Middle School Principals’ Reflection: A narrative research study exploring how leaders make sense of a recently launched educational intervention

A thesis presented
by
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to

Dr. Margaret Gorman, Chair

Dr. Sandy Nickel, Second Reader
This work is dedicated to:

My wonderful family that has inspired me to reach my goals.
Acknowledgements

This journey has been completed with the support of many and would never have begun without those who believe in me.

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Abstract

In a world of increasing responsibilities placed on schools, principals have been faced with mounting pressure to make decisions to improve instruction for all students. This pressure, coupled with state and federal mandates to improve performance has forced administrators to develop, implement, and evaluate educational interventions within their schools. This study explored how these school leaders made sense of this process as it related to a recently launched initiative. The research was conducted using the theoretical framework of sensemaking and included 4 middle school principals as participants. Data was gathered through a 3 tiered interview process allowing for a rich narrative to be developed. Data from the narrative was analyzed using a deductive approach and key themes were identified. The process identified the complexity of sensemaking as an emergent theme. At the conclusion of this study recommendations were made for future research and implications for both the theory and practice as it relates to this study.

Keywords: Sensemaking, Educational Interventions, Program Evaluation, Response to Intervention
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CHAPTER ONE: INTRODUCTION

Overview

The role of the principal has changed significantly over the last several decades. The position that was once solely responsible for managerial tasks has been transformed into a position that is primarily responsible for curriculum and instruction in their schools. These changes have also led to an environment where principals are not remaining in districts for their entire careers. The multitude of factors associated with changes in the role of the principal has led to a decrease in overall job satisfaction. This has been compounded by the increased accountability associated with high stakes assessments promoted by both federal and state governments (Center for Public Education, 2012; DESE, 2011; Leithwood, Louis, Anderson, & Whalstrom, 2004; Markow, Macia, & Lee, 2013; The Wallace Foundation, 2013). How do these principals make sense of their role in this ever-changing landscape?

When the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) sat down in 2009 to discuss best practices in education, they ushered in a new era in educational reform not seen since the 2001 passage of the No Child Left Behind (NCLB) Act (Public Law 107-110). While policy reform has been the norm in public education since the 1965 passage of the Elementary and Secondary Education Act (ESEA), the most recent reauthorizations of education reform have been centered on accountability. Most recently, No Child Left Behind was reauthorized in 2015 as the Every Student Succeeds Act (ESSA) (P.L. 114-95). This study, however, when referencing public law, will refer to the 2001 NCLB Act as little literature exists that references the impact of this newly passed legislation (P.L. 107-110).

Where NCLB became the framework for increasing student and educator accountability, the implementation of Common Core State Standards added a new dimension of complexity to
school principals: helping to ensure that students are both college and career ready (Jones, Van Belle, Johnson, & Simmons, 2014; Rammler & Ouimette, 2016). Similar to the goals of NCLB, schools are still charged with assuring that all students exhibit growth on an annual basis, placing a great deal of pressure on parents, students, teachers and administrators to improve student learning (Dunkle, 2012; Smith & Teasley, 2014). This pressure, once in the form of stringent graduation requirements, school accountability designations, and destabilization of job security for teachers and administrators alike, has now grown to include implementation of new curriculum frameworks in English Language Arts and Mathematics, as well as literacy standards for all content areas and technical subjects (Kramer, Cai, & Merlino, 2015; Giouroukakis & Connolly, 2012).

The adoption of new standards for accountability including the restructuring of teacher evaluation again increased the pressure felt by school principals. Principals are now accountable for the oversight of sweeping changes to curriculum and instructional practices (Karp, 2013; McDermott-McNulty, 2014). There is now a new focus placed on rigor and higher order thinking skills versus rote memorization of content, the CCSS required a drastic shift in common classroom instructional practices (Dwyer, 2013; Marzano & Toth, 2014). These high demands have resulted in a surge of program options designed to address skill gaps in student learning and increase teacher effectiveness (Cortiella, 2005; Cortiella, 2006).

Not only has new legislation placed the responsibility of improving student achievement on school principals, but it has also been somewhat prescriptive in how it needs to be done. Since the original authorization of the act in 2001, several major reforms have taken place putting a new onus upon school principals to close any discernible gaps in achievement in any and all groups of students (Jorgensen & Hoffman, 2003; Rudalevige, 2005; Hursh, 2007; Manaday,
2014). Most notably, in 2009, the federal government developed the American Recovery and Reinvestment Act, requiring America’s schools to provide comprehensive interventions aimed at improving student achievement (Turnbull & Anderson, 2012). School leaders faced a further shake up when President Barack Obama signed into law the Every Student Succeeds Act (ESSA) at the close of 2015, underscoring the end of the No Child Left Behind era, while ushering in the belief that one size does not fit all in education (U.S. DOE, 2015). In no place is this more evident than the variety of means by which school leaders approach and explore the multitude of intervention options for students that struggle to meet with success.

Students in Massachusetts, especially those designated as students with special needs, have not been able to perform at a proficient level on the Massachusetts Comprehensive Assessment System exams and other high stakes tests (Thurlow & Johnson, 2000; Katsiyannis, Zhang, Ryan, & James, 2007; Burns & Gibbons, 2008; Yell, Katsiyannis, Collins, & Losinski, 2012). This lack of performance has left many middle schools with a designation of underperforming as measured by the guidelines set forth under the No Child Left Behind Act. The designation of underperforming led these schools to explore intervention options for students that are struggling academically. The responsibility for determining and implementing these interventions has been placed squarely on the shoulders of school principals.

The term Response to Intervention (RtI) has been coined as a specific process for implementing interventions and monitoring student performance (National Center, 2010). While some of the tenets of RtI are discussed in this study, the term “educational interventions” was used to globally cover all procedures, programming, or practices aimed at closing gaps in student learning. The use of intervention strategies can help to improve a students’ skill set (Fuchs & Deshler, 2007; Spillane & Kenney, 2012; Kretlow & Helf, 2013). It is critical that these
intervention strategies be implemented appropriately and evaluated to determine their
effectiveness (Kretlow & Helf, 2013; Balu et al., 2015).

Due to increased pressure in Massachusetts to expose all students to specific frameworks,
there has been little time offered to provide intervention for students that did not reach mastery
of specific skills in the areas of English Language Arts and Mathematics. When a student is not
able to master a specific skill within the allotted timeline they may not have a chance to be
exposed to it again. The strain placed on a teaching staff to be able to remediate and introduce
new skills within the same class period is immense (Lyon & Weiser, 2009). In order to address
this problem schools must be able to identify appropriate, research-based programming to help
them strengthen student skill deficits (Fuchs, Mock, Morgan, & Young, 2003; Vaughn, Linan-
Thompson, & Hickman, 2003; Gerzel-Short & Wilkins, 2009).

This is not a problem that is isolated solely to Massachusetts. Schools throughout the
country are trying to adopt various intervention programs (Fuchs & Fuchs, 2006; Glover &
DiPerna, 2007; Fletcher & Vaughn, 2009; Brown, Davis, Nantais, & Stindt, 2013). A study on
selecting, implementing, and evaluating the variety of intervention strategies used by school
leaders is critical as it will give other school leaders insight into this crucial practice. A study of
this scope would also allow these school leaders to review how their made sense of the
challenges of implementing an intervention strategy.

Vast research has identified the importance and benefits to using intervention strategies
as a means of improving student achievement (Fletcher, Coulter, Reschly, & Vaughn, 2004;
Buffum, Mattos, & Webber, 2010). The increased number of programs available has made it
difficult for school districts to identify ones that are most appropriate for their setting (Kretlow &
Helf, 2013). While there are many intervention strategies available to practitioners and school
leaders, a review of the literature identifies few cases in which the people implementing them have been asked to reflect on their impact.

The specific goal and purpose of this study was to examine how school leaders perceived this process of selecting, implementing, and eventually evaluating the wide variety of educational intervention programs they used to increase student success. This study asked school leaders to reflect on this process of determining the efficacy of these strategies and how they understood their process and perceived their role when making meaningful change within their school community.

**Problem of Practice**

There has been a significant decline in principals’ satisfaction with their jobs over the past several years. Seventy-five percent of principals believe that their role has become too complex. Only sixty percent of them feel as if they have significant control over the decision making in their buildings. This combination of factors has led to an environment where around fifty percent of principals feel as if they are highly stressed several days out of the work week (Markow, Macia, & Lee, 2013). Over the past couple of decades there has been a significant increase in the responsibilities of these principals and in many cases the role that they were trained for has been changed significantly. This significant change in responsibilities has shifted the focus of the principal from managerial duties to that of student learning (The Wallace Foundation, 2013).

Throughout the literature and within scholarly journals, principals are being identified as “instructional leaders” and there are widely varying views on what this means. The lack of clarity that surrounds the principalship and associated responsibilities causes a great deal of confusion about the role (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Along with a lack
of understanding of their roles as instructional leaders, principals are underprepared for their role in data analysis and implementation of interventions. This is all happening at a time where principals are being identified as having a significant impact on student performance both in a positive and negative manner (The Wallace Foundation, 2013).

Due to the increased pressure caused by these changes, school principals are tasked with improving student performance in a high stakes environment. These pressures include student graduation and employment for the principals. The pressure of outside mandates and in district evaluation has required principals to develop interventions that are aimed at improving overall student performance. If a quality, formalized plan for intervention is not established then the schools will risk further involvement by the state and federal government, and student performance will not improve.

As the literature review will show, there is much debate within schools as to who is primarily responsible for implementing and sustaining intervention initiatives within various schools (Fuchs & Fuchs, 2006). Both research and interviews with school leaders show that the school principal is typically charged with the task of ensuring the fidelity of intervention implementation (Marzano, Waters, & McNulty, 2005). However, many school leaders find there is little guidance as to the practices that best support successful intervention implementation. The principalship by nature, is an isolated profession and there is little to no guidance for principals in many districts. Because of this isolation there is little information available about how principals make sense of the world around them as it relates to the implementation of these interventions. A research study that explores how school principals makes sense of implementing and evaluating an educational intervention would give others in that role insight into the sensemaking process.
Research Question

1. How do school leaders make sense of intervention programs that they have launched in the past five years?

Theoretical Framework

In the world of public education, leaders are required to implement and evaluate a number of interventions within their schools. This study explored how these educational leaders make sense of this process. The seven characteristics of Karl Weick’s Sensemaking, in particular the use of retrospection, was used as the framework for this research. The use of this lens helped to give the researcher perspective into the process of developing, implementing, and evaluating educational interventions in a public school setting and how school principals have made sense of this process.

Sensemaking refers to the process that an individual follows in order to come to terms with a complex set of circumstances that surrounds them (Weick, 1995). This phenomenon is part of the process used to help develop “intelligent systems” (Klein, Moon, & Hoffman, 2006). Karl Weick asserts that sensemaking can be used as a frame to simplify a complex set of variables. This action can be used to review and evaluate vast amounts of data in a calculated and effective manner, therefore simplifying the process. However, Weick also cautions his readers that this is a process that cannot be simplified completely; rather it is a process that works to couch complex data and situations into a format that is easier to understand (Weick, 2012).

Another key component to the theoretical framework of sensemaking is the fact that the landscape is always changing (Weick, 2001). This concept is especially true in public education. Today’s educational leaders are faced with a continuously changing landscape that
guides their thinking. A school leader’s ability to successfully navigate this changing landscape is critical to his or her success within this role (Hamilton, 2010). By understanding the process of sensemaking a school leader will be better able to balance the demands of their job.

Part of the difficulty in making sense within organizations is the reality that all are filled with individuals that have differing viewpoints. These differing viewpoints have been established due to the personal history of each of the stakeholders in the organization. It is important to note that there is no single appropriate interpretation of life in an organization and that all viewpoints may be plausible (Weick, 2001). It is also important to acknowledge that personal history and sentiment need to be taken into account in order to gain an information rich perspective about any phenomenon. Weick’s sensemaking process allows this information to be collected and organized into a story that is able to be interpreted.

In order to organize the sensemaking process, Weick identified seven characteristics that individuals or organizations go through to make sense of the world around them. The seven characteristics include identity construction, retrospection, enactment, social activity, ongoing, extracting cues, and plausibility rather than accuracy. The seven characteristics associated with sensemaking are at the basis of this research and are referred to throughout this study. While you will find a brief description of each of the characteristics below, they will be covered in significantly greater detail in chapter two of this research (Weick, 1995).

- **Identity Construction**-Sensemaking deals with a person’s identity and how they see themselves fitting into the world around them.

- **Retrospection**-Past experiences are used to guide how a person makes sense of the world today.
- Enactment—Allows individuals to make sense of the complex environment around them by simplifying complex variables into a manageable narrative.

