19, providing the researcher with rich, contextually relevant

data that directly informed the study’s research questions. In addition, the triangulation process enhanced the credibility and validity of the findings, producing a nuanced and well-substantiated depiction of the district’s response. By integrating multiple perspectives, the methodological rigor of the study was strengthened and mitigated potential biases associated with reliance on a single source of evidence, resulting in data that were both detailed and closely aligned with this study’s objectives.

**Table 4.1**

*Data Sources and Research Questions Addressed*

Data Source	Data Collected	Research Questions Addressed
District-Level Documents	Committee membership Timelines of strategic plan creation and submission Key agenda and action items	1, 2, 3
Semi-Structured Interviews	Interview transcripts Quotes Themes	1, 2, 3, 4
Reflective Journaling	Logistics of interviews Emerging themes Anecdotal information	3, 4

*Note. This table outlines the types of data sources used in this study, what was collected, and the research questions each source helped address.*

### **Research Participants**

Following the initial analysis of district documentation, a list of potential interview participants was generated. A purposeful sampling strategy was employed to identify individuals who held facilitation or leadership roles on Carteret County Public Schools’ seven re-entry committees. This approach yielded a preliminary pool of 14 eligible participants. Due to

scheduling constraints and limited access to in-person availability, two individuals were excluded, resulting in a final invitation list of 12 participants. Recruitment occurred through email correspondence (Appendix B), in which each potential participant was provided with a detailed overview of the study's purpose, the consent form (Appendix C), and assurances of confidentiality and voluntary participation to support informed decision-making .

Of the 12 individuals contacted, nine agreed to participate in the study. These participants included school principals, district-level directors, and one former assistant principal, each contributing extensive professional experience ranging from 21 to 37 years in public education. As displayed in Table 4.2, the participants' years of service, roles during the school reopening period in August 2020, and their current positions within the district are summarized. To maintain confidentiality, additional demographic details have been withheld due to the small size of the school system and the potential for inadvertent identification. Although committee affiliations are not disclosed in the table to further preserve anonymity, all seven re-entry committees were represented within the interview sample, thereby enhancing the comprehensiveness of perspectives related to both the planning and implementation phases of the district's Strategic Re-entry Plan. To further protect confidentiality, participants were assigned pseudonyms that are gender-neutral in nature. This naming convention was selected to avoid unintentionally signaling gendered identities, thereby ensuring consistency and safeguarding anonymity throughout the presentation of findings.

Upon receiving verbal or written agreement to participate, each respondent was provided with a digital consent form (Appendix C) and a background questionnaire (Appendix F), which was completed electronically. Participants were granted autonomy in selecting the time and location of their interview, all of which were scheduled outside of regular work hours to promote

open and candid engagement. Interviews were conducted in person and recorded via Zoom with participant consent. Recordings were transcribed using the Zoom transcription services and downloaded for organization and cleaning using Otter Ai, followed by a thorough manual review by the researcher to ensure accuracy and clarity. Transcripts were then uploaded to Google Documents for additional editing and preparation for analysis. A semi-structured interview protocol (Appendix E) was followed, allowing for conversational flexibility while maintaining alignment with the study's research objectives. This approach fostered a comfortable environment in which participants could reflect freely on their experiences during the district's COVID-19 response efforts.

**Table 4.2***Interviewee Demographics*

Participant	Pseudonym	Years of Experience in Education	Years in Carteret County Schools	Age Range	Position in August 2020
A. Interview 1	Marsh Landing	23	12	40 - 50	Principal
B. Interview 2	Shelly Banks	35	27	50 - 60	Assistant Principal
C. Interview 3	Alex Current	23	4	40 - 50	Principal
D. Interview 4	Morgan Bay	25	25	40 - 50	Principal
E. Interview 5	Gale Storme	30	29	50 - 60	Principal
F. Interview 6	Riley Dune	21	21	40 - 50	Principal
G. Interview 7	Casey Drift	36	36	50 - 60	Principal
I. Interview 8	Taylor Cove	37	37	60 - 70	Director
H. Interview 9	Jordan Shore	24	12	50 - 60	Principal

**Data Analysis****Codes**

This study employed both a deductive and inductive coding approach to analyze the qualitative data collected from participant interviews and district documentation. Deductive coding is appropriate when a study is guided by a clearly defined theoretical or conceptual framework, as it enables the researcher to identify and organize data in accordance with pre-established categories or constructs (Saldaña, 2021). In this case, the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, provided a structured foundation for interpreting participant responses and institutional decision-making. This framework helped direct attention to specific aspects of crisis leadership,

organizational adaptability, and stakeholder collaboration that were anticipated to emerge within the dataset.

The coding process began with a set of a priori codes derived from the major components of the conceptual framework, as outlined in Table 4.3. Each component of the framework informed the creation of initial code categories used to examine how the district’s crisis response aligned with principles of resilience and responsiveness. Deductive coding allowed for systematic identification of patterns and themes that corresponded to these predefined elements, facilitating an in-depth evaluation of the ways in which the school district operationalized its crisis response strategy during the COVID-19 pandemic. This approach also ensured consistency across data sources and enabled direct alignment between the study’s research questions, the guiding framework, and the emergent findings.

**Table 4.3**

*Deductive Codes*

Theoretical Components	Descriptive Words
Prodromal	Recognition of warning signs Preparing & Organizing
Acute Crisis	Acting quickly, decisively, and with accuracy
Chronic Crisis	Adjusting and adapting to evolving needs
Crisis Resolution	Reflecting and revising practices for future crisis
Historical Socioecological Resilience	Adaptability Flexibility Diversity of perspectives Community involvement
Overall Responsiveness	Flexible Collaborative Self-correcting

Following the initial analysis of interviews and district documents using a deductive coding framework, a second cycle of coding was conducted using an inductive approach, specifically employing In Vivo coding techniques. Inductive coding, unlike deductive methods, does not rely on pre-established categories but allows themes and patterns to emerge organically from the data itself (Creswell & Poth, 2018; Saldaña, 2021). This approach is particularly useful in exploratory research, where the goal is to understand how participants make meaning of their experiences without imposing external theoretical constructs.

In Vivo coding, a specific form of inductive analysis, was used to capture the exact language and expressions of participants, preserving the authenticity and significance of their perspectives. This method ensured that the participants' voices remained central to the analytical process and facilitated the identification of concepts that may not have been anticipated during the deductive phase. As patterns across responses emerged, they were coded independently from the predefined deductive categories, thereby enriching the analysis with participant-defined meanings.

Given that the purpose of this study is to examine the perceptions of district leaders as they engaged in decision-making during a time of crisis, it was essential to prioritize their lived experiences and insights. Honoring participant voice is a foundational principle of qualitative research, particularly in studies involving leadership and complex organizational responses (Miles et al., 2014). Table 4.4 provides as an example of the In Vivo coding. Throughout the interview process, the researcher maintained reflective notes and a journal to document immediate impressions and contextual observations. These records served as an additional layer of analysis, helping to frame the coding process and provide deeper interpretive insight into the dynamics of the district's initial crisis response.

**Table 4.4***In Vivo coding example*

Raw Data	Preliminary Codes	Final Code
So, what I try to carry forward is the fact that at the heart of what we do is the well-being of the adults in the building first, because nothing else will happen for kids, if adults are not well and it was my job to be aware, to know, to respond.	Staff Mental Health	Relationships Matter
	Leaders' awareness of staff needs	
I think this school system has always had the focus on what is good for kids. And that's the driving force behind pretty much everything	Student focus above all else	Students Matter
	Student needs	
The mental health of just everybody who served in this capacity took a hit. I struggled as a school leader and sometimes worrying did I focus on anything academic this week?	Mental Health Needs	The Mental Well-being of Leaders Matters
	Leaders struggled emotionally	

**Key Findings**

This section presents the findings of the study in detail, offering evidence-based interpretations supported by rich narrative accounts. Drawing on the principle of thick description (Denzin, 2001), the analysis seeks to authentically represent the experiences of educational leaders within Carteret County Public Schools during the phases of crisis decision-making. By situating participant perspectives within the broader context of the district's COVID-19 response, the study aims to enhance understanding of the realities faced by these leaders. Direct quotations from the interviews are incorporated throughout the chapter to provide voice to the participants, offering nuanced insight into their experiences. These quotations serve not only to substantiate the thematic findings but also to humanize the data, capturing the complexity and depth of leadership during an unprecedented crisis.

The following tables provide the number of coding references across the nine interviews.

Table 4.5 are the inductive code references determined through In Vivo coding. Table 4.6 presents the deductive code references directly tied to the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*.

**Table 4.5**

*Inductive coding references - Emergent themes*

Codes	Aggregate number of coding references
Students Matter	58
Relationships Matter	53
The Mental Well-being of Leaders Matter	51

**Table 4.6**

*Deductive coding references - Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*

Codes	Number of coding references	Component and Result Codes	Aggregate number of coding references
Early Warning Signs	10	Prodromal Crisis Stage	40
Preparing & Organizing	30		
Acting Quickly	11	Acute Crisis Stage	35
Acting Decisively	13		
Acting Accurately	11		
Adjusting	18	Chronic Crisis Stage	37
Adapting	19		
Reflecting for future - Personal	21	Crisis Resolution Stage	37
Revising for future - Personal	16		
His. Adaptability & Flexibility	26	Historical Socioecological Resilience	69
His. Diversity of Perspectives	21		
His. Community Involvement	22		
Overall Flexibility	40	Overall Responsiveness	127
Overall Collaborative	59		
Overall Self-correcting	28		

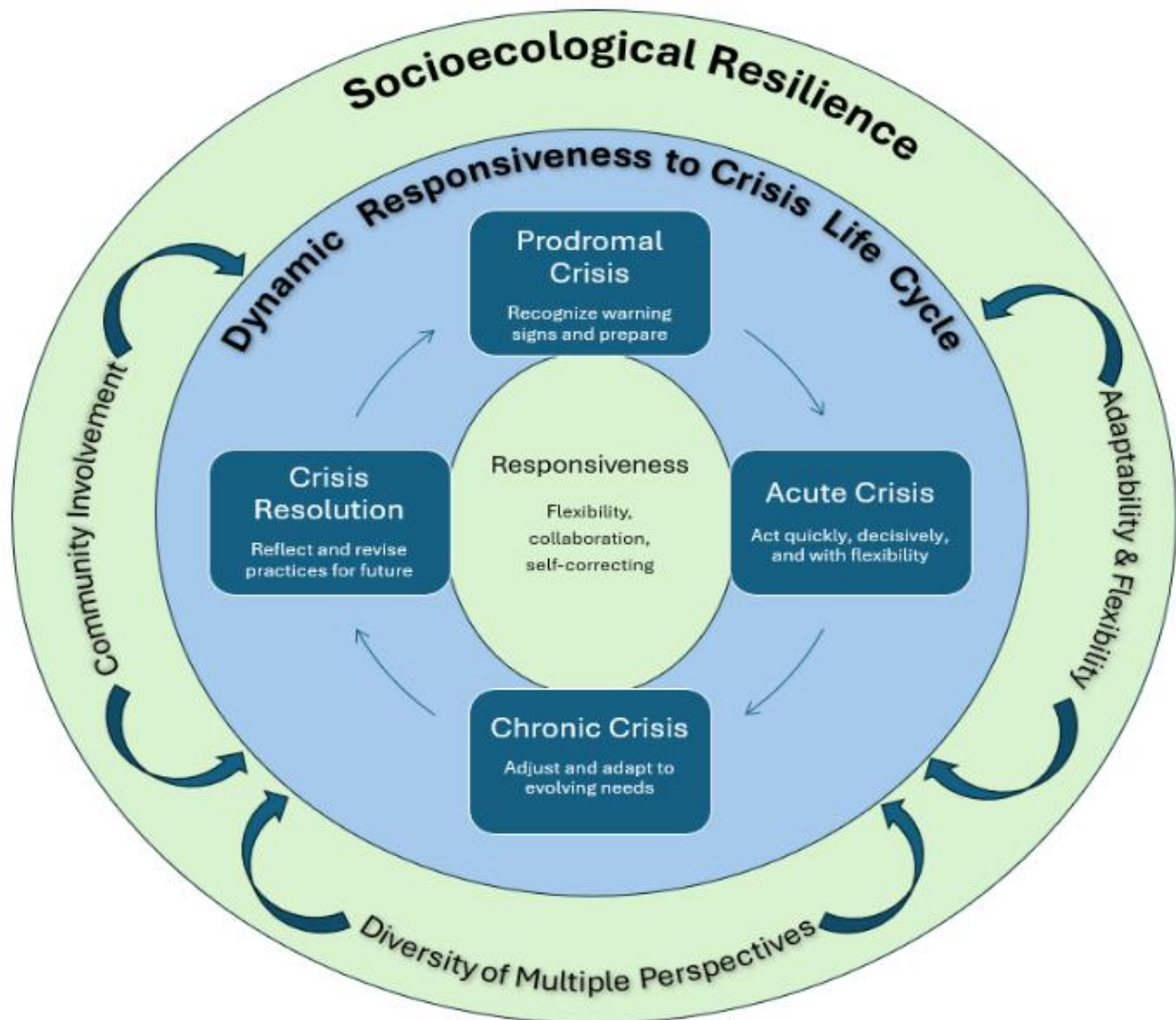
All codes and coding results were collated into a codebook which provides a collective overview of the codes, including subthemes, and frequency of the code within the interview narratives (Appendix H).

### **Key Findings: Deductive Coding Themes**

In the sections that follow, the key findings are organized around the deductive codes derived from the study's conceptual framework (Figure 4.2).

**Figure 4.2**

*Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic*



This framework, introduced in Chapter Two, integrates Fink’s Crisis Life Cycle Model (1986) and Liou’s Dynamic Responsiveness to Crisis Life Cycle (2014) with socioecological resilience principles. These resilience elements emphasize adaptability, flexibility, diversity of perspectives, and the interconnectedness of individuals within a community, all of which are critical in understanding how school systems navigate crises. Together, these components

provide a comprehensive lens for interpreting Carteret County Public Schools' response to the COVID-19 pandemic. Each code is presented with attention to its frequency of occurrence and analyzed in relation to the guiding research questions. This structure not only documents patterns across the data but also highlights how dimensions of crisis leadership, organizational adaptability, and community collaboration shaped the district's decision-making and overall resilience during a period of sustained disruption.

### ***Prodromal Crisis Stage: Early Warning Signs and Preparing & Organizing***

The prodromal stage, as defined in Fink's Crisis Life Cycle Model (1986), Liou's Dynamic Responsiveness to Crisis Life Cycle (2014), and the conceptual framework for this study represents the pre-crisis phase in which early warning signs or indicators suggest that a crisis may be developing. In this stage, the ability of a school district to detect subtle signals within their dynamic and often unpredictable environments is critical for effective crisis response. Drawing on complexity and chaos theory, Liou (2014) emphasizes that districts must develop adaptive capacities that enable them to reorganize resources and implement preparedness strategies without destabilizing the broader system. These adaptations can significantly shape the trajectory of a crisis and effective leadership during the prodromal stage enables leaders to anticipate challenges, allocate resources strategically, and implement preventive measures, ultimately shaping the district's capacity to manage the crisis effectively once it fully emerges.

In the context of Carteret County Public Schools' response to COVID-19, the prodromal stage was marked by an awareness of the global spread of the virus and its growing impact on other regions, yet without immediate local evidence of disruption. While state and national news outlets reported increasing hospitalizations, international travel restrictions, and community

transmission in other areas, Carteret County had no confirmed cases in the early spring of 2020. Consistent with Liou's (2014) application of complexity theory, district leaders were operating within a dynamic environment where emerging signals were present but not yet perceived as direct threats requiring large-scale organizational change. All interviewees spoke of their surprise, often labeled as shock, to initial closing of schools in North Carolina:

*Gale Storme:* "I don't know that I ever really thought it would impact us in Carteret County, to be honest with you. I knew it was real, it was out there, and on the news, but I don't think I ever thought it would be us."

In the fourth interview, a similar response was noted, recognizing that COVID-19 existed and was impacting the United States, with belief that it would not happen in Carteret County:

*Morgan Bay:* "At first, not understanding, the ignorance. I know this sounds a little silly, but I don't watch the news for a reason. I heard people talking, other principals, parents, people were talking. Then there was the shock of the first closure. You're going to cancel school for two weeks, you are going to work from home, and we're going to see if we can get a handle on this, this illness, the illnesses that were going around. And that sounded okay. And then after that, I felt this huge responsibility of, 'Okay, now we're not coming back.'"

Alex Current echoed Bay in the realization that there was tremendous responsibility suddenly placed on administrators to figure how to handle the closing of schools in the spring of 2024:

*Alex Current:* "I remember thinking, okay, life just changed. Like life just really changed. But here's the naive part. I still didn't really believe that it was going to last as long as it did. I'm like, the glass half full *person*. I thought, you know, the two-week

shutdown, or whatever, you know, that would take care of it, and then we get back and everything would be fine. It was not expected that we would close and that it was last through the end of the year.”

Liou (2014) contends that organizations, including school districts, must possess the adaptive capacity to reorganize resources and decision-making structures, thereby positioning themselves for a more effective transition into active crisis management. In the case of Carteret County Public Schools (CCPS), the shift from pre-crisis to a structured crisis response in the prodromal stage was marked by the district’s pivot at the close of the 2019-2020 academic year to establish seven strategic reopening committees upon receipt of the State of North Carolina’s guidance for the 2020-2021 academic year. Each committee was composed to represent the district’s three grade-level bands, elementary, middle, and high school, and was tasked with interpreting extensive and frequently updated state directives, synthesizing this information into actionable recommendations, and developing operational protocols for systemwide implementation. The establishment and operation of the seven strategic reopening committees emerged as a consistent theme across all nine participant interviews, with references to their organization and planning occurring a total of 30 times. Riley Dune stated, “That summer the committee work gave us time to really address what this was going to look like next year.”

Both Riley Dune and Shelly Banks spoke of the creation of the strategic committees during the summer, which gave the school system the opportunity to plan for the reopening of schools in August of 2020:

*Shelly Banks:* “*The superintendent* knew to divide us up into seven committees and really play in on our strengths trusting what we could bring to the table. It was to divide the massive amount of work that was going to be an undertaking for opening schools.” “I

thought the way we did it as a committee was, this was great in that we had specific roles and responsibilities, so it wasn't like you're in isolation, open up your school with your learning plan, your communication plan, your feeding plan, all those things in isolation would have been impossible. It was nice that all of us were there, in it together.”

### ***Acute Crisis Stage: Acting Quickly, Decisively, and Accurately***

The acute crisis stage, as defined in Fink’s (1986) Crisis Life Cycle Model, represents the period in which the triggering event escalates into a significant issue requiring immediate organizational attention and response. This phase is typically characterized by heightened uncertainty, rapid decision-making, and concentrated efforts to contain the situation and limit its impact. Building on this framework, Liou (2014) integrates chaos theory, noting that crises during the acute stage can escalate quickly, with conditions that are unpredictable yet bounded within certain parameters. Within this stage, bifurcation points, critical decision-making junctures, emerge, where choices can lead to distinctly different outcomes. Recognizing this dynamic nature, Liou (2014) emphasizes the necessity for school leaders to remain flexible and responsive as circumstances evolve. In Carteret County Public Schools (CCPS), the acute stage of the COVID-19 pandemic began after the close of the 2019-2020 academic year, when the district needed to finalize reopening plans and move into execution of those plans for the 2020-2021 academic year. The first bifurcation point was the decision of the district to open under a hybrid model providing all students the option of attending school in person. All plans made by the district centered around their cohort model of in person and virtual learning and included implementing digital learning platforms, distributing devices and hotspots for students without internet access, preparing the building with social distancing measures, and establishing protocols for contact tracing and quarantines. The acute phase represents the point at which plans

developed during the prodromal stage are implemented. The defining characteristics of this phase, acting quickly, decisively, and accurately, were identified by all nine interviewees and referenced a total of 35 times.

*Jordan Shore:* “We had seating charts and we had to determine the proximity of the kids to each other for quarantines.” “We had plans in place and we used them. Plans for everything like social distancing, checking temperatures, making phone calls. All the things the committees came up with we used.”

Interviewees Banks and Landing spoke about the creation of plans that were communicated to all stakeholders. The plans allowed staff to act quickly and decisively while remaining calm:

*Shelly Banks:* “And I think really what we knew was information would be coming fast and furious from the state and federal governments. It was constantly changing, and we asked ourselves how could we as a district communicate what we needed to concisely, calmly, timely, but also create a sense of hope and safety for our stakeholders.”

*Marsh Landing:* “First, we presented the plan to the board. We had to share the plans. Then we created posters, fliers, phone scripts, things for the websites. But our front line of defense was always the principals. District communication went out through phone calls, the website, social media and the district maintained the COVID tracking information for community, where they were keeping track of, all the metrics.”

### ***Chronic Crisis Stage: Adjusting & Adapting***

The chronic stage, as described in Fink’s Crisis Life Cycle Model, represents the period following the immediate crisis response, during which organizations are engaged in the new status quo and focus is on maintaining crisis efforts with a goal towards long-term recovery

efforts. Liou (2014) integrates chaos and complexity theories into this phase, emphasizing the need for schools to adapt their strategies to the evolving needs of students, staff, and the broader system. In this stage, the crisis environment becomes less volatile, yet the challenges remain significant and multifaceted. Continuous feedback mechanisms are essential, allowing leaders to refine strategies based on ongoing evaluation of the situation and its impacts. This aligns with the continuous adaptation principle in complexity theory, ensuring that recovery actions remain responsive to emerging conditions and informed by lessons learned.

In Carteret County Public Schools (CCPS), the chronic stage of the COVID-19 crisis began once the 2020-2021 academic year under a hybrid instructional model was underway. The seven strategic reopening committees that had guided the district's planning during the prodromal and acute stages were disbanded, with responsibility for ongoing implementation and oversight assumed by the superintendent's leadership team and district directors. Initially, countywide leadership meetings with district and school leaders were conducted weekly via Zoom to monitor operations, address emergent issues, and ensure consistent application of health and instructional protocols across the district. As the school year progressed and procedures became more established, the frequency of these meetings transitioned to an as-needed basis, reflecting the gradual stabilization of the system. This shift from intensive crisis coordination to a more routine management structure illustrates the district's movement deeper into the chronic stage, where the focus turned toward sustaining operations, addressing residual impacts, and refining strategies in response to the ongoing realities of pandemic-era schooling. All interviewees described the transition from the initial implementation of committee-developed plans to a more routine operational environment, a shift facilitated by weekly Zoom meetings. In the data coding process, the themes of adjustment and adaptation, characteristic of the chronic

stage, were identified a total of 37 times. In the comments from Gale Storme, the frequency of meetings and the use of that time to solve new problems and support each other was evident:

*Gale Storme:* “We got emails, phone calls, we had meetings. It seems like we had a lot of meetings with leadership. It was almost aggravating. I'm not much of a meeting person anyway, and it was aggravating. But looking back on it, it made sense, and it was probably also a good mental break for all of us. To hear that, oh, okay, this is happening somewhere else, because a lot of times the admin chairs can be very lonely, and you wonder if it only happens at your school. So having that opportunity to hear different experiences helps, helps you get through it.”

Jordan Shore's comment recognized the shift from a committee structure that had been established during the summer to weekly Zoom meetings with the school administrators and central services that took place once the school started, stating, “There were Zoom meetings with other principals and central services. Instead of the committees, we met weekly over Zoom and then less frequently.”

Apparent in all of the interviews and highlighted in the quote from Dune, was the need to listen, adjust, and collaborate once the initial plans had been implemented for the opening of the year. Processes and protocols were revised as needed based on current and shifting needs:

*Riley Dune:* “What I remember is fairly regular Zoom meetings, and whether they were scheduled or kind of quick ones, where we got on to just touch base, we were always talking to *the superintendent* and his team and to other principals. That was good, because we had to kind of revise lots of things and talk about lots of things. Some things we had good solutions for, and some things I feel like we had to just do the best we could with the circumstances and what we had. Lots of talking, listening, and adjusting.”

### ***Crisis Resolution Stage: Reflecting and Revising for the Future***

The resolution stage, as outlined in Fink's Crisis Life Cycle Model, represents the point at which the organization has stabilized following the disruption and either returns to its prior state or evolves into a new operational order (Liou, 2014; Mitroff, 2004). This stage is characterized by the identification of lessons learned, the development or refinement of policies and strategies, and preparation for future challenges informed by the experiences of the crisis. From a complexity theory perspective, Liou (2014) argues that schools should treat the resolution stage as a strategic opportunity for growth, using post-crisis reflection to strengthen institutional resilience and enhance crisis management practices. In this phase, organizations are expected to engage in systematic evaluation of their crisis response, collect feedback from key stakeholders, and institutionalize improvements to prevent or mitigate the effects of future crises.

In Carteret County Public Schools (CCPS), the resolution stage of the COVID-19 crisis was notable for the absence of formal, systemwide reflection. While all nine interviewees engaged in personal reflection regarding their individual experiences during the pandemic and shared what they had learned in relation to their role as a leader, half indicated that the district did not engage in a structured process to gather reflections from district leaders, nor were formal meetings convened to analyze the crisis response and identify organizational takeaways. This absence of systematic post-crisis evaluation contrasted with CCPS's historical practices; four interviewees noted that such reflection and debriefing sessions had been standard following previous crises, such as hurricanes, student deaths, and bus accidents, and had yielded effective and actionable outcomes for school leaders. In the case of COVID-19, however, the district's transition to stability was not accompanied by an intentional process of collective analysis, resulting in the loss of an opportunity to consolidate lessons learned into future planning and

policy. While the system resumed operational stability in the Spring of 2021, when all grade level spans officially returned to school five days a week, the lack of structured resolution activities marked a departure from prior approaches that had contributed to the district’s capacity for continuous improvement in earlier crises. All nine interviewees discussed their personal takeaways and reflections on the district and school-level crisis response. Four participants specifically noted that CCPS has historically maintained a well-established resolution process, routinely engaging all principals in reviewing past crises; however, this process was not implemented following COVID-19. Despite the absence of a formal, districtwide effort, the themes of reflection and revision of leadership practices appeared 37 times across the interview data. Those same four participants emphasized that forgoing the established resolution process represented a missed opportunity for CCPS to systematically learn from its experience with the pandemic. Morgan Bay noted that the leadership in CCPS historically conducted reviews of each crisis but did not for COVID-19 stating,

“The central office team has done a good job of debriefing after crisis that have happened in school. They have made other leaders aware of what has happened, what the response looked like, and the school principal often shared what they learned from it. We have plans where we might need your counselors and other available staff that can come and help assist. As a county we really do like a triage in a lot of ways with our situations. We did none of that with COVID and I’m not sure why.”

Even without a formal system-wide process for review and reflection, Alex Current acknowledged the personal learning that each administrator applies from previous crisis response:

I think each of the crises that I dealt with, they certainly increase your mindfulness of the importance of always planning for the what ifs, the details. I think, as leaders, good leaders, you want to be proactive as much as possible. So trying to not put yourself in a position where you have to be reactive, you know, to put things in place.

Echoed in several of the interviews was acknowledgement of takeaways from COVID-19 that remain questions in the minds of leaders.

*Jordan Shore:* “I think we will always ask ourselves, did we do enough during that time to help kids who were struggling. That's something that's always bothered me since COVID. Did we take into account the differentiation of socioeconomics. It took a lot longer for my school with a lower socioeconomic status to regain back pre-COVID levels. That's one of the things that stands out to me. It took four years to fully rebound. I know there are things I would do differently to better support those students.”

### ***Historical Socioecological Resilience: Adaptability & Flexibility, Diversity of Perspective, and Community Involvement***

The integration of Socioecological Resilience Theory within the Adaptive Crisis Resilience framework highlights the capacity of systems, whether social or ecological, to absorb shocks, adapt to evolving conditions, and preserve their essential functions and structures in the face of disruption (Walker et al., 2004). Within the educational context, resilience develops over time through three interconnected elements: adaptability, diversity, and community involvement. Adaptability enables schools to respond flexibly to external disruptions while maintaining operational continuity. Diversity within the system, reflected in the varied expertise and perspectives of staff, fosters innovative problem-solving and supports the creation of practical, context-specific solutions. This diversity further strengthens dynamic responsiveness by

equipping leaders with multiple perspectives from which to address evolving challenges and adjust strategies as circumstances shift (Berkes & Folke, 1998). Community involvement reinforces socioecological resilience by leveraging local resources, shared knowledge, and social capital. In Carteret County Public Schools (CCPS), previous districtwide crises, most notably hurricanes, had necessitated a coordinated response that built strong community relationships through collaborative recovery efforts. These experiences required flexibility in planning, adaptation in implementation, and reliance on diverse perspectives to ensure that recovery strategies were comprehensive, inclusive, and effective in facilitating a return to normal operations.

All nine interviewees referenced elements of CCPS's historical socioecological resilience as influencing the district's crisis response during COVID-19. This theme appeared 69 times across the interview transcripts, making it one of the most frequently discussed topics in the data set. Taylor Cove recognized how crises create resilience in leaders, acknowledging that experience builds a better emotional response:

I think every one of those experiences (referring to crisis) helps you better prepare for the next one. They help you better react in a calm manner so you can be the voice of reason and logic. They help you learn not to contribute to the emotion, the heightened emotional atmosphere that can happen and also help you learn to get in front of the emotion as much as possible.

Repeatedly evidenced in the interviews was the theme captured by the following quote: the community's ability to respond to crises with a spirit of resilience. A proverbial "been there, done that" mindset:

*Shelly Banks*: “Our culture and what our families here have dealt with over the years with crises like hurricanes and other types of events. They're willing to take it on because it is part of their heritage, facing a crisis head on.”

While COVID-19 was a crisis no school administrator would want to experience, Gale Storme acknowledges that these experiences are more successfully addressed in a collaborative manner:

I think it's like with anything else, anything you go through gives you background knowledge to pull from for the next event that you experience, whether it's big or small. I mean the reminder of how you need people to make the crisis response successful, how important it is to have input, but at the same time, having a sense of what you can handle on your own, without them, when it's too much and you need to pull your people together to help.

***Overall Responsiveness: Flexibility, Collaborative, and Self-correcting***

Within the Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness framework, the core construct of responsiveness is defined by three interrelated traits: flexibility, collaboration, and self-correcting capacity. Flexibility refers to the ability of leaders and organizations to adapt strategies and actions in response to the evolving nature of a crisis (Liou, 2014). Collaboration involves engaging a broad range of stakeholders, including staff, emergency responders, and community members, to ensure coordinated and effective crisis management (Liou, 2014). Self-correcting capacity reflects the organization's ability to learn from ongoing experiences and adjust responses dynamically to improve crisis handling as circumstances develop (Liou, 2014). Liou's Dynamic Crisis Response Model positions crisis as a cyclical and adaptive process rather than a linear event, requiring schools to

remain agile, cooperative, and committed to continuous learning throughout all stages of the crisis. By integrating concepts from chaos theory, complexity theory, and Fink's Crisis Life Cycle Model, Liou offers a holistic framework that moves school leaders beyond static, prescriptive crisis plans toward dynamic strategies capable of addressing the unpredictable and complex realities of modern crises. This integration enables educational systems to anticipate shifts, respond to emerging challenges, and enhance resilience, ultimately preparing schools to operate effectively in the face of uncertainty and to recover more robustly from disruptive events.

Dynamic responsiveness in crisis management was referenced by all nine participants, making it the most frequently occurring theme in the data, with a total of 127 coded instances. Within this overarching theme, flexibility was identified 40 times, collaboration 59 times, and self-correcting capacity 28 times, reflecting the multifaceted nature of CCPS's adaptive response during the COVID-19 crisis. Marsh Landing spoke of the flexibility, collaboration, and self-correcting the took place in CCPS:

I think there's a constant process throughout the whole time, like from the 2020 closing to fully opening schools in 2021 I think we certainly went back, time and time again and adjusted. I will say, while the committee's work was initially very focused and intentional and purposeful on the initial opening in 2020, once the school year started as an administrator, things got super busy with your focus on your school. And so I think at that point, we really relied on district staff to kind of take the frameworks that we had built and to modify or change as needed, because the work at the school level was exhausting, like it was so encompassing that we didn't have time to really come back together after that initial summer work sessions and the initial fall work sessions we had,

and we could give feedback right to the Chief Information Officer or other district leaders and they could use that feedback to adjust. Feedback like, I think this or that or this doesn't make sense. But I think really that Initial leg work we did, laid the groundwork, and then it was district staff who kind of modified and changed as needed, because it was constantly changing.

As mentioned by Casey Drift, even when community organizations did not serve directly on one of the strategic reopening committees, they were often consulted by a committee liaison stating, “She was really the liaison between us and any outside agency not on our committee. She kind of took that on herself. We consulted with outside agencies like the health department.” The collaboration extended beyond the immediate Carteret County community to other counties and school systems, as Storme stated, “He had talked to other school systems about their plans and brought that information to our committee. We even had several join us over Zoom to share what they had done and what they learned.”

Flexibility was exercised to appropriately respond to the shifting state guidance and Shelly Banks indicated this happened often:

The COVID mandates kept changing. Right? We went from no school to you can come if you wear a mask, and you can be five feet apart or maybe six feet apart, and then later feet and masks didn't matter but quarantines did if you were sick or exposed. Anytime we came to the table, we tried to play out every scenario, so we weren't so reactive. If the situation happened, we were able to have something in place to send out, like, I remember all the scripts we wrote for each of them.

At times the need to meet was immediate and administrators dropped what they were doing to join a Zoom meeting, emulating a truly flexible mindset with a willingness to adapt as shared by Taylor Cove:

What I remember is fairly regular zoom meetings, and whether they were scheduled or kind of quick ones, where we got on to just touch base, we were always talking to *the superintendent* and his team and to other principals. That was good, because we had to kind of revise lots of things and talk about lots of things. Some things we had good solutions for, and some things I feel like we had to just do the best we could with the circumstances and what we had. Lots of talking, listening, and adjusting.

### **Key Findings: Inductive Coding Emergent Themes**

Emergent themes represent patterns, concepts, or ideas that arise inductively from qualitative data rather than being predetermined by the researcher. In this study, emergent themes were developed through the process of In Vivo coding, which involves using participants' own words and expressions as the basis for initial codes. This approach grounds the analysis in the authentic language and perspectives of those interviewed, ensuring that the findings remain closely connected to their lived experiences. As the coding process progressed, these initial codes were clustered, compared, and refined into broader thematic categories that reflected shared meanings across the dataset. The strength of emergent themes in qualitative research lies in their capacity to reveal insights that might not have been anticipated at the outset of the study, thereby deepening understanding and providing a richer, more nuanced interpretation of the phenomenon under investigation.

## *Students Matter*

Across all nine interviews, a consistent theme emerged in the words of participants: concern for students served as the primary driver behind decision-making at each stage of the crisis response. Leaders described a range of actions taken with student needs at the forefront, including delivering meals throughout the county via bus routes, conducting home visits to provide and install internet hotspots, offering doorstep tutorials on accessing the district's learning management system, and implementing a hybrid instructional model that allowed families to select either in-person or virtual learning based on individual circumstances. Additional examples included adjusting social distancing and masking protocols as soon as state guidelines permitted and returning elementary students to a full five-day in-person schedule in October: the governor had issued an order releasing guidelines for K-5 and CCPS was one of the first districts to take advantage of this option. This theme, decision-making grounded in what was best for students, was referenced 58 times across the interview data, underscoring that CCPS consistently approached crisis management with the impact on students as its central consideration. Jordan Shore spoke of the community's desire for students to have the option to return to school in August of 2020 and the CCPS' response to this:

I think part of it is the commitment to our education system and kids and doing what is right for them no matter what. . . I think our community wanted our kids to go to school and we knew we could find a way to make that happen. Also, we gave the opportunity if they didn't want to come back to school for whatever reason, they had the option to stay virtual. It wasn't mandated for every kid to come to school. We did give them an option for full time virtual.

The needs of the students were a priority and staff went to extraordinary lengths to meet them, as shared by Gale Storme some of these efforts were emotionally challenging for the staff:

We rode around and gave them out door to door to the children that needed them. I also think about driving to give out food to households. If you didn't ride on the bus and experience that you missed something, you really did. To explain that a little bit for somebody who's not an educator, every adult on the bus had to be spread out because we're not supposed to be close to each other, which is next to impossible if you think about what it takes to give out food. It was such a moving experience, the feeling of doing something good for those children, those families, and the excitement that they had when they saw us. It was this feeling of wanting to hug them, but you couldn't hug them or wanting to high five them, or interact with them however you typically do, but you just couldn't. Our cafeteria manager, she's a hugger, and she knows the children by name. She was amazing, and I saw her cry several times throughout those trips just because she was worried that they were not getting food because of parents ' work schedules. Some were working and not home to make sure their children were eating and some were not working and couldn't afford to feed them. It was all very overwhelming to realize the responsibility, to feed children while they weren't at school, that all of a sudden became ours.

Morgan Bay recognized that even though the community was pushing for an in-person option in August of 2020, the school leadership was as well stating, "I think that our families in this area were really worried about the social, emotional state of our kids and their ability to get back to normal. Most of them wanted students back and we did too."

Ultimately the leadership in CCPS, both at the central office and in the schools, were determined to bring students back to school in August of 2020 because they recognized the importance. Marsh Landing reflects on the attitude of “making it happen:”

Then, like this attitude of let's pull the bootstraps up and figure out what we're going to do for kids took over. You know what I'm saying. So, I didn't, you don't stay in that place of emotion for long, but it was just something that was unprecedented. It was just initial shock, which sounds bad, I think, because I had no inclination, and maybe that was just me not being aware that it would even be something we would have to do, to close schools. I know how important schools are in the lives of children and families, especially in Carteret County and we were going to make it happen.

### ***Relationships Matter***

Another emergent theme centered on the preexisting relationships within the school community, which became a critical element of CCPS’s crisis response. The district’s relationship with the broader community was characterized by trust, strengthened through recent and effective collaboration during hurricane recovery efforts. School leaders leveraged this trust in developing and implementing reopening protocols that allowed families the option for their children to attend school in person during the 2020-2021 academic year. Equally important were the established relationships among members of the school system, particularly among district and school leaders, which provided a foundation for achieving consensus within the strategic reopening committees. This collegial rapport facilitated efficient decision-making and supported a unified approach to planning. The shared sense that “we are all in this together” served as a binding call to action. Several participants also reflected on the importance of attending to staff well-being, focusing time and energy on supporting their mental and emotional health to ensure

they were equipped to serve students effectively. The theme of relationships appeared 58 times across the interview data, underscoring its central role in the district's ability to navigate the crisis. Marsh Landing recognized the preexisting relationships of committee members as having a positive impact on decision making:

At the table was people who worked well together. . . We had to be able to come up with a consensus, because time is of the essence, right? We didn't have a lot of time to drag our feet on this, because our superintendent started July 1st and enacted this plan. We had to open schools back up in a strategic and calm manner. Um, so I think that part was nice, the committees and size. We just, we were able to work well together.

So much of the work that took place during the reopening and throughout the 2020-2021 academic school year relied on the staff. Shelly Banks invested in their staff knowing that their social emotional state was crucial in meeting in the needs of the students:

What I kept telling myself was, we're all in this together and we really were. . . I learned as a leader that I needed to take more time with the adults in my building, because I realized the impact it was having on them, personally and professionally. I was more deliberate with my time and immediacy with them to ensure they were okay, because the adults had to be good and ready to go for the kids. They needed to be the calm in the chaos too.

Teamwork allowed school administrators to accomplish what would have been impossible on their own as reflected in the quotes from Alex Current and Morgan Bay:

*Alex Current:* "I think the significance of teamwork and collaboration really increased during that time, because, just like the committee examples, there's no way you know that one person could have sat down and just figured out all the logistics for each of those

areas on their own. It was nice to feel like you had a team of people who were in the trenches of planning, with you. We leaned on each other a lot. There was trust.”

*Morgan Bay:* “We have this history of relying on each other and trusting each other to figure things out.”

### ***The Mental Well-being of Leaders Matter***

All nine participants described the period of COVID-19 crisis response as one that placed a significant toll on district and school leadership. This time was frequently characterized as a “rollercoaster of emotions,” beginning with the initial denial and shock that accompanied the sudden closure of all North Carolina schools. Leaders recounted the rapid transition from disbelief to an overwhelming sense of responsibility, particularly when serving on reopening committees tasked with making consequential decisions, some of which were met with skepticism or criticism from members of the broader community. The constantly evolving state regulations and shifting public health directives further compounded these pressures, as school-based protocols had to be revised repeatedly, often with little advance notice. In this environment, district leaders found themselves on the front lines, charged with the dual responsibility of maintaining operational stability while also bolstering the morale and well-being of their staff. Several participants noted the emotional labor inherent in projecting calm and confidence amid uncertainty, even as they personally navigated the stress and fatigue of sustained crisis leadership. Interviewees also reported working weekends and late evenings, returning to school facilities after hours to conduct contact tracing, and, in some cases, using personal funds to expedite the purchase of necessary supplies, such as spray paint and floor stickers, to ensure timely implementation of safety measures. The theme of leader mental well-being emerged 51 times in the interview data, underscoring its prominence as a critical

dimension of the district's crisis experience. Alex Current spoke of the overwhelming expectations during that time and the impact it had on the leaders of CCPS:

I think a lot was asked of leaders, and not necessarily by our district alone, but by the state and we were all put in this very difficult position. And some, I think, just chose not to face those challenges and the restrictions, because some chose not to open their buildings and keep kids at home (referring to other districts). . . I just remember at times feeling like I was drowning. So sometimes I felt like we were blindsided.

There were many opinions within the community and some questioned the screening, social distancing, and masking requirements. Morgan Bay spoke of that pressure to uphold the state guidelines while helping stakeholders understand that there were no other options:

Lots of emotions. At times we were also defensive. I think sometimes you had parents who may have questioned you or didn't agree with you or did not agree with the protocol you had to follow, did not agree with the mask wearing. I remember at the very beginning we had situations where the parents had come to the board meetings. And I was close to these parents, and they would come to a board meeting, and they were very vocal, with signs, and it was these same parents that would come and challenge you. I remember we came back and I remember a parent not willing to wear the mask and just walk through the temperature checkers, just busted through. I remember going down to the classroom and having to escort them out. Sometimes in this job, we have to do things that we might not always agree with and you know, I was very careful to be very kind but direct and share that, 'Hey, this might not be what we all feel, but this is what the guidance is from the state, and we must follow that guidance'. . . You just felt like you were on a tightrope, because you don't want to offend families, you don't want to upset them. So very

conscientious about the things that are shared in call outs, in conversations you know, helping to calm the fears of others. There was some fear of saying or doing the wrong thing, of being very cautious. And just having sympathy for those who you know were scared to come back. When it came time to come back, some of our teachers were very scared.

Leaders worried often and Gale Storme reflected that many placed their needs last while serving students, staff, and their families:

Being able to work through the staff members who had lots of questions, lots of unknowns, just worrying about some of the kids who maybe might not be in households that were able to support and help them through some of this. So having that weight was a bit overwhelming. Being able to self-check your own needs at the time, sometimes there's no time for that. You just had to push forward. . . It was very stressful.

Most school leaders are planner with goals related to culture and academics. Jordan Shore talked about the shift to day-to-day response that COVID-19 forced:

It was hard as a principal, because the whole three or five-year plan was completely thrown out the window. We were going day to day. There was no forward thinking allowed that whole first year because we were constantly battling outbreaks, the politics around it, and the medical direction from the state.

The public's perception weighed heavily on leaders, who as Marsh Landing said, "were just trying to keep schools open," further elaborating:

It felt like as an educator you were being pulled in a lot of different directions, and you were just trying to keep schools open. I wish the public had understood more that it wasn't personal. We were just trying to keep schools open. I didn't anticipate the politics

of that time. Because every other crisis I've faced as an educator, as a leader, has been rallying around and supporting one another no matter what, but this felt very divided at times because not everyone (referring to the public) agreed with those safety measures, and you just had to learn to navigate that. I had to call parents about quarantines and some were, 'Oh, you've drank the Kool Aid.' No, I did not drink the Kool Aid. I'm following the DHHS guidelines. So, I think a lot of times, we were put in positions to make decisions based on the guidance, and we took a lot of heat for that. I was a fairly new administrator; I didn't maybe understand that political implications and how that played into reactions from some stakeholders. It was a lot to take on.

### **Chapter Summary**

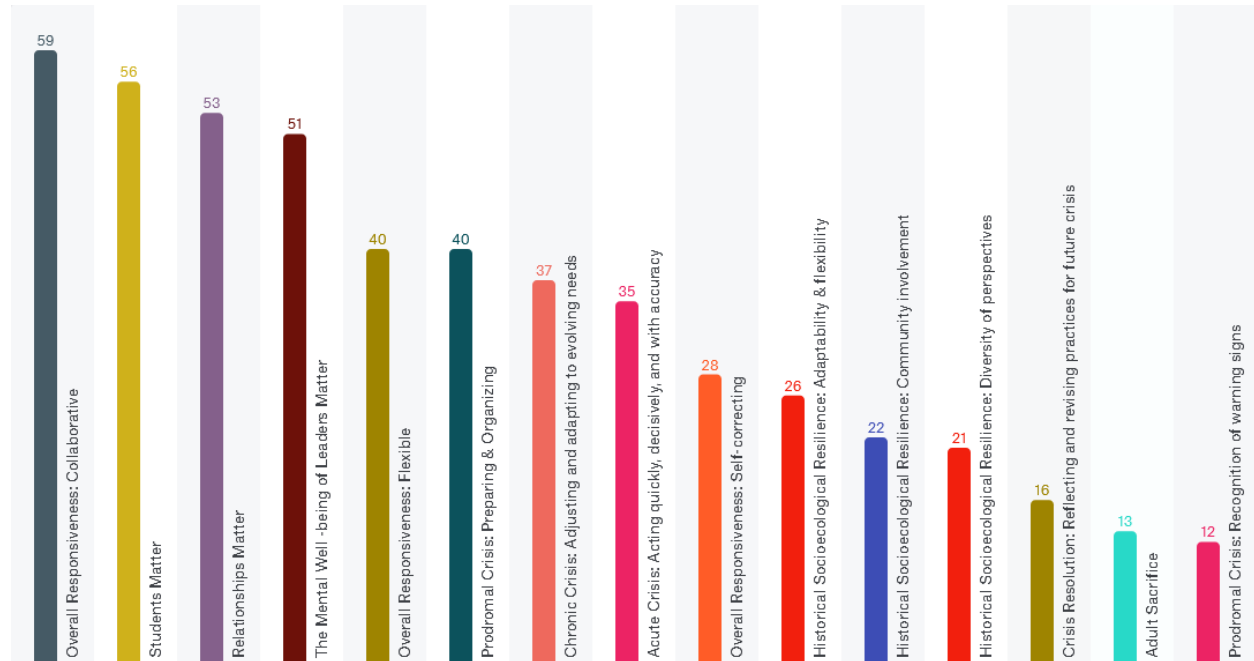
To conclude this chapter, it is important to acknowledge my position as a principal in Carteret County Public Schools during the COVID-19 school closures in the spring of 2020 and the subsequent reopening in August of the same year. My role on the district's reopening committees allowed me to witness and participate in the crisis response alongside the leaders interviewed for this study. However, in maintaining the integrity of the research, I intentionally excluded my own perspectives from the data analysis. All findings presented are grounded solely in the voices of the participants. The recruitment process emphasized that participation was voluntary and had no implications for employment or personal relationships, fostering an environment in which participants spoke candidly and honestly about their experiences. Their reflections provided rich, first-hand insights into each stage of the district's crisis response.

While the historical documents housed in the district's shared Google Drive did not provide the depth of documentation initially expected, they offered useful timelines, committee structures, and summaries of coordinated actions. These documents, when combined with the

narratives from interviews, contributed to a fuller understanding of the district’s strategic and operational response. My own journaling served as a critical tool during the analytic process, helping to guide the emergence of the three salient In Vivo themes. Figure 4.3 presents a visual representation of the 15 themes that emerged from both inductive and deductive coding. An enlarged version of this visual is provided in Appendix K for ease of review.

**Figure 4.3**

*The 15 Themes*



The use of a case study design proved appropriate for capturing nuanced perceptions and allowed for the triangulation of data across sources. As a result, this research has not only illuminated the lived experiences of Carteret County’s school leaders but has also deepened my understanding of the complexities of crisis leadership, particularly its enduring impact on those who were responsible for guiding schools through one of the most disruptive periods in modern education.

## Chapter 5: Summary, Implications, Conclusions

The purpose of this qualitative case study was to examine the crisis decision-making processes and as experienced by district and school-level leaders within Carteret County Public Schools (CCPS) during the COVID-19 pandemic. This research aimed to assess whether the leadership response exhibited during the pandemic reflected the knowledge, attitudes, and attributes commonly associated with effective crisis management. Grounded in the conceptual framework of *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, the study explored six interrelated components of crisis response: the prodromal crisis stage, acute crisis stage, chronic crisis stage, crisis resolution stage, historical socioecological resilience, and overall responsiveness.

To collect data, the study utilized strategic reopening documents maintained by the district in a Shared Google Drive. These documents were used to identify key district and school-level leaders who had been directly involved in facilitating the COVID-19 response in CCPS. These leaders were invited to participate in individual interviews guided by a semi-structured interview protocol (see Appendix E). The district documents also provided contextual information, including a timeline of decision-making, associated action steps, and committee structures and outcomes. Researcher journaling, conducted immediately following each interview, supported the development of emergent themes and informed subsequent In Vivo coding. Collectively, data from participant interviews, archival documents, and researcher reflections were triangulated to address each of the four research questions guiding this study.

1. How did the leaders in Carteret County Public Schools respond to the COVID-19 crisis during the summer of 2020 and throughout the 2020–2021 academic year?

2. What decision-making processes were employed by Carteret County Public Schools leaders in their response to the COVID-19 crisis during this time period?
3. How did the strategies utilized by Carteret County Public Schools leaders align with the conceptual framework Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness?
4. What lessons were learned by Carteret County Public Schools leaders as a result of their crisis response to the COVID-19 pandemic?

### **Summary of the Findings**

As presented in Chapter Four, the interview protocol questions were aligned with the research questions (Table 4.1). Responses from the interviews and researcher reflections were coded using a deductive coding and In Vivo coding scheme. The coding themes are shown in Tables 4.5 and 4.6 and the codebook (Appendix H) .

*Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness* was the conceptual framework used to define this case study. This framework consists of 6 non-linear components that interact with each other ensuring successful crisis response:

- Prodromal Crisis: recognition of warning signs; preparing & organizing
- Acute Crisis: acting quickly, decisively, and with accuracy
- Chronic Crisis: adjusting and adapting to evolving needs
- Crisis Resolution: reflecting and revising practices for future crisis
- Historical Socioecological Resilience: adaptability, flexibility, diversity of perspectives, community involvement
- Overall Responsiveness: flexible, collaborative, self-correcting

These interrelated elements function as a cyclical and iterative process for guiding effective crisis response in school systems. The prodromal stage, focused on recognizing early warning signs and engaging in structured preparation, establishes the foundation for all subsequent stages. This initial phase enables school leaders to anticipate potential disruptions, organize resources, and develop collaborative structures for decision-making. These preparatory efforts directly influence the acute crisis stage, during which leaders implement immediate actions, adjust strategies in real time, and balance competing priorities under conditions of uncertainty. The socioecological dimension reinforces this work by emphasizing the importance of leveraging relationships, networks, and community partnerships to ensure that responses are contextually appropriate and inclusive. As the crisis moves into the chronic phase and eventually toward resolution, the dynamic responsiveness element of the framework ensures that leaders continually adapt based on emerging information, stakeholder feedback, and shifting circumstances. Lessons learned from each stage inform recovery planning and contribute to long-term resilience building, thereby creating a feedback loop in which prior experiences strengthen future preparedness. In this way, the framework's components operate not as isolated steps, but as interconnected processes in which the effectiveness of each stage is dependent upon the strength of the preceding phases and the capacity to integrate learning into ongoing practice (Berkes & Folke, 1998; Liou, 2014; Walker et al., 2004).

This study investigated the perceptions of a COVID-19 crisis response within a rural, coastal school district in North Carolina. While the district serves an overall economically disadvantaged population of 36.9%, with some schools reaching as high as 55%, it is consistently ranked among the top ten districts in the state based on state and federal performance measures. The community is characterized by strong social cohesion and a

longstanding history of coordinated, district-wide crisis responses, shaped in part by its geographic vulnerability to hurricanes and flooding. The leaders who participated in the study possessed between 21 and 37 years of experience in education, representing all three grade-level spans, elementary, middle, and high school, and across the district’s eastern, central, and western regions, as well as positions at the district level. To maintain anonymity, additional demographic details are withheld; however, it is notable that the participant group was balanced by gender, and all seven strategic reopening committees were represented. This combination of professional experience, geographic representation, and leadership perspectives provided a breadth and depth of insight that enriched the case study and contributed to a nuanced understanding of the district’s crisis response.

### **Research Question 1**

Research Question One asked “*How did the leaders in Carteret County Public Schools respond to the COVID-19 crisis during the summer of 2020 and throughout the 2020–2021 academic year?*” and examined how educational leaders within Carteret County Public Schools (CCPS), including the superintendent, members of the leadership cabinet, district-level directors, and school-based administrators, responded to guidance and directives issued by the State of North Carolina during the COVID-19 pandemic. The study focused on individuals who were directors, principals, or assistant principals and served on a crisis committee between May 2020 and the reopening of schools for the 2020-2021 academic year. During this period, the researcher, serving as the Director of Student Behavior Support and Alternative Intervention, participated in facilitating one of the district’s strategic reopening committees.

## **Organizing Strategic Re-Opening Committees for the Purpose of Planning: Prodromal Stage**

Findings indicate that Carteret County Public Schools (CCPS) leaders were initially unprepared for the Governor's March 2020 Executive Order mandating a two-week statewide school closure. Although leaders were aware of the global spread of COVID-19, along with associated travel restrictions and rising hospitalizations, many did not anticipate such an immediate local impact, particularly since Carteret County had no confirmed cases at that time. The subsequent extension of the closure through the end of the academic year heightened both uncertainty and urgency. Leaders expressed concern not only for maintaining academic continuity but also for addressing students' socioemotional well-being and access to essential resources.