- Social Activity—Sensemaking is a social activity and individuals use information that they gain through social interaction to help them make sense of the environment around them.

- Ongoing—The process of sensemaking does not have a clear end. Individuals constantly reflect on their environments and as new data is introduced there may be alterations in their perspective.

- Extracting Cues—In order to make sense of the world around them, individuals use the information presented in their environment to make assumptions that are used to help them move forward.

- Plausibility Rather Than Accuracy—Due to the complexity of the sensemaking process it is necessary for individuals to formulate their views based on the information that they have rather than information that is complete. This causes the sensemaking process to be unique to the individual.

This theoretical framework has been used as the lens for the study. The seven characteristics of sensemaking were used throughout the entire process of the research design, including the development of interview questions and data organization and analysis.

**Research Design**

A narrative research design was used to explore how middle school principals made sense of the process of implementing an educational intervention. A qualitative paradigm is used due to the complexity of the data that was collected during the study (Creswell, 2009). It was not the attempt of this research to determine the relationship between specific treatments and
outcomes, but rather to develop a more “holistic” view of how school leaders reflected on and made sense of their development, implementation, and evaluation (Fraenkel, Wallen, & Hyun, 2012). This research design included three phases including, Potential Participant Identification, Participant Recruitment, Participant Selection, Conducting of Interviews, and Overview of Data Analysis and Reporting Out.
CHAPTER TWO: LITERATURE REVIEW

This literature review outlines the key components necessary to developing, implementing, and evaluating intervention strategies, as well as an exploration into the theory of sensemaking. The review will encompass scholarly literature related to the themes of sensemaking, leadership, principal development, organizational change, response to intervention (RtI), intervention strategies in action, and evaluation of change.

The review begins with an in depth look at the theory of sensemaking and is followed by a review of literature in the areas of leadership and principal development. The last sub-section includes an exploration of change as it pertains to leadership including the implementation of interventions and evaluating change. Several areas of this literature review involve research around varied instructional models and subject areas.

Managerial Sensemaking

In their day-to-day lives people are inundated with a vast amount of information. The information to which all people are exposed is growing at an exponential pace (Blandford & Attfield, 2010). In a world filled with stimuli, individuals are constantly struggling to make sense of that which they are presented. This deep-seated need to make sense of organization of thought and structures led educational theorists to attempt to develop a framework by which one could conceptualize the practice of making sense (Czarniawska, 2005). Karl Weick (2005) states that “sensemaking involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action” (p.1).
Evolution of Sensemaking

It is important to note that for the purpose of this research the evolution of sensemaking has been researched with a particular lens. The following section explores the foundations of sensemaking theory and its evolution as it relates Karl Weick and more specifically to the fields of research and leadership. This section is not intended to be an all-encompassing historical review of sensemaking theory.

While it is widely accepted that the process of making sense has been ambiguously referenced in research since the beginning of the 20th century, it was not formally referenced until the 1960’s (Maitlis & Christianson, 2014). The term “sensemaking” was formally coined in Karl Weick’s book titled The Social Psychology of Organizing published in 1969. Weick used the term sensemaking to describe the process by which actors made sense of the changes that happened within organizations. Through this original publication, he was also able to identify that the process of sensemaking was cyclical and that there was a predictable process that actors went through when doing so.

Throughout the 1960’s and 1970’s Weick’s sensemaking was used as a framework for a great deal of research around individuals and organizations. It also became a staple in the field of social psychology as researchers began to apply sensemaking to a wide-array of social issues and settings (Friedman & Weiner, 2003). Some of these issues included national intelligence (Moore, 2012), education (Dressman, 2008), industrial organization, and management (CTI, 2016). Weick also continued to complete research during the 1970’s which he published in his second edition of The Social Psychology of Organizing. The second edition of Weick’s work is
presented as a matured version of the theory that further explores the dynamics of organizations and organizational change (1979).

While Weick continued to publish research throughout the 1980’s that focused on the details of sensemaking, his book *Sensemaking in Organizations* (1995), details for the first time, a complex overview of sensmaking theory and how it can be used. This theory outlines the cyclical process that all actors follow when trying to make sense of the world around them. The details of the sensemaking process will be outlined in the next section of this research. Since 1995, Weick has continued to research and publish in the field of sensemaking. Each new publication of work builds on his original theory and gives an increasingly refined and comprehensive interpretation. While Weick is seen as the pioneer of the sensemaking process it is critical to note that others have had a significant impact on the evolution of the theory.

In the 1970’s another leader in the world of sensemaking emerged. Dr. Brenda Dervin, a professor of communication at Ohio State University, has used sensemaking as a theoretical framework to address many problems of practice and to look generally at how organizations work. She has applied this theory to feminist studies, library science, health and wellness, and campaign design. Dervin has also worked since 1972 developing what she has coined the “Sense-Making Methodology” or the SMM. The SMM was developed as a tool to guide research and as an additional framework for interpreting the data that is collected (Dervin, 2011).

Dervin’s work includes a term that she has dubbed “gappiness.” This term refers to how individuals make sense of information that is rarely ever complete. In reality, most individuals have to make decisions or come to realizations when they rarely have all of the information necessary to do so. Dervin builds on the idea of “gappiness” in her theory of what she calls “un-
making.” As individuals are faced with a world that is ever-changing with a knowledge base and experiences that present gaps, there are often “realities” developed that are inaccurate. These “realities” often change as new information is collected. SMM was developed in an attempt to bring order to the field of research within a qualitative paradigm that is forever evolving and full of gaps. By acknowledging these gaps and identifying them as part of the research, it can be possible to make sense of a multitude of complex issues (Naumer, Fisher, & Dervin, 2008). Dervin’s work helps to refine the structure of current research and in an invaluable part of the research associated with sensemaking.

Another key figure in the evolution of sensemaking theory, especially as it relates organizational change and leadership, is Dennis Gioia. Gioia brings an interesting perspective to the sensmaking process as his background is not in academia, but from the business world. He also acknowledges that Weick’s work was influential in the development of his own thoughts about organizations and organizational change (Gioia, 2006). In his paper Sensemaking and Sensegiving in Strategic Change Initiation (1991) Gioia explores the role that a leader plays in initiating and sustaining organizational change. Through his work, he determined that although organizational change had been routinely studied, strategic change had not. This determination has led to continued study of strategic planning and how leaders and the role that sensemaking has played in this process.

Sensemaking has become a mainstream theoretical framework and can be found as a reference in a significant amount of literature. The expansive nature of this theory gives it widespread appeal for researchers in various fields. Through an organized review of the literature as it pertains to the evolution of sensmaking theory, this researcher was able to gain a deeper understanding as to the underpinnings of the sensemaking process. By examining the
roots of the theory and its expansion throughout the decades, it is possible to identify the key aspects of the theory. It is important to note that the research base on this topic is continuously expanding and that its evolution is ongoing.

**Characteristics of Sensemaking**

Since the inception of Weick’s theory on Sensemaking, most research has focused peoples’ efforts to gain insight into the reasons and results of the happenings around them (Brown, 2002). This theory has permeated the world of leadership as it pertains to many areas including medicine, business, the military, and both primary and secondary education.

Sensemaking as a theory can essentially be applied to all organizational settings.

While many discuss an individual’s role in the sensemaking process, some researchers have used the theory to explain how organizations function as a whole. This use of the theory relies on the understanding that organizations are systems and that these systems share “norms” and “rules” that are mutually accepted and understood (Cecez-Kecmanovic, 2005). Weick, Sutcliffe, and Obstfeld (2005) claim that “sensemaking is first and foremost about the question: How does something come to be an event for organizational members (p. 410)?” The rationalization of events within an organization, by it’s members becomes a collective process of understanding the event through a lens that includes the norms and values of that organization.

Sensemaking has been applied liberally in the field of education research as its primary focus is based on the study of organization. Researchers have used this framework to determine how educators and school systems make sense of a wide-variety of events including, mandates, instructional changes, and reform (Coburn, 2005). Although this theory is a framework for understanding organizations, it is not always an easy process to comprehend. Klein, Moon, and
Hoffman (2005) caution that “sensemaking doesn’t always have clear beginning and ending points” (p. 72). The process of sensemaking can be a complex one and therefore it is necessary to use a systematic approach to working through it. In Chapter 2 of his book titled *Sensemaking in Organizations* (2001), Weick develops a list of seven characteristics that sets sensemaking apart from other processes.

The first characteristic identified by Weick (2001) is that of “identity construction.” Every individual has a self-image that they understand to be who they are. This understanding impacts how they interact with their surroundings and how they interpret them. The individual’s view of self also has an impact on how they use these events to construct an understanding of the events that they are exposed to. Weick also stresses the importance of identity as it relates to organizations. The way people identify their role within an organization can also impact the process by which they make sense of the events to which they are exposed. By understanding the lived experiences of the participants in this study this researcher was able to gain a deeper understanding into how they made sense of the process of implementing educational interventions.

The second characteristic that sets sensemaking apart from other processes is that of “retrospection.” Retrospection refers to the process of looking to one’s past in order to put the present into context. This act of reflection is a critical component of the sensemaking theory as it highlights the importance of experiences on the sensemaking process. Sensemaking operates under the pretence that an individual’s past dictates how they perceive current events. Retrospection was used as a catalyst for the development of this study. Understanding retrospection was a necessary component of interpreting how participants used their past experiences to make sense of their present landscape.
The third characteristic of sensemaking is that it is “enactive” of sensible environments. Through narrative discussion people simplify the events that have taken place. The enactive characteristic allows individuals, including organizational leaders, to function within a complex environment. This process of discussing topics, issues, or concerns allows the individual to come to terms with what has taken place and develop an action plan for moving forward (Weick, 2001). Due to the complexity of the process of implementing educational interventions, participants needed to simplify the vast amount of data that they were exposed to. This enactive practice of simplifying the process to make sense of it was evident throughout the study and having an understanding of this characteristic allowed this research to review the data with a lens that highlighted its presence.

The fourth characteristic of sensemaking relates to the fact that it is a social activity. The social characteristic of sensemaking blends the voice of the individual with that of the organization. By conducting a narrative that incorporates self-reflection with open dialogue, individuals are able to narrow their understanding of an event. The importance of social activity on the sensemaking process is even more pertinent in an organizational setting. The interactions with those around you have a direct impact on how you see the world and how you interpret the stimuli to which one is exposed. By nature, the role of a school principal is social, and there are constant interactions with others. These interactions play a role in how they make sense of the world around them.

The fifth characteristic of sensemaking is that it is ongoing. The process of sensemaking does not end. Individuals are constantly assessing and reassessing their reality and trying to organize their thinking to make sense of an event. This process is exacerbated by ever-changing variables that impact one’s outlook. This characteristic is also prevalent in an organizational
setting where people are exposed to constant feedback that forces individuals to adjust their thinking (Weick, 2001). As a school principal there is an ever-changing set of variables and requirements that you are faced with. This turbulent environment requires the process of sensemaking to be ongoing.

The sixth characteristic of sensemaking is that it is focused on and by extracting cues. Individuals that are trying to make sense of an event use the details of the narrative to gain understanding. These details are evaluated by the individual and used to paint a larger picture of the event as a whole. By extracting cues the individual is able to develop a sense of the world around them and how they fit into it. For the purpose of this study, it was important to gain an understanding into how principals made sense of their role. By extracting cues from the happenings around them, they are able to gain a deeper understanding of how they fit into that environment.

The seventh and last characteristic is that it is driven by plausibility rather than accuracy. This reality is necessary because of the ever-changing world that we live in. With changes in conventional wisdom and popular perspective it is unrealistic to think that accuracy will be obtained. This is a critical aspect of the sensemaking process because most decision making is not black and white. The constant bombardment by random variables forces an individual to view the world in a way that fits for them (Weick, 2001). The characteristic of plausibility rather than accuracy was necessary to understand for this study. The sheer complexity of the process of implementing an educational evaluation makes clarity an unrealistic expectation. However, with the use of this characteristic, participants are able to paint a picture of their role in the process.
Empirical Studies Using Sensemaking

Sensemaking, as a theory, has been used in numerous studies in wide-ranging fields. These studies cross disciplines, subject areas, and have been used to evaluate, adjust practice, and improve performance (Dervin, 2011). While most of the studies associated with sensemaking have not focused on the field of education, they do hold value to this research as it relates to structure and format. The following studies are examples of research that was conducted using sensemaking as a framework.