The closing months of the 2019 - 2020 school year were characterized by a reactive, survival-oriented approach as school leaders attempted to meet unprecedented logistical challenges. These included transitioning instruction to digital platforms, providing paper-based instructional materials for students without reliable internet access, retrieving student belongings left at schools, and finalizing grades under rapidly changing conditions. As one principal recalled:

Back in the spring when we learned schools were closed for the rest of the year, I remember that being a scramble. Getting kids what they needed: making sure they've got their Chromebooks and returning their stuff to them that they had left at school because we were only supposed to be closed for two weeks.

During the summer of 2020, CCPS shifted from reactive crisis management to a more deliberate planning process, developing a comprehensive Strategic Re-entry Plan for the 2020-

2021 academic year. This work was guided by state-level directives, including the North Carolina Department of Health and Human Services' *StrongSchoolsNC Public Health Toolkit* and the North Carolina Department of Public Instruction's *Lighting Our Way Forward* framework. These documents provided statewide operational, instructional, and public health guidance that local education agencies were required to incorporate when determining reopening strategies.

Operating under a condensed timeline, the district established seven specialized reopening subcommittees, each tasked with addressing a distinct component of the plan. The committees were intentionally composed of diverse stakeholders chosen for their expertise, professional experience, and representation across elementary, middle, and high school levels. In some cases, membership extended beyond district personnel to include community representatives and external partners whose perspectives were essential to the planning process. Each committee consisted of approximately eight to ten members and met multiple times over a two-week period in July 2020. This structure fostered cross-level representation, integration of community resources, and the development of operational protocols that were both comprehensive and contextually grounded. As emphasized in national guidance, when “leaders rely on staff expertise, staff collaboration, and school-family relationships,” the safety and well-being of students and educators are strengthened (Hashim et al., 2024, p. 1). One committee member reflected on the intentionality of this approach stating, “The people on the committee, you could tell, were strategically placed for their strengths. It was to divide the massive amount of work that was going to be an undertaking for opening schools.”

The district's planning schedule was ambitious, with a goal of finalizing a draft plan by July 16, 2020, allowing time for review and revision prior to the required submission to the

North Carolina Department of Public Instruction later in July. Each subcommittee met at least three times during this period, working intensively on their assigned thematic areas as defined by the state's guidance documents. This structured yet expedited approach demonstrated the district's commitment to aligning with state requirements while also responding collaboratively and adaptively to the rapidly evolving public health crisis. The seven reopening subcommittees were:

1. Student/Staff Health & Well-Being
2. Instructional Delivery & Curriculum
3. Athletics & Extracurricular Activities
4. Transportation
5. Facility Maintenance
6. Child Nutrition
7. Communications & Stakeholder Engagement

The establishment of the seven reopening committees marked a critical shift from reactive management to intentional, distributed leadership. By organizing decision-making around thematic subcommittees and drawing on the expertise of both internal and external stakeholders, CCPS leaders created a collaborative structure capable of addressing the complex challenges of reopening schools during a global pandemic. This approach aligns with research emphasizing that distributed leadership decentralizes authority, leverages diverse expertise, and builds organizational resilience, particularly in contexts of uncertainty and disruption (Harris, 2020; Spillane, 2006). Committee members were not only positioned according to their professional strengths but also entrusted with meaningful responsibility, which reinforced a sense of ownership and collective accountability for the district's reopening plan.

Committee-based leadership has been recognized as especially valuable in times of crisis, when no single leader can manage the breadth and pace of demands. Collaborative decision-making processes enable schools to respond flexibly while maintaining transparency and stakeholder trust, both of which are essential for sustaining confidence during high-stakes moments (Gronn, 2009; Leithwood et al., 2020). CCPS's reliance on distributed structures exemplified these principles in practice. The work of the reopening committees mobilized collective expertise, reduced ambiguity, and produced contextually grounded solutions that balanced compliance with state directives and responsiveness to local needs. This theme underscores how distributed leadership, operationalized through committee structures, can serve as an engine of resilience; allowing schools not only to withstand disruption but also to emerge stronger in their organizational learning and community trust.

### **Choosing a Hybrid Instructional Model – Prodromal Stage**

Following the intensive two-week planning period, district committees engaged in virtual review sessions to refine their recommendations, presented finalized plans to the Carteret County Board of Education, and submitted the reopening plan to the North Carolina Department of Public Instruction. Participants consistently described the significant responsibility and, at times, overwhelming pressure associated with making high-stakes decisions under conditions of uncertainty.

One consistent theme across interviews was that a fully virtual instructional model for the 2020-2021 academic year was never seriously considered. District leaders strongly believed that resuming face-to-face instruction, when permissible, was essential to supporting students' academic, social, and emotional needs. While definitive local health data were unavailable at the time, leaders relied on observations from the spring 2020 closures, noting evidence of academic

regression, emotional distress, and insufficient support in some home environments. As a result, the district adopted a hybrid instructional model, believing that, with safety measures such as physical distancing and enhanced sanitization, the benefits of in-person learning outweighed the potential risks.

*Jordan Shore:* “I think our school system was very progressive in trying to get our kids back in school because we realized the value of it. I think our community wanted our kids to go to school and we knew we could find a way to make that happen.”

This decision was further reinforced by a foundation of community trust, built through prior collaborative responses to crises such as hurricanes. Families had long relied on schools not only for instruction but also for essential services, including meals, clothing, and a sense of stability. The inclusive and distributed planning process helped reduce ambiguity, share responsibility, and increase leader confidence in executing the hybrid instructional plan. The district’s progression from reactive crisis management to adaptive, shared leadership reflected its growing organizational capacity, anchored in contextual awareness, community relationships, and a sustained commitment to student-centered priorities.

Once the strategic plan was finalized with a hybrid instructional model as its basis, CCPS transitioned to implementation and communication for reopening under North Carolina’s Plan B/hybrid framework. Students were divided into two cohorts to reduce building occupancy and maintain physical distancing: Cohort A attended on Mondays and Tuesdays, while Cohort B attended on Thursdays and Fridays. Approximately 30% of students (Cohort C) opted for full-time virtual instruction, reflecting the district’s commitment to family choice and differentiated learning environments (EducationNC, 2020b). Wednesdays were designated for remote learning

across all cohorts, while schools conducted deep cleaning and sanitization procedures (EducationNC, 2020a).

Following the commencement of the 2020-2021 school year, the seven district-level reopening committees were formally disbanded, and decision-making authority transitioned to a centralized administrative structure. The district implemented weekly virtual meetings via Zoom that included all school principals, district directors, and members of the superintendent's executive leadership team. These meetings provided a platform for continuous review and adjustment of reopening protocols initially developed by the committees. Operational refinements, including instructional delivery formats, health screening procedures, and social distancing measures, were made as conditions evolved and new state guidance became available.

On occasion, external stakeholders were invited to participate in these administrative meetings to contribute specialized expertise. Over time, as the immediacy of decision-making diminished, the frequency of these meetings decreased and they were convened as needed, particularly in response to new state directives. For example, when Governor Roy Cooper announced that districts could transition kindergarten through fifth-grade students to Plan A as early as October 5, 2020, CCPS convened administrators via Zoom to deliberate on the option. The district subsequently secured BOE approval and became one of the first in North Carolina to return K-5 students to full-time in-person instruction, albeit with continued adherence to basic health protocols such as symptom screening, mask-wearing, and hygiene practices (Martin, 2020).

The decision to adopt and implement a hybrid instructional model illustrates how adaptive leadership and collaborative structures enabled CCPS to balance competing priorities in the midst of crisis. Leaders recognized that educational continuity, social-emotional needs, and

family stability could not be met through virtual instruction alone, and they leveraged both distributed planning and centralized oversight to ensure responsiveness as conditions evolved. Research on crisis leadership in education emphasizes that adaptability, shared responsibility, and community trust are critical for sustaining organizational effectiveness during disruption (Harris & Jones, 2020; Netolicky, 2020). By drawing on past experiences with natural disasters, the district was able to ground its decisions in existing relational capital, demonstrating how trust-based leadership and transparent communication strengthen organizational resilience (Bryk & Schneider, 2002; Spillane, 2006). CCPS's hybrid reopening strategy reflects this interplay between structure and flexibility: the district harnessed distributed expertise through its committees, maintained stakeholder confidence through open communication, and adapted quickly to policy changes by shifting to centralized decision-making when appropriate. This theme underscores the importance of responsive, trust-based leadership in enabling districts to navigate uncertainty while preserving student-centered priorities.

### **Doing Whatever Was Needed to Execute District Plans - Responsiveness**

Participants reported that the demands of school leadership during the COVID-19 pandemic far exceeded the already intensive nature of their roles. While long work hours, evening commitments, and weekend responsibilities are not uncommon in educational administration, the onset of school closures in spring 2020 and the subsequent reopening process for the 2020-2021 academic year required an unprecedented shift in focus. Leaders assumed expanded managerial and logistical responsibilities, including redesigning campus layouts for social distancing, establishing contact tracing procedures, coordinating with teachers to adapt instructional spaces, and maintaining continuous communication with families and stakeholders.

Meeting these demands required rapid adaptation, sustained problem-solving, and extraordinary personal investment of time and resources.

Administrators described the extraordinary measures they undertook to ensure safe and effective hybrid learning environments. Workdays frequently extended late into the evening and across weekends as leaders navigated shifting state guidance, oversaw operational logistics, and supported staff and families. Several reported using personal funds to address immediate needs, such as purchasing spray paint to mark outdoor spaces or ordering hallway signage to guide student traffic flow. These actions demonstrated both ingenuity and an unwavering commitment to maintaining operations while safeguarding student well-being.

Leaders expressed particular concern for students who relied on schools for meals, stability, and access to learning resources. In many cases, administrators personally delivered supplies, assisted families in setting up district-provided hotspots and devices, or conducted home visits to ensure students remained connected to instruction. The urgency of these efforts was evident in participants' descriptions of "doing whatever it took" and "sacrificing time with my family," underscoring both the intensity of their dedication and the personal toll of their work. Despite the strain, administrators emphasized that these sacrifices were justified by the outcome: the safe reopening of schools and the continued support provided to students during a time of significant disruption.

Amid these challenges, a strong sense of professional solidarity emerged. Administrators drew strength from one another, finding encouragement in a collective understanding of the sacrifices required and the importance of their shared mission. This spirit of camaraderie proved to be a critical source of resilience, reinforcing both individual morale and the district's overall capacity to respond effectively to the crisis. As one administrator reflected:

It was a time of a lot of sacrifice. Late nights, weekends, early mornings and being exhausted. I had friends dropping off dinner for me and my husband who called often to check on me. We just did what was needed for the students. We were determined to make it work and personal cost was not really considered.

The experiences of Carteret County administrators during the pandemic highlight both the extraordinary burdens and the resilience that school leaders demonstrated under crisis conditions. Research suggests that crises often expand the scope of educational leadership, requiring administrators to assume new logistical, managerial, and emotional responsibilities while sustaining continuity of operations (Netolicky, 2020; Pollock, 2020). The accounts of leaders working late nights, drawing on personal resources, and supporting families beyond traditional school boundaries reflect a form of servant leadership deeply rooted in student-centered priorities (Greenleaf, 2002; Harris & Jones, 2020). At the same time, the emergence of professional solidarity, captured in administrators' reliance on one another for encouragement and shared purpose, echoes findings that collegial networks and collective efficacy are critical sources of resilience during times of disruption (Day & Gu, 2014; Hargreaves & Fullan, 2020). Together, these findings underscore that while the personal costs of leadership during COVID-19 were considerable, the combination of adaptive problem-solving, relational trust, and collective commitment enabled school leaders to safeguard student well-being and sustain the district's capacity to respond effectively

### **Research Question 1 Summary**

The leadership response of Carteret County Public Schools (CCPS) during the COVID-19 pandemic reflected a coordinated approach rooted in shared decision-making and a focus on maintaining student-centered outcomes. In the summer of 2020, district leaders established seven

strategic reopening committees to plan for the upcoming year. These committees, composed of school and district administrators along with select community stakeholders, represented all grade spans and areas of expertise. Operating intensively over a three-week period, they translated evolving state directives into context-specific reopening protocols. This distributed leadership structure ensured an equitable division of responsibilities, fostered cross-level collaboration, and created a collective sense of ownership for the reopening strategy. Consistent with research on distributed leadership, CCPS's committee-based approach mobilized diverse expertise, reduced ambiguity, and reinforced stakeholder confidence in the district's reopening plan (Harris, 2020; Spillane, 2006).

The district also made a deliberate choice to adopt a hybrid instructional model that balanced in-person and virtual learning. Interview data revealed that a fully virtual approach for the 2020-2021 academic year was never seriously considered; rather, there was broad agreement that a hybrid cohort system was essential to supporting students' academic, emotional, and social needs. This decision reflected both a philosophical commitment to in-person learning and a pragmatic understanding of health and safety constraints. Moreover, the decision was reinforced by a foundation of community trust, built through previous collaborative responses to crises such as hurricanes. By drawing on this relational capital, CCPS leaders strengthened transparency and preserved stakeholder confidence, demonstrating how trust-based, adaptive leadership contributes to organizational resilience during times of disruption (Bryk & Schneider, 2002; Harris & Jones, 2020).

Finally, executing the district's plans required a rapid shift in the professional focus of school leaders toward operational logistics, public health protocols, and consistent stakeholder communication. Administrators navigated intensified responsibilities and personal sacrifices,

with many long hours reported, expanded managerial duties, and even personal expenditures to meet immediate needs. Leaders also expressed concern for vulnerable students, going so far as to deliver supplies and ensure access to remote learning. Despite the strain, a strong sense of professional solidarity emerged, with administrators drawing strength from one another and reinforcing the district's collective capacity to respond effectively. Their actions demonstrated resilience and adaptability, underscoring how intentional leadership structures can sustain educational continuity and strengthen community trust during crisis conditions. While the absence of early local COVID-19 cases initially delayed full-scale preparedness, once the statewide closure occurred, CCPS transitioned quickly into reactive crisis management (Darling, 1994; Fink, 1986; Liou, 2014). The district's experience suggests that earlier strategic preparation might have mitigated some of the abrupt disruptions of March 2020, but the adaptability, collaboration, and professional commitment of its leaders ultimately enabled a safe and student-centered reopening.

## **Research Question 2**

The second research question asked “*What decision-making processes were employed by Carteret County Public Schools leaders in their response to the COVID-19 crisis during this time period?*” An analysis of the Carteret County Public Schools' Strategic Reopening documents, accessed via the district's shared Google Drive repository, revealed a deliberate and systematic approach to preparing for the reopening of schools for the 2020-2021 academic year. These documents reflected a coordinated planning effort that served as a foundational framework for the implementation of a hybrid learning model. This structured planning process enabled the district to effectively reopen their schools for students on August 17, 2020, with a clear,

organized blueprint that guided operational decision-making and ensured alignment with state guidance.

### **Organized Crisis Response with Clear Short-term Goals – Prodromal Stage**

In June 2020, the newly appointed superintendent of Carteret County Public Schools, in collaboration with the district leadership team, conducted a comprehensive review of state-issued planning documents, including *Lighting Our Way Forward: North Carolina’s Guidebook for Reopening Public Schools* and the *StrongSchoolsNC Public Health Toolkit*. Utilizing the guidance provided in these documents, district leadership identified critical areas of operational focus necessary for a safe and effective reopening. In response, seven thematic reopening committees were formed, each composed of school-based administrators (principals and assistant principals), district-level leaders, and, in some cases, community representatives. The seven committees were:

1. Student/Staff Health & Well-Being
2. Instructional Delivery & Curriculum
3. Athletics & Extracurricular Activities
4. Transportation
5. Facility Maintenance
6. Child Nutrition
7. Communications & Stakeholder Engagement

According to one participant, the superintendent’s decision to divide the district’s reopening efforts across seven committees was both strategic and effective:

He (the superintendent) knew to divide us up into seven committees and really play in on our strengths, trusting what we could bring to the table. It was to divide the massive amount of work that was going to be an undertaking for opening schools.

From the convening of these committees through the official reopening of schools in mid-August 2020, the district followed a clearly defined series of action steps.

1. A virtual orientation meeting was held on July 1, 2020, during which committee members received an overview of expectations, essential planning materials, intended deliverables, and a structured timeline to guide their work.
2. Over the following two weeks, each committee met regularly to develop a comprehensive set of action items. These were compiled into draft proposals for internal review. As one leader recalled, the committees worked not only to address logistics but also to manage communication strategically in a rapidly changing environment:

What we knew was information would be coming fast and furious from the state and federal governments. It was constantly changing, and we asked ourselves how could we as a district communicate what we needed concisely, calmly, and timely, but also create a sense of hope and safety for our stakeholders? We wanted to be very strategic in that.

3. On July 13, a district-level virtual meeting was convened, providing committee representatives an opportunity to present their proposals, receive cross-committee feedback, and refine their recommendations collaboratively.
4. On July 22, committee facilitators formally presented finalized proposals to the Carteret County Board of Education (BOE) during an open session. Board members

engaged in dialogue, asked clarifying questions, and ultimately approved the district's comprehensive reopening plan.

5. The approved plan was submitted to the North Carolina Department of Public Instruction in late July, meeting the required state deadline.
6. By early August, the district shifted into the implementation phase, procuring necessary materials such as hand sanitizer stations, personal protective equipment, and digital thermometers. Building-level leaders coordinated with staff to prepare classrooms and common areas for compliance with health protocols. As one administrator observed, the logistical demands of reopening fundamentally altered what a "normal" school opening looked like:

I do remember feeling like, heading into that school year, a lot of my time was spent on logistics because we could not truly open a school traditionally like how we had in previous years. Instruction and class assignments looked different because there had to be an A day and a B day (hybrid cohort model). So, I remember thinking, this is so different than any other opening before.

With the official start of the 2020-2021 academic year on August 17, operational oversight transitioned from the committee-based planning structure to the district-level leadership team. Weekly virtual administrative meetings, convened by the superintendent and supported by the central office leadership cabinet, became the primary forum for monitoring implementation, reviewing ongoing procedures, and addressing new challenges. These meetings also ensured alignment with evolving guidance from the North Carolina Department of Health and Human Services and the Department of Public Instruction. Over time, as operational systems stabilized, the frequency of these meetings decreased, and they were convened only as needed in

response to new state directives or emerging district-level concerns. One participant summarized this transition succinctly, “Those committees did the initial heavy lifting and when school started Central Services took over.”

### **Research Question 2 Summary**

The reopening efforts of Carteret County Public Schools (CCPS) exemplify a phased, distributed leadership approach to crisis planning that balanced immediate demands with long-term continuity. Guided by state-issued documents such as *Lighting Our Way Forward* and the *StrongSchoolsNC Public Health Toolkit*, district leaders organized seven specialized committees to divide responsibilities across health, instruction, operations, and communication. This structure mobilized cross-functional expertise, ensured alignment with state mandates, and created a collaborative process that balanced logistics with strategic communication. A defining feature of this work was the articulation of clear short-term goals, such as drafting proposals within two weeks and submitting the reopening plan by late July, which provided accountability and direction amid rapidly changing conditions. As participants recalled, information was “fast and furious,” requiring leaders to remain calm, clear, and hopeful while advancing toward these benchmarks. Once the Board of Education approved the plan and it was submitted to the state, responsibility shifted from the committees to the district’s central leadership team, which used weekly virtual meetings to coordinate implementation, monitor procedures, and adjust to evolving guidance. While the formal committees disbanded following reopening, their efforts established the foundation for ongoing collaboration between central office and building leaders, reflecting research on distributed and adaptive leadership that emphasizes decentralization, short-term benchmarks, and centralized oversight as essential features of effective crisis response (Gronn, 2009; Harris, 2020; Spillane, 2006).

### Research Question 3

Research Question Three asked “How did the strategies utilized by Carteret County Public Schools leaders align with the conceptual framework Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness?” In analyzing the responses of the participants, it became clear that the Carteret County Public School System’s crisis response aligned with the conceptual framework, *Adaptive Crisis Resilience: Integrating Sociological Resilience and Dynamic Responsiveness*. Table 5.1 provides the deductive codes that align with this framework and the corresponding evidence found in the responses from the interviewees is provided in the analysis presented in this next section.

**Table 5.1**

*Deductive Codes*

<b>Theoretical Components</b>	<b>Descriptive Words</b>
Prodromal Crisis	Recognition of warning signs Preparing & organizing
Acute Crisis	Acting quickly, decisively, and with accuracy
Chronic Crisis:	Adjusting and adapting to evolving needs
Crisis Resolution	Reflecting and revising practices for future crisis
Historical Socioecological Resilience	Adaptability Flexibility Diversity of perspectives Community involvement
Overall Responsiveness	Flexible Collaborative Self-correcting

## **Theme: Prodromal Crisis**

### ***Prodromal Crisis – Recognition of Warning Signs***

The initial closure of schools in March 2020 came as an unexpected development for participants in this study. At the time the statewide mandate was issued, there were no confirmed cases of COVID-19 within Carteret County Public Schools, nor had any cases been publicly reported in the broader county community. While some early indicators were present, such as informal discussions at school events, including athletic competitions and carpool lines, and inquiries from concerned parents regarding national and international developments, these signals did not lead participants to anticipate an imminent closure. Most school leaders interviewed reported being unaware of the impending Executive Order issued by the Governor on March 14, 2020, and described the decision as abrupt and surprising, particularly given the county's relatively low exposure to the virus at that time. This theme was identified 10 times in the narratives of the interviewees and is evident in the reflections of Marsh Landing:

So interestingly enough, I had this parent that reached out to me a lot. I remember it being March and a Friday. We're in the car rider line. She's like, 'do you think schools are going to close down for COVID?' I'm like, 'no way', but I was not sure and so much that I didn't really know. . . We didn't have any cases of COVID in Carteret County.

Within the conceptual framework of *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, this period corresponds to the prodromal stage, the critical window in which early warning signs of an impending crisis are recognized and initial preparations are undertaken. For Carteret County Public Schools, this stage was marked by early discussions regarding the possibility of state-mandated school closures, assessment of anticipated student and staff needs, and review of state and national

guidance for the coming academic year. Although the absence of local cases contributed to a sense of geographical detachment from the pandemic, district and school leaders began to organize resources, review state-issued toolkits, and evaluate potential instructional delivery models. The establishment of reopening committees and the initiation of strategic planning during this phase demonstrated the district's efforts to prepare despite significant uncertainty, laying the groundwork for adaptive capacity and positioning school leaders to respond more effectively as the crisis escalated.

### ***Prodromal Crisis – Preparing and Organizing***

In response to the statewide directive that schools would remain closed through the conclusion of the 2019-2020 academic year, and in conjunction with the appointment of a newly selected superintendent, Carteret County Public Schools shifted its organizational focus toward strategic preparation for the 2020-2021 school year. Under the leadership of the superintendent, the district established seven strategic reopening committees. These committees were tasked with the development of comprehensive and actionable operational plans aimed at facilitating a safe, efficient, and contextually responsive reopening of schools amid the evolving challenges presented by the COVID-19 pandemic. The initiative reflected a proactive approach to crisis management, emphasizing collaboration, adaptability, and alignment with public health guidance. This theme was identified 30 times in the narratives of the interviewees including the following:

That summer the committee work gave us time to really address what this was going to look like next year. . . I remember that the *Strong Schools Toolkit* left a lot to be desired as far as it being this document that gave specific guidance. Everything was so broad that you were just kind of back to deciding what you were going to do back in the schools

given some of the broad guidelines for things like instruction. So, at the end of the day, it just came down to the school system making plans.

In the early stages of the COVID-19 pandemic, prior to the full reopening of schools, leaders within Carteret County Public Schools engaged in comprehensive and anticipatory crisis planning that reflected the characteristics of a prodromal phase, a critical window during which an organization prepares for the onset of a crisis. Participants described deliberate efforts to proactively organize systems and resources in anticipation of a highly uncertain and evolving public health context. These preparations included the formation of strategic reopening committees composed of individuals representing varied grade spans and professional expertise, allowing for informed decision-making and diverse stakeholder input. District leaders emphasized the logistical complexity of planning for multiple contingencies, such as contact tracing protocols, quarantine procedures, and learning management systems. Additionally, attention was given to ensuring equitable access to instruction and basic needs, including the distribution of devices, hotspots, and meals to students across the county.

Interviewees noted that the committees served not only as a mechanism for practical planning, but also as a forum for shared governance, emotional support, and professional collaboration. Engagement with community partners, including health professionals, law enforcement, and local government, further informed the district's operational plans and promoted continuity across systems. Despite state-issued guidelines being at times vague or inconsistent, district leaders interpreted, adapted, and contextualized the mandates into actionable, school-level procedures. The commitment to collective problem-solving, transparent communication, and adaptability enabled Carteret County Public Schools to construct a

responsive and sustainable reopening framework, laying the groundwork for the hybrid instructional model implemented in the 2020-2021 academic year.

### ***Prodromal Stage Summary***

The prodromal stage of Carteret County Public Schools' (CCPS) COVID-19 response was marked by both delayed recognition of immediate risks and proactive preparation for an uncertain future. While early community inquiries signaled potential disruption, most administrators did not anticipate the abrupt statewide closure in March 2020, citing the absence of local cases and a sense of geographical detachment. However, once closures were extended through the end of the academic year and a new superintendent was appointed, the district shifted its organizational focus toward deliberate preparation for reopening. Leaders established seven strategic committees to develop actionable operational plans, addressing health protocols, instructional delivery, and stakeholder communication. These committees facilitated cross-level collaboration, engaged community partners, and enabled the district to translate vague state-issued guidance into contextually relevant procedures. Preparations included planning for contact tracing and quarantine procedures, ensuring equitable access through device and hotspot distribution, and safeguarding student nutrition services. Beyond logistics, the committees also served as forums for shared governance, professional collaboration, and emotional support, reinforcing the collective capacity of school leaders to navigate uncertainty. In line with the prodromal stage of crisis response described in Fink's (1986) Crisis Life Cycle and Liou's (2014) model of dynamic responsiveness, CCPS demonstrated how early recognition, organization, and strategic planning, even in the context of incomplete information, can build adaptive capacity and lay the foundation for resilient crisis leadership.

## **Theme: Acute Crisis – Acting Quickly, Decisively, and with Accuracy**

During the acute phase of the COVID-19 crisis, Carteret County Public Schools demonstrated the capacity to move from the plans that had been made in the prodromal stage to the implementation of these plans at the school level. This stage required leaders to act swiftly, decisively, and with a high degree of organizational coordination so that students could be welcomed back to school for the August 2020 reopening. Interview data revealed that district and school leaders prioritized timely execution of their strategic reopening plans, recognizing that urgency and clarity were essential to ensuring a safe and functional start to the 2020-2021 academic year. This theme was identified 35 times in the narratives of the interviewees, including the statement from Marsh Landing:

Time is of the essence, right? We didn't have a lot of time to drag our feet on this. . . We had to open schools back up in a strategic and calm manner. . . I think our district did a great job of immediately working through some technology needs. We could get the hot spots delivered to the school to get to families.

The interviewees described immediate responses to evolving logistical and health-related challenges, such as establishing quarantine protocols within limited physical space, managing the distribution of technology resources including Wi-Fi hotspots, and adapting communication strategies to engage with families across differing perspectives. Participants noted that the clarity and specificity of the plans developed by the strategic committees, combined with the consistent guidance provided by district-level leaders and support staff, facilitated confident decision-making under pressure. The presence of pre-established protocols and accessible district-level expertise, particularly in areas such as contact tracing, COVID leave, and stakeholder communication, enabled school leaders to focus on implementation rather than improvisation.

This capacity for decisive and accurate action underscored the effectiveness of the district's preparedness efforts during the prodromal stage and contributed to a more stable and responsive crisis management process during one of the most volatile periods in public education.

### ***Acute Stage Summary***

During the acute phase of the COVID-19 crisis, Carteret County Public Schools (CCPS) shifted from planning to rapid implementation, requiring leaders to act with urgency, clarity, and precision. Administrators focused on executing reopening protocols, addressing technology distribution, and adapting health and safety measures under significant time constraints. The clarity of the district's pre-established plans and consistent district-level support enabled school leaders to concentrate on implementation rather than improvisation. This capacity for swift and coordinated action highlighted the district's organizational resilience and the effectiveness of its prodromal-stage preparations (Fink, 1986; Harris, 2020; Liou, 2014).

### **Theme: Chronic Crisis - Adjusting and Adapting to Evolving Needs**

As the initial emergency response transitioned into a prolonged period of uncertainty, Carteret County Public Schools entered a chronic phase of crisis management characterized by continuous adaptation and operational flexibility. While early prodromal planning and acute response efforts provided a foundational structure, interviewees consistently emphasized the need for ongoing adjustments as realities shifted across the 2020-2021 academic year. School leaders described a recursive cycle of implementation, evaluation, and revision, wherein protocols originally developed by reopening committees were modified in real time at the district level based on feedback, emerging needs, and updated public health guidance. This theme was identified 37 times in the narratives of the interviewees. Marsh Landing spoke of the review process which led to change, stating, "I think there was a constant process throughout the whole

time. We certainly went back, time and time again and adjusted.” Similarly, Shelly Banks reflected on the mindset of the leaders regarding the continual changes, saying, “A willingness to reinvent was always on the table.”

This stage demanded sustained responsiveness to evolving state mandates, fluctuating infection rates, and disparities in student access to resources. Leaders highlighted the importance of continuous communication, internally through administrative check-ins and externally via multi-modal outreach to families. The overlapping influence of earlier crisis phases remained evident, as the structures and relationships formed during the prodromal and acute stages served as essential scaffolds for the continuous refinement and situational adaptation required throughout the chronic phase. Ultimately, this period was marked by a spirit of flexibility, collaboration, and student-centered decision-making, which enabled the district to remain operationally agile despite persistent challenges.

### ***Chronic Stage Summary***

During the chronic phase of the COVID-19 crisis, Carteret County Public Schools (CCPS) shifted from short-term emergency response to sustained adaptation, requiring leaders to continually adjust protocols and practices as new challenges emerged. Administrators described an ongoing cycle of implementation, evaluation, and revision, with district-level leaders modifying committee-developed plans in real time based on feedback, shifting public health guidance, and student needs. This period demanded flexibility, collaboration, and clear communication across multiple levels of the system to address fluctuating infection rates, inequities in student access, and changing state mandates. The ability to “reinvent” and refine practices throughout the 2020-2021 academic year reflected the district’s organizational resilience and aligned with the chronic stage of crisis management, where sustained

responsiveness and adaptive problem-solving are essential to maintaining continuity (Fink, 1986; Harris, 2020; Liou, 2014).

### **Theme: Crisis Resolution – Reflecting and Revising Practices for Future Crisis**

In the aftermath of the acute and chronic phases of the COVID-19 crisis, participants reflected on their individual growth and the lessons learned through navigating unprecedented challenges. Several interviewees emphasized personal takeaways such as increased resilience, enhanced adaptability, and the value of drawing from lived experiences to inform future decision-making. These reflections are captured in the themes detailed under research question four and underscore the potential for organizational learning following a prolonged crisis. However, while participants articulated clear examples of individual learning and personal professional development, there was a notable absence of references to a formalized, district-wide effort to consolidate these insights. This theme was identified 37 times in the narratives of the interviewees. Shelly Banks captured the essence of the resilience in CCPS saying, “I think that we've all learned that we are much, much more resilient than we ever thought. We can draw from those experiences. Reflect on what worked, what didn't work. And use that in making decisions moving forward.” Noted by Morgan Bay was the lack of formal reflection and review from the district:

The central office team has done a good job of debriefing after crisis that have happened in schools. They have made other leaders aware of what has happened, what the response looked like, and the school principal has often shared what they learned from it. We have plans where we might need your counselors and other available staff that can come and help assist. As a county we really do like a triage in a lot of ways with our situations. I am not sure why it didn't happen here.

Interviewees noted that there were no structured reflective mechanisms employed by the district, such as surveys, debriefing sessions, or feedback systems, intended to gather or institutionalize the knowledge gained by school and district leaders. Although some participants noted that the central office team often debriefs specific school level crises and communicates lessons learned from these isolated incidents, there appeared to be limited systemic reflection at the district level focused on the COVID-19 response. The lack of a comprehensive post-crisis evaluation process represents a missed opportunity to leverage the collective experiences of leaders in preparation for future crises, particularly in developing adaptive policies and refining emergency response protocols.

### ***Resolution Stage Summary***

During the crisis resolution stage, Carteret County Public Schools (CCPS) leaders reflected on the resilience and adaptability gained through navigating the COVID-19 pandemic, emphasizing the importance of drawing from lived experiences to inform future decision-making. Participants highlighted personal and professional growth, noting that the challenges of the 2020-2021 academic year revealed their capacity to adapt under pressure and reinforced the value of reflective practice. However, interview data also revealed a gap between individual learning and collective organizational reflection. Unlike smaller-scale crises, where the district routinely conducted debriefs and shared lessons across schools, there was no formal, district-wide effort to evaluate or institutionalize the insights gained from its pandemic response. This absence of systemic reflection limited opportunities for organizational learning, a crucial step in the crisis resolution stage that strengthens preparedness for future disruptions. As crisis leadership literature emphasizes, formalized post-crisis evaluation processes, such as structured

debriefings, surveys, or policy reviews are vital for transforming lived experiences into adaptive strategies that build long-term resilience (Boin & Lodge, 2016; Fink, 1986; Liou, 2014).

### **Theme: A History of Sociological Resilience**

#### ***A History of Sociological Resilience – Adaptability and Flexibility***

This component of the conceptual framework highlights how Carteret County Public Schools' prior experiences with crises, particularly weather-related disasters such as Hurricane Florence, equipped school leaders with a foundational capacity for responsive leadership and logistical adaptability. Participants repeatedly reflected on the ways in which past crises had instilled habits of proactive planning, decisive action, and a commitment to restoring educational continuity for students under adverse conditions. These events had previously necessitated complex responses, such as facility repair, meal distribution, and resource reallocation, which mirrored many of the logistical demands brought about by the COVID-19 pandemic. As a result, district leaders and staff entered the COVID-19 crisis with an implicit framework for crisis response already in place, enabling them to more confidently navigate the unprecedented scope of the pandemic. This theme was identified 26 times in the narratives of the interviewees, including the following from Shelly Banks:

Because we have had hurricanes, we were one of the counties that came back quickly after Florence, I mean, I think we got back within two weeks and there were some school systems that were out for four or five, six. I think we knew that we can come back after something difficult and that it is important to come back. We had done it on a smaller scale before.

Interviewees emphasized that previous challenges cultivated an understanding of the importance of strategic delegation, stakeholder collaboration, and emotional regulation in high-

pressure situations. They also noted that Carteret County’s strong cultural emphasis on education and its history of overcoming adversity especially during times of crisis, contributed to both community trust and district-wide resolve. While COVID-19 was recognized as uniquely complex, leaders drew strength and insight from their historical experiences, reinforcing the idea that sociological resilience, developed through repeated exposure to hardship, played a critical role in the district’s ability to adapt and act effectively in times of crisis; ultimately leading to the decision to open the 2020-2021 academic school year under a hybrid instructional plan.

***A History of Sociological Resilience – Community Involvement and Diversity of Perspectives***

Rooted in a tradition of strong local ties and collective problem-solving, the theme “A History of Sociological Resilience – Community Involvement and Diversity of Perspectives” highlights how Carteret County Public Schools leveraged community engagement and varied stakeholder input in navigating the COVID-19 crisis. Participants described a longstanding cultural norm of mutual reliance within the county, often rooted in past experiences responding to natural disasters such as hurricanes. This tradition of interdependence fostered strong relationships among school personnel, families, and local agencies, which proved essential during the pandemic. This theme was identified 43 times in the narratives of the interviewees, such as this statement from Morgan Bay:

I think our community is used to making decisions for just our community and not always based on what people outside of our community believe. We have this history of relying on each other and trusting each other to figure things out. We have faced hard things in the past like hurricanes and have a reputation of handling those well.

Leaders highlighted how the district’s ability to engage external stakeholders, such as public health departments and community organizations, allowed for more informed and

contextually appropriate decision-making. The trust built over time between school leaders and the broader community enabled families to have confidence in the district's reopening efforts and to actively support the transition back to in-person learning. Moreover, participants emphasized the importance of including a wide range of voices and expertise in the decision-making process, reflecting a commitment to equity and inclusiveness. Rather than depending solely on top-down directives, the district leaned into the collective wisdom and practical knowledge of those closest to the challenges. This inclusive and collaborative approach reinforced Carteret County's sociological resilience, demonstrating how the integration of community input and trust in local expertise shaped a responsive and culturally grounded crisis management strategy.

### ***Summary of Sociological Resilience***

Carteret County Public Schools' (CCPS) ability to navigate the COVID-19 pandemic was deeply rooted in a history of sociological resilience shaped by prior crises, particularly hurricanes and other weather-related disasters. These earlier experiences cultivated habits of adaptability, strategic delegation, and logistical problem-solving, enabling leaders to respond to complex challenges such as meal distribution, resource allocation, and instructional continuity with greater confidence during the pandemic. Participants emphasized that repeated exposure to hardship had instilled both an expectation of recovery and a collective determination to restore educational stability, reinforcing the district's decision to reopen schools under a hybrid model in 2020 (Fink, 1986; Liou, 2014). At the same time, CCPS's response reflected a longstanding tradition of community involvement and reliance on diverse perspectives. Leaders drew on strong, preexisting relationships with families, local agencies, and community partnerships that had been strengthened during past disaster responses to guide reopening decisions. By

integrating a broad range of voices, including educators, parents, health officials, and other stakeholders, the district fostered trust and ensured that its crisis response was both contextually grounded and inclusive. This reliance on adaptability, collaboration, and community trust illustrates how sociological resilience, developed over time, functioned as an essential resource in sustaining operations and supporting students during the prolonged disruption of COVID-19 (Harris, 2020; Spillane, 2006).

**Theme: Overall Responsiveness – Flexible, Collaborative and Self-Correcting**

Flexible, collaborative, and self-correcting truly encapsulates the ways in which Carteret County Public Schools navigated the evolving and unpredictable landscape of the COVID-19 crisis through intentional adaptability, inclusive leadership, and continuous learning. Leaders consistently demonstrated a willingness to prioritize student needs, even amid uncertainty, often adjusting plans in real time to reflect new information, guidance, or emerging challenges. This responsiveness was rooted in a leadership culture that valued shared decision-making and broad stakeholder engagement. Particularly noteworthy was the superintendent’s strategic approach to distributing leadership responsibilities, enabling diverse voices from across the district to contribute to the planning and implementation of crisis response measures. This theme was the most frequently identified, occurring 127 times in the narratives of the interviewees, exemplified by Casey Drift’s response that “Every step of the way we were talking to each other. No plans were made alone” and Marsh Landing stating:

Sometimes you didn’t know if a plan would work until you tried it. There was this understanding that we would be adjusting lots of things. Some because they didn’t work or make sense and some because guidance from the state changed.

By recognizing the magnitude of the situation and actively seeking stakeholder buy-in, the district fostered trust and accountability while leveraging the collective expertise of its personnel. Flexibility emerged as a defining feature of the response, with leaders adjusting plans as conditions evolved, incorporating feedback, and self-correcting when initial strategies proved insufficient. Frequent meetings and robust communication channels, though at times overwhelming, served as essential mechanisms for a self-correcting approach that allowed the district to remain nimble and effective in its decision-making, ultimately sustaining in-person learning and preserving a steadfast focus on what was best for students throughout the pandemic.

### ***Responsiveness Summary***

The theme of overall responsiveness highlights how Carteret County Public Schools (CCPS) demonstrated flexibility, collaboration, and self-correction throughout the COVID-19 crisis. Leaders continually adjusted strategies in response to evolving state guidance, stakeholder feedback, and real-time challenges, ensuring that decisions remained student-centered and contextually grounded. This adaptability was supported by distributed leadership and strong communication structures, which fostered trust, accountability, and collective problem-solving across the district (Gronn, 2009; Harris, 2020; Spillane, 2006). Ultimately, responsiveness emerged as the defining feature of CCPS's crisis management, allowing the district to sustain operations and prioritize student well-being despite ongoing uncertainty.

### **Research Question 3 Summary**

The leadership response of Carteret County Public Schools (CCPS) to the COVID-19 crisis exemplifies the key dimensions of the Adaptive Crisis Resilience framework, which integrates socioecological resilience and dynamic responsiveness across all phases of crisis management (Fink, 1986; Liou, 2014). During the prodromal stage, district leaders engaged in

anticipatory action by forming seven reopening committees, proactively identifying operational and instructional needs, and coordinating with community partners. Although early warning signs of the pandemic did not initially prompt widespread concern, with one principal recalling telling a parent in March 2020 that closures were unlikely, leaders quickly shifted to structured planning once state directives mandated shutdowns. This early organization laid the groundwork for decisive action when uncertainty escalated.

In the acute crisis phase, CCPS moved rapidly from planning to implementation, with leaders acting quickly and decisively to prepare for reopening under constrained timelines. As one administrator noted, “time is of the essence...we had to open schools back up in a strategic and calm manner.” Pre-established protocols from the committees, coupled with district-level support in areas such as technology distribution and contact tracing, enabled leaders to focus on execution rather than improvisation. This stage reflected what Liou (2014) terms “dynamic responsiveness,” where speed, clarity, and accuracy are essential for stabilizing operations during volatile conditions.

The chronic crisis stage required sustained adaptation as leaders continuously revised protocols in response to shifting guidance, fluctuating infection rates, and disparities in student access. Administrators described “a constant process” of revisiting and refining plans, emphasizing that “a willingness to reinvent was always on the table.” Weekly administrative meetings, multimodal communication with families, and cross-level collaboration allowed the district to remain operationally agile. This recursive cycle of implementation, evaluation, and adjustment highlights how organizational resilience is maintained through long-term flexibility and collaboration (Harris, 2020).

By contrast, the crisis resolution stage revealed both strengths and limitations. Individually, leaders reflected on increased resilience and professional growth, recognizing the value of drawing from lived experiences to inform future decisions: “We can draw from those experiences...reflect on what worked, what didn’t work, and use that in making decisions moving forward.” However, unlike smaller-scale crises where the district typically conducted structured debriefs, no formal district-wide mechanism was implemented to capture lessons learned from the pandemic response. As Boin and Lodge (2016) argue, systemic reflection is essential for converting experiences into long-term organizational learning, and its absence represented a missed opportunity for CCPS to institutionalize the knowledge gained.

Underlying these stages was a history of socioecological resilience, shaped by the district’s repeated exposure to hurricanes and other natural disasters. Prior crises had cultivated habits of adaptability, proactive planning, and community reliance, instilling both leaders and families with confidence that schools could “come back after something difficult.” This cultural foundation of resilience proved vital during COVID-19, as CCPS leveraged prior crisis management strategies and community trust to inform its hybrid reopening plan.

Finally, the district’s overall responsiveness was defined by flexibility, collaboration, and a self-correcting orientation. Leaders frequently adjusted plans as conditions evolved, engaged diverse voices in decision-making, and relied on robust communication structures to foster transparency and trust. As one administrator observed, “every step of the way we were talking to each other. No plans were made alone.” This collective responsiveness reflects distributed leadership practices, where decision-making authority is shared and refined through ongoing collaboration (Gronn, 2009; Spillane, 2006).

Taken together, these findings affirm that CCPS's response to COVID-19 closely aligned with the conceptual framework *Adaptive Crisis Resilience*. Leaders not only acted decisively in the face of uncertainty but also drew upon historical resilience, leveraged collaborative structures, and sustained student-centered priorities throughout the disruption. While gaps in systematic reflection limited opportunities for institutional learning, the district's experience underscores how integrating adaptability, inclusiveness, and responsiveness can sustain educational continuity and strengthen long-term organizational resilience during complex and extended crises.

#### **Research Question 4**

The final research question asked “*What lessons were learned by Carteret County Public Schools leaders as a result of their crisis response to the COVID-19 pandemic?*” In Vivo coding, a qualitative analytic approach that utilizes participants' own language as codes, is particularly effective in preserving the authenticity and contextual meaning of lived experiences shared during interviews. This method facilitates a deeper understanding of participants' emotions, values, and beliefs by anchoring analysis in their natural expressions. In the present study, three prominent In Vivo themes emerged from the voices of Carteret County Public Schools leaders as they reflected on their experiences during the COVID-19 crisis: “Relationships matter,” “Student well-being matters,” and “The mental health of leaders matters.” The first two themes reflect core leadership priorities during the pandemic, highlighting the emphasis on human connection and the desire to do whatever was needed to meet the needs of students and bring them back to school in August 2020 while still providing flexibility to families through the option of either in-person or virtual learning. In contrast, the third theme, mental health of leaders, represents a critical and largely unaddressed area of need, underscoring the emotional toll experienced by

school leaders and the absence of systemic structures to support their well-being during and after the crisis.

### **Theme: Relationships Matter**

A prevailing theme that emerged across participant interviews was the central importance of relationships and a sustained investment in both staff and students throughout the COVID-19 crisis. Leaders repeatedly reflected on the multifaceted role of public education in addressing not only academic needs, but also the broader social, emotional, and economic challenges faced by students and their families. The crisis heightened leaders' awareness of the holistic needs of their school communities, particularly around issues such as food insecurity, mental well-being, and inequitable access to resources. In response, school leaders prioritized human-centered approaches, recognizing that the success of any initiative hinged on the health and stability of the adults charged with supporting students. This theme appeared 53 times in the narratives of the interviewees. Casey Drift recognized the collaborative nature of the work and how prior community relationships eased the process of working together:

People who were doing everything they could, every day for the kids and their families and their staff. I knew this, but COVID really emphasized how important relationships are. We could not do this work by ourselves, in isolation. We all had to work together and because I had strong relationships with the community and members of the community prior to COVID, it was easier during that time to reach out and get input.

While Taylor Cove acknowledged prior relationships with staff members as a foundation for trust in decision making:

Relationships are key and trusting each other to make good decisions in the crisis ensures you are making well thought out decisions. Sometimes you have to make a quick

decision because timing is essential but other times you need to really talk it out, think it out. Relationships make this process smooth.

Leaders intentionally fostered trust, offered reassurance, and responded with empathy to the diverse emotional responses and needs among staff members and students. The crisis also reinforced the value of pre-existing positive relationships within schools and the broader community, which served as a foundation for collaborative problem-solving and rapid decision-making. Participants noted that strong interpersonal trust enabled them to act with confidence, share leadership responsibilities, and take informed risks in support of students. These reflections underscored a core belief that relational capital, among colleagues, with families, and across community partners, was essential to both immediate crisis response and long-term recovery.

The findings underscore that relationships with staff, students, and community partners were central to effective leadership during the COVID-19 crisis. Relational trust, built over time, allowed leaders to navigate uncertainty with confidence, share leadership responsibilities, and engage in collaborative problem-solving. Bryk and Schneider (2002) emphasized that “relational trust is not merely a pleasant by-product of a professional school community; it is a necessity for effective school improvement” (p. 5), a point echoed during the pandemic as leaders relied heavily on trust and mutual respect to sustain morale and enact rapid decisions. Similarly, Tschannen-Moran and Hoy (2000) argued that trust is the “glue” of effective schools, binding together staff and leaders in ways that support both stability and adaptability. In times of crisis, such as COVID-19, relationships also served as a foundation for empathy and emotional support, ensuring the well-being of educators while enabling them to meet the diverse needs of students (Leithwood et al., 2020; Louis et al., 2010). Collectively, these insights affirm that investing in

strong professional and community relationships is not only integral to day-to-day school leadership but also essential for resilience and recovery in moments of crisis.

**Theme: Students' Well-being Matters**

An enduring focus on student well-being emerged as a defining element of Carteret County Public Schools' response to the COVID-19 crisis. Throughout the interviews, school leaders emphasized an uncompromising commitment to meeting students' academic, social, and emotional needs, even when doing so required stepping outside traditional roles or working under extraordinary conditions. Administrators described delivering meals and devices, restructuring school operations, and personally checking on students to ensure no child was left behind. The decision to resume in-person instruction at the earliest permissible moment was framed not as a political stance, but as a moral imperative grounded in the visible impacts of prolonged isolation on student health and learning. Leaders also became more attuned to the disparities students faced at home, such as food insecurity and inadequate learning environments, which heightened their resolve to restore access to school-based support systems. This theme appeared 58 times in the narratives of the interviewees. In the responses from interviewees, this theme was revealed in phrases like the one from Shelly Banks, "for the kids," recognizing that at the heart of the decisions made were the students of CCPS:

It was a powerful realization, that we all were stepping up and jumping in and needed to do it for the kids. . . That we can do it, we can do really hard things for kids. It is amazing to think back on that time, that we pulled it off.

Alex Current tied the decision of CCPS back to an understanding that there were districts who chose not to bring students back to school in August of 2020, stating "We were a district that chose to do what was needed for kids."

This student-centered approach guided district-level decision-making and was reflected in the board's actions, particularly its willingness to take calculated risks based on firsthand understanding of student challenges. Ultimately, this emphasis on doing what was best for students reinforced the district's core values of academic excellence, equity, and resilience.

The emphasis on student well-being emerged as a defining principle of Carteret County Public Schools' crisis response, shaping every decision and action taken during the pandemic. Leaders consistently described their choices as grounded in a moral imperative to prioritize students' academic, social, and emotional needs, even when this required extraordinary effort or personal sacrifice. Research supports this emphasis, as Darling-Hammond et al. (2020) emphasize that academic learning is deeply connected to students' social and emotional well-being, and that schools must create environments that foster healthy development and supportive relationships, an imperative made even more critical during times of crisis. Similarly, Fullan (2007) emphasized that leaders who center students' needs demonstrate moral purpose in action, recognizing the interdependence of equity, safety, and learning continuity. For CCPS leaders, this meant delivering meals and devices, checking in personally on families, and reopening schools at the earliest opportunity, not as a political act but as a moral response to the visible harms of isolation and inequity. As Leithwood and Azah (2016) note, effective crisis leadership requires "keeping the well-being of students at the forefront of decision-making" (p. 12), and this was evident in CCPS's approach. Ultimately, the district's relentless focus on students reinforced its core values of academic excellence, equity, and resilience, while illustrating that in times of prolonged crisis, attending to the whole child is both a moral obligation and a practical necessity.

## **Theme: The Mental Health of Leaders Matter**

Another significant theme that emerged from participant interviews was the profound mental health impact experienced by school leaders during the COVID-19 crisis. While much attention has been given to the mental well-being of students and teachers, these findings emphasize the often-overlooked emotional toll on principals and other administrators who bore the weight of operational decision-making, crisis management, and community reassurance. This theme appeared 51 times in the narratives of the interviewees. Interviewee Marsh Landing spoke passionately about this impact on leaders:

I think we need to focus on the physiology behind what the leaders went through at that time. There is a mental health impact with a lot of us, and I'm not saying I was having a nervous breakdown or others were, but I see the impact to the mental health of folks on the front lines. . . We were quarantining, tracking, shifting practices, fielding issues in the community, all the things. The mental health of just everybody who served in this capacity took a hit.

CCPS moved on from the closure of the 2020-2021 school year and through crisis response with no clear crisis resolution as acknowledged by Riley Dune:

It was a lot. We were asked to do so much but we did it for the kids and then the year wrapped up and we were already planning for the next year like we hadn't just been through something that would be written in history books. It was like we just moved on and I don't know that I ever processed it. I was tired and just burnt out for so long. But I kept giving because that's what leaders do.

Participants shared that the sustained stress of navigating changing mandates, tracking quarantines, responding to parent concerns, and attempting to maintain instructional continuity

left little time or capacity for attending to their core instructional leadership responsibilities. The cumulative effect of these demands eroded the joy and fulfillment for some that was once associated with school leadership, creating a lasting sense of emotional depletion. Others described internalizing the burdens of their staff, overextending themselves in an effort to provide comfort and stability for others, often at the expense of their own mental health. Interviewees noted a gap in support structures that addressed the emotional needs of leaders themselves, highlighting the need for more intentional efforts to acknowledge, process, and mitigate the psychological strain of crisis leadership. The absence of systemic mechanisms to check on the well-being of those managing the front lines points to a critical area for future improvement in organizational crisis response and recovery.

The findings highlight the profound mental health toll on school leaders during the COVID-19 crisis, an often-overlooked dimension of educational leadership. While much research and policy attention has rightly focused on the well-being of students and teachers, principals and district administrators carried the weight of operational decision-making, crisis management, and community reassurance under relentless and uncertain conditions. Research underscores that prolonged stress and emotional labor among school leaders can erode both personal resilience and professional effectiveness (Federici & Skaalvik, 2012; Van der Vyver et al., 2014). Leaders described internalizing the burdens of their staff and communities, often providing comfort and stability at the expense of their own well-being. As Harris and Jones (2020) observe, crisis leadership requires “reserves of resilience that, if not replenished, risk being depleted to the detriment of both leaders and their organizations” (p. 247). For CCPS administrators, the absence of systemic structures for emotional support left many feeling depleted and unprocessed even as they immediately transitioned into planning for the following

school year. This gap reveals a critical need for districts to embed leader well-being into crisis response frameworks, ensuring that those on the front lines of decision-making are equipped not only with logistical resources but also with the psychological support necessary to sustain effective leadership over time.

#### **Research Question 4 Summary**

The findings related to Research Question 4 revealed that Carteret County Public Schools (CCPS) leaders developed key insights during the COVID-19 crisis that shaped their understanding of effective educational leadership under extreme circumstances. Using In Vivo coding to elevate the authentic voices of participants, three major themes emerged:

*“Relationships matter,” “Student well-being matters,” and “The mental health of leaders matters.”* These themes underscore a multifaceted learning process in which leaders prioritized human connection, student-centered decision-making, and an emerging awareness of their own psychological needs. Leaders came to recognize that relational trust among staff, families, and community members was essential to navigating uncertainty and sustaining school operations, consistent with research that identifies trust as the foundation of effective school leadership and organizational resilience (Bryk & Schneider, 2002; Louis et al., 2010).

Equally, the experiences reinforced the district’s unwavering commitment to student welfare, including academic continuity, social-emotional well-being, and equitable access to basic needs such as food, technology, and safe learning environments. Leaders often described their work as a moral imperative, affirming what Leithwood et al. (2020) suggest, that student-centered leadership is indispensable in moments of crisis. At the same time, the prolonged stress of leading during the pandemic illuminated a previously underacknowledged vulnerability: the toll on the mental health of school leaders themselves. Participants noted feelings of exhaustion,

burnout, and emotional depletion, reflecting broader scholarship on the risks of sustained crisis leadership without sufficient systemic supports (Federici & Skaalvik, 2012; Harris & Jones, 2020).