In a paper written by Andrew Brown, Ian Colville, and Annie Pye, titled Making Sense of Sensemaking in Organization Studies, the authors review literature associated with this theoretical framework. This unique study references key research in the field and uses the lens of sensemaking to make sense of the research going on in the field. This study highlights the difference between micro and macro-sensemaking that fluctuates between the day-to-day functioning of organizations and their overall performance as well as the relationship between individual and collective consciousness. This work also stresses the fact that sensemaking is not only a scholarly pursuit, but more importantly a practical one that lends itself to deeper understanding to organizations and to the self (2015). The information in this study provides insight into the relationship between the individual and the organization which relates directly to decision makers in all fields of study.

In a study titled Sensemaking as a Methodology for ISCRAM Research: Information Processing in an Ongoing Crisis, conducted in 2008, authors Willem Muhren, Gerd Van Den Eede, and Bartel Van de Walle used sensemaking as a framework for evaluating how information systems can be used during crisis response. By the nature of crisis situations, there
is chaos, misinformation, and immense amounts of data that is associated with every situation. Information systems are used to relay critical components of individual scenarios to the decision-making members of organizations associated with the crisis. This study uses the sensemaking framework to determine how these decision makers absorb and react to the information that they are presented. The case study was implemented using interviews as the main vehicle for gathering information about the topic. This study determined that sensemaking was an effective tool for determining how individuals make decisions in a crisis situation and how they react to gaps in the information that is provided to them. This study is important to the research because it specifically looks at how decision makers deal with large amounts of information that is not always accurate or complete.

In 2010, Rebecca R Kitzmiller, Ruth A Anderson, and Reuben R McDaniel Jr. proposed a study entitled *Making Sense of Health Information Technology Implementation: A qualitative study protocol*. This study used sensemaking as the theoretical framework to understand how decision makers made sense of the process associated with implementing a new information technology system. The design of the study was as a longitudinal, multiple-case-study that was conducted in a hospital setting. Data was collected for the study using observations and document review. This research proposed to use priori or preset coding as a methodology for data analysis. This coding system lends itself to the structure of this study and was used to complete data analysis.

One study that lends itself neatly to this research was conducted by Dennis Gioia in 1991. This study was conducted as a means of determining how CEO’s made strategic changes within their organizations. The use of sensemaking was an integral part of this study as it explored exactly how these CEO’s navigated the process. He used an interpretive approach to gain a
deeper understanding of the meaning making process of the actors involved in his study. Through this research he identified two key findings to the sensemaking process. First, he identified the initial stages that entailed “envisioning,” “signaling,” “re-envisioning,” and “energizing.” This initial stage took place when a newly appointed CEO took his/her position and was followed by his second finding that was targeted directly on sensemaking.

Gioia’s findings built on the research conducted by Weick. Similarly to Weick, Gioia identified the idea that sensemaking was a reciprocal process that had no clear beginning and end. He was also able to identify a sequential pattern to the framework of the sensemaking process. Where Gioia’s research diverges from that of Weick is with his exploration of what he refers to as sensegiving. This process refers to the leaders attempt to convey their vision of an initiative to their constituents. This study lends to this research because it not only explores the sensemaking process, but it delves into the process by which a leader implements a specific initiative within an organization. The tenets of this study are transferable to the environment of public education and the role of a CEO shares significant similarities with the role of a school principal.

Another study that expanded on the research of Gioia was conducted by Jean Bartunek, Robert Krim, Raul Necochea, and Margaret Humphries (1999). This study dug even deeper into the idea of strategic planning to include the strategic development of organizations. In their research they identified that there is often a disconnect between a managers sensemaking and their sensegiving acknowledging that there is sometimes a variation between what they think and what they portray to their constituents. This concept was important to keep in mind for the design of this study. While this study focused on the sensemaking process for the school leaders it was limited in its scope as to how the message was interpreted by stakeholders.
By reviewing the literature associated with several studies conducted over the past few decades, that used sensemaking as a theoretical framework, this researcher was able to gain a more complete understanding of how to develop this research. The conclusions and recommendations of past researchers helped to frame this study, while identifying gaps in the research associated with sensemaking.

**Sensemaking Summary**

In summary, the review of literature regarding sensemaking highlights a framework by which individuals can systematically understand and rationalize any event. This process helps individuals, including those in an organizational setting, move to action in a calculated manner. While a significant amount of research that has been conducted using sensemaking, this researcher has not found any studies that specifically use sensemaking to evaluate how school administrators make sense of a recently launched initiative within their schools. The next portion of this literature review outlines the literature associated with Response to Intervention, a formalized approach to offering educational interventions to students.

**Leadership & Principal Development**

The following section details the exploration of literature as it relates to leadership and principal development. The section begins with a brief overview of leadership in general and gains specificity with a review of educational leadership and eventually the principalship. This section is intended to identify the key literature that was responsible for the development of this study. By gaining a historical perspective the role of the principal, this researcher was able to gain a holistic view of what it takes to be a principal today.

**History of Leadership**
In Mark Van Vugt’s paper titled *Evolutionary Origins of Leadership and Followership* (2006) he argues that leadership and followership play a part in the development of a civilized society. While the socially, physically, or financially advantaged in society tend to take on leadership roles, there are others that fall under their persuasion as followers. Vugt sites evolution theory that suggest that followers seek out leaders for multiple purposes including protection, guidance, social interaction, and positive opportunities. This evolutionary need for leaders and followers has led to the development of theory and training in the area of leadership that has grown throughout history.

While it is impossible to trace the roots of leadership to their origin, it is possible to identify key research in the academic review of the role of a leader. If the assumption is that the study of leadership began with recorded history than it is possible to identify early literature that specifically references what it takes to be a leader. Alan Bryman (2011) identifies Sun Tzu’s *The Art of War* as one of the first written references to leadership. This text ushered in an era of military leaders that were required to participate in leadership training. This formal training of military leaders is found as a common theme throughout history including the Romans and modern military personnel both in the United States and abroad.

Formalized studies of leadership are first found in the classical period through study of the work of Plato and Aristotle. These political philosophers began to explore the world of political leadership and began to identify traits seen in the leaders of their time. They also identified the importance of rhetoric or political speak to the role. The focus on the military and politics, from a leadership perspective, continued through the renaissance and up to the industrial period. During the industrial period a new type of leader emerged both in Europe and the United States (Grint, 2011).
During the late 1800’s and early 1900’s leaders of industry emerged as a powerful class of private citizens that ran businesses (Majewski, 1986). The emergence of industrial leaders highlighted a timeframe when the focus shifted from leaders with formalized governmental ties to a period where leaders were closely tied to organizations. The focus on organizational leadership began to be studied throughout the early 1900’s as a means for improving the effectiveness of organizations. This led to significant studies in the areas of scientific management, psychology of organizations, social aspect of organizations, and organizational development (Burke, 2008). In the 1960’s the study of organizational management, leadership, and change began to be applied to the world of education. The next sub-section of this chapter explores the route of educational leadership and its current state.

**Educational Leadership and the Principalship**

The roots of education leadership can be found spanning across multiple disciplines including “sociology, political science, economics, and general management (Bush, 2003). Because of its varied origins it is difficult to find a mutually agreed on definition through a study of literature and it may be more effective to outline the areas of influence pertaining to the field. According to an educational brief from Cambridge International Examinations (2015) there are six dimensions of educational leadership that have an impact on outcomes. These dimensions include “establishing goals and expectations, strategic resourcing, planning, coordinating and evaluating teaching and curriculum, promoting and participating in teaching learning and development, and ensuring an orderly and supportive environment.” These key dimensions apply a generic overview to the role and responsibilities associated with educational leadership.
The origins of educational leadership in the United States does not come specifically from the world of education at all, but rather from the world of business. Early school leaders were identified as managers in a model that tended to be designed after industry. In the mid-to-late parts of the 19th century. Early school leaders had little autonomy and no clear mission or guiding principles. Throughout the later parts of the 19th century more defined roles of educational leadership began to materialize with guidance from community groups and governmental leaders in isolated areas throughout the country. However, this loosely governed position had little specific guidance through the early part of the 20th century (Rousmaniere, 2013).

For the purpose of this literature review, there will be a focus on the principalship as an educational leader. Similarly to educational leadership as a whole, the role of the school principal does not appear to be fully defined until the middle of the 19th century. During the educational reform of the 1850’s and 1860’s the principal was identified as a guiding force for the improvement of schools and of teacher performance (Rousmaniere, 2013). While periodic reviews of education took place throughout the 19th and early 20th centuries a thorough review of educational leadership was not conducted in the United States until the 1960’s. During this time period there was a significant uptick in educational research and an active attempt to move the practice of education and educational leadership from a “trade to a profession” (Urban, 2011). The view of educational leaders, and more specifically school principals as an integral part of the school reform process changed the landscape of educational research.

In 1983 the Carnegie Foundation sponsored Ernest Boyer’s evaluation of secondary education in the United States. The report titled High School: A Report on Secondary Education in America outlined the current state of America’s high schools and identified key areas of
improvement that should be addressed. In the report Boyer stated that “After visiting schools from coast to coast, we are left with the distinct impression that high schools lack a clear and vital mission (p. 90).” While this report focused on the secondary school, its tenets had wide-ranging effects on education reform in the United States. The report cited the importance of the school principal in improvement, but also identified significant barriers to their success. This identification of the principal as the key individual responsible for the success of a school gives relevance to a study of how they view their roles and how they make sense of that role.

Another key report calling for the improvement of America’s schools was titled *A Nation at Risk: The Imperative for Educational Reform* (1983). This report, presented by The National Commission on Excellence in Education, called to arms the people of the United States in an attempt to curb a significant decline in the educational system within the country. This report led to educational reform throughout the country. In Massachusetts, this reform came in the form of the Education Reform Act of 1993. The Education Reform Act of 1993 again identified the principal as the key educational leader responsible for the improvement of schools. As the literature shows, the school principal is identified as an integral piece of school improvement. The following section will outline various types of change that inform this research and the role of the principal as it relates to change.

**Leadership & Change**

As discussed in the previous section educational reform has become a primary focus of the principalship and leading change has been identified as one of their key responsibilities. This
section will cover an overview of the study of organizational change, outline the differences between mandated change and program change, and cover the specific change of intervention (RtI) implementation. This section will conclude with a sub-section on evaluating change.

Organizational Change

Organizational change is found in the literature both as a theory and a practice. There are two key types of change including “evolutionary change” identified as incremental changes that occur through the day-to-day operations of an organization and “revolutionary change” that significantly modifies or changes how an organization operates (Burke, 2008). This exploration of organizational change will be started with a discussion of change theory and will conclude with a discussion of organizational change as a practice. Through a review of the scholarly literature two key theories have been identified that deal with change in organizations (Kritsonis, 2005).

Kurt Lewin was one of the first to develop a theory about organizational change. He theorized that there were two types of forces in organizations. These forces included both driving forces and restraining forces. He believed that these forces were responsible for either moving an organization forward or holding it back from making necessary changes. Because of these forces, he felt that it was necessary for a leader to make changes in a well-planned manner. In order for these changes to be made he proposed a three stage model for making changes (Lewin, 1947).

The first stage or phase in his model is referred to as unfreezing. Lewin believed that organizations have a specific set of beliefs or practices that are set in place. In order to effect change is first necessary to unfreeze these static systems. By building trust with
stakeholders and mitigating both driving forces and restraining forces a leader can get an organization ready for change. Once an organization is unfrozen it is possible to move it forward. This can be done by convincing stakeholders of a need for change and helping them to identify that the current systems can change. Once changes or movements have taken place, it is important to refreeze the system with the new beliefs in place. Lewin believes that by refreezing the organization a new set of organizational norms can become engrained (Lewin, 1947).

Ronald Lippett worked as a professor at the University of Michigan and spent the majority of his career looking at organizational structure and change. Along with his associates Jeanne Watson and Bruce Westley, he developed a theory that expanded on Kurt Lewin’s Three Stage Model. Their model titled the Seven Phases of Change outlined seven phases that all planned organizational change should go through. Lippett’s theory included a change agent or leader that was responsible for the proposed change. The seven phases or stages included in this theory are:

1. Diagnose the problem
2. Assess the motivation and capacity for change
3. Assess the resources and motivation of the change agent. This includes the change agent’s commitment to change, power, and stamina.
4. Define progressive stages of change
5. Ensure the roles and responsibilities of changes agents are clear and understood. Examples of roles include the motivator, facilitator, and subject matter expert
6. Maintain the change through communication, feedback, and group coordination.
7. Gradually remove the change agents from relationship, as the change becomes part of the organisational culture (Lippett, Watson, and Westley, 1958).

Outside of the theory associated with organizational change there is a significant amount of literature that deals with organizational change in practice. The field of organizational change has become increasingly popular as more organizations attempt to make changes that help them to become more efficient. Marshal Poole, Andrew Van de Ven, Kevin Dooley, and Michael
Holmes outline a process for organizational change. They believe that one key step to effecting change is for the leader or change agent to build trust with the members of the organization. They also believe that there is a strategic approach that should be taken to implementing change (Poole, Van de Ven, Dooley, and Holmes, 2000).

Michael Fullan, a leader in the world of organizational change, argues that there are six secrets to effecting change. Secret one is to love your employees, by making them feel engaged and satisfied within their role, they will be committed to the organization. Secret two, is to connect peers with purpose, by facilitating peer-to-peer learning rather than a top-down model. Secret three is capacity building prevails, by developing individuals within an organization that have the skills necessary for success. Secret four states that learning is the work. This secret calls for the development of organizations that are constantly learning and growing. Secret five calls for transparency throughout the organization by clearly letting stakeholders what is being done and why. Lastly, secret six is that systems learn, by constantly reviewing practice and trying to be better. Fullan believes that if these six secrets are known and practiced by an organization that change not only becomes possible, but that it is expected (Fullan, 2008).

These views on organizational change have also been widely applied to the world of educational change. Most literature associated with organizational change in an educational setting starts with a shared vision or mission for the organization. Change in educational organizations is also heavily reliant on a positive school culture. Positive culture exists in educational organizations when stakeholders have trust in educational leaders and when they feel like they are a part of the decision making process. Another key aspect to a positive school culture is well-established and clear norms (Curtis & City, 2015; Dufour, Dufour, & Eaker, 2008).
Change in an educational organization can come through either mandated changes from the state or federal government, or through systemic changes that are decided on by the organization itself. Many times these interventions are implemented because of mandated changes, but are done with little to know guidance on how they should be done. Chapter one of this research outlined the federal and state mandates that have influenced school principals to implement interventions. The following section outlines a specific methodology for implementing educational interventions, and evolves into an exploration of several studies associated with educational intervention implementation.

**Response to Intervention**

Response to intervention (RtI) refers to a formalized system of academic, behavioral, and social emotional supports designed to support students. The two major components of an RtI model are school or district-wide curriculum-based measurement tools and progress monitoring protocol. Within this model students are typically separated into three distinctly different tiers of intervention (Burns & Gibbons, 2008; Gerzel-Short & Wilkins, 2009). In this portion of the review of literature, RtI programming will be reviewed as it relates to curriculum-based measurement, progress monitoring, and the tiers of intervention. It will also be necessary to identify RtI’s connection to the current special education system.

With the reauthorization of the Individuals with Disabilities Education (IDEA) act in 2004, school districts were forced to rethink how students were determined eligible for special education services (Burns & Gibbons, 2008). No longer would a discrepancy between a student’s I.Q. and their achievement be grounds for identification of a learning disability (Torgesen, 2000; Berkeley, Bender, Peaster, & Saunders, 2010). Instead school districts would now be required to
provide research-based early intervention strategies for struggling students prior to making any determination about special education eligibility (Fuchs & Fuchs, 2006). With this shift in special education eligibility determination, school districts have begun to adopt an approach referred to as Response to Intervention (RtI).

In the past students were not identified as needing support until they had already met with failure (Moors, Weisenburgh-Snyder, & Robbins, 2010). Schools were not allowed to use dollars that had been earmarked for special education to support students that had not yet been identified as such. The reauthorization of IDEA coupled with sweeping changes associated with the No Child Left Behind ACT (NCLB) now allows schools the opportunity to be proactive, starting to provide interventions to students prior to their being identified as needing special education services (Hughes & Dexter, 2011). The reauthorization also allows districts to use up to 15 percent of their funding from IDEA to provide early intervention to students that are struggling in school (Tilly, 2006).

The first component of implementing an RtI model is the development of a universal screening process (Gerzel-Short & Wilkins, 2009). In order to do this, schools typically adopt Curriculum-Based Measurement (CBM) tools. A CBM is aligned completely with the curriculum that is being taught. It is also based on specific criterion that is identified as being important for determining student performance levels (McMaster & Wagner, 2007; Fuchs, Compton, Fuchs, & Bryant, 2008). It is also important that a CBM be easy to administer and score. By nature CBMs must be given regularly as a formative benchmark assessment (Vaughn, Linan-Thompson, & Hickman, 2003). With the use of a comprehensive universal screening model educators can identify students that are in need of additional services early in the process (Hosp, Hosp, & Howell, 2007). Once students have been identified as needing additional
support a system of research based intervention strategies can be used to address gaps in student skills (Shinn, 2007).

While RtI models vary in their methods of service delivery, they all operate with some form of a tiered system (Jimerson, Burns, & VanDerHeyden, 2007; Hoover & Love, 2011). Students that are identified as needing additional services are placed in tiers that provide increasing levels of support. According to Fuchs and Fuchs (2006) the increased levels of support may include:

(a) Using more teacher-centered, systematic, and explicit (e.g., scripted) instruction; (b) conducting it more frequently; (c) adding to its duration; (d) creating smaller and more homogeneous student groupings; or (e) relying on instructors with greater expertise (p. 94).

By increasing the intensity of instruction for individual students, it is believed that identified skill gaps will be eliminated (Rinaldi, Averill, & Stuart, 2010). Once a gap has been identified and a system of interventions has been set in place it is up to an intervention team to monitor the progress of the students.

RtI models are typically represented in the form of a three-tiered triangle with increasing levels of support identified. The tiers of instruction are commonly referred to as Primary, Secondary, and Tertiary listed in order from least restrictive to most restrictive. The figure below is an example of an RtI triangle:
Each individual school or district is responsible for determining the makeup of their intervention team. In most cases teams consist of administration, teachers, specialists, and parents (Barnett, Daly, Jones, & Lentz, 2004; Lembke, Garman, Deno, & Stecker, 2010). The team is responsible for evaluating data, prescribing interventions, and then monitoring the progress of the students. Progress monitoring is conducted by using regular assessments that gauge the progress of the students and using the data to evaluate and deploy intervention strategies (Wedl, 2005).

Many studies have been conducted to evaluate RtI models and interventions for literacy throughout the United States, but no research exists on how school leaders make sense of the process of selecting, implementing, and evaluating these interventions. Much of the body of scholarly literature available on successful RtI implementation focuses primarily on efforts to increase student literacy namely as a matter of early intervention and in the elementary school.
years. While some research on RtI implementation does exist, they relate only tangentially to the purpose of this researcher’s particular focus. Once again, as mentioned above in regards to literacy studies, many of the scholarly articles are more focused on Response to Intervention methods in the early pre-school to elementary levels, as evidenced by the two studies below.

Matthew Burns, Robin Codding, Christina Boice, and G. Lukito published a study in 2010 investigating the link between skill proficiency in Mathematics and implemented classroom interventions that are meant to address the fluency of those math skills. Their work concludes that using curriculum-based measures and assessments at the proficiency level of the student (or the “skill-by-treatment” paradigm) is an effective methodology for approaching math interventions for struggling students.

Similarly, in 2011, Cherri Sloan Rains investigated the effects of utilizing interactive whiteboard on student performance on standardized mathematics assessments. Rains, whose quantitative study resulted in conflicting findings on the use of instructional technology and will be referenced in more detail later in this literature review, concluded that while purposeful use of instructional technology can help a certain population of the student body on standardized assessments, that this is merely one attempt at intervention.

Although little research on RtI implementation exists no fundamental roadblock would preclude its use (Tilly, 2006). Additional research will be needed in this area to determine the process by which implementation of the RtI approach takes place, in particular at the middle school level, and how educational leaders make sense of this process.

**Intervention Strategies and Targeted Instruction in Action**
While it is important to review the scholarly literature regarding theory, it is also critical to review the literature regarding the practice of implementing intervention programs that have already been put into place. By gaining additional understanding of educational interventions in action, this researcher gained better insight into the process behind administrators making sense of their selection, implementation, and evaluation. The following is a look into twelve studies conducted as a review of established intervention practices and programs. The studies address multiple aspects of intervention strategies and targeted instruction including delivery, fidelity, and progress monitoring. Of the studies reviewed, eight were of a quantitative design and four used a mixed-methods design. They were gathered through a search of scholarly search engines including Academic OneFile (Gale), Academic Search Premier (Ebscohost), Education Research Complete (Ebscohost), Educator’s Reference Desk (Gale), and MathSciNet.

The first study was conducted in 1998 by Stipek, et al. at schools that had received a designation as “low income schools” in California. This mixed-methods study was conducted in order to determine if interventions provided by teachers could improve student motivation in the area of Mathematics. The study was completed using an experimental design. The main point of interest in this study is determining the impact of the teacher as the individual that delivers the intervention.

This study is important to the research because it identifies the importance of fidelity to the intervention strategy. By implementing an intervention with fidelity it assures that there is the best chance of the intended outcome. This study also highlights the importance of selecting the proper personnel when delivering intervention strategies to students. According to this study,
staffing is directly connected to an intervention’s success and this variable is typically within the scope of responsibility for the school leader.

In a study conducted by P. Seethaler and L. Fuchs (2005), a review of scholarly literature was completed that evaluated data pertaining to the amount of peer-reviewed articles available about math and reading interventions. The quantitative study took place on the campus of Vanderbilt University. The results of this study indicate a lack of peer-reviewed data regarding math instruction. In order for an educational leader to select an educational intervention, it is first important for them to research the different options. This article outlines a procedure that was used to identify specific intervention in both math and reading. The selection process is necessary to the development of a comprehensive RtI model.

The next study reviewed was conducted by J. Vsseldyke and S. Tardew in 2007 to evaluate the use of a progress monitoring system to help students to differentiate instruction. The study was completed using mixed-methods and was intended to evaluate both the impact of the treatment as well as student and teacher perception about its value. The research took place in 125 classrooms throughout 24 states. This study reviewed the use of a purchased intervention program known as Accelerated Math which is offered through Renaissance Learning.

This study highlights the importance of collecting data to the process of implementing and evaluating educational interventions. In the case of this study, data was also used to monitor the progress of students that were participating in the educational intervention. The use of progress monitoring is a critical aspect of the RtI process. The use of data is also a factor in the sensemaking process, and its impact is worth further exploration.
In a study conducted by T. Hartsell, S. Herron, H. Fang, and A. Rathod, (2010) researchers looked at the importance of professional development for teachers who were going to be implementing technology-based interventions in their classroom practice. The researchers’ work was aimed at showing a causal connection between teacher confidence in implementing an intervention strategy and student achievement. The research site included various schools in Southern Mississippi.

This study has focused on the importance of professional development as it relates to the success of intervention programs. High quality professional development has been shown to have an impact on the outcomes of an intervention. This is another area that falls within the responsibilities of the educational leader. Further exploration of these perceptions is needed to determine the potential impact and efficacy that professional development has on the success of intervention implementation.

D. Gilbertson, J. Witt, G. Duhon, and B. Dufrene (2008) investigated the use of brief assessments to determine student need for intervention. The quantitative study used an experimental design. The use of brief assessments to determine student needs was an essential component to this research.

The use of these brief assessments, sometimes referred to as universal screeners, is critical to the RtI approach. By giving all students a brief assessment it is possible to identify students that may be in need of additional intervention. Sometimes these brief assessments are followed by more in-depth assessments for the targeted population, while on other occasions it is appropriate for them to receive the intervention immediately. These brief assessments give an educational leader important data to determine the need of educational interventions.
G. Tindal, et al. conducted a study in 2003 that explored alternative assessment methods for identifying intervention needs for students with significant disabilities. The research site consisted of 36 school districts in one state in the Pacific Northwest. The mixed-method study employed an experimental design. The researchers’ conclusions provided insight into the need for developing assessment tools that can be used with all students to identify their intervention needs.

After students have been identified through a brief screening process, it is sometimes necessary to do more in depth assessment to determine exactly what intervention strategies should be used. This study outlines assessment tools that were used to identify significant needs within students. The practice of completing comprehensive assessment to identify areas of need allows educators to provide targeted instruction. The use of such assessments is yet another variable that educational leaders must face.

A study conducted by L. Meltzer, T. Katzir-Cohen, L. Miller, L., and B. Roditi, (2001) explored the impact of student effort and teacher strategy on academic performances. The research site consisted of seven schools across two separate school districts. One district was identified as an urban district and the other identified as a suburban district. The quantitative study was conducted using the theoretical framework of strategic learning. The research gives insight into the role effort plays in the success of an intervention tool.

Another variable critical to the success of an educational intervention is student effort. This article explored the impact of student effort on the success of an intervention. It also attempted to determine the impact of teacher perceptions on the process. While these variables may not be originally taken into consideration they are certainly impactful on the process of
implementing educational interventions. This study helps give insight into the complex process of implementing these interventions and the effect that this can potentially have on how an educational leader makes sense of the implementation process.