Together, these findings suggest that leadership learning during the pandemic was not only operational or strategic but deeply human and adaptive, shaped by the realities of caring for others while navigating a crisis of unprecedented scale. Strong relationships and a steadfast focus on students enabled resilience and effective decision-making, but the neglect of leaders' own mental health revealed a critical gap in organizational crisis response and recovery. This underscores the importance of embedding relational trust, student-centered practices, and leader well-being into future resilience planning as central, not peripheral, dimensions of educational leadership in times of disruption.

### **Implications for Practice**

The purpose of this qualitative case study was to examine the crisis decision-making processes experienced by district- and school-level leaders within Carteret County Public Schools (CCPS) during the COVID-19 pandemic. Specifically, the study sought to determine the extent to which the leadership response aligned with the knowledge, attitudes, and attributes commonly associated with effective crisis management. Guided by the conceptual framework *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, the research analyzed six interrelated components of crisis response: the prodromal stage, acute stage, chronic stage, resolution stage, historical socioecological resilience, and overall responsiveness. Findings indicate that this framework provides a robust lens for evaluating a district's crisis response and for informing future preparedness and decision-making. The analysis revealed that each component operates as a critical, interconnected element that

contributes to mitigating negative impacts on stakeholders while fostering leadership cohesion and buy-in. Moreover, the framework emphasizes the importance of adaptability, flexibility, and collaboration, leading to resolution efforts that not only address immediate challenges but also strengthen long-term organizational resilience.

### **Prodromal Crisis Stage**

The prodromal crisis stage represents a critical window in which early warning signs emerge, offering school systems the opportunity to transition from a reactive posture to a proactive one. Early recognition and strategic engagement during this stage can substantially reduce the scope and severity of later disruptions (Darling, 1994; Fink, 1986). For districts, this involves mobilizing leadership structures, identifying key stakeholders, and establishing decision-making bodies capable of addressing anticipated impacts before they fully materialize. In educational contexts, such actions are vital, as crises directly affect instructional continuity, student well-being, and operational stability. In the case of COVID-19, Carteret County Public Schools (CCPS) did not initiate large-scale preparations until after the statewide closure of schools, due in part to the absence of confirmed local cases. Nevertheless, once the potential impact became evident, particularly as the 2019-2020 academic year drew to a close, district leaders began organizing their response. Guided by state-issued resources, including the *StrongSchoolsNC Public Health Toolkit* and *Lighting Our Way Forward: North Carolina's Guidebook for Reopening Public Schools*, leadership translated evolving state guidance into actionable district-level strategies. This work included forming seven strategic reopening committees representing all grade spans and critical operational domains such as health and well-being, instructional delivery, transportation, facilities, and child nutrition. The implication for future practice is clear: recognizing early indicators and initiating coordinated, cross-functional

planning during the prodromal stage can position districts to mitigate disruptions, streamline implementation, and maintain public trust before the acute crisis phase unfolds.

### **Acute Crisis Stage**

The acute crisis stage marks the onset of immediate and disruptive impacts, demanding rapid decision-making, efficient communication, and coordinated execution of crisis response strategies. For CCPS, this stage began with the August 2020 launch of protocols developed by the reopening committees. Leaders moved swiftly from planning to implementing measures that ensured instructional continuity, safeguarded student and staff health, and addressed essential needs such as food distribution and technology access. The pace and scope of operational demands required both decisive leadership and high levels of collaboration among administrators, staff, families, and community partners as such the initial strategic reopening committees were disbanded allowing school leaders to focus their efforts on their buildings. District leadership took over with facilitation of Zoom meeting to address the need for frequent adaptation to changing guidance. This underscored the necessity of flexible systems capable of integrating new information without undermining stability. The experience reinforces an important implication for district-level crisis planning: the acute stage requires a clear operational framework, coupled with distributed leadership structures, to facilitate timely, coordinated action while avoiding bottlenecks in decision-making.

### **Chronic Crisis Stage**

The chronic crisis stage encompasses the sustained period in which modified operations remain in place under conditions of ongoing uncertainty. In CCPS, this stage spanned the entirety of the 2020-2021 academic year, characterized by hybrid instruction, persistent health and safety protocols, and evolving state mandates. While the initial reopening plan provided a

solid framework, leaders engaged in continuous refinement of operational procedures in response to updated public health guidance, fluctuating infection rates, and shifting community needs. Weekly administrative meetings served as a district-wide alignment mechanism, allowing for the sharing of emerging challenges and collective problem-solving. The prolonged nature of the crisis tested leadership endurance, requiring administrators to balance operational oversight, instructional quality, and community trust while managing the emotional well-being of staff and students. Many leaders reported working extended hours, making personal financial contributions to fill resource gaps, and engaging in direct outreach to families most at risk of disconnection from schooling. This stage highlights a critical implication for practice: sustained crises require intentional structures to support leader well-being, prevent burnout, and maintain distributed responsibility over time. Without such supports, districts risk diminished leadership capacity and erosion of morale during extended disruptions.

### **Crisis Resolution Stage**

The crisis resolution stage signals the transition from sustained emergency operations to the reestablishment of more routine educational practices, ideally paired with a structured integration of lessons learned into future crisis preparedness. In CCPS, the absence of a district-led debriefing process meant that evaluation of critical elements, such as the hybrid instructional model, the reopening committee framework, and the crisis communication systems, occurred informally, at the discretion of individual leaders. This lack of formal reflection limited the district's ability to embed adaptive decision-making processes into its long-term emergency response planning. Ideally, the resolution phase serves not only to close the operational chapter of a crisis but also to strengthen organizational resilience, positioning the district for more proactive engagement in future emergencies. In this case, the protracted duration of the

pandemic, spanning over two academic years, likely contributed to crisis fatigue, as leaders were simultaneously closing one school year and preparing for the next when state guidelines were fully lifted in the spring of 2021. The omission of a structured review is notable given CCPS's history of post-crisis analyses following other crisis events, which typically included collaborative evaluation and protocol revision. The implication for future leadership practice is that even in extended crises, intentional closure processes are essential. These processes provide a shared space for reflection, codify effective strategies, and ensure that lessons learned are preserved to inform future decision-making.

A particularly significant missed opportunity in CCPS's resolution stage was the absence of a formal assessment of the mental health impact on district and school leaders, a theme that emerged prominently in participant interviews and remains salient more than four years after the conclusion of COVID-19 directives. Administrators described sustained exhaustion, emotional strain, and personal sacrifices that extended well beyond the acute crisis period, reflecting the cumulative toll of prolonged operational demands and uncertainty. The lack of a structured, district-led reflection process precluded the opportunity to formally recognize and address the psychological and emotional well-being of those who had shouldered the responsibility of navigating the district through unprecedented challenges. Had a systematic debrief occurred, the persistent stress reported by leaders could have been identified as an area requiring targeted support and intervention. This omission underscores a critical implication for future crisis resolution efforts: without consistently implemented and intentional mechanisms to evaluate and respond to the human impact on leadership teams, districts risk carrying forward unresolved strain that may diminish capacity, morale, and readiness for future crises. In this respect, the

overlooked mental health needs of leaders stand as a direct example of the negative consequences of omitting key components of the resolution stage.

### **Historical Socioecological Resilience**

Historical socioecological resilience reflects the cumulative capacity a school district develops over time to adapt, respond, and recover from prior crises, shaped by experiences that foster flexibility, diverse perspectives, and community engagement. In CCPS, prior crisis, including repeated hurricane-related school closures, had cultivated a culture of adaptability and collective problem-solving. Leaders and staff had become accustomed to mobilizing quickly, reallocating resources, and collaborating across schools and community organizations to restore operations and maintain services. This history of coordinated response reinforced the value of drawing on a diversity of perspectives, as prior recovery efforts often relied on contributions from a broad range of stakeholders, including district administrators, school-based leaders, community agencies, and parent organizations. The embedded expectation that “everyone has a role” fostered trust and strengthened relationships between the district and its community partners, creating a foundation for collaborative action when COVID-19 emerged. The implication for educational leadership is that a district’s prior experiences with disruption caused by crisis can significantly influence its readiness and capacity to respond to future crises. Historical resilience functions as both a cultural asset and a strategic resource, enabling leaders to activate established networks, replicate effective decision-making structures, and adapt operational practices with greater confidence and efficiency. Districts lacking such a history may need to deliberately cultivate these capacities during non-crisis periods to ensure they are better positioned for proactive and coordinated responses when the next emergency arises.

## **Overall Responsiveness**

Overall Responsiveness encompasses a district's capacity to remain flexible, collaborative, and self-correcting across all stages of a crisis, ensuring that decision-making processes and operational strategies evolve in alignment with emerging needs. In CCPS, responsiveness was demonstrated through the district's willingness to adjust plans in real time, engage in open communication across leadership levels, and integrate feedback from diverse stakeholders to refine protocols. This adaptability was evident in the rapid mobilization of reopening committees during the prodromal stage, the coordinated execution of safety and instructional measures during the acute stage, the sustained recalibration of operations throughout the chronic stage, and the informal, though incomplete, personal reflection of leaders that occurred during the resolution phase. While the absence of a formal post-crisis evaluation limited opportunities for structured learning, the capacity to self-correct in the midst of ongoing uncertainty allowed CCPS to sustain educational services and maintain community trust. The implication for practice is clear: districts that cultivate responsiveness as an embedded organizational norm, through fostering flexibility in leadership structures, promoting inclusive collaboration, and building mechanisms for continuous feedback, are better positioned to navigate complex crises. Such systems can respond not only to the immediate demands of an evolving situation but also to the secondary and tertiary challenges that often emerge over time, thereby enhancing long-term resilience and stability.

## **Summary of Implications**

The following implications are drawn from the analysis of Carteret County Public Schools' (CCPS) COVID-19 response through the Adaptive Crisis Resilience Framework. These recommendations are organized under policy and practice and research to provide actionable

strategies for strengthening districts' capacity to anticipate, navigate, and recover from complex and extended crises. Districts that embed structured early-response protocols into their crisis plans are better positioned to minimize operational disruption and maintain instructional continuity.

### ***Policy and Practice***

Crises such as the COVID-19 pandemic underscore the need for school districts to adopt policies and/or practices that foster resilience, flexibility, and organizational learning. Effective policies help leaders respond to immediate challenges while also creating the conditions for long-term improvement. The following implications emphasize the importance of preparedness, decisiveness, and reflection as structural components of district-level crisis planning.

The first implication is the need to embed structured early-response protocols into crisis management plans. Districts that clearly define initial actions are better positioned to minimize disruptions to teaching and learning while maintaining a sense of stability for staff and students. Early-response policies provide clarity and reduce hesitation during chaotic moments, allowing leaders to act quickly and consistently. As Grossman et al. (2021) notes, the districts that were able to sustain operations during COVID-19 often had preexisting structures that allowed leaders to mobilize resources and communicate effectively at the onset of the crisis. By codifying these procedures into policy, districts enhance their ability to act with confidence and coordination when crises arise.

Equally important is institutionalizing structures that enable accelerated decision-making. Policies should outline frameworks for rapid collaboration, delegation of authority, and robust communication channels to ensure that decisions can be made efficiently under pressure. Harris and Jones (2020) emphasized that leaders during COVID-19 were required to act decisively and

collaboratively, balancing urgency with transparency to maintain trust. Without such structures, districts risk delays, confusion, and eroded confidence among stakeholders. By contrast, policies that support distributed responsibility and streamlined communication provide the foundation for decisive action in high-stakes contexts.

Finally, district policies should formalize crisis resolution as a distinct stage focused on reflection and organizational learning. CCPS's experience during COVID-19 illustrated the consequences of omitting such a process, as critical reviews of hybrid instruction, reopening committees, and communication systems were left to the discretion of individual leaders. Without deliberate mechanisms for reviewing actions, documenting lessons learned, and assessing the human impact on leadership teams, opportunities for institutional growth are easily overlooked. Honig (2012) emphasized that organizational learning depends on structures that transform experience into actionable knowledge, enabling institutions to become more resilient over time.

To address this need, school districts should adopt a formal resolution protocol embedded within its district response plan and referenced in policy. This protocol would require school administrators to conduct structured debriefs at the close of building-level crises and obligate district leaders to do the same for district-wide or regional events. A guided process should capture effective practices, areas for improvement, and the mental health toll on leaders, ensuring both operational and human dimensions are addressed. By institutionalizing reflection, the district would preserve lessons learned, strengthen organizational resilience, and cultivate the adaptive capacity needed to navigate future crises with greater effectiveness.

## ***Research***

Findings from this study highlight that effective crisis response in school districts is shaped not only by decisions made during the immediate event but also by the systems, relationships, and capacities that were in place beforehand. Participants frequently pointed to the importance of trust among stakeholders, the adaptability of staff, and the strength of preexisting communication channels as central to their ability to respond to COVID-19 disruptions. This echoes Harris and Jones's (2020) observation that resilience during the pandemic was less about individual leaders and more about the collective capacity of the organization. Future research should continue to examine how socioecological resilience factors, such as adaptability, stakeholder diversity, and community involvement, interact with crisis life cycle models to influence district outcomes across varied contexts. As Honig (2012) suggests, understanding these systems-level dynamics is critical for building organizational learning that endures beyond a single crisis event.

Taken together, these six components of the Adaptive Crisis Resilience Framework provide a comprehensive lens for understanding and strengthening a district's crisis leadership capacity. The CCPS experience demonstrates that while effective crisis response depends on situational decision-making, it is equally shaped by the systems, relationships, and capacities cultivated long before a crisis emerges. Districts that invest in these capacities proactively, prioritizing early recognition, collaborative planning, sustained adaptability, structured resolution, and a culture of responsiveness, are better equipped to preserve educational continuity, safeguard stakeholder well-being, and emerge from crises with stronger institutional resilience.

## **Limitations of the Study**

This study was intentionally designed to focus on a single school district, Carteret County Public Schools (CCPS), and its response to the COVID-19 pandemic, examined through the lens of the *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness* framework. While this design allowed for an in-depth analysis, several limitations should be acknowledged, as they may influence the interpretation and transferability of the findings.

### **Scope and Generalizability**

The selection of CCPS as the sole case study limits the generalizability of findings to other districts with differing contexts. CCPS possesses distinctive characteristics, including a history of districtwide crisis response to hurricanes and flooding, as well as consistently high academic performance, ranking among the top ten districts in North Carolina. These attributes may have shaped its COVID-19 response in ways that are not representative of other districts, particularly those without similar historical resilience or performance records. As a result, while the findings may offer valuable insights, their applicability to other settings should be considered with caution.

### **Insider Researcher Positionality**

The researcher's role as an insider, serving within CCPS as a current director and during the period under study as a principal and strategic reopening committee facilitator, provided notable advantages, including access to archival documents, institutional knowledge, and established trust with participants. However, this positionality also carries the potential for bias, both in data collection and interpretation, which could influence the credibility of the findings. To mitigate this limitation, participation was voluntary, interviews were conducted outside

regular work hours to reduce perceived obligation, and steps were taken to address any concerns of coercion or undue influence. Additionally, the researcher used only the data sources noted: archived strategic reopening documents from the committees, interviews of the committee facilitators, and journals written after each interview that captured initial themes. Despite these safeguards, the possibility remains that preexisting relationships could have influenced participants' willingness to disclose dissenting or critical perspectives.

### **Potential Bias in Participant Responses**

While insider trust may have facilitated candid reflection, it could also have introduced social desirability bias, with participants potentially framing their responses to align with perceived expectations. Efforts to minimize this included providing assurances of confidentiality, structuring interview questions to encourage multiple viewpoints, and cross-referencing participant accounts with documentary evidence. Nevertheless, the potential influence of perceived reputational risk or loyalty to the district cannot be entirely ruled out.

### **Impact of Time on Participant Recollection**

The study took place more than four years after the start of the 2020-2021 school year, introducing the possibility of recall bias that may affect the accuracy of participants' accounts. To address this limitation, interview protocols were designed to prompt recollection of specific events, decisions, and processes documented in historical records. Additionally, meeting minutes and planning documents from the district's reopening committees were used both to stimulate memory during interviews and to cross-check participant narratives, thereby enhancing reliability. While these strategies improved alignment between recollections and documented events, the potential for selective or reconstructed memory remains.

Taken together, these limitations highlight the importance of interpreting the study's findings within their specific context and considering the potential influence of scope, researcher positionality, participant bias, and the passage of time on data accuracy. While mitigation strategies were applied to address each of these limitations, they cannot be fully eliminated. As such, the findings are best understood as a rich, contextually grounded account of CCPS's COVID-19 crisis response, offering insights that may inform but not wholly predict crisis leadership in other educational settings.

### **Delimitations of the Study**

This study was purposefully designed with specific boundaries to focus the inquiry and align with the research purpose. These delimitations reflect the researcher's intentional choices regarding scope, participant selection, time frame, conceptual framing, and the selection of data sources.

#### **Focus on a Single District**

The study examines Carteret County Public Schools (CCPS) exclusively, rather than conducting a multi-district or statewide analysis. This decision allowed for an in-depth, contextually rich exploration of the district's COVID-19 crisis response and its alignment with the *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness* framework. While this focus enhanced the depth of analysis, it intentionally excluded broader geographic or demographic variation that might be found in a comparative study.

#### **Participant Selection**

The participant pool was delimited to district-level leaders, principals, and assistant principals who served in CCPS between May 2020 and the reopening of schools for the 2020-

2021 academic year. Other groups, such as teachers, support staff, parents, or students, were intentionally excluded to maintain a leadership-focused perspective on decision-making processes. This choice was aligned with the study's central aim of examining leadership actions, perceptions, and decision-making capacity during a complex crisis.

### **Time Frame of Inquiry**

The study specifically focuses on the period from the initial statewide school closure in March 2020 through the reopening of CCPS schools in August 2020, and the subsequent operation of the hybrid instructional model during the 2020-2021 academic year. While references to earlier events (such as prior hurricane responses) and later developments (such as post-COVID operations) provide contextual depth, these periods were not examined in full detail and fall outside the primary scope of analysis.

### **Conceptual Framework Alignment**

The study is deliberately grounded in the *Adaptive Crisis Resilience* framework, which integrates socioecological resilience and dynamic responsiveness. This theoretical alignment shaped data collection, coding, and interpretation, and intentionally excluded alternative crisis leadership models that might have offered different analytical perspectives.

### **Data Sources**

The study draws on semi-structured interviews, researcher journals, and district-generated documents, including meeting minutes and planning materials from the reopening committees. External media reports, state-level policy documents beyond those directly referenced in district planning, and observational field data were not incorporated, as the study prioritized internal district perspectives and documentation.

By clearly defining these boundaries, the study maintains a targeted focus on district-level crisis leadership in a single, high-performing North Carolina school district with prior experience in managing communitywide crises. These delimitations, while narrowing the scope, enhance the study's ability to generate detailed, context-specific insights that may inform leadership practice in similar educational settings.

### **Recommendations**

In this section, recommendations for policy and future research are presented. The process of conducting this study has not only deepened my understanding of crisis leadership but has also contributed to my growth as an educational leader. The findings have reshaped my perspective on effective crisis response and will directly inform my future service in public education.

Over the course of my career, I have served as a teacher, assistant principal, principal, and currently as a district-level director. These roles have exposed me to a wide range of crises, each offering unique challenges and lessons. Some crises were relatively contained, such as a flooded hallway caused by a clogged sink or a non-life-threatening student injury that nonetheless required immediate attention. Others were more profound and far-reaching, leaving a lasting impact on the school community.

As a teacher, I experienced the sudden loss of a colleague in an accident and, tragically, the accidental choking death of a student. While serving as an assistant principal, I navigated the grief and disruption following the death of a teacher from cancer, as well as the loss of several students in accidents and gang-related violence. One of the most devastating events of my career occurred during my tenure as a principal, when a teacher died from a brain aneurysm at 39 weeks

pregnant with twins. Her husband, an exceptional children's teacher at a neighboring school, endured the loss of his wife and their unborn children.

In my later years as a principal, I led through the community-wide impacts of two hurricanes, managing both immediate recovery efforts and the long-term implications for instructional continuity. Most recently, I worked through the unprecedented challenges of COVID-19, navigating the closures, evolving state guidelines, and complex reopening processes.

Each of these experiences has informed my understanding of crisis response. However, the research process for this study required me to think with greater intentionality about what distinguishes effective from ineffective crisis leadership, particularly in terms of decision-making, preparedness, and the well-being of leaders themselves. This work has expanded my thinking, underscoring the need for structured, reflective, and adaptive approaches to crisis management that prioritize both organizational resilience and the human capacity of those leading the response.

The insights gained from this study highlight areas where district-level policy can be strengthened to better prepare educational organizations for future crises. Specifically, the findings point to the importance of proactive planning, distributed leadership, structured reflection, and leader wellness as integral components of sustained effectiveness during prolonged disruptions.

### **Policy and Practice Recommendations**

Based on the findings of this study and the application of the Adaptive Crisis Resilience Framework, several policy recommendations are proposed to strengthen district-level crisis response capacity.

### ***Prodromal-stage Protocols***

Districts should formalize prodromal-stage protocols within their crisis management plans to ensure that early warning signs prompt the timely mobilization of leadership teams. The prodromal stage, as identified in the *Adaptive Crisis Resilience Framework*, represents the critical period when potential crises can be detected and mitigated before escalating into acute disruption (Darling, 1994; Fink, 1986). Proactive engagement at this stage positions districts to organize leadership structures, identify key stakeholders, and establish decision-making bodies capable of rapid response. Formal protocols should include clearly defined decision-making processes that delineate leadership roles and responsibilities, stakeholder communication strategies to ensure transparency and trust, and resource allocation procedures that enable the swift deployment of necessary personnel, technology, and materials. Embedding such structured processes into policy and practice ensures that districts can move from recognition of early warning signs to coordinated, collaborative planning with minimal delay, thereby reducing operational disruption and safeguarding instructional continuity.

### ***District-Level Debrief Process***

Districts should institute a formal, district-level debrief process at the conclusion of every major crisis, regardless of its duration, to ensure that experiences translate into improved preparedness and impacts of the crisis are fully addressed. This structured mechanism, similar to the military's After-Action Review (AAR) process, provides a framework for evaluating operational strategies, instructional delivery models, communication systems, and leadership structures. *Training Circular 25-20, A Leader's Guide to After-Action Reviews*, authoritatively defines the AAR process as a professional discussion that enables participants to critically assess what happened, why it happened, and how to sustain strengths or improve upon shortcomings

(U.S. Army, 1993). AARs are designed to foster candid reflection in a non-blaming environment, enabling teams to actively integrate learned lessons into future actions (Darling et al., 2005). Embedding this debrief structure within district policy ensures that crisis response moves beyond mere reaction, to an ongoing, adaptive, and learning-oriented institutional culture. Such a formalized review supports the dual function of closing the operational chapter of a crisis and simultaneously reinforcing organizational resilience, preparing the district for future emergencies with enhanced insight and collective knowledge.

### ***Post-Crisis Wellness Assessments and Supports***

Given the enduring mental health impacts documented among CCPS leaders, districts should implement comprehensive post-crisis wellness assessments and targeted support programs for school and district administrators. School leaders occupy roles that expose them to elevated levels of secondary traumatic stress, emotionally compounding the trauma they manage on behalf of others. Research from The School Superintendents Association (AASA) underscores the importance of proactive wellness strategies such as self-assessment tools, personal resilience planning, and open communication structures to safeguard leadership well-being (Hanover Research, 2022). Districts should adopt policies requiring structured wellness check-ins, peer support networks, and routine mental health assessments, ensuring that leaders recognize and respond to signs of stress before burnout sets in. Doing so not only acknowledges the personal toll of crisis leadership but also reinforces organizational capacity by fostering a sustainable leadership structure that can adapt and thrive in future emergencies.

### **Future Research**

The findings of this study highlight several areas where future research could expand understanding of school district crisis leadership, particularly through the lens of the conceptual

framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*. First, additional case studies across diverse district contexts, urban, suburban, and rural, could explore how variations in demographic composition, resource availability, and historical socioecological resilience influence crisis response effectiveness. Comparative studies could help determine whether the patterns identified in CCPS, such as the reliance on distributed leadership structures and the prioritization of in-person instruction during the COVID-19 pandemic, are replicable or context-specific.

Second, longitudinal research is warranted to examine the sustained effects of crisis leadership decisions on district operations, student outcomes, and leader well-being. The mental health impacts reported by CCPS leaders in this study suggest a need for research into the long-term personal and professional consequences of prolonged crisis response, as well as the efficacy of post-crisis wellness interventions for educational leaders.

Third, future research could further test and refine the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, by applying it to non-pandemic crises, such as natural disasters, a school safety incident, or a school-based medical emergency. Such studies could assess whether the six interrelated components, prodromal, acute, chronic, and resolution stages; historical socioecological resilience; and overall responsiveness, function similarly across different crisis types, or whether modifications are needed to address unique contextual demands.

Fourth, mixed-methods approaches could provide richer insights into both the qualitative experiences and the quantitative impacts of crisis leadership. Integrating survey data, performance metrics, and qualitative interviews could create a more comprehensive understanding of how leadership decisions influence outcomes for students, staff, and the

broader community. Expanding the scope of research in these directions would not only strengthen the empirical foundation for crisis leadership theory but also equip districts with actionable strategies to enhance preparedness, adaptability, and resilience in the face of future disruptions.

Finally, an important area for future inquiry concerns the grief process that educational leaders experienced during the COVID-19 pandemic. While grief was not an explicit focus of this study, reflective follow-up conversations and transcript analysis revealed a recurring undercurrent of loss, disorientation, and adaptation among participants. Further research could examine how leaders' experiences of grief shaped their decision-making, resilience, and capacity to support their school communities during times of crisis. Such work would contribute to a deeper understanding of the emotional dimensions of educational leadership and inform preparation for future large-scale disruptions. Attending to these emotional dimensions may be one of the most enduring lessons for leadership research in the post-pandemic era.

### **Reflections and Personal Insights**

The findings of this study underscore the considerable pressure placed on school leaders to provide comprehensive and multifaceted support during crises. These individuals are tasked with managing operational complexities, ensuring educational continuity, maintaining community trust, and supporting emotional well-being, all simultaneously. Research confirms that this role is emotionally intense and often overlooked; as noted by Heffernan et al. (2025), "principals deal with heightened emotions each day, both their own and those of others" (p. 1). This constant emotional labor is compounded by expectations, many of which emerge from critical stakeholders, who may not fully grasp the personal toll that leadership demands, especially under crisis conditions. Even in normal circumstances, school leaders commonly

invest personal time, energy, and emotional resources beyond their formal role. In crisis, these demands multiply exponentially, spanning long hours, involving layers of complexity, and added emotional strain. This underscores the urgent need for systems and policies that recognize and sustain leader well-being, reinforcing their capacity to serve effectively over time.

Central to the reflections shared by participants was a recurring and unambiguous priority: the students. Across interviews, leaders consistently anchored their decision-making in the best interests of the district's students, even when doing so required navigating complex logistical challenges and making unpopular decisions. This finding affirms that, for these leaders, the heart of leadership resides in the unwavering commitment to safeguard students' academic growth, social-emotional well-being, and long-term success. The district examined in this study has a long-standing history of successfully meeting student needs, fostering a culture of trust between the community and its leaders. This established trust enabled decision-makers to navigate contentious periods with a foundation of credibility, reinforcing the community's belief that leaders were acting with students' best interests at the forefront.

Equally notable was the resilience demonstrated by these leaders during a time when a majority of schools across the nation, and indeed, across much of the world, chose not to resume in-person instruction. In contrast, the leaders within Carteret County Public Schools drew upon past crisis experiences, relied on one another for support, and stepped boldly into uncharted territory to make in-person learning possible. Their actions reflected a rare blend of adaptability, perseverance, and collective courage, rooted in both professional dedication and personal conviction. The ability to move forward in the face of uncertainty, without a clear blueprint, speaks to a depth of commitment that transcends professional obligation. Listening to their

accounts reveals a portrait of leaders who were not only willing to meet the demands of the moment but also to redefine what was possible in the midst of unprecedented challenges.

### **Chapter Summary**

This chapter presented an analysis of the leadership response of Carteret County Public Schools (CCPS) to the COVID-19 pandemic, framed through the *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, which integrates socioecological resilience and dynamic responsiveness. The discussion explored six interconnected components, prodromal crisis stage, acute crisis stage, chronic crisis stage, crisis resolution stage, historical socioecological resilience, and overall responsiveness, highlighting how each stage influenced district decision-making and operational outcomes. Findings underscored the district's transition from reactive to adaptive leadership, the value of distributed decision-making through reopening committees, and the centrality of student well-being in guiding policy and practice. The analysis also illuminated missed opportunities, particularly in the resolution stage, where the absence of a structured district-wide debrief limited institutional learning and left critical issues, such as leader mental health, unaddressed.

The chapter also outlined implications for district crisis policy and practice, emphasizing the need for structured early-response protocols, leadership capacity-building for long-duration crises, intentional crisis resolution processes, and the integration of mental health support for school leaders. Recommendations further reinforced the importance of collaborative planning and sustained adaptability to strengthen institutional preparedness. Policy suggestions were grounded in the study's findings and supported by relevant literature, offering a practical roadmap for school districts seeking to enhance crisis leadership capacity and preserve educational continuity during future emergencies.

Finally, the chapter reflected on the personal and professional insights drawn from the study, recognizing the extraordinary resilience demonstrated by CCPS leaders during an unprecedented crisis. Their experiences affirmed that effective crisis response is shaped as much by the systems and relationships cultivated prior to an event as by the decisions made in the moment. The findings provide not only a detailed account of CCPS's COVID-19 response but also a transferable conceptual framework for understanding and improving crisis leadership in other educational contexts.

### **Study Conclusion**

This study set out to examine the decision-making processes of Carteret County Public Schools (CCPS) during the COVID-19 pandemic, using the conceptual framework, *Adaptive Crisis Resilience: Integrating Socioecological Resilience and Dynamic Responsiveness*, to analyze leadership actions across six interconnected components of crisis response. Beginning with the identification of early warning signs in the prodromal stage and extending through acute, chronic, and resolution phases, the study illuminated how historical resilience, collaborative planning, and adaptive responsiveness shaped CCPS's ability to navigate one of the most significant disruptions in modern education. By situating the district's experience within the broader context of crisis leadership literature, the findings offer both a detailed case analysis and a transferable framework for strengthening school system preparedness in future emergencies.

The research revealed that while CCPS demonstrated notable strengths, particularly in distributed leadership, cross-level stakeholder engagement, and prioritization of student well-being, gaps remained in formal post-crisis reflection and leader mental health support. The absence of a structured resolution phase limited institutional learning, preventing the systematic

integration of lessons learned into future crisis planning. This omission, compounded by the prolonged nature of the pandemic, left leaders without a formal mechanism to process their experiences, evaluate operational strategies, or collectively address the emotional toll of sustained crisis leadership. The implications of this finding extend beyond the COVID-19 context, underscoring the necessity for districts to institutionalize structured closure processes, early-response protocols, and leadership capacity-building initiatives.

Ultimately, this study reinforces that effective crisis leadership is not solely a product of real-time decision-making, but also of the systems, relationships, and capacities cultivated long before a crisis emerges. CCPS's prior experiences with hurricanes and other community-wide disruptions provided a foundation of socioecological resilience that leaders drew upon in 2020; however, the pandemic's scale and duration tested even these established strengths. The lessons derived from this case study point to the critical importance of proactive planning, distributed decision-making, sustained adaptability, and intentional resolution processes in maintaining educational continuity and organizational stability. As districts prepare for future disruptions, whether natural disasters, public health emergencies, or other large-scale events, the integration of these elements into crisis leadership policies and practices will be essential to safeguarding both student outcomes and leader well-being.

## References

- Adger, W. N. (2003). Social capital, collective action, and adaptation to climate change. *Economic Geography*, 79(4), 387–404. <https://doi.org/10.1111/j.1944-8287.2003.tb00220.x>
- Adom, D., Hussein, E. K., & Agyem, J. A. (2018). Theoretical and conceptual framework: Mandatory ingredients of a quality research. *International Journal of Scientific Research*, 7(1), 438-441. <https://doi.org/10.36106/ijsr>
- AJMC Staff. (2021, January 1). A timeline of COVID-19 developments in 2020. *AJMC: The Center for Biosimilars*. <https://www.ajmc.com/view/a-timeline-of-covid19-developments-in-2020>
- Ali, M. M., Dwyer, D. S., Vanner, E. A., & Lopez, A. (2012). The relationship between adolescents' mental health and school type. *Social Psychiatry and Psychiatric Epidemiology*, 47(5), 723-731. <https://doi.org/10.1007/s00127-011-0388-4>
- Allen, M., Burt, K., Bryan, E., Carter, D., & al, e. (2002). School counselors' preparation for and participation in crisis intervention. *Professional School Counseling*, 6(2), 96. <https://proxying.lib.ncsu.edu/index.php?url=https://www.proquest.com/scholarly-journals/school-counselors-preparation-participation/docview/213356676/se-2>
- American Red Cross. (2018). *How to prepare for emergencies*. Redcross.org. <https://www.redcross.org/get-help/how-to-prepare-for-emergencies.html>
- Anfara, V. A., & Mertz, N. T. (2006). *Theoretical frameworks in qualitative research*. Sage Publications.
- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.

- Balch, B. V., & Adamson, M. T. (2018). *Building great school board-superintendent teams: A systematic approach to balancing roles and responsibilities*. Solution Tree Press. 129  
[https://solutiontree.s3.amazonaws.com/solutiontree.com/media/pdf/study\\_guides/BGSBST\\_study%20guide.pdf](https://solutiontree.s3.amazonaws.com/solutiontree.com/media/pdf/study_guides/BGSBST_study%20guide.pdf)
- BallotPedia. (2021, May 16). *School responses in North Carolina to the coronavirus (COVID-19) pandemic during the 2020-2021 school year*. BallotPedia Organization.  
[https://ballotpedia.org/School\\_responses\\_in\\_North\\_Carolina\\_to\\_the\\_coronavirus\\_\(COVID-19\)\\_pandemic\\_during\\_the\\_2020-2021\\_school\\_year#School\\_responses\\_timeline](https://ballotpedia.org/School_responses_in_North_Carolina_to_the_coronavirus_(COVID-19)_pandemic_during_the_2020-2021_school_year#School_responses_timeline)
- Barclay, C. (2004). Crisis management in a primary school. *Teacher Development*, 8(2–3), 297–312. <https://doi.org/10.1080/13664530400200222>
- Barnett, B. G., Shoho, A. R., & Oleszewski, A. M. (2012). The job realities of beginning and experienced assistant principals. *Leadership and Policy in Schools*, 11(1), 92–128.  
<https://doi.org/10.1080/15700763.2011.611924>
- Barth, P. (2013). *Virtual schools: Where's the evidence*. *Educational Leadership* 70(6): 32–36.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559.  
<https://doi.org/10.46743/2160-3715/2008.1573>
- Bazzaz, D., & Blethen, R. (2020, February 27). *Bothell High School closed Thursday-Friday in “abundance of caution” over coronavirus fears*. The Seattle Times.  
<https://www.seattletimes.com/seattle-news/health/bothell-high-school-closed-thursday-in-an-abundance-of-caution-over-coronavirus-fears-after-staffer-traveled-internationally/>

Beabout, B. (2007, Winter). Stakeholder organizations: Hurricane Katrina and the New Orleans public schools. *Multicultural Education*, 15(2), 43–49.

<https://files.eric.ed.gov/fulltext/EJ784847.pdf>

Beauchamp, G., Hulme, M., Clarke, L., Hamilton, L., & Harvey, J. A. (2021). ‘People miss people’: A study of school leadership and management in the four nations of the United Kingdom during the COVID-19 pandemic. *Educational Management Administration & Leadership*, 49(3), 375–392.

Beltekin, N., & Kuyulu, N. (2020). The effect of COVID-19 pandemic period on university students: The relationship between anxiety and depression levels. *European Journal of Education Studies*, 7(9), 1-14. <https://doi.org/10.5281/zenodo.4270066>

Berg, B. L. (1998). *Qualitative research methods for the social sciences*. Pearson.

Berkes, F., & Folke, C. (Eds.). (1998). *Linking social and ecological systems: Management practices and social mechanisms for building resilience*. Cambridge University Press.

Blad, E. (2024, April 17). How Columbine shaped 25 years of school safety. *Education Week*.

<https://www.edweek.org/leadership/how-columbine-shaped-25-years-of-school-safety/2024/04>

Blad, E., & McFarlane, L. (2023, August 10). Hawaii wildfires thrust educators into disaster response roles. *Education Week*. <https://www.edweek.org/leadership/hawaii-wildfires-thrust-educators-into-disaster-response-roles/2023/08>

Bogdan, R., & Biklen, S. K. (2007). *Qualitative research for education*. Allyn & Bacon.

Boin, A., & Lodge, M. (2016). Designing resilient institutions for transboundary crisis management: A time for public administration. *Public administration*, 94(2), 289-298.

- Boudreaux, B. (2005). *Exploring a multi-stage model of crisis management: Utilities, hurricanes, and contingency* (Doctoral dissertation, University of Florida). University of Florida. [http://ufdcimages.uflib.ufl.edu/UF/E0/01/04/86/00001/boudreaux\\_b.pdf](http://ufdcimages.uflib.ufl.edu/UF/E0/01/04/86/00001/boudreaux_b.pdf)
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Bradburn, N. M., Rips, L. J., & Shevell, S. K. (2004). Answering autobiographical questions: The impact of memory and inference on surveys. *Science*, 236(4798), 157–161.  
<https://doi.org/10.1126/science.356349>
- Brock, S. E., Lazarus, P. J., & Jimerson, S. R. (Eds.). (2002). *Best practices in school crisis prevention and intervention*. National Association of School Psychologists.
- Brock, S. E., Nickerson, A. B., Reeves, M. A., Conolly, C., Jimerson, S. R., Pesce, R. C., & Lazzaro, B. R. (2013). *School crisis prevention and intervention: The PREPaRE model*. National Association of School Psychologists.
- Brock, S. E., Nickerson, A. B., Reeves, M. A., Conolly, C. N., Jimerson, S. R., Pesce, R. C., & Lazzaro, B. R. (2016). *School crisis prevention and intervention: The PREPaRE model* (2nd ed.). National Association of School Psychologists.
- Brock, S. E., Sandoval, J., & Lewis, S. (2001). *Preparing for Crises in the Schools*. John Wiley & Sons.
- Brodinsky, B. (1977). *How a school board operates* (No. 88). Phi Delta Kappa Educational Foundation.

- Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. Russell Sage Foundation.
- Cambridge Dictionary. (2024, August 14). *crisis*. @CambridgeWords.  
[https://dictionary.cambridge.org/us/dictionary/english/crisis#google\\_vignette](https://dictionary.cambridge.org/us/dictionary/english/crisis#google_vignette)
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- Campbell, D., & Fullan, M. (2019). *The governance core: School boards, superintendents, and schools working together*. Corwin Press.
- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Houghton Mifflin Company.
- Campbell, R. B. (1997). *Gone to Texas: A history of the Lone Star State*. Oxford University Press.
- Caplan, G. (1964). *Principles of preventive psychiatry*. Basic Books.
- Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviors in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science*, 26(1), 81–98. <https://doi.org/10.1002/sres.903>
- Carpenter, S. R., Walker, B., Anderies, J. M., & Abel, N. (2001). From metaphor to measurement: Resilience of what to what? *Ecosystems*, 4(8), 765–781.  
<https://doi.org/10.1007/s10021-001-0045-9>
- Carteret County Planning & Development. (n.d.). *Carteret County flood information*. Carteret County Government. <https://www.carteretcountync.gov/244/Carteret-County-Flood-Information>
- Carteret County Public Schools. (n.d.). *About us*. <https://www.carteretcountyschools.org/>

- Carteret County Public Schools. (2021). *Crisis Response*. <https://carteretcountyschools.org>
- Centers for Disease Control and Prevention. (2018). *Adolescent and school health: Protective factors*. Division of Adolescent and School Health, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- <https://www.cdc.gov/healthyyouth/protective/index.htm>
- Centers for Disease Control. (2023, July 15). *About COVID-19*.
- <https://www.cdc.gov/covid/about/index.html>
- Chapter 115C - Article 5. (n.d.). North Carolina General Assembly.
- [https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/ByArticle/Chapter\\_115c/Article\\_5.html](https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/ByArticle/Chapter_115c/Article_5.html)
- Charles, D. (2020a). Coronavirus prompts many states to keep schools closed for rest of academic year. *NPR*. <https://www.npr.org/2020/04/20/838089283/coronavirus-prompts-many-states-to-keep-schools-closed-for-rest-of-academic-year>
- Charles, D. (2020b). District-By-District: Explore Map of Public School Reopening Plans Across N.C. *Spectrum Local News*. <https://spectrumlocalnews.com>
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.
- Cichocki, M. (2020, April 24). *Despite reversals in AIDS deaths, challenges remain*. VeryWell Health. <https://www.verywellhealth.com/how-many-people-have-died-of-aids-48721>
- Cilliers, P. (1998). *Complexity and postmodernism: Understanding complex systems*. Routledge.
- CNN. (2013). *Columbine High School shootings fast facts*. Retrieved October 12, 2022, from <https://www.cnn.com/2013/09/18/us/columbine-high-school-shootings-fast-facts/index.html>

- Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education* (8th ed.). Routledge.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(Supplement), S95-S120. <http://www.jstor.org/stable/2780243>
- Coombs, W. T. (2015). *Ongoing crisis communication: Planning, managing, and responding* (4th ed.). Sage.
- Corcoran, T., Fuhrman, S. H., & Belcher, C. L. (2001). The district role in instructional improvement. *Phi Delta Kappan*, 83(1), 78–84. <http://www.jstor.org/stable/20440064>
- Coronado, A., Tucker, E., Bleiberg, J., & Whitehurst, L. (2024, January 17). US Justice Department to release report on halting police response to Uvalde school massacre. *AP News*. <https://apnews.com/article/uvalde-school-shooting-justice-department-report-police-16b59efa5c5015d685d917c3f0f26256>
- Cornell, D. G., & Sheras, P. L. (1998). Common errors in school crisis response: Learning from our mistakes. *Psychology in the Schools*, 35(3), 297–307. <https://www.badgemessenger.com/sites/default/files/uploads/resourceLibrary/common-errors.pdf>
- Cowan, K. C., & Rossen, E. (2013, December). Responding to the unthinkable: School crisis response and recovery. *Phi Delta Kappan*, 95(4), 8–12. <https://www.kappanonline.org/cowan-rossen-responding-unthinkable-school-crisis-response-recovery/>
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Cuban, L. (1988). *The managerial imperative and the practice of leadership in schools*. State University of New York Press.
- Cyranoski, D. (2007). Worse quake to come, Indonesia warned. *Nature*, 449(7160).
- Darling, J. R. (1994). Crisis management in international business: Keys to effective decision making. *Leadership & Organization Development Journal*, 15(8), 3–8. [https://doi-org.prox.lib.ncsu.edu/10.1108/01437739410073047](https://doi.org/prox.lib.ncsu.edu/10.1108/01437739410073047)
- Darling, M., Parry, C., & Moore, J. (2005). *Learning in the thick of it*. Harvard Business Review. Retrieved from <https://hbr.org/2005/07/learning-in-the-thick-of-it>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. <https://doi.org/10.1080/10888691.2018.1537791>
- Day, C., & Gu, Q. (2014). *Resilient teachers, resilient schools: Building and sustaining quality in testing times*. Routledge. <https://doi.org/10.4324/9781315769015>
- Decker, S., Peele, H., & Riser-Kositsky, M. (2020, July 1). *The coronavirus spring: The historic closing of U.S. schools (A timeline)*. Education Week. <https://www.edweek.org/leadership/the-coronavirus-spring-the-historic-closing-of-u-s-schools-a-timeline/2020/07>
- Delyser, D. (2001). “Do you really live here?” Thoughts on insider research. *Geographical Review*, 91(1/2), 441–453. <https://doi.org/10.2307/3250847>
- Denzin, N. K. (2001). *Interpretive interactionism*. Sage.

- Department of Public Instruction (NC DPI). (2023). *Recovery analysis shows NC students made gains on pandemic losses in 2021-22*. North Carolina Department of Public Instruction. <https://www.dpi.nc.gov/news/press-releases/recovery-analysis-shows-nc-students-made-gains-pandemic-losses-2021-22>
- Donohue, E., Schiraldi, V., & Zeidenberg, J. (1998). *School house hype: The school shootings, and the real risks kids face in America*. Center on Juvenile and Criminal Justice. <https://www.cjcj.org/pubs/shooting/shootings.html>
- Dooley, K. J. (1997). A complex adaptive systems model of organization change. *Nonlinear Dynamics, Psychology, and Life Sciences*, 1(1), 69–97. <https://sctpls.org/resources/files/art0101-5-Dooley.pdf>
- Down Home NC. (2022, February 16). *Wondering what a school board does? Welcome to Down Home!* <https://downhomenc.org/2022/02/16/school-board-democracy-series/>
- DuFour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Solution Tree.
- Duncan, P. K., & Seguin, C. A. (2002). The perfect match: A case study of a first-year woman principal. *Journal of School Leadership*, 12(6), 608–639. <https://doi.org/10.1177/105268460201200601>
- Dwyer, K., Osher, D., & Warger, C. L. (1998). *Early warning, timely response: a guide to safe schools*. U.S. Department of Education, Office of Educational Research and Improvement, Educational Resources Information Center.
- Dyregrov, A., Wikander, A. M. B., & Vigerust, S. (1999, May). Sudden death of a classmate and friend: Adolescents' perception of support from their school. *School Psychology International*, 20(2), 191–208. <https://doi.org/10.1177/0143034399202003>

- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- EducationNC. (2020a). *StrongSchoolsNC Public Health Toolkit: What schools need to know*. <https://www.ednc.org>
- EducationNC. (2020b). *Ask & Answer | Lessons learned in Plan B inform transition to Plan A for elementary schools*. <https://www.ednc.org/ask-answer-lessons-learned-in-plan-b-inform-transition-to-plan-a-for-elementary-schools/>
- EducationNC. (2022). *Recovery analysis shows NC students made gains on pandemic losses in 2021-22*. <https://www.ednc.org/recovery-analysis-shows-nc-students-made-gains-on-pandemic-losses-in-2021-22/>
- Education Recovery Scorecard. (2025). *Carteret County Public Schools report* [Data set]. Center for Education Policy Research at Harvard University & Educational Opportunity Project at Stanford University. [https://educationrecoverycard.org/wp-content/uploads/2025/02/report\\_NC\\_3700630\\_carteret-county-public-schools.pdf](https://educationrecoverycard.org/wp-content/uploads/2025/02/report_NC_3700630_carteret-county-public-schools.pdf)
- Education Week. (2021, March 4). *A year of COVID-19: What it looked like for schools*. Education Week. <https://www.edweek.org/leadership/a-year-of-covid-19-what-it-looked-like-for-schools/2021/03>
- Elger, T. (2010). Critical realism. In A. Mills, G. Durepos, & E. Wiebe (Eds.), *Encyclopedia of case study research* (pp. 253-257). Sage.

- Elmer, T., Mepham, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLOS ONE*, *15*(7), e0236337. <https://doi.org/10.1371/journal.pone.0236337>
- Fearing, H. (2008, March 4). *Collinwood school fire*. Cleveland Historical. <https://clevelandhistorical.org/items/show/32>
- Federal Emergency Management Agency. (2019a). 2019 hurricane readiness report. U.S. Department of Homeland Security. <https://www.fema.gov>
- Federal Emergency Management Agency. (2019b). *Guide for developing high-quality school emergency operations plans*. <https://www.fema.gov/sites/default/files/2020-07/guide-developing-school-emergency-operations-plans.pdf>
- Federal Emergency Management Agency. (2024). Schools in Joplin, Missouri stand up to tornadoes by building safe rooms. *FEMA.gov*. <https://www.fema.gov/case-study/schools-joplin-missouri-stand-tornadoes-building-safe-rooms>
- Federici, R. A., & Skaalvik, E. M. (2012). Principal self-efficacy: Relations with burnout, job satisfaction, and motivation to quit. *Social Psychology of Education*, *15*(3), 295–320. <https://doi.org/10.1007/s11218-012-9183-5>
- Fink, S. (1986). *Crisis management: Planning for the inevitable*. American Management Association.
- Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change*, *16*(3), 253–267. <https://doi.org/10.1016/j.gloenvcha.2006.04.002>

- Ford, M. R., & Ihrke, D. M. (2020). School board member strategic planning prioritization and school district performance. *Leadership and Policy in Schools, 19*(4), 597–609.  
<https://doi.org/10.1080/15700763.2019.1638420>
- Fowler, F. J. (2014). *Survey research methods* (5th ed.). SAGE Publications.
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. Free Press.
- Fullan, M. (2007). *Leading in a Culture of Change*. Jossey-Bass.
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*(9), 1408–1416. <https://doi.org/10.46743/2160-3715/2015.2281>
- Fussell, E. (2015). The long-term recovery of New Orleans' population after Hurricane Katrina. *American Behavioral Scientist, 59*(10), 1231–1245.  
<https://doi.org/10.1177/0002764215591181>
- Gleick, J. (1987). *Chaos: Making a new science*. Viking.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). Longman.
- Goleman, D. (1995). *Emotional intelligence*. Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. Bantam.
- Golway, T. (2003). *So others might live: A history of New York's bravest: The FDNY from 1700 to the present*. BasicBooks Oxford Publicity Partnership.
- Graham, J., Shirm, S., Liggin, R., Aitken, M., & Dick, R. (2006). Mass casualty events at schools: A national preparedness survey. *Pediatrics, 117*, 8–15.  
<https://10.1542/peds.2005-0927>
- Granados, A. (2020, April 24). *Gov. Cooper closes NC schools for the rest of the school year*. EdNC. <https://www.ednc.org/nc-schools-closed-for-rest-of-school-year/>

- Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness* (25th anniversary ed.). Paulist Press.
- Grissom, J. A., & Condon, C. A. (2021). *Leading schools and districts in times of crisis*. National Governors Association. <https://www.nga.org/wp-content/uploads/2023/06/Leading-Schools-and-Districts-in-Times-of-Crisis-.pdf>
- Gronn, P. (2009). From distributed to hybrid leadership practice. In A. Harris (Ed.), *Distributed leadership: Different perspectives* (pp. 197–217). Springer. [https://doi.org/10.1007/978-1-4020-9737-9\\_11](https://doi.org/10.1007/978-1-4020-9737-9_11)
- Grossman, A., Loeb, S., & Dynarski, S. (2021). The politics of school reopening during COVID-19: A case study in micropolitics. *Educational Administration Quarterly*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10186136/>
- G.S. 115C-525. (n.d.). *North Carolina General Statutes*. North Carolina General Assembly. [https://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter\\_115C/GS\\_115C-525.html](https://www.ncleg.net/EnactedLegislation/Statutes/HTML/BySection/Chapter_115C/GS_115C-525.html)
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. <https://doi.org/10.1177/1525822X05279903>
- Gunderson, L. H., & Holling, C. S. (2002). *Panarchy: Understanding transformations in human and natural systems*. Island Press.
- Hanover Research. (2022). *School leadership and mental health*. The School Superintendents Association.
- Hargreaves, A., & Fullan, M. (2020). *Professional capital after the pandemic: Revisiting and revising classic understandings of teachers' work*. Teachers College Press.