The following three studies outline the role of evaluation in determining the effectiveness of an educational intervention. While each study used different practices to evaluate their interventions, they all did so through a formalized process. The use of evaluation is a necessary component of RtI as it relates to a determination of the effectiveness of the treatment. This evaluative process is also a significant factor in the process of making sense of the usefulness of an educational intervention.

J. Fearrington, S. McCallum, and C. Skinner (2001) completed research aimed at using counseling to improve completion of math work. This research is relevant because of the use of pre-assessment to determine the reasons for a lack of student performance, an essential component in executing a successful RtI model. The quantitative study used an experimental design. The research was conducted at an inner-city elementary school.

When reviewing the data on completed assignments, all participants had significant increases in their output. By comparing this data to the baseline data it was determined that there was a connection between the treatment, referred to as solution-focused brief counseling, and the outcome (increase in completion of assignments). Follow-up data collection on the six participants showed that five out of six students maintained or raised their level of completed work after the treatment was removed. One participant showed a sharp decline in his overall completion of work.
In another study conducted by Ysseldyke, Spicuzza, Kosciolek, & Boys in 2003 about the Accelerated Math program, the researchers evaluated how the program affected classroom structure. The research took place at a large urban school district in a Midwestern state in the United States. The quantitative study was conducted using an experimental design.

In 2004, J. Ysseldyke, J. Betts, T. Thill, & E. Hannigan completed a study that compared the accuracy rating of Title I students participating in the Accelerated Math Program to a group of students that were not identified for Title I support. The research took place in 125 classrooms in 24 states in 47 schools throughout the United States. The quantitative study was conducted using an evaluation theory framework.

As previously mentioned, Cherri Sloan Rains (2011) conducted research to determine the effectiveness of a new program on math achievement. This study was conducted at a public elementary school in the state of Georgia. The researcher was identified as the technology coordinator for the district. The quantitative study was conducted using a learning theory framework. The development of this research to evaluate an established program gives insight into research design.

This study outlines the importance of the evaluation process when dealing with educational interventions. The results of this research indicates that there were no significant gains that could be identified due to the intervention being in place. This lack of improvement would give an educational leader data that would be necessary in the decision-making process. The use of evaluation is critical to the sensemaking process as it relates to implementing educational interventions.
This previous section outlined multiple studies of interventions in action and gives insight into how interventions are implemented and evaluated. These studies are important because they outline variables that are within the control of an educational leader, and that may have an impact on how they make sense of the process of selecting, implementing, and evaluating educational interventions within their schools. The next section covers a review of the scholarly literature involving evaluation theory.

**Evaluating Change**

In this research, the evaluation of change will be used as a lens to determine how school leaders make sense of an intervention system that they have implemented. By using a structured approach to evaluation, one is able to determine the effectiveness of an intervention strategy while developing a plan that others can follow. This approach also allows the researcher to identify specific strategies and stakeholders prior to completion of the research (Ottoson, 2009). This framework will help to guide the research of this topic and give structure to the results.

Some evaluation theorists view this framework as a tool directed at shifting intervention programs from a system of knowledge to a system of learning (Hawe, Bond, & Butler, 2009). This shift in thinking hones the focus of the researcher. Clarifying how evaluation impacts programming will be critical when reviewing how other programs have been implemented and evaluated. The use of evaluation theory forces the researcher to continuously reflect on the purpose of the research to determine whether the learner is learning.

In the field of evaluation research, there are two main types including formative and summative evaluations. Formative program evaluations are intended to make the program better
by exploring the intricacies of the delivery and implementation of the model. In this type of research the evaluator attempts to adjust delivery in order to improve the outcome. On the other hand, summative program evaluations focus on the results of the prescribed program. In summative evaluations, the researcher is attempting to determine if a prescribed treatment has the desired effect on the participants (Fraenkel, Wallen, & Hyun, 2012).

Another key feature of evaluating change is the determination of gaps in programming. The purpose of any program evaluation is to determine if it is having the desired outcome on the participants in the research. Through a thorough evaluation of programming, the researcher can determine if the intervention is having the desired effects and whether or not there should be adjustments made to the treatment (Butin, 2010). By reviewing the results of the data, decisions can be made to determine the validity of the programming and whether it should continue to be implemented, adjusted as per the results of the research, or eliminated.

Through the process of program evaluation, some believe that it is vital to identify the stakeholders that are linked to the research. The values, bias, and feelings of all stakeholders involved in the process have the potential to impact the research (Stringer, 2007). By identifying all stakeholders involved and coming to terms with the various platforms of these constituent groups, the researcher can best be prepared to deal with these variables.

Leading researchers in the field of evaluation, Egon Guba and Yvonna Lincoln (1989) claim that there are multiple facets to evaluation that have been left out through the historical model. They state that it is vital to include the “myriad human, political, social, cultural, and contextual elements” (p. 8) to gain a holistic view of the program that is being evaluated. By including these aspects of evaluation theory, a researcher will be able to paint a fuller picture
during their evaluation. This view comes from a thorough look at the history of evaluation and how it has developed throughout the years.

In their book *Fourth Generation Evaluation*, Guba and Lincoln explore the historical context of evaluation and the evolution of the theory behind it. According to Guba and Lincoln, there have been three distinct generations of evaluation. The first of these generations came in the form of a demonstration of the mastery of facts. Early on, evaluation was completed in the form of examinations. These examinations were conducted in order to ascertain if students had mastered a predetermined set of facts. This approach to evaluation was elementary in nature and centered on students and their performance. However, this generation of evaluation did not allow evaluators the opportunity to measure the outcomes of a specific treatment. As school curriculum and treatments became more complex the system of evaluation needed to evolve in order to keep pace with the demands (1989).

The next two generations of evaluation centered on objectives. In the second generation of evaluation, evaluators focused on objectives to determine whether or not specific goals were being met. No longer was it considered adequate to evaluate if a student could regurgitate facts, but instead evaluators focused on the objectives to determine if the treatment had the desired effect on the individuals involved.

In the 1960s and 1970s, this focus on the objective further evolved into what was called the third generation of evaluation. In this generation not only did the evaluator determine if the objectives were met, but now the evaluator was responsible for making a judgment about whether or not the treatment was worthwhile (Guba & Lincoln, 1989). A review of the three
generations of evaluation led Guba and Lincoln to believe that a fourth more, well-developed, edition of evaluation needed to be created.

In the fourth generation of evaluation, Guba and Lincoln place a clear focus on the importance of the stakeholders. Without the input and feedback of stakeholders, they believe there will be gaps in the evaluation model. In the fourth generation, there is also a delineation of the process that is involved in the conduction of a formalized evaluation. This process is necessary to assure that the evaluator does not miss any steps or ignore a constituent group in the development and carrying out of the research (1989).

While some theorists and researchers emphasize the importance of involving stakeholders in the evaluation process, others tout the idea of using a quasi-experimental design to eliminate the need for the inclusion of qualitative data in evaluation research. In order for research to truly adhere to an experimental design it must, by nature, be randomized. The use of a quasi-experimental design allows the researcher to discount some of the potentially problematic side-effects of using a purely experimental model. At the same time, the researcher must identify potential pitfalls associated with the non-randomized assignment of the treatment and control groups, and account for them in their data analysis (Shadish, Cook, and Campbell, 2002). Due to the overwhelming variable contained in realm of social science research, the quasi-experimental design has gained support.

Dan Butin (2010) believes that the quasi-experimental design can be ideal when doing an evaluation study. He believes that this design can be appealing to researchers because it can give solid results without creating any ethical problems for the researcher. This design allows the researcher to look at the mediating variables and attempt to determine how much of an impact
they had on the outcome of the research. In a quasi-experimental design, the evaluator must take steps to determine the causal relationship between the treatment and the effect. If alternative mediating variables are not discounted, then it would be impossible for the researcher to determine if the desired effect is due to the treatment.

Pseudoevaluations are typically conducted by people that would benefit from a specific result that comes through the evaluation of a program. These evaluations are usually conducted in politics or business. The purpose of a pseudoevaluation is not to determine the actual value of a program but rather to influence a constituent group for personal gain. In order for an evaluation to be valid it must be conducted without bias. Stuffleman (1999) also uses the term “quasi-evaluation” to describe evaluations that attempt to include qualitative data into a program evaluation. While this research is typically referred to as evaluation, it does not always meet the standard for an appropriate program evaluation (Stuffleman, 1999).

With the exception of pseudoevaluations, evaluation approaches can be separated into three main categories. The first of these categories is referred to as “questions/methods oriented-approaches.” These approaches typically are narrow in focus and start with the establishment of questions that guide methodology prior to a determination about whether they show the value of a program. While these approaches have validity to research, it is important that the evaluator does not use them to make a holistic claim about the quality of a program. These studies should be used to answer specific questions about components of the program being evaluated (Stuffleman, 1999).

According to Stuffleman (1999), the second set of approaches used to complete program evaluations are categorized as “improved/accountability-oriented evaluation approaches.” These
approaches are used when an evaluator would like to determine the general value of a program. They can be used either as a formative program evaluation, to improve a specific program, or as a summative evaluation to determine if the program is having the desired effect. In an improved/accountability-oriented evaluation, stakeholders are included in the evaluation to determine goals and priorities, but not necessarily in the completion of the study.

The last set of evaluation approaches is referred to as “social/agenda advocacy approaches.” These approaches have been established primarily as a means of ensuring equity in research. By using these methods, the researcher designs the evaluation in a way that may even give an advantage towards a disenfranchised group. While the intent of this approach is to level the playing field for constituent groups, the evaluator must be aware of the potential pitfall of allowing bias to permeate the results of the study.

Because this research has been developed to gain an understanding of how principals make sense of evaluating an educational intervention, it was critical to gain a deeper understanding of evaluation and evaluation theory. The frameworks established within this theory have been used as a guide for the research design established for this study.

**Literature Review Conclusion**

Improving student performance is a task charged to principals throughout the country. Traditional methodologies of delivering instruction have left students with knowledge gaps that need to be addressed by educators. School districts throughout the country have worked to develop intervention protocols aimed at eliminating these gaps. The process by which these interventions are selected, implemented, and evaluated needs additional research.
Thorough research has been completed regarding sensemaking, RtI, the use of specific intervention strategies, and program evaluation. However, there are significant gaps in the research as to how principals work through the process of putting these interventions into place. Using the review of literature as a guide, this research has been conducted as an effort to increase the amount of meaningful data available regarding how principals grapple with the process of selecting, implementing and evaluating these educational interventions. This research has been conducted in a manner that will allow others to replicate the outcome.

CHAPTER THREE: RESEARCH DESIGN
The purpose of this study was to explain the stories of middle school administrators as they struggle to make sense of a recently launched educational initiative. Due to the rich complexity of this process, a narrative approach was selected. The narrative approach allowed this researcher to delve into the details of the sensemaking in a manner that fully captured the process. The data collected came in the form of open-ended interviews conducted by this researcher. This research approach allowed for the compilation of several stories into one collective whole. This chapter includes research questions for the study, along with the justification for using a qualitative research design and a narrative approach to data analysis. The chapter also includes procedural information including participant recruitment, interviewing procedures and data collection, data analysis and storage, and the trustworthiness of the study.

This research comes as a response to the struggles of principals to make sense of the variables associated intervention implementation. Principals have been faced with mandated reform and exposure to regulations that requires improvement for all students. The use of interventions has been identified as the methodology for improvement. By interviewing practicing principal and exploring their lived experience this research has attempted to understand how they make sense of this process.

Methodology

Research Question

1. How do school leaders make sense of intervention programs that they have launched in the past five years?

Qualitative Paradigm
This research was conducted using a qualitative paradigm. According to Denzin and Lincoln (2005):

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (p. 3).

The use of a qualitative design for this research was necessary due to the complexity of the sensemaking process. The research questions and design called for the collection of complex data that could only be analyzed through qualitative means. The use of a qualitative design allowed this researcher to identify the “nuances” and “subtleties” of the problem being studied (Fraenkel, Wallen, & Hyun, 2012). By using this approach, a broader picture was able to be examined and the researcher had the ability to interpret the different aspects of the sensemaking process as it related to the implementation of educational initiatives.

Another key reason for the use of a qualitative approach was the need to contextualize the raw data that was collected through the interview process. By contextualizing data associated with the sensemaking process, the researcher was able to develop a holistic account of lived experiences of the participants. This holistic view gives a broad picture of the complex relationship between the school principals and the variables that they were faced with throughout the sensemaking process (Creswell, 2007). For the purpose of this study, it was critical for this
researcher to have access to a varied account of the participants lived experiences to gain a deeper understanding of how they made sense of the process involved in implementing and evaluating educational interventions.

The structure of the qualitative research design allowed this researcher to develop a deeper understanding of the sensemaking process as it relates to a principal’s account of implementing an educational initiative. The qualitative design allowed the researcher to be a tool in the process of gathering data. This point-of-fact allowed for flexibility in the collection of data. By including the researcher as a tool, this design allowed for the interpretation of a multitude of data sources that may not have been detected otherwise (Maxwell, 2005). Because this study called for a blending of many stories into one shared vision, it was necessary to allow for such interpretation of data.

**Narrative**

The narrative approach to inquiry was used as the basis for this study. The narrative approach allowed for the collection of data through words or text that told the participants’ stories about events or actions that impacted their ability to make sense of their role in implementing an educational intervention. The data collected and shared through the narrative approach allowed the researcher to be able to interpret the data in order to formulate conclusions about the sensemaking process for the participants (Creswell, 2007). This approach was appropriate for this study due to the complexity of the sensemaking process. Because this researcher was able to hear the stories of four middle school administrators and weave those stories into one, a rich context was established that can have an impact on the larger educational community.
In their book *How to Design and Evaluate Research in Education*, Jack Fraenkel, Norman Wallen, and Helen Hyun (2012) describe narrative research as “the study of the life experiences of an individual as told to the researcher or found in documents or archival material” (p. 432). Using this approach made this researcher responsible for setting the stage for the participants and retelling their stories in a manner that is understandable within the context of the sensemaking process. By collecting biographical data about the participants the researcher was able to give readers background information that is vital to the process (Fraenkel, Wallen, & Hyun, 2012). In using this approach this researcher was able to obtain background knowledge about the individual participants in order to gain deeper understanding of how they made sense about their role in implementing and evaluating educational interventions.

**Site Selection and Participant Recruitment**

In order to complete this qualitative study, purposeful selection of participants was necessary. Because the study called for the examination of lived experiences of middle school administrators, it was necessary to establish specific guidelines for determining participation. Unlike quantitative research that typically uses probability or convenience sampling, this research needed a purposeful approach because of the need to establish a sample that included individuals that had like experiences (Maxwell, 2005). Fraenkel, Wallen, and Hyun (2012) define purposeful sampling ever further to include the use of what they call a “typical sample.” They define a “typical sample” as “one that is considered or judged to be typical or representative of that which is being studied” (p. 436). For the purpose of this study, a purposeful sampling approach was used that included a “typical sample” of middle school administrators that shared specific traits.
Because this was a small scale qualitative study, purposeful sampling was even more important. With such a small sample of participants it would have been virtually impossible to gain access to individuals that had shared experience using random sampling (Maxwell, 2005). With the use of a qualitative design, it was important to elaborate on the small details of the stories shared by the participants. This approach required the collection of vast amounts of data that was only possible using a small sample group; therefore it was necessary to identify participants that gave the researcher the best chance of answering their research questions (Creswell, 2012). By purposefully selecting participants for this research it was possible to gain access to participants that allowed for the collection of data useable for answering the question of how principals make sense of a recently launched initiative.

In order to determine participants for this study, several factors were taken into consideration. First, this researcher felt that it was necessary to conduct the first formal interview in a face-to-face format with the participants. Due to the nature of this interviewing style it was necessary to employ some aspects of convenience sampling (Maxwell, 2005). In order to bind this study, only participants that lived within a fifty mile radius of the researcher’s residence were recruited. This necessity limited the potential candidates for the study. In actuality, all participants selected for the study were employed within a twenty mile radius of one another.

Second, participants in the study were limited to those that had been in a role where they were responsible for implementing and evaluating educational interventions for at least three years. This limitation to the selection process was important due to the fact that it was necessary for the participant to have time to reflect on the educational intervention that had been
implemented. Table 3.1 below outlines the selected participants including the number of years that they were employed in the role of principal at the time of this study.

Third, the participant must have implemented an educational intervention within the past five years. This detail was necessary because of the sweeping changes in education that were discussed in Chapter One of this study. The participants chosen for this study were in various stages of the implementation process for their interventions. The specific details of their intervention implementation are found in chapters four and five of this study.

In order to refine this research further, only participants that worked in suburban districts within Massachusetts were approached. This was necessary based on the need for the participants to have a shared experience. The educational landscape in Massachusetts is significantly different than other states in New England. These differences make it difficult to generalize information about school districts as it relates to educational interventions. In order to create the greatest opportunity for the sample population to have shared experience regarding educational intervention implementation, the study was limited to Massachusetts middle school administrators. The purpose behind limiting the sample to suburban district administrators was due to funding models. In Massachusetts, urban districts tend to receive different levels of funding than suburban schools. In order to eliminate any discrepancies caused by funding differences, only suburban or rural school administrators were recruited. Another variable associated with urban districts in this area is diversity of the students. Massachusetts requires additional interventions for students identified within specific subgroups. By selecting suburban districts with similar demographics there was a decrease in the likelihood that the intervention was mandated by the state.
Recruitment for the study was completed in several stages. First, this researcher identified potential participants by conducting research about surrounding school districts, including student demographics. Second, when districts were identified that met selection criteria this researcher made contact with the school administrator by phone. Potential participants were sent an introduction letter that can be found in Appendix A. Lastly, through pre-interview phone calls it was determined whether or not the school administrator met selection criteria for inclusion in the study. Once school administrators were identified, they were invited to participate in the study. Through this process the following participant group was selected (see table below):

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pseudonym</th>
<th>Gender</th>
<th>Years of Experience</th>
<th>Years in Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Principal Steve</td>
<td>Male</td>
<td>15+</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Principal Jack</td>
<td>Male</td>
<td>40+</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Principal Jean</td>
<td>Female</td>
<td>20+</td>
<td>3 at the time of the interview</td>
</tr>
<tr>
<td>4</td>
<td>Principal Bill</td>
<td>Male</td>
<td>20+</td>
<td>3</td>
</tr>
</tbody>
</table>

According to Creswell (2007) all of the individuals in a narrative study “need to have stories to tell about their lived experiences” (p. 128). With this context in mind and the criteria that had been established, four middle school administrators were chosen to participate in the study. All of these administrators had the shared, lived experience of implementing an educational intervention that allowed them to discuss how they made sense of this process.
Data Collection

Interviews

For the purpose of this study interviews were selected as the primary data source. Interviews were used by this researcher in order to understand the stories of the principals that were selected for the study. In describing the relevance of stories to the research process Irving Seidman (2006) states “It is this process of selecting constitutive details of experience, reflecting on them, giving them order, and thereby making sense of them that makes telling stories a meaning-making experience” (p. 7). The process of interviewing allowed the interviewee the ability to reflect upon past experiences in an attempt to make sense of the process of implementing a recently launched initiative (Stringer, 2007).

Because interviewing is a process that can be conducted through several methods including face-to-face, telephone, focus groups, and email it was critical that this researcher selected a methodology that worked for this study (Creswell, 2009). For the purpose of this study a mixed methodology was selected that included an initial face-to-face meeting and then the option of a telephone interview for the remaining questions. Once an interviewing methodology was established it was necessary to identify the type of interview that would be conducted. According to Fraenkel, Wallen, and Hyun (2012) there are four interviewing strategies that are used in educational research including “informal conversational interviews,” “interview guide approach,” “standardized open-ended interviews,” and “closed, fixed-response interviews” (p. 452). This study employed a standardized open-ended interviewing strategy that allowed for flexibility in responses.

While there are many models of interviewing, this research was conducted using Seidman’s (2006) “Three-Interview Series” model. The first interview took place in a location
of the participants choosing using a face-to-face methodology and used an informal conversational approach. Using Seidman’s model, the first interview was focused on the personal story of each of the interviewees. These interviews were staged in a manner that allowed the interviewee to talk about their life history. The first interview was held in order to give this researcher perspective about the profile of the participant.

The second and third follow up interviews in the series were conducted as either phone or face-to-face interviews based on participant preference. Three out of the four participants chose to meet face-to-face for the follow-up interviews and one participant chose to conduct their follow-up interviews over the phone. These interviews used a standardized open-ended interviewing strategy (Seidman, 2006). The second interview was held in order to get details about a specific educational intervention that the participant had implemented and evaluated in the past. Details of this interview were discussed in order to set the stage for the last interview. The final interview was where the participants were asked to make sense of how that process took place. Interviewees were given the opportunity to reflect upon the process and put it into context as it related to their life history.

Interview questions for this study were developed using Weick’s (1995) seven characteristics of sensemaking. These characteristics have been used to code the data found in chapter 4 of this study. A full interview outline can be found in Appendix B of this study. The following table includes round and question numbers along corresponding characteristic from Weick that the question is associated with:
Table 3.2

Questions with corresponding characteristics

<table>
<thead>
<tr>
<th>Round</th>
<th>Questions/Probes</th>
<th>Weick’s Characteristic of Sensemaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>Question: 1</td>
<td>Identity Construction</td>
</tr>
<tr>
<td></td>
<td>Question: 2</td>
<td>Retrospection</td>
</tr>
<tr>
<td></td>
<td>Question: 3</td>
<td>Enact</td>
</tr>
<tr>
<td>Round 2</td>
<td>Question: 1</td>
<td>Enact</td>
</tr>
<tr>
<td></td>
<td>Question: 2</td>
<td>Social/Retrospection</td>
</tr>
<tr>
<td></td>
<td>Question: 3</td>
<td>Retrospection</td>
</tr>
<tr>
<td></td>
<td>Question: 4</td>
<td>Ongoing/Extract Cues</td>
</tr>
<tr>
<td>Round 3</td>
<td>Question: 1</td>
<td>Extract Cues</td>
</tr>
<tr>
<td></td>
<td>Question: 2</td>
<td>Plausibility Over Accuracy</td>
</tr>
<tr>
<td></td>
<td>Question: 3</td>
<td>Retrospection/Extract Cues</td>
</tr>
</tbody>
</table>

Throughout the process, the interviewer followed the structure set forth in Seidman’s model (2006). This model called for interviews to be scheduled for up to ninety minutes. The length of the interview was such that it required investment by the participant and allowed ample time to complete the discussion process. Although the interview sessions were scheduled to allow up to 90 minutes of time, most interviews were completed in less than an hour. Seidman also recommends that the interviewer adheres strictly to the structure of the model. He cautions against blurring the lines between interview sessions for fear of losing the focus of the interview. Due to the constraints of participant schedule the first and second interview had to be
combined for two participants. This duration allowed the participant enough time to reflect on the session, while keeping the topic fresh in their mind.

Due to the nature of the participants’ roles as educational administrators, it was important to be cognizant of the demands of their jobs. With this in mind, all interviews were set up at times that were convenient to the participant. Flexibility in the interview schedule was also necessary to avoid potential scheduling conflicts for the interviewee. The face-to-face interview component of the research was held at a location of the participants’ choosing in an attempt to make them feel as comfortable as possible. In most cases the interviews were held in the home school of the participants although one participant chose to meet at an alternative site. The second and third interviews were conducted as either phone interviews or face-to-face in order to allow for additional flexibility.

**Recording and Storage**

In order to maintain the informal feeling of the interviews, minimal field notes were taken during the process. All interviews were digitally recorded using two recording instruments in order to ensure that data collection would not be interrupted. The voice recording software for the interviews was Rev Voice Recorder. All participants were informed that the sessions would be recorded and acknowledged their consent by signing a participation consent form. The letter of informed consent is attached in Appendix C. Once interviews were finished, they were transcribed for the purpose of completing data analysis. The transcription of the interviews was completed using the Rev Voice Recorder Transcription Service. All of the data recorded through the interview process was collected and maintained with security in mind.

All interviews were recorded and maintained in a digital format. Digital recordings of interviews were stored on hard drives of computers that used password protection. All digital
copies of transcripts were also maintained using the password protected hard drives. Paper copies of transcripts were stored in a locked file cabinet and shredded upon completion of the study. All signed consent documents will be maintained for three years after completion of the study and then shredded. All electronic copies of transcripts and additional data will be maintained using password protection and destroyed ten years after completion of the study.

**Data Collection & Analysis**

After gaining approval from Northeastern University to move forward with the data collection portion of this study, this researcher began the process of recruitment for this study. Once participants had been selected, interview were conducted. Upon completion of the interviews the data was coded and analyzed. In order to clearly define the process that was followed for data collection and analysis, three distinct phases have been identified.

**Phase I: Potential Participant Identification, Participant Recruitment, Participant Selection**

Phase I began with a comprehensive search of all middle schools within a 50 mile radius of this researcher’s home district. Once schools were identified they were categorized using demographic data found on the Department of Elementary and Secondary Education’s website. Schools were grouped by size and sub-groups identified. Schools that did not meet established selection criteria were eliminated from the selection process. Eliminated schools included urban schools and schools that had identified sub-groups that required implementation of intervention strategies as a state mandate. The remaining schools were categorized based on ease of access regarding distance from researcher. Once schools had been identified and categorized a web search was conducted to identify the principals of each school. By reviewing information on the district websites and the Department of Elementary and Secondary website this researcher was
able to determine which school principals had been in their schools for a minimum of three consecutive years.