- Harris, A. (2020). COVID-19 – school leadership in crisis? *Journal of Professional Capital and Community*, 5(3/4), 321–326. <https://doi.org/10.1108/JPCC-06-2020-0045>
- Harris, A., & Jones, M. (2020). COVID-19 – school leadership in disruptive times. *School Leadership & Management*, 40(4), 243–247.  
<https://doi.org/10.1080/13632434.2020.1811479>
- Hashim, A. K., Weddle, H., & Irondi, O. N. (2024). Responding to crisis: A multiple case study of district approaches for supporting student learning in the COVID-19 Pandemic. *Educational Administration Quarterly*, 60(5), 583-623.  
<https://doi.org/10.1177/0013161X241271317>
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. State University of New York Press.
- Hausman, C. S., Nebeker, A., McCreary, J., & Donaldson, G. A. (2002). The worklife of the assistant principal. *Journal of Educational Administration*, 40(2), 136–157.  
<https://doi.org/10.1108/09578230210421139>
- Heath, M. A., Ryan, K., Dean, B., & Bingham, R. (2007). History of school safety and psychological first aid for children. *Brief Treatment and Crisis Intervention*, 7(3), 206–223. <https://doi.org/10.1093/brief-treatment/mhm011>
- Heffernan, A., MacDonald, K., & Longmuir, F. (2025). The emotional intensity of educational leadership: A scoping review. *International Journal of Leadership in Education*.
- Heimann, C. F. L. (1993). Understanding the Challenger Disaster: Organizational Structure and the Design of Reliable Systems. *American Political Science Review*, 87(2), 421–435.  
<https://doi.org/10.2307/2939051>

- Hensler, B. (2023, December 1). *A failure of imagination: The Our Lady of the Angels School tragedy*. FireRescue1. <https://www.firerescue1.com/firefighting-history/a-failure-of-imagination-the-our-lady-of-the-angels-school-tragedy>
- Hightower, A. M. (2002). *San Diego's big boom: District bureaucracy supports culture of learning*. University of Washington Center for the Study of Teaching and Policy.
- Hobfoll, S. E., Watson, P. J., Bell, C. C., Bryant, R., Brymer, M., Friedman, M. J., Friedman, M., Gersons, B. P., de Jong, J. T. V. M., Layne, C. M., Maguen, S., Neria, Y., Norwood, A. E., Pynoos, R., Reissman, D. B., Ruzek, J., Shalev, A. Y., Solomon, Z., Steinberg, A., & Ursano, R. J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry: Interpersonal and Biological Processes*, 70(4), 283–315. <https://doi.org/10.1521/psyc.2007.70.4.283>
- Holland, J. H. (2006). *Studying complex adaptive systems*. *Journal of Systems Science and Complexity*, 19(1), 1–8. <https://doi.org/10.1007/s11424-006-0001-8>
- Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly*, 48(4), 733–774. <https://doi.org/10.1177/0013161X12443258>
- Honig, M. I., Copland, M. A., Rainey, L., Lorton, J. A., & Newton, M. (2010). *Central office transformation for district-wide teaching and learning improvement*. University of Washington, Center for the Study of Teaching and Policy.
- Houston, P., & Bryant, A. (1997). The roles of superintendents and school boards in engaging the public with the public schools. *Phi Delta Kappan*, 78(10), 756–759. <https://www.proquest.com/docview/218475588>

- Howell, G., & Miller, D. R. (2006). How the relationship between the crisis life cycle and mass media content can better inform crisis management. *PRism*, 4(1).  
<https://www.prismjournal.org/uploads/1/2/5/6/125661607/v4-no1-a2.pdf>
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause Quarterly*, 31(4), 51–55. <https://er.educause.edu/articles/2008/11/asynchronous-and-synchronous-elearning>
- Hybrid Learning Environments. (n.d.). *College of Education Technology Center*.  
<https://www.education.uw.edu/technologycenter/hybrid-learning-environments/>
- Irwin, V., Wang, K., Cui, J., & Thompson, A. (2022). *Indicators of school crime and safety: 2021*. National Center for Education Statistics. <https://nces.ed.gov/pubs2022/2022092.pdf>
- Jackson, K. T. (1998). *The encyclopedia of New York City*. Yale University Press.
- Jackson, M., Bass, L., Jackman-Ryan, S., Hoeflaken, K., & Picart, J. A. (2022). Locating Equity in Principals' Pandemic Decision-Making Practices. *Peabody Journal of Education*, 97(3), 274–290. <https://doi-org.prox.lib.ncsu.edu/10.1080/0161956X.2022.2079883>
- Jacobo, J., & El-Bawab, N. (2022, July 17). Timeline: How the shooting at a Texas elementary school unfolded. *ABC News*. <https://abcnews.go.com/US/timeline-shooting-texas-elementary-school-unfolded/story?id=84966910>
- James, R. K., & Gilliland, B. E. (2013). *Crisis intervention strategies* (7th ed.). Thomson Brooks/Cole.
- Jones, D. (2022, May 17). *How the Colonial Pipeline attack instilled urgency in cybersecurity*. Cybersecurity Dive. <https://www.cybersecuritydive.com/news/post-colonial-pipeline-attack/623859/>
- Keene, A. (2000). Complexity theory: The changing role of leadership. *Industrial and Commercial Training*, 32(1), 15–18. <https://doi.org/10.1108/00197850010309378>

- Kilincel, S., Kilincel, O., & Murat, M. (2020). Factors influencing anxiety and depression among adolescents during the COVID-19 outbreak. *Journal of Psychiatric Research, 129*, 1-7.  
<https://doi.org/10.1016/j.jpsychires.2020.07.006>
- Kitchin, R., & Tate, N. J. (2000). *Conducting research in human geography: Theory, methodology, and practice*. Pearson Education.
- Klingman, A. (1987). A school-based emergency crisis intervention in a mass school disaster. *Professional Psychology: Research and Practice, 18*(6), 604–612.  
<https://doi.org/10.1037/0735-7028.18.6.604>
- Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology, 50*, 569–598.  
<https://doi.org/10.1146/annurev.psych.50.118538>
- Kvale, S., & Brinkmann, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage.
- Law Insider. (2024). *Crisis team definition: 125 samples*.  
<https://www.lawinsider.com/dictionary/crisis-team>
- LeCompte, M. D., & Preissle, J. (1993). *Ethnography and qualitative design in educational research*. Academic Press.
- Leithwood, K., & Azah, V. N. (2016). Characteristics of effective leadership networks. *Journal of Educational Administration, 54*(4), 409-433.
- Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management, 40*(1), 5–22.  
<https://doi.org/10.1080/13632434.2019.1596077>

- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. The Wallace Foundation.  
<https://www.wallacefoundation.org/knowledge-center/pages/how-leadership-influences-student-learning.aspx>
- Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255.  
<https://doi.org/10.1016/j.hrmr.2010.07.017>
- Leshem, S., & Trafford, V. (2007). Overlooking the conceptual framework. *Innovations in Education and Teaching International*, 44(1), 93-105.  
<https://doi.org/10.1080/14703290601081407>
- Lieberman, M. (2020, November 12). *How hybrid learning is (and is not) working during COVID-19: 6 case studies*. Education Week. <https://www.edweek.org/leadership/how-hybrid-learning-is-and-is-not-working-during-covid-19-6-case-studies/2020/11>
- Lin, N. (2001). *Social capital: A theory of social structure and action*. Cambridge University Press. <https://doi-org.prox.lib.ncsu.edu/10.1017/CBO9780511815447>
- Liou, Y.-H. (2014). School Crisis Management: A model of Dynamic Responsiveness to Crisis Life Cycle. *Educational Administration Quarterly*, 51(2), 247–289.
- Loller, T. (2022, September 7). *25 Years After Kentucky School Shooting, a Chance at Parole*. AP News. <https://apnews.com/article/religion-shootings-education-kentucky-school-56840294aca361dbed910f412449b754>

- Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Learning from leadership: Investigating the links to improved student learning. Final report of research to the Wallace Foundation*. The Wallace Foundation.
- Marion, R., & Bacon, J. (2000). Organizational extinction and complex systems. *Emergence*, 1(4), 71–96. [https://doi.org/10.1207/S15327000EM0104\\_06](https://doi.org/10.1207/S15327000EM0104_06)
- Marion, R., & Uhl-Bien, M. (2001). Leadership in complex organizations. *The Leadership Quarterly*, 12(4), 389-418. [https://doi.org/10.1016/S1048-9843\(01\)00092-3](https://doi.org/10.1016/S1048-9843(01)00092-3)
- Marshall, C., & Hooley, R. M. (2006). *The assistant principal: Leadership choices and challenges* (2nd ed.). Corwin Press.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd ed.). Sage Publications.
- Martin, K. (2020, October). *When can the kids go back to school? Cooper allows more full-time in-person options*. Carolina Public Press. <https://carolinapublicpress.org/37910/cooper-allow-options-nc-elementary-schools-covid/>
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works: From research to results*. ASCD.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications.
- McClenny, J. (2024, October 1). *Limitless Learners Update*. Monthly Board of Education Public Meeting, Carteret County Schools Board of Education, Board Room.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service.

<https://purl.fdlp.gov/GPO/LPS118480>

Merriam, S. B., & Grenier, R. S. (2019). *Qualitative research in practice: Examples for discussion and analysis* (2nd ed.). Jossey-Bass.

Merriam, S. B., & Ntseane, G. (2008). Transformational learning in Botswana: How culture shapes the process. *Adult Education Quarterly*, 58(3), 183–197.

<https://doi.org/10.1177/0741713608314087>

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.

Merriam-Webster. (2024). *Cohort*. In Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/cohort>

Merriam-Webster. (2019). *Crisis*. Merriam-Webster.com. <https://www.merriam-webster.com/dictionary/crisis>

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage Publications.

Mitchell, M. (2009). *Complexity: A guided tour*. Oxford University Press.

Mitroff, I. I. (2004). *Crisis leadership: Planning for the unthinkable*. John Wiley.

- Mitroff, I. I. (2005). *Why some companies emerge stronger and better from a crisis: 7 essential lessons for surviving disaster*. AMACOM.
- Mitroff, I. I., & Anagnos, G. (2000). Why crises are an inevitable and permanent feature of modern societies. In *Managing crises before they happen: What every executive & manager needs to know about crisis management* (pp. 1–9). American Management Association International.
- Moore, M. G., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, 14(2), 129–135. <https://doi.org/10.1016/j.iheduc.2010.10.001>
- Morgan, H. (2015). Online instruction and virtual schools for middle and high school students: Twenty-first-century fads or progressive teaching methods for today’s pupils? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 88(2), 72–76. <https://doi.org/10.1080/00098655.2015.1007909>
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(2), 120–123. <https://doi.org/10.1097/00006199-199103000-00014>
- Moustakas, C. (1994). *Phenomenological research methods*. SAGE Publications.
- Murphy, P. (1996). Chaos theory as a model for managing issues and crises. *Public Relations Review*, 22, 95–113. [https://doi.org/10.1016/S0363-8111\(96\)90009-0](https://doi.org/10.1016/S0363-8111(96)90009-0)
- myFutureNC. (2024). *Carteret County 2024 education profile*. <https://dashboard.myfuturenc.org/>
- National Education Association. (2018). *School crisis guide: Help and healing in a time of crisis*. <https://www.nea.org/sites/default/files/2020-07/NEA%20School%20Crisis%20Guide%202018.pdf>

- National Park Service. (n.d.). *Cape Lookout National Seashore*. U.S. Department of the Interior.  
<https://www.nps.gov/cal0/index.htm>
- National School Boards Association. (n.d.) *About School Board and Local Governance*.  
<https://www.nsba.org/About/About-School-Board-and-Local-Governance>
- National Weather Service. (2018). *Tornado safety*. <https://www.weather.gov/>
- Neisser, U. (1981). John Dean's memory: A case study. *Cognition*, 9(1), 1–22.  
[https://doi.org/10.1016/0010-0277\(81\)90011-6](https://doi.org/10.1016/0010-0277(81)90011-6)
- Neff, K. (n.d.). *Louisiana hurricanes: Impact on education*. Louisiana State University Libraries.  
<https://guides.lib.lsu.edu/Hurricanes/KatrinaEducation>
- Nelson, L., Gellert, K., Short, S., & Burkart, S. (2021). The impact of remote learning on students' well-being: Insights from school leaders. *Journal of Education and Learning*, 10(4), 15-28. <https://doi.org/10.5539/jel.v10n4p15>
- Netolicky, D. M. (2020). School leadership during a pandemic: Navigating tensions. *Journal of Professional Capital and Community*, 5(3/4), 391–395. <https://doi.org/10.1108/JPCC-05-2020-0017>
- North Carolina Department of Health and Human Services. (2021). *2021 Carteret County community health assessment*. <https://schs.dph.ncdhhs.gov>
- North Carolina Department of Health and Human Services (NCDHHS). (2022). *StrongSchoolsNC Public Health Toolkit*. <https://www.ncdhhs.gov>
- North Carolina Department of Public Instruction. (n.d.). *Economically disadvantaged – all years* [Data set]. <https://www.dpi.nc.gov/data-reports/economically-disadvantaged>

- North Carolina Department of Public Instruction. (2020a). *Lighting our way forward: North Carolina's guidebook for reopening public schools*. <https://www.dpi.nc.gov/news/covid-19-response-resources>
- North Carolina Department of Public Instruction. (2020b). *School performance grades*. <https://www.dpi.nc.gov>
- North Carolina Department of Public Safety. (2019). *Hurricane Dorian after-action report*. <https://www.ncdps.gov>
- North Carolina School Boards Association. (2024). *Roles and responsibilities of the superintendent*. <https://www.ncsba.org/>
- North Carolina General Assembly. (2020). Senate Bill 704: COVID-19 Recovery Act. <https://www.ncleg.gov/Sessions/2019/Bills/Senate/PDF/S704v6.pdf>
- Northouse, P. G. (2019). *Leadership: Theory and practice*. Sage Publications.
- Office for Victims of Crime. (2003, September). *A model for school-based crisis preparedness and response* (NCJ 197832). U.S. Department of Justice, Office of Justice Programs. <https://ovc.ojp.gov/sites/g/files/xyckuh226/files/publications/bulletins/schoolcrisis/pg3.html>
- Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *Qualitative Report*, 13(4), 695–705.
- Paraskevas, A. (2006). Crisis management or crisis response system? A complexity science approach to organizational crises. *Management Decision*, 44(6), 892–907. <https://doi.org/10.1108/00251740610677940>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Sage Publications.

- Pepper, A. (2002). Leading professionals: A science, a philosophy, and a way of working. *Journal of Change Management*, 3(4), 349-360.  
<https://doi.org/10.1080/146970102762400942>
- Peres, L. C., Trapido, E., Rung, A. L., Harrington, D. J., Oral, E., Fang, Z., Fontham, E., & Peters, E. S. (2016). The Deepwater Horizon Oil Spill and Physical Health among Adult Women in Southern Louisiana: The Women and Their Children's Health (WaTCH) Study. *Environmental Health Perspectives*, 124(8), 1208–1213.  
<https://doi.org/10.1289/ehp.1510348>
- Poland, S. (1994). The role of crisis intervention teams to prevent and reduce school violence and trauma. *School Psychology Review*, 23(2), 175–189.
- Pollock, K. (2020). School leaders' work during the COVID-19 pandemic: A two-pronged approach. *International Studies in Educational Administration*, 48(1), 38–44
- Powers, R. (2017, February 6). *Duties of the board*. North Carolina School Boards Association.  
<https://ncsba.org/news-resources/board-member-knowledge-base/duties-of-the-board/>
- Public School Review. (n.d.). *Carteret County public schools*.  
<https://www.publicschoolreview.com/north-carolina/carteret-county>
- Putnam, J. (2016, May 18). Evil of Bath School disaster remembered 89 years later. *Lansing State Journal*. <https://www.lansingstatejournal.com/story/opinion/columnists/judy-putnam/2016/05/18/putnam-evil-remembered-89-years-later/84276384/>
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.
- Putnam, R. D., Leonardi, R., & Nanetti, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton University Press.

- Ramseyer, C., Holliday, L., & Sherry, S. T. (2019). Lessons learned from two elementary school collapses during the May 20, 2013 Moore tornado. *Journal of Performance of Constructed Facilities*, 33(1), 04018095. [https://doi.org/10.1061/\(ASCE\)CF.1943-5509.0001228](https://doi.org/10.1061/(ASCE)CF.1943-5509.0001228)
- Ravitch, S. M., & Riggan, M. (2017). *Reason & rigor: How conceptual frameworks guide research* (2nd ed.). SAGE Publications.
- Reams, M. A., & Irving, D. R. (2019). Applying community resilience theory to engagement with residents facing cumulative environmental exposure risks: Lessons from Louisiana's industrial corridor. *Reviews on Environmental Health*, 34(3), 235–244. <https://doi.org/10.1515/reveh-2019-0022>
- Rees, P., & Seaton, N. (2011, February). Psychologists' response to crisis: International perspectives. *School Psychology International*, 32(1), 73-94.  
doi:10.1177/0143034310397482
- Reeves, D. B. (2006). *The learning leader: How to focus school improvement for better results*. ASCD.
- Reeves, M. A., Kanan, L. M., & Plog, A. E. (2010). *Comprehensive planning for safe learning environments: A school professional's guide to integrating physical and psychological safety—Prevention through recovery*. Taylor & Francis.
- Resnick, M. A., & Bryant, A. L. (2010). School boards: Why American education needs them. *Phi Delta Kappan*, 91(6), 11–14. <https://www.proquest.com/docview/218517305>
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. SAGE Publications.

- Roach, V., Smith, L. W., & Boutin, J. (2011). School Leadership Policy Trends and Developments: Policy Expediency or Policy Excellence? *Educational Administration Quarterly*, 47(1), 71-113. doi:10.1177/0011000010378611
- Robert, B., & Lajtha, C. (2002). A new approach to crisis management. *Journal of Contingencies and Crisis Management*, 10(4), 181–191. <https://doi.org/10.1111/1468-5973.00182>
- Roberts, G., Hennessey, S., & Woessmann, L. (2005). The impact of family background on educational attainment in secondary education: A comparison across countries. *Review of Economics and Statistics*, 87(2), 383-393. <https://doi.org/10.1162/0034653053970177>
- Roberts, J., Phinney, J. S., Masse, L. C., & Chen, Y. R. (2005). The structure of academic self-concept among adolescents: Gender and ethnic variations. *Educational Psychology*, 25(1), 59–74.
- Roth, J. C. (2015). *School crisis response: Reflections of a team leader*. Hickory Run Press.
- Roth, J. C., & Fernandez, B. S. (2018). *Perspectives on school crisis response: Reflections from the field* (1st ed.). Routledge.
- Rubin, H. J., & Rubin, I. S. (2011). *Qualitative Interviewing: The Art of Hearing Data* (3rd ed.). Sage Publications.
- Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). SAGE Publications Ltd.
- Saldaña, J., & Omasta, M. (2022). *Qualitative research: Analyzing life*. Sage.
- Sandy Hook Promise. (2019). *About us*. <https://www.sandyhookpromise.org/about>
- Santibañez, L., & Guarino, C. (2020). The effects of absenteeism on academic and social-emotional outcomes: Lessons for COVID-19. Brookings Institution. <https://doi.org/10.26300/35nj-v890>

- Schwartz, S., & Riser-Kositsky, M. (2023, September 22). What does a school principal do? An explainer. *Education Week*. <https://www.edweek.org/leadership/what-does-a-school-principal-do-an-explainer/2023/09>
- Schwarz, N., & Sudman, S. (Eds.). (1994). *Autobiographical memory and the validity of retrospective reports*. Springer-Verlag. <https://doi.org/10.1007/978-1-4612-2624-6>
- Seeger, M. W., Sellnow, T. L., & Ulmer, R. R. (1998). Communication, organization, and crisis. In M. E. Roloff (Ed.), *Communication yearbook* (pp. 231–275). Sage.
- Senge, P. M. (2006). *The fifth discipline: The art & practice of the learning organization*. Doubleday.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2015). *Research methods in psychology* (10th ed.). McGraw-Hill.
- Shultz, J. M., Muschert, G. W., Dingwall, A., & Cohen, A. M. (2013). The Sandy Hook Elementary School shooting as tipping point. *Disaster Health, 1*(2), 65–73. <https://doi.org/10.4161/dish.27113>
- Siegel, F. R. (2019). Site selection with attention to susceptibility to natural and human-caused hazards. In *Cities and mega-cities* (pp. 25–41). *SpringerBriefs in Geography*. Springer. [https://doi.org/10.1007/978-3-319-93166-1\\_3](https://doi.org/10.1007/978-3-319-93166-1_3)
- Simola, S. K. (2005). Organizational crisis management: Overview and opportunities. *Consulting Psychology Journal: Practice and Research, 57*(3), 180–192. <https://psycnet.apa.org/doi/10.1037/1065-9293.57.3.180>

- Singh, J., Steele, K., & Singh, L. (2021). Combining the best of online and face-to-face learning: Hybrid and blended learning approach for COVID-19, post vaccine, & post-pandemic world. *Journal of Educational Technology Systems*, 50(2), 140–171.  
<https://doi.org/10.1177/00472395211047865>
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning. *American Journal of Distance Education*, 33(4), 289–306. <https://doi.org/10.1080/08923647.2019.1663082>
- Singer, J. (2022). *School reopening decisions during the COVID-19 pandemic: What can we learn from the emerging literature?* (EdWorkingPaper: 22-617). Annenberg Institute at Brown University. <https://doi.org/10.26300/z9w0-9q22>
- Slaikue, K. (1990). *Crisis intervention: A handbook for practice and research* (2nd ed.). Allyn & Bacon.
- Smith, L., & Riley, D. (2012). School leadership in times of crisis. *School Leadership & Management*, 32(1), 57–71. <https://doi.org/10.1080/13632434.2011.614941>
- Smith, D. J., & Sutter, D. (2013). Response and recovery after the Joplin tornado: Lessons applied and lessons learned. *The Independent Review*, 18(2), 165–188.  
<https://www.proquest.com/docview/1442998348>
- Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review*, 85(11), 68–76.
- Sprague, J. R., & Walker, H. M. (2022). *Safe and healthy schools: Practical prevention strategies* (2nd ed.). Guilford Press. <https://www.guilford.com/p/sprague>
- Spillane, J. P. (2006). *Distributed leadership*. Jossey-Bass

- Sprung, M. (2008). Unwanted intrusive thoughts and cognitive functioning in kindergarten and young elementary school-age children following Hurricane Katrina. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 575–587.  
<https://doi.org/10.1080/15374410802148236>
- Stacey, R. D. (1995). The science of complexity: An alternative perspective for strategic change processes. *Strategic Management Journal*, 16(6), 477-495.  
<https://doi.org/10.1002/smj.4250160606>
- Stake, R. E. (1995). *The art of case study research*. Sage Publications.
- Stanford Graduate School of Education. (2022). *The job of a school superintendent*.  
<https://ed.stanford.edu/>
- Superville, D. R. (2023, March 31). The central office is a mystery. A researcher broke the code. *Education Week*. <https://www.edweek.org/leadership/the-central-office-is-a-mystery-a-researcher-broke-the-code/2023/03>
- Supovitz, J. A. (2006). *The case for district-based reform: Leading, building, and sustaining school improvement*. Harvard Education Press.
- Taubenberger, J. K., & Morens, D. M. (2006). 1918 influenza: The mother of all pandemics. *Emerging Infectious Diseases*, 12(1), 15–22. <https://doi.org/10.3201/eid1201.050979>
- The Business Intelligence Platform for School and Community Life. (2022). *Burbio*.  
<https://burbio.com>
- The New Humanitarian. (2020, July 6). *The 25 Crises That Shaped History*. The New Humanitarian. <https://www.thenewhumanitarian.org/Rethinking-humanitarianism-25-crises-shaped-history>

- Thorpe, M. (2020, March 10). *Governor Cooper declares state of emergency to respond to coronavirus COVID-19*. NC Governor Roy Cooper.  
<https://governor.nc.gov/news/governor-cooper-declares-state-emergency-respond-coronavirus-covid-19>
- Toch, T. (2010). In an era of online learning, schools still matter. *Phi Delta Kappan*, 91(7), 72–73.
- Tortorici, J., & Johnson, L. K. (2004, January). Adapting critical incident stress management to the schools: A multi-agency approach. *Journal of School Violence*, 3(4), 59–76.  
[https://doi.org/10.1300/J202v03n04\\_05](https://doi.org/10.1300/J202v03n04_05)
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837–851.
- Trump, K. S. (2011). Proactive school security and emergency preparedness planning. Corwin.
- Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of educational research*, 70(4), 547-593.
- Ulla, M. B., & Perales, W. F. (2022). Hybrid Teaching: Conceptualization Through Practice for the Post COVID19 Pandemic Education. *Frontiers in Education*, 7.  
<https://doi.org/10.3389/feduc.2022.924594>
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2021). *Education: From disruption to recovery*. <https://en.unesco.org/covid19/educationresponse>
- U.S. Army. (1993). A Leader’s Guide to After-Action Reviews (No. 25–20; Training Circular). Department of the Army. <https://www.hsdl.org/?view&did=775082>

- U.S. Congressional Research Service. (2022). *Federal support for school safety and security* (R46872). <https://crsreports.congress.gov/product/pdf/R/R46872>
- U.S. Department of Education. (2008). *A guide to school vulnerability assessments: Key principles for safe schools*. Office of Safe and Drug-Free Schools. [https://cdpsdocs.state.co.us/safeschools/Resources/USED%20US%20Department%20of%20Education/Vulnerability%20Assessment%20Guide\\_2008.0.pdf](https://cdpsdocs.state.co.us/safeschools/Resources/USED%20US%20Department%20of%20Education/Vulnerability%20Assessment%20Guide_2008.0.pdf)
- U.S. Department of Education. (2006, July). *Creating emergency management plans*. Emergency Response and Crisis Management (ERCM) Technical Assistance Center: ERCM Express, 2(8), 1-12. [https://www.tn.gov/content/dam/tn/education/safety/save-act/save\\_act\\_creating\\_emergency\\_mgmt\\_plans.pdf](https://www.tn.gov/content/dam/tn/education/safety/save-act/save_act_creating_emergency_mgmt_plans.pdf)
- U.S. Department of Education, (2007). *Practical information on crisis planning: A guide for schools and communities*. Office of Safe and Drug-Free Schools. <https://www2.ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf>
- U.S. Department of Education. (2010). *Guide for developing high-quality school emergency operations plans*. [https://rems.ed.gov/docs/REMS\\_K-12\\_Guide\\_508.pdf](https://rems.ed.gov/docs/REMS_K-12_Guide_508.pdf)
- U.S. Department of Education. (2021). *North Carolina ARP ESSER State Plan*. [https://www.ed.gov/sites/ed/files/2021/09/North-Carolina-ARP-ESSER-State-Plan-Final\\_Redacted.pdf](https://www.ed.gov/sites/ed/files/2021/09/North-Carolina-ARP-ESSER-State-Plan-Final_Redacted.pdf)
- U.S. Department of Education. (n.d.). Local educational agency (34 C.F.R. § 300.28). In *Code of Federal Regulations, title 34—Education*. <https://www.ecfr.gov/current/title-34/subtitle-B/chapter-III/part-300/subpart-A/section-300.28>

- U.S. Department of Health and Human Services. (2003). *Developing cultural competence in disaster mental health programs: Guiding principles and recommendations*.  
<https://dam.assets.ohio.gov/image/upload/mha.ohio.gov/Portals/0/assets/HealthProfessionals/About%20MH%20and%20Addiction%20Treatment/Emergency%20Preparedness/developing-cultural-competence-in-disaster-mh-programs.pdf>
- U.S. Department of Homeland Security. (2018). *Presidential policy directive/PPD-8: National preparedness*. U.S. Department of Homeland Security. <https://www.dhs.gov/presidential-policy-directive-8-national-preparedness>
- U.S. News & World Report. (n.d.-a). *Carteret County public schools*. U.S. News & World Report. <https://www.usnews.com/education/k12/north-carolina/districts/carteret-county-public-schools-108183>
- U.S. News & World Report. (n.d.-b). *Croatan High School performance report*. U.S. News & World Report. <https://www.usnews.com/education/best-high-schools/north-carolina/districts/carteret-county-public-schools/croatan-high-14260>
- Van den Bossche, P., Gijssels, W., Segers, M., & Kirschner, P. A. (2006). Social and cognitive factors driving teamwork in collaborative learning environments: Team learning beliefs and behaviors. *Small Group Research*, 37(5), 490–521.
- Van der Vyver, C. P., Van der Westhuizen, P. C., & Meyer, L. W. (2014). The possible influence of school principals' stress on their leadership. *Journal of Social Sciences*, 38(1), 77–88.  
<https://doi.org/10.1080/09718923.2014.11893238>
- van Teijlingen, E., & Hundley, V. (2001). *The importance of pilot studies*. *Social Research Update*, (35), 1–4.

Virginia Department of Education. (n.d.). *Model school crisis management plan*.

<https://crocog.org/wp-content/uploads/2017/12/Virgina-DOE-Model-School-Crisis-Management-Plan.pdf>

Walker, B., Holling, C. S., Carpenter, S. R., & Kinzig, A. (2004). Resilience, adaptability, and transformability in social-ecological systems. *Ecology and Society*, 9(2), Article 5.

<https://doi.org/10.5751/ES-00650-090205>

Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, 17(1), 23–32.

<https://www.infoagepub.com/qrde-issue.html?i=p54c3fa797853a>

Williams, H. K. (1919). The Group Plan. *The Biblical World*, 53(1), 80–81.

Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty*. John Wiley & Sons.

Wolpow, R., Johnson, M. M., Hertel, R., & Kincaid, S. O. (2009). *The heart of learning and teaching: Compassion, resiliency, and academic success*. Office of Superintendent of

Public Instruction. <https://www.k12.wa.us/student-success/health-safety/mental-social-behavioral-health/compassionate-schools-learning-and-1>

Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *Isuma: Canadian Journal of Policy Research*, 2(1), 11–17.

Wooten, L. P., & James, E. H. (2008). Linking crisis management and leadership competencies: The role of human resources development. *Advances in Developing Human Resources*, 10(3), 352–379.

- Yan, H. (2023, December 2). *Chowchilla details how 26 kids were buried alive in California – and how they escaped*. CNN. <https://edition.cnn.com/2023/12/02/us/chowchilla-kidnapping-escape-cnn-film/index.html>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.
- Yin, R. K. (1994). Discovering the future of the case study: Method in evaluation research. *Evaluation Practice*, 15(3), 283-290.
- Zach. (2014, July 28). July 1764 Enoch Brown schoolhouse massacre commemorated. *Waynesboro Record Herald*. <https://www.therecordherald.com/story/news/local/2014/07/28/july-1764-enochbrown-schoolhouse/36776348007/>

## Appendices

## Appendix A: Email Recruitment Script

Dear [Name],

My name is Jessica Emory and I am a doctoral student at the School of Education at North Carolina State University. I am conducting a research study examining the COVID-19 crisis response of Carteret County Public Schools and you are invited to participate in the study. If you agree to participate, you will participate in an interview. The interview is anticipated to take no more than one hour and a half and will be audio and video recorded. It will occur at a time and place of your choosing and outside of workday hours.

Participation in this study is voluntary and is not a requirement or expectation of your employment in Carteret County Public Schools or an expectation of your relationship with me. Your identity as a participant will remain confidential during and after the study. In the transcripts of the interview, the data coding, and the data presentation in the published dissertation, your identity will be protected through a naming convention/coding system (ie Staff Member 1). The audio and visual recording will be stored in a private laptop and on NC State's Google Drive platform. This platform requires 2 Factor Authentication and the laptop access is both password and fingerprint protected. At no time will the master list of participant names be openly stored or available to anyone other than myself as the researcher.

If you have questions or would like to participate, please contact me at:

- [jlburro2@ncsu.edu](mailto:jlburro2@ncsu.edu)
- 919-730-XXXX

If you choose to participate, a link to Qualtrics will be provided to you so you can provide informed consent. The informed consent will provide you with additional information regarding this research including potential risks, benefits, and your rights. If, after receiving the consent information, you decide to not participate, that is your right and at no time will your decision impact your employment or our relationship. If consent is provided, we will work together to determine the time and location for the interview.

Thank you for your consideration,

Jessica Emory  
North Carolina State University  
School of Education  
Doctoral Student

## Appendix B: Phone Recruitment Script

Hello,

This is Jessica Emory and I am reaching out to you as a doctoral student at the School of Education at North Carolina State University. I am conducting a research study examining the COVID-19 crisis response of Carteret County Public Schools and you are invited to participate in the study. I would like to send you an email with more details so you can review them at your leisure. Can you provide me with the preferred email address for this communication?

*If the person says they are not interested, thank them for their time and politely end the call.*

*If the person says they are interested and are willing to provide their email address:*

Thank you for providing your email address. I will be emailing you shortly and encourage you to reach back out to me if you have any questions or concerns.

I look forward to hearing from you.

*If the person would like my contact information prior to the email, the following will be provided to them:*

- [jlburro2@ncsu.edu](mailto:jlburro2@ncsu.edu)
- 919-730-XXX

## Appendix C: Adult Non-Exempt Consent Form

**NC STATE UNIVERSITY**

### Informed Consent Form for Participation in Research

**Title of Study:** The Choice to Educate Students at School During the COVID-19 Pandemic:  
A Case Study on the North Carolina, Carteret County Public School System's Crisis Response

**IRB Protocol:** 27649

**Principal Investigator(s):** Jessica Emory, jlbirro2@ncsu.edu

**Funding Source:** None

**NC State Faculty Point of Contact:** Dr. Lisa Bass, lrbass@ncsu.edu

You are invited to take part in a research study. Here are some important things to know:

- Your participation in this study is voluntary. You can choose not to participate without penalty. If you decide to participate and change your mind, you can stop participating at any time without penalty.
- The purpose of this research study is to analyze the decisions made by Carteret County School's leadership during the COVID reopening of schools in August of 2020. More specifically a crisis framework will be coupled with a resilience theoretical lens to determine the impact of leadership at that time.
- You will be asked to participate in an interview, lasting no more than an hour and a half and occurring at a time and place of your choosing. The interview will be audio and visual recorded and digitally transcribed for data analysis purposes but will be deleted at the conclusion of the research. Additionally, all participants names will be kept confidential with labeling consisting of Staff Member 1, Staff Member 2 etc.
- You are not guaranteed any personal benefits from being in this study. Research studies may pose risks to those who participate.
- You may want to participate in this research because the incredible work of the Carteret County Public Schools leadership led to the opening of schools in 2020 for face-to-face instruction, while more than 60% of the state of North Carolina, more than 60% of the nation, and more than 60% of the world chose to remain on a virtual instruction model. This research will be added to the body of research on K – 12 public education. You may not want to participate in this research because it has been a few years since these events took place and you are not interested in sharing your thoughts on what occurred. This interview will require your time, and you may be busy between work and personal obligations and not have the time to designate. Please know that the researcher does not expect participation, it is not a requirement of your workplace or relationship with the researcher. The researcher is grateful to any participants who are willing to be involved.
- If you have questions about your participation in this research at any time, do not hesitate to contact the researcher, Jessica Emory, whose contact information is listed

above.

- If you have questions about your rights as a research participant, do not hesitate to contact the NC State IRB office via email at [IRB-Director@ncsu.edu](mailto:IRB-Director@ncsu.edu) or via phone at 1-919-515-8754.

Please read the rest of this consent form for more specific details of this research. If you do not understand something, please ask the researcher for clarification or more information.

**What is the purpose of this study?**

The purpose of the study is to analyze the decision-making processes of the leadership in Carteret County Public Schools that led to the opening of the schools during August of 2020 with a face-to-face option for instruction.

**How many people will be in the study?**

There will be between 8 – 24 participants in this study.

**Am I eligible to be a participant in this study?**

To be a participant in this study, you must agree to be in the study, have been employed by Carteret County Public Schools in the summer of 2020 as a principal, assistant principal, or director and facilitated one of the 7 COVID-19 crisis committees.

You cannot participate in this study if you do not meet the inclusion criteria and not wish to provide consent.

**What will happen if you take part in the study?**

If you agree to participate in this study, you will be asked to do all of the following:

1. Consent to participation in this study.
2. Coordinate with the researcher to determine a time and location of your choice for the interview.
3. Participate in a video and audio interview lasting no more than 1.5 hours.

The total amount of time that you will be participating in this study is 1.5 hours.

**Recording in research**

Participants will be audio and video recorded with a digital transcription of the interview. If you do not want this information collected, you cannot participate in this research.

Please initial next to the sentence that you agree to:

\_\_\_\_\_ It's okay to audio record me

\_\_\_\_\_ It's okay to video record me

The research will use the audio and video recording and transcription for data analysis. This will include the identification of common themes amongst interviewees as well as analysis of responses using a crisis response framework and resilience theory lens . The researcher will keep these recordings and transcripts during the research, defense, and publication of the research

findings. All recordings and transcripts will be deleted three years after the dissertation has received a pass by the dissertation committee. Data of deletion will be approximately June of 2028.

### **Benefits to participating in this research**

There are no direct benefits to your participation in the research. The indirect benefits are:

1. Being able to contribute to the body of research surrounding educational leadership.
2. Being able to contribute to the body of research surrounding the K -12 response to COVID-19.
3. Being able to contribute to the documentation of Carteret County Public School's efforts to open schools for the 2020-2021 school year with a face-to-face instruction as an option.

### **Risks to participating in this research**

There is minimal risk associated with your participation in this research.

### **Researcher obligations**

Due to my professional role as a director in the Carteret County Public School system, I have an obligation to report child neglect and abuse and sexual discrimination and harassment of students and adults. This means that if I observe instances of, or you tell me about any situations related to child neglect or abuse and sexual discrimination and harassment, I am obligated to report that. The risks associated with reporting this information include involvement in an investigation with human resources and/or law enforcement and potential termination of employment for any guilty parties.

### **What data will be collected about me and are there risks associated with that?**

The data collected about you will be limited. It will include your position held within Carteret County Public Schools during the summer of 2020, which of the 7 COVID-19 committees you helped facilitate, and the audio, video, and digital transcripts from the interview. Your position at the time and committee participation will only be used to verify that you meet the research criteria. The transcription from the interview is the only data that will be used in the research analysis will not be connected to your name or other information that could easily identify you and any labeling that exists will be done to provide a level of anonymity (ie Staff Member 1, Staff Member 2 etc). The risks to you as a result of collecting this information is minimal. These risks will be mitigated through implementing data protections in accordance with NC State data protection standards.

### **How will my identity and the data about me be stored and protected?**

After all data is collected, the researcher will go through the transcribed data and remove all direct and indirect identifiers from the dataset and create a coded list that connects your real identity to the dataset. The coded list will only be used by the researcher to member check the data against research protocol.

### **Who can access my data and how will my data be shared and used in the future?**

Your data will be accessed by the researcher, the dissertation advisor, and the dissertation committee. It will not be used or shared for future research studies. We will delete your data after

your interview has been completed, data analysis has occurred, and the research has been published. Regulations indicate that the data be stored for three years after publication. It will be deleted approximately June 2028.

**How will the data about me be reported to the public and are there risks associated with that?**

The researcher may quote you or share specific responses from you in the publications and presentations associated with this research, but she will not include your name, position/role, or any other information that could easily identify you. As a result, there are minimal risks to you because of how we report the data.

**Right to withdraw your participation**

Your participation is voluntary. Even if you agree initially, consent is an ongoing process. You can stop participating at any time for any reason. To do so, you can inform the researcher, Jessica Emory, at [jlburro2@ncsu.edu](mailto:jlburro2@ncsu.edu), and 919-730-4041 at any point in this process prior to publication of the research. You can also contact the faculty advisor for this research, Dr. Lisa Bass, at [lrbass@ncsu.edu](mailto:lrbass@ncsu.edu), and 919-515-6291.

If you withdraw, the researcher will stop any procedures or data collection that may be happening. She will also delete any data that's already been collected from you whenever possible. The researcher will not be able to delete your data if we cannot identify which responses are yours or if the data has already been published.

**Compensation**

There is no compensation for participating in this study.

**What if you are an employee?**

Your participation in this study is not an expectation or requirement of your employment. Your participation or lack thereof will not affect your job.

**What if you have questions about this study?**

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the researcher, Jessica Emory, at [jlburro2@ncsu.edu](mailto:jlburro2@ncsu.edu) and 919-730-4041. You can also contact the faculty advisor for this research, Dr. Lisa Bass, at [atlrbass@ncsu.edu](mailto:atlrbass@ncsu.edu) and 919-515-629.

**What if you have questions about your rights as a research participant?**

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State University IRB office at [IRB-Director@ncsu.edu](mailto:IRB-Director@ncsu.edu), 919-515-8754, or [fill out a confidential form online](https://research.ncsu.edu/administration/participant-concern-and-complaint-form/) at <https://research.ncsu.edu/administration/participant-concern-and-complaint-form/>

**Consent to participate**

By signing this consent form, I am affirming that I have read the above information. All of the questions that I had about this research have been answered. If I consent to participate, I understand that I can stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

**Yes, I want to be in this research study.**

**Name** \_\_\_\_\_ **Today's Date** \_\_\_\_\_

**No, I do not want to be in this research study.**

**Thank you for your consideration.**

### Appendix D: Interview Schedule Template

<b>Interview</b>	<b>Date</b>	<b>Time</b>	<b>Link to Transcript</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			

## Appendix E: Interview Protocol and Interview Questions

I will conduct interviews with staff members who served in leadership positions during the summer of 2020. I will start with the 12 strategic reopening subcommittee chairs, hoping to at least 8 will agree which will meet my minimum for IRB. If needed I will expand the pool to all of the school principals, assistant principals, and any of the directors involved in the strategic opening committees as members, but not facilitators (an additional 14 invitations). The following protocol will be used for the interview sessions.

- Welcome and thank the participant for their involvement in my study.
- Remind the participant that their participation is not a requirement or expectation of their employment or relationship with me.
- Explain the purpose of the study and review the fact that they are participating voluntarily.
- Ensure a signed copy of the consent has been collected from the participant.
- Remind the participant that the session will be audio and video recorded using NCState's ZoomPro application and this application will also create a transcript of the interview. This will be done so that I capture all the information.
- Explain to the participant that the transcript of the interview will be edited to remove all identifying information including names. Names will be replaced with labels like Staff Member 1, Staff Member 2 etc.
- Remind that participant that they can withdraw at any time prior to publication of the research.
- Ask the participant to refrain from using the names of other individuals during the interview. Instead, they should labels (colleague, friend, supervisor etc.). If a name is

used by mistake, this name will be replaced in the transcription with a label.

Questions:

During that summer of 2020 a Strategic Opening Plan was created by Carteret County Public Schools to address the state and federal regulations regarding the COVID-19 crisis and its impact on the opening of schools for the 2020 – 2021 school year. Staff members were assigned to re-opening committees to help create the plan.

1. What was your position in Carteret County Public Schools (CCPS) during the spring and summer of 2020? What is your position now? (prior to recording)
2. When did you become aware that the 2020 – 2021 school year for CCPS students and staff would be impacted by COVID- 19? (Prodromal Stage)
3. Why do you think CCPS leadership decided to create committees/teams to create a Strategic Opening Plan for the 2020-2021 school year? (Dynamic Responsiveness to Crisis Life Cycle Framework Prodromal Stage & Responsiveness)
4. What was your role in the Strategic Opening Plan? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage)
5. How many staff members were on your team and what were their positions within the school? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage)
6. Had you worked closely with all these staff members prior to that work? Explain (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage)
7. Were non-CCPS staff involved in the work of your committee/team? If so, how did they impact the work? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)

8. What role did external agencies (e.g., public health, government) play in guiding your team's decision-making? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)
9. What documents from the school system, state, or federal government did you use, and how did they influence your planning? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)
10. How did your plans affect existing systems, processes, methods, or physical environments within CCPS? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)
11. How did the school system address relationships between social equity (distribution of resources, opportunities, privileges are equitable regardless of background or circumstances/), access to technology, access to food, AND learning outcomes during the pandemic? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)
12. Were there clear, predetermined plans in your committee/teamwork for scenarios like outbreaks or government mandates? How structured and focused were these plans on emergency measures? (Dynamic Responsiveness to Crisis Life Cycle Framework Acute Stage & Responsiveness)
13. How flexible were the reopening plans in response to changing conditions like infection rates or health advisories? Explain (Dynamic Responsiveness to Crisis Life Cycle Framework Chronic Stage & Responsiveness)

14. How were decisions communicated to stakeholders, such as parents, teachers, and students? (Dynamic Responsiveness to Crisis Life Cycle Framework Chronic Stage & Responsiveness)
15. How was the success or failure of the reopening efforts evaluated and adjusted by your team, school leadership, and at the county level? (Dynamic Responsiveness to Crisis Life Cycle Framework Chronic Stage & Responsiveness)
16. Can you describe your feelings and emotions during that period as member of society, a school leader, and your feelings regarding your work on the reopening plan? (Dynamic Responsiveness to Crisis Life Cycle Framework Chronic Stage & Responsiveness)
17. Did your feelings change from the initial shutdown in spring 2020 to the planning and reopening that summer? If so, when and why? (Dynamic Responsiveness to Crisis Life Cycle Framework Chronic Stage & Responsiveness)
18. How did the experience of planning and reopening schools during the summer of 2020 affect your leadership, attitudes, and capabilities? (Dynamic Responsiveness to Crisis Life Cycle Framework Resolution Stage & Responsiveness)
19. What did you learn, your committee learn, through and after this process? (Dynamic Responsiveness to Crisis Life Cycle Framework Resolution Stage & Responsiveness)
20. How long have you lived on the coast of North Carolina? (Socioecological Resilience Theory)
21. What is your experience with school crisis outside of COVID-19? (Socioecological Resilience Theory)

22. Do you think previous crisis experience impacted how you responded to the impact of COVID-19 on the closing and reopening of schools in 2020? Your committee members? (Socioecological Resilience Theory)
23. 36% of schools in North Carolina and globally opened with in-person options for students. Do you think CCPS's history, location, and environment influenced the decision to open with in-person options? Please explain. (Socioecological Resilience Theory)
24. Is there anything else you would like to add?

## Appendix F: Demographic Questionnaire

# Carteret County Public Schools COVID-19 Response Demographic Questionnaire

To save us time during the interview, please take a few minutes to answer these questions. Your responses will not be used in the presentation of the research in a way that can identify you as a participant. They will be used collectively to describe the overall participant demographics.

1. Please enter your name (First and Last)

---

2. How long have you been an educator?

---

3. What roles have you had in education?

---

4. Which role have you enjoyed the most?

---

5. Have you always worked in education in North Carolina or have you worked in other states/countries?

---

6. How long have you lived on the coast of North Carolina?

---

## **Appendix G: List of Documents Examined**

- The Carteret County Public Schools Strategic Opening Plan
  - General Plan
  - Committees 1 – 7 agendas, minutes, and documents
  - Operational Opening Plan
- Carteret County Public Schools Crisis Plan
- North Carolina School Report Card Data
- Carteret County Schools Website
- BOE Meeting Agendas and Minutes

## Appendix H: Codebook

Name	Description	Sources	References
1-Predromal Crisis Stage	The first stage in crisis response	9	40
Subcategory Early Warning	Detecting early signs of an impending crisis	9	10
Preparing and Organizing	Taking the steps to mitigate the crisis through establishing a crisis team/teams, gathering relevant information, and determining an action plan	9	30
2-Acute Crisis Stage	The second stage in crisis response	9	35
Subcategory Acting quickly	Recognition that time is of the essence, decisions are made quickly	9	11
Subcategory Acting Decisively	Decisions are made with authority and clarity	9	13
Subcategory Acting Accurately	Decisions are made based on established guidelines and protocols	9	11
3-Chronic Crisis Stage	The third stage in crisis response	9	37
Subcategory Adjusting	Crisis response protocols and guidelines are changed as needed	9	18
Subcategory Adapting	Crisis response is not static, but recognizes where the need lies and changes to meet those needs	9	19
4-Crisis Resolution Stage	Final last stage in crisis response	9	37
Subcategory Personal Reflection	In the absence of district-wide reflection, participants shared their personal reflections and impact on future decisions as leaders	9	21
Subcategory Personal Revising	In the absence of district-wide revision, participants shared their personal revision of leadership efforts	9	16
5-Historical Socioecological Resilience	Evidence of historical resilience impacting present crisis response		69
Subcategory His. Adaptability & Flexibility	References made to the district responding to past crisis in a flexible and adaptive manner and this history impacting the current crisis	9	26
Subcategory	References made to the district responding to past crisis by including various district roles (not all district	9	21

Name	Description	Sources	References
His. Diversity of Perspectives	level leadership) in the decision making and using a similar model for the current crisis		
Subcategory His. Community Involvement	References made to the district responding to past crisis by involving community organizations, stakeholders outside of the school	7	22
6-Overall Responsiveness	In each stage of the crisis response, the district exercised a responsive approach	9	127
Subcategory Overall Flexibility	Stages 1 – 4 flexibility occurred	8	40
Subcategory Overall Collaborative	Stages 1- 4 collaboration occurred	8	59
Subcategory Self-correcting	Stages 1- 4 self-correcting occurred	8	28
Emergent Themes			
Students Matter	The elements of teaching, learning, and assessment come together to interact and support learning outcomes.	9	58
Relationships Matter	Self-direction, self-governance, self-regulation, and the experience of the freedom to choose.	9	53
The Mental Well-being of Leaders Matter	The exchange of information that is used to express thoughts, ideas, feelings to others.	8	51

## Appendix I: IRB Approval



Sponsored Programs and Regulatory Compliance  
Institutional Review Board (IRB)  
Jennie Ofstein, Director  
IRB-Director@ncsu.edu

Campus Box 7514  
2701 Sullivan Drive  
Raleigh, NC 27695  
P: 919.515.8754

From: Jennifer Ofstein, IRB Director  
North Carolina State University  
Institutional Review Board

Date: 8/20/2025

Title: The Choice to Educate Students at School During the COVID-19 Pandemic: A Case Study on the North Carolina, Carteret County Public School System's COVID -19 Crisis Response

IRB#: 27649

Dear Dr. Bass,

The research proposal named above has received administrative review and has been approved on 01/09/2025 as exempt from the policy as outlined in the Code of Federal Regulations [45 CFR 46.104 (d)(2)]. Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review. This approval does not expire, but any changes must be approved by the IRB prior to implementation.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NC State University projects, the Assurance Number is: FWA00003429.
2. Any changes to the research must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days.
4. When all research activities (including analysis of identifiable data) are completed, please submit a [study closure](#) request.
5. As a part of routine best practices, the NC State IRB office engages in [post approval monitoring activities](#). Please refer to the NC State University IRB website.

Please forward a copy of this letter to your faculty sponsor, if applicable.  
Thank you.

Sincerely,

A handwritten signature in black ink that reads "Jennifer B. Ofstein".

Jennifer B. Ofstein, Ph.D., IRB Director  
North Carolina State University  
Institutional Review Board (IRB)  
[irb-director@ncsu.edu](mailto:irb-director@ncsu.edu)  
919.515.8754

## Appendix J: Gatekeeper Permission



Richard L. Paylor  
*Superintendent*

Jody McClenny  
Blair E. Propst  
*Assistant Superintendents*

107 SAFRIT DRIVE, BEAUFORT, NC 28516  
252-728-4583 / 252-728-3028 FAX

[www.carteretcountyschools.org](http://www.carteretcountyschools.org)

*Board of Education*  
Kathryn Smith Chadwick, Chair  
Katie Statler, Vice Chair

Travis Day  
Dennis M. Goodwin  
Clark Jenkins  
Stephanie Krzich  
Brittany Wheatly

November 25, 2024

Dear NC State Institutional Review Board,

Jessica Emory has proposed a research project titled: The Choice to Educate Students at School During the COVID-19 Pandemic: A Case Study on the North Carolina, Carteret County Public School COVID -19 Crisis Response to be conducted from December 2024 – December 2025. This research will involve interviewing current and former employees (principals, assistant principals, and directors) of Carteret County Schools who were involved in COVID-19 crisis response in the summer and fall of 2020. She will also be accessing historical documents housed in the Return to Learn Google Shared Drive. I support these planned activities because:

1. All interviews will be conducted outside of the workday and staff member names will be deidentified using a naming convention (ie Staff Member 1) such that data cannot be traced to a particular participant.
2. Any historical documents accessed will only be for the identification of staff members who participated in the facilitation of the crisis sub committees.

I support the research that Jessica Emory will be conducting and these planned activities which involve interviewing current and former staff and accessing historical documents to determine which staff should be interviewed. This research is in compliance with Policy 5230 by meeting the established guidelines.

Sincerely,

Richard Paylor

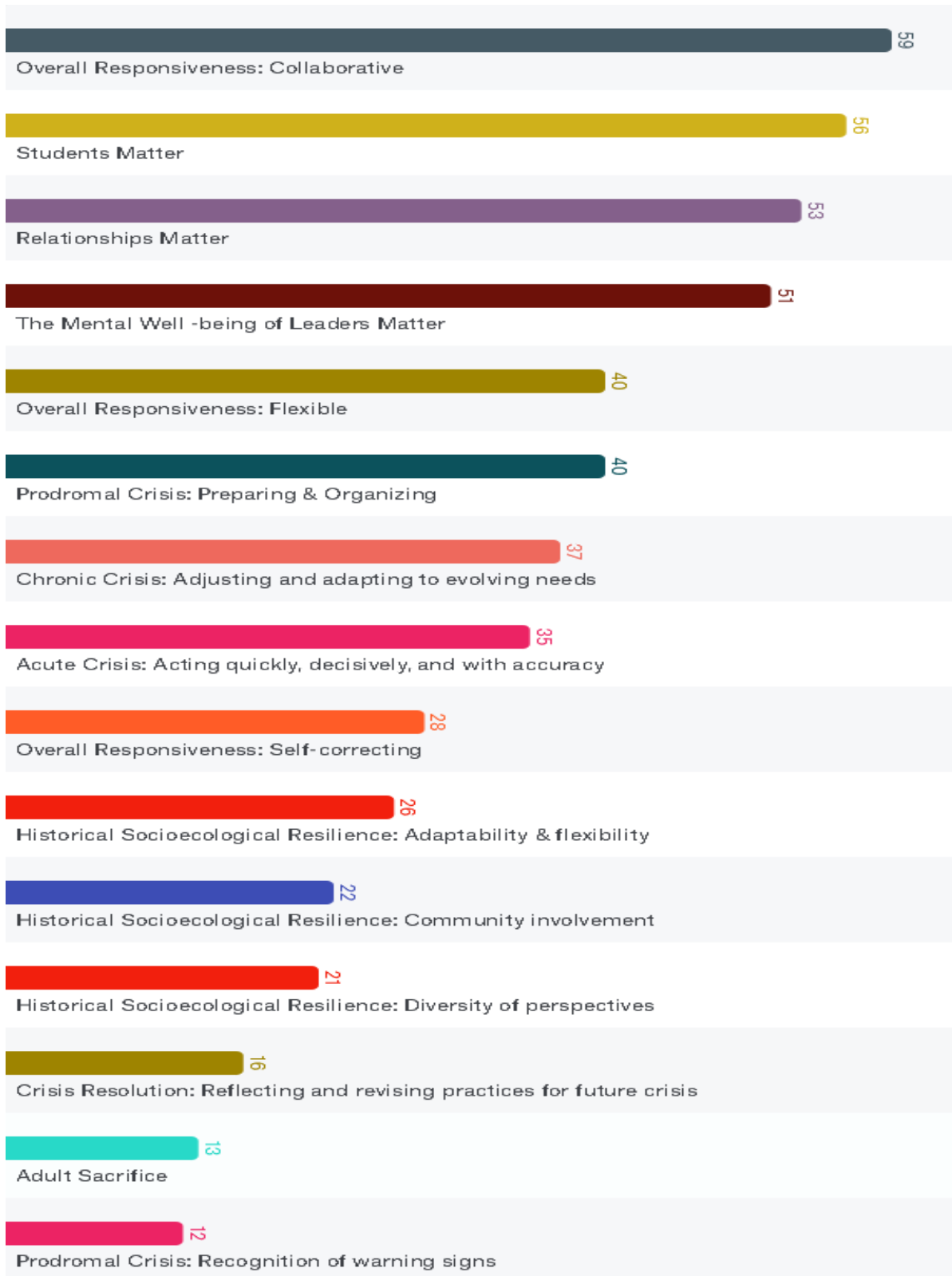
Superintendent

Carteret County Public Schools

VISION

*Engaging, Educating and Empowering ALL Learners from Cedar Island to Cedar Point.*

## Appendix K: Table 6 – Themes



## Appendix L: Interview Reflection Journal Format

Interviewee:

Interview date and time:

Interview location:

Interview length:

Questions answered:

- 

Overall impression of the interview:

- 

Body language, tone, emotions during the interview:

- 

Themes noted from the interview:

- 

Something surprising/not expected:

- 

Follow-up questions:

-