After identifying potential principal candidates for the study phone calls were placed to the principals in an attempt to recruit them for the study. In total, six principals were contacted for participation in the study. Each candidate was questioned regarding selection criteria and four were identified for participation. Potential candidates were emailed an introduction letter and an outline of the study as a follow up to the initial phone call. Once the candidates were identified for the study they were asked to sign a consent to participate and the process was discussed with them. When the participants committed to the study, interview times were selected that were mutually agreed on by both the interviewer and the interviewee.

Throughout the process of participant recruitment and selection this researcher worked to refine the interview questions for the study. Two principal volunteers were recruited to complete the interview process and offer feedback on the interview questions. To complete this, interview questions were asked following the interview protocol and responses were recorded. Transcription of the interviews were completed to assure that the technology would work as planned. After completion of the interviews and review of the transcripts meetings were held with the volunteers to solicit feedback about the process and interview questions. The revised interview questions were used to conduct the interviews in phase II of the data collection and analysis process. The finalized interview questions can be found in their entirety within the appendix of this study.

**Phase II: Conducting of Interviews**

After completion of the selection process, participants were notified via phone that they had been chosen to participate in the study. During this phone call, initial interview times were
established that were acceptable for the participants. At the initial interview, this researcher shared appropriate study approval paperwork and had the participants sign an informed consent form that can be found in Appendix C. Initial interviews were set up for a time slot of 90 minutes, but all interviews were completed between 40-60 minutes depending on the brevity or fullness of participant responses. At the conclusion of the initial interview additional times were established. Due to time constraints of the participants, two chose to hold the second interview immediately after the first. Throughout the interview process the Rev Voice Recorder application was used on a Samsung phone and a backup recording was completed using the same application on an iPad.

During follow up interviews, meetings were again held at locations determined by the interviewee. Three out of the four participants chose to meet at their home school, while one chose to meet at an alternate location at a coffee shop close to their home. Because a standardized open-ended interviewing strategy was employed there was some variation in the questioning. While the interviewer did proceed with a predetermined set of questions, there was flexibility in the process that allowed for both follow up and clarification questions for both the interviewer and interviewee. At the conclusion of the final interviews the interviewees were thanked for their participation and an additional meeting was established for a review of the transcripts associated with the interviews.

The voice recordings for each interview were uploaded to the Rev Transcription Service and full transcripts were received by this researcher within 48-72 hours. After receipt of the interview transcripts they were reviewed for errors and edited. This researcher altered transcripts to assure confidentiality of both the participants and those that they had spoken about. Once transcripts had been edited and altered for confidentiality, they were shared with the participants
to check for accuracy. In all cases the first round of interviews was available prior to any follow-up meetings. No participants recommended alterations to the transcripts after editing.

**Phase III: Overview of Data Analysis and Reporting Out**

Data analysis was completed in a narrative format. Stringer (2007) states that narrative analysis “presents richly detailed, thickly described accounts that enable readers to empathetically understand the lived reality of the research participants” (p. 180). This research study explored the concept of how middle school administrators make sense of the implementation and evaluation of educational interventions. The display or “visual format” of the study is vital to help the reader gain understanding to nature of the study (Miles & Hubberman, 1994). The narrative format allowed for research data to be displayed in a manner that is understandable for the reader.

Creswell (2007) breaks down narrative analysis into five steps including data managing, reading/memoing, describing, classifying, interpreting, and representing/visualizing. This framework was used for the completion of the data analysis. Interview data was separated by participant into separate files. Within each of the participant’s file, the data was broken down further into three separate interviews. The three interviews were reviewed in order to create a biographical history of each participant in the study. All interviews for each participant were read through and shared with participants to assure accuracy of the data. Margin notes and initial codes were used to identify data that was later used in the narrative.

Next, all of the interview data was arranged into chronological order. This process allowed for individual experiences to be described and put into a context that was readily used. Materials within the context of the interviews were broken down into classifications and reviewed in order to identify relevant stories and key insights described by the participants. As
with all narrative research, the data then needed to be interpreted by this researcher (Creswell, 2007). Coded transcripts and notes were reviewed and interpreted using the theoretical framework of Weick’s theory of sensemaking as a guide.

Coding was conducted using priori or preset codes. This methodology allowed for a comprehensive evaluation of the data with a focus on the theoretical framework (Gibbs, Graham, 2007). All preset or initial codes were assigned using Weick’s seven characteristics of sensemaking including enactment, social, identity construction, extracting cues, plausibility rather than accuracy, retrospection, and ongoing. The purpose of using priori codes was to add structure to the study, but it was also imperative that this researcher allowed for emerging codes to be used during the analysis. The priori codes were coupled with the emerging codes that came out of the research including data, complexity, and roadblocks. All transcripts were reviewed in their entirety and coding was conducted using both marginal notes and color coding.

The following table was used as a framework for the coding process. It contains both priori and emerging categories as well as codes and associated colors:

*Table 3.3 Coding Table*

<table>
<thead>
<tr>
<th>Category</th>
<th>Alpha Code</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enact</td>
<td>E</td>
<td>Light Blue</td>
</tr>
<tr>
<td>Social</td>
<td>S</td>
<td>Light Green</td>
</tr>
<tr>
<td>Identity Construction</td>
<td>IC</td>
<td>Red</td>
</tr>
<tr>
<td>Extract Cues</td>
<td>EC</td>
<td>Orange</td>
</tr>
<tr>
<td>Plausibility Over Accuracy</td>
<td>PA</td>
<td>Yellow</td>
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<td>Complexity</td>
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<td>Road Blocks</td>
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The final stage in a narrative analysis is the visual representation. It is the responsibility of the researcher to weave the story of several individuals into one comprehensive account of the
phenomenon being studied (Creswell, 2007). This process allowed for the development of a narration that included the lived experiences of middle school administrators as they relate to their ability to make sense of the implementation and evaluation of an educational intervention. Because this researcher felt that the lived experiences of the individuals was critical to telling their stories, significant portions of their transcripts are included in chapter four of this study.

Throughout the data analysis process analytic memos were kept that helped this researcher to identify emerging themes within the research. In total nine themes were identified through the analysis and reported on in chapter five of this study.

**Trustworthiness**

Lincoln and Guba (1985) outline criteria they believe helpful to establish trustworthiness in research. The areas included in this procedure are credibility, transferability, dependability, and confirmability. Credibility relates to the integrity of the study and whether or not the participants see value in it. Transferability of a study refers to the possibility that the findings of the study can be related to others. In order for a study to show dependability it must be comprised of procedures that are clearly outlined and must be able to stand up to external inquiry. If a study has confirmability there must be evidence that the study followed the research design that has been described.

As previously stated this research study used Seidman’s Three-Interview Series (2006) as the benchmark for interviewing procedures. This interviewing protocol calls for a series of three distinctly different interviews that last for a duration of up to ninety minutes. The duration of these interviews established “prolonged engagement” that allowed for investment in the process by both the researcher and participants. The process also created an environment where “persistent observation” was present due to the amount of time interviewing and conducting
check-ins with participants. The data collected during these interviews was triangulated through the use of recordings, transcripts, and participant feedback (Lincoln & Guba, 1985).

The transferability of this study is evident in its context. While this study is primarily focused on the role of middle school administrators in Massachusetts, the context and findings of this study are transferable to other fields. Leaders in many capacities are required to implement and evaluate programming, interventions, and policies that include planning, developing, introducing, and monitoring strategies. The reflections narrated from school leaders in this study would likely give insight to leaders in other school positions or even in other professions.

In terms of dependability, this study closely followed the guidelines of well-documented research procedures and protocols. The use of an established interviewing protocol, known data collection procedures, and documented research design should give readers the feeling that the research data is dependable. A detailed research journal was kept throughout the research process. The format of the journal was a collection of meeting notes, memory aides, and call logs kept in a binder for reference. The journal also included reflections from the researcher that were noted throughout the research process.

In an attempt to maintain an informal feel throughout the interview process, there were minimal field notes kept during the formal interviews. However, a brief collection of field notes were kept with the interview questions. There were also field notes taken during informal conversations regarding principal backgrounds and opinions. The purpose for keeping field notes during informal conversations was to assure that the research was able to capture the whole story as it related to the individual participants.

The research design also called for member checks throughout the process. As stated in the previous section, once transcripts were received from the transcription service they were
edited and checked for confidentiality. Edited transcripts were shared with in a face-to-face meeting with participants to assure accuracy of the data. While there were no edits offered by the participants, this was a critical step in determining trustworthiness for the study.

In order to maintain dependability throughout the coding and data analysis process it was important to keep analytic memos. These memos helped this researcher to memorialize what was learned through the coding and analysis process. These analytic memos were used during the final data analysis process and were critical to the identification of key themes within the research.

Throughout the data analysis and coding process inter-rater-reliability was checked through a peer review process. Two separate reviewers were used to determine both the reliability of the coding structure and the analysis of the data. Reviewers participated in the establishment of initial codes and emergent codes. They were also responsible for reviewing the identified themes through the data. The use of reviewers for the purpose of inter-rater-reliability helped to assure accuracy of the data coding, collection, and interpretation.

**Identifying Researcher Bias**

Narrative research is designed with the researcher as a “key instrument” (Creswell, 2007). Because the researcher is a central part of the research process it is critical that potential bias be identified and planned for prior to beginning research. First, it is important to acknowledge that this researcher currently holds a position as a middle school administrator in Massachusetts. In this role the researcher has planned, developed, implemented, and evaluated educational interventions in the past. Through this process, the researcher has had to make sense
of the process that took place while carrying out these activities. It is also important to recognize that this researcher has a distinct interest in this topic on both an academic and professional level.

In Kathryn Herr and Gary Anderson’s book *The Action Research Dissertation* (2005) they cite a Lomax, Woodward, and Parker (1996) text encouraging the need for “validation meetings” to defend research findings against peers. For this research, validation meetings were held with a second reader in order to identify potential researcher bias. The practice of reviewing interview data with participants has also been used as part of the validation process. By meeting with participants and reviewing assumptions and interpretations that were made, this researcher limited the potential for researcher bias to negatively impact the study.

**Human Subjects Considerations**

All research completed through this study was gathered in compliance with the procedures set forth through Northeastern University’s Institutional Review Board. All participants involved in this research did so on a voluntary basis and completed participation consent forms (Appendix C) that stated such. In order to assure that all participants were clear on the parameters of the study, confidentiality precautions, purpose of the research, and the interview process, all participants were given a participant information document (Appendix A).

To protect the identity of the participants in this study, each individual was given an alias. The aliases were used as the indicator for participant response throughout the study. This low risk study was conducted in a manner that prevented individuals from being under any physical or psychological stress. In order to maintain complete confidentiality, all research material were kept on a password protected hard drive or in a locked cabinet.
Limitations of the Study

This study took place in a limited number of school districts in Massachusetts. The total sample group included four middle school principals.

The limitations of this study included the following:

1. The limited size of the sample group may have limited the scope of the research.
2. Researcher bias was possible due to the fact that the researcher is a current school leader.
3. This research was completed using one sample group and did not show any longitudinal data.
4. The targeted population was nonrandom and did not show results from a generalized population of school leaders. All participants in the study met specific criterion identified by the researcher.
5. The scope of this study was limited to the researcher’s interpretation of information shared by participants.
6. The research sites were limited to a single state and therefore may not be normalized for other locations.

Summary of Research Design

This qualitative study used a narrative approach to explore how middle school administrators make sense of educational interventions that they have implemented and evaluated. A sample group of four middle school administrators was purposefully selected for this research. All participants took part in Seidman’s Three-Interview Series (2006) in order to collect the data necessary for this research. Once the data was collected, a narrative analysis was conducted that compiled the stories of 6 individuals into one using the framework of sensemaking as a guide.
The next chapter of this study begins to lay out the finding from this research and includes participant profiles coupled with data analysis.
CHAPTER FOUR: FINDINGS

Overview

The purpose of the chapter is to present the findings of this research. The findings will be presented through a review of interview transcripts that have been coded in order to identify common themes. In Chapter Five, common themes will be analyzed and a summary of the findings will be provided. This chapter will explore the process of how middle school principals make sense of the process of implementing and evaluating educational interventions.

To share interview data, Seidman (2006) offers a conventional approach to lay out the story of the research. This approach gives the reader insight into the experiences and background of the participants through an organized approach that categorizes the information presented. Seidman (2006) also states that “telling stories is a compelling way to make sense of the interview data.” Following this framework, Chapter Four presents the interview content categorized using Weick’s (2001) Seven Characteristics of Sensemaking. Throughout the chapter interview data is shared in the words of the participants through presentation of transcript excerpts taken from the interview sessions. The content of this chapter was shared with the participants in order to assure that it is consistent with the information they shared during the interview sessions.

The purpose of using Weick’s theory on sensemaking is to contextualize the data that has been collected through this research. In this chapter, the data collected will be analyzed using this theoretical overlay in an effort to glean deeper insight into how and why school principals have worked through the process of identifying, implementing, and evaluating educational
interventions within their schools. This framework allows for the data to be analyzed and laid out in a format that is easily digested.

This chapter examines the narratives derived from the interview process as a means to identify common themes across the stories of the participants. Because it is difficult to reiterate the stories of individuals with fidelity, this researcher felt that it was critical to use their own words. The format of this chapter flows between this researcher’s explanations of sections and the rich descriptive responses of the participants. Participant responses have all been removed of any personally identifiable information and specific names and places have been altered to protect the identity of the participants. The chapter concludes with a brief summary of the findings that will be expanded upon in Chapter Five.

It is important to note that because the participants have different backgrounds, personalities, and levels of experience, their responses to questions vary in both duration and scope. This differentiation in responses allows for multiple perspectives to be analyzed for the purpose of this study. Due to the nature of this data, there was some difficulty in coding, as many of the topics began to transition between characteristics. This transitioning speaks to the complexity of the sensemaking process.

**Overview of Participants**

The participants in this study are representative of suburban middle school principals that work in Massachusetts. All of the participants work in schools that have a population of under 600 students and are responsible for students ranging from grades 5-8. Each of the participants had a minimum of three years of administrative experience. While the participants share some similarities in their roles, their backgrounds, including what brought them to administration,
varies. This section includes a brief overview of each participant that is aimed at giving the reader insight into their makeup as administrators.

**Principal Steve**

Principal Steve is a middle school administrator in his late thirties. His path to the world of education was a reluctant one as he never really wanted to be a teacher let alone an administrator. He presents himself as a frustrated administrator that has very strong opinions about how educational systems should run and how much control he should have as an administrator. He feels minimal support as an administrator from his current central office administration. Principal Steve has spent a great deal of time putting his educational intervention into place and is fearful that powers outside of his control will cause its permanent demise. His experiences throughout the process have soured his views of education as a whole. His responses detail a belief that if he had more control, he would be able to build a far stronger intervention program.

**Principal Jack**

Principal Jack is a school principal in his early sixties with over 40 years of experience in a wide-variety of educational roles. He is in the last few years of his educational career and is more than willing to share his vast experience with anyone. Because he has been around for such a long time and has worked in so many different roles as an educational leader he has had significant opportunity to implement educational interventions in a wide-array of settings. When talking about a specific educational intervention he is able to give insight into the struggles that were faced throughout the process. He has been around the game long enough that he has seen many initiatives come and go. There is some skepticism in his responses as he views many
things as just another responsibility in an already difficult job. It is also important to note that many of his responses are student focused and that he spends a great deal of time talking about his interventions impact on students.

**Principal Jean**

Principal Jean is also an administrator that never really envisioned herself in that role. She is a free spirit that spent a great deal of her twenties traveling. Now in her mid-forties, she finds herself in a role as a middle school principal that she does not feel totally prepared for. Through conversation there is a distinct feeling that she may not be in her role for long and she share a deep discontent for the current central office administration. She feels strongly that her educational intervention is what is best for students, but is uncomfortable with some of the support that she has received from her staff. She is certainly knowledgeable about the most current intervention strategies. However, she has never worked long enough in one location to see an intervention through the evaluation process.

**Principal Bill**

Principal Bill is a school principal in his late-forties with well over 20 years of service as a school teacher and administrator. He spent the majority of his career as a high school teacher and administrator prior to being asked to move to the middle school as an administrator. He is an incredibly pleasant and friendly man that admits having limited understanding about the implementation of interventions despite being in an administrative role for years. He views intervention implementation as a newer requirement that he has just heard about in the last couple of years. Despite his lack of background with interventions he acknowledges his
responsibility in implementing them and is more than willing to share what he has been working on.

**Deductive Development of Codes and Categories**

The following section outlines the deductive approach taken to code the data using Weick’s 7 Characteristics of Sensemaking. It is organized by the individual participant and characteristics which include identity construction, retrospection, enactment, social activity, ongoing, extracting cues, and plausibility over reliability. Each characteristic is supported by quotes that were used to code accordingly. This section concludes with a review of the three codes that emerged through analysis of the data. These three codes include data, complexity and roadblocks.

**Characteristic One: Identity Construction**

As stated in Chapter Two, the first characteristic of sensemaking is that of “identity construction.” This characteristic can be used to help the researcher determine how an individual makes sense of the world around them. By asking specific questions of the participants in this study it was possible to gain insight into the story of who they are, how they view education, and why they make the decisions that they do in their roles as a school principal. This characteristic assumes that each individual comes to the table with a different background and set of experiences that makes them who they are. These experiences guide how people think and how they make decisions. These following interview excerpts shed light on how the four school leaders had distinct experiences in their career paths that have subsequently impacted how they view their role as principals and leaders in the educational landscape.

Principal Steve
The first participant will be referred to as Principal Steve. He is middle-aged school administrator with over seven years of administrative experience. In his eyes, the path that he took to becoming an educational leader was through a non-traditional route. Principal Steve came from a long line of educators and it had a significant impact on his career path and, in fact, this background had actually soured his opinion on the field of education in general:

I think the path I took was fairly unique in that I never thought I'd be in education. Education was a family business: my uncle Richard, my aunt Mary Ellen, my mother and my mother's sister. The other people mentioned were on my father's side. We're all heavily involved in education: Special education teachers, librarian, former librarian who was a former elementary school teacher at all different levels. My mother was an ESL teacher, ESL department head, and then my cousin ... My cousin is an educator in the city as well so it was the thing that I never wanted to do.

Principal Steve’s initial view of education as the “family business” provides insight into his mindset about the field. He states that he “never thought [he’d] be in education” and this may have an impact on how he has developed as a leader and as an educator. His view of education, however, was changed when his original career path was altered due to a change in the economy and he was looking for a new career path. When working as a substitute teacher, he was approached by the principal of the school regarding the pursuit of a career in education. The impact of this principal was significant on Principal Steve’s career path. With the guidance of this mentor, he made the decision to not only enter the field of education as a teacher but to move forward with the explicit purpose of becoming an educational leader as his end goal.
Principal Jack

The next participant will be referred to as Principal Jack. Principal Jack is a veteran educational leader with over 40 years of experience in both the classroom and as an administrator. He is currently in the last few years of his educational career and he spoke extensively about the long winding path that he followed to become an educational leader. Because his responses regarding identity construction were significant it was difficult to break down his responses. Principal Jack lived through a process of significant budget cuts on his road to becoming a school administrator and this certainly had an impact on his identity construction and led to some of his future views about budget and central office administration:

Well, for 11 years in this community I was hired and laid off. They viewed me as being in the art department, and art and music were the nonessentials during the prop 2-1/2 era. So I would get laid off, and then the superintendent would re-hire me. Anyway, long story short, I would get laid off in June and hired back in August. They did that for nine years in a row.

My son who was seven at the time said, "Daddy, every year Mommy gets worried about you because you lose about 20 pounds and then you seem to be okay in August when you go back to work. What's going on?" This was from my youngest kid at the time. I said, "Well, it's all this stuff that goes on, honey, and it's all about money." He said, "But it's not fair." He said, "We live here, and you don't know whether you have work, and I'm only a little kid."

The constant struggle to maintain employment and the associated stress caused Principal Jack to have a different perspective about certification. This fear of losing employment led to
him becoming certified in multiple subject areas including school administration. With his new found administrator’s certification, Principal Jack was prepared to make the leap into school administration. His first foray into an administrative role was as a curriculum coordinator for a district comprised of six townships. This role gave him insight into what it took to be an educational leader and how to bring together different constituent groups.

After leaving his role as a curriculum coordinator due to conflict with the superintendent of schools, Principal Jack worked in the role of principal and assistant principal in several more districts. The new districts included both urban and rural districts that he left due to a combination of both frustration with the positions and personal reasons. This last move, brought on by his wife, brought Principal Jack to the district where he was working during the time of these interviews. In his new district, Principal Jack has also taken on a wide-variety of roles. He has worked as principal in multiple buildings. These experiences have led to a unique perspective regarding educational interventions and education as a whole.

Principal Jean

The next participant in this study will be referred to as Principal Jean. Principal Jean is an educator with over 20 years of experience as both a teacher and an administrator. She has worked for a good portion of her career as an educator in charter schools and has been a principal for the last five years. Principal Jean also felt that she had taken a non-traditional path to her role as an administrator. She also stated that it took her time to become comfortable with the new role:

I decided to give being a principal a chance. I left there to go to the local charter school. I was the interim principal there for two years, and then I was at a charter
school in another community for two years, and now I'm here. I would say, it was until about year five before I could say I actually liked the job.

Principal Bill

The next participant in the study will be referred to as Principal Bill. Principal Bill has over 20 years of experience as a public school educator with administrative experience at both the middle and high school levels. His pathway to educational leadership is a bit more traditional with over 20 years of classroom experience before making the jump to school administration. Below is his account of the path he took to the role of educational leader and eventually to the principalship where he was employed at the time of this interview:

Well, I started as a teacher of English. I did that for about 10 years. I became a department chair, and about ten years after that I had the opportunity to get certified in administration at the high school. Basically the principal asked me if I'd be willing to be his assistant to help him out, and since I had been certified I thought I'd give it a try. I spent two years at the high school level as an assistant principal. Then an opening happened at the middle school in the district, so I gave that a try since I had done two years in administration, liked it, and was ready for a change. I had never worked in the middle school level, and, again, due to the opportunities, and challenges, and change that I was ready for. Now, I'm a year and half in, in this role here with a lot of experience in education with teaching, but not with middle school, and I’m still relatively new to the administration.

Conclusion: Identity Construction
While the stories of the four participants are very different, this was a critical component of gaining an understanding of how they make sense of their surroundings as a school principal. The identity construction component of these interviews helps to tell the story of the participants and how their identity has impacted their role as a principal. In reviewing their stories, two themes arise that have an impact on how these principals’ make sense of the process. The themes are introduced in this section and will be further reviewed and analyzed in Chapter Five of this study.

An interesting theme that emerged while reviewing the responses for identity construction was that none of the four participants entered the field of education with the intent of being a school administrator. This was further compounded by the fact that three out of the four participants actually referred to the fact that they took a non-traditional path to the field of education in general. Principal Steve even referred to the fact that he never wanted to enter education due to the fact that that was what everyone in his family did. In his own words, he stated “I think the path I took was fairly unique in that I never thought I'd be in education.” Similarly, Principal Jack did not see himself as an educator when he started off working. He stated that “I originally ended up in educational leadership by default.” The fact that none of these participants planned on being educational leaders and that three out of the four of them did not originally intend to enter the field of education had a significant impact on the sense making process for them as they worked through the stages of implementing interventions.

Another consistent theme across the participants in the study was that they all entered the world of educational leadership due to encouragement from someone else in the field. Principal Bill stated “Basically the principal asked me if I'd be willing to be his assistant to help him out, and since I had been certified I thought I'd give it a try” when talking about how he originally ended
up in educational leadership. Principal Steve had a similar experience when his principal said “You are the type of person with ideas. You should be a vice principal, a curriculum coordinator ...” The impact of influential people in their lives and the relationships that they had with these individuals absolutely were factors in how they moved forward in the decision-making process.

**Characteristic Two: Retrospection**

Retrospection allows individuals to reflect back on a problem of practice and to draw on their lived experiences. By understanding the nature of these experiences and the pathways taken to deal with a problem of practice, this researcher has been able to identify themes regarding the sensemaking process. Throughout this section we will explore the stories of the participants as they relate to how the individuals come to terms with how they make sense of the process of identifying, implementing, and evaluating educational interventions in a middle school setting.

**Principal Steve**

Principal Steve felt as if he had an extensive understanding of educational interventions and how they impacted student performance. He was able to articulate what his perception was of educational interventions, and how they were intended to be used when looking to improve achievement with students. While this line of questioning was not originally intended to have Principal Steve identify a targeted intervention, it did spark that thought for him. This led to Principal Steve not only sharing his perspective on what an educational intervention was, but also provided insight into how that understanding led to his decision making:
I think educational interventions can be looked at or you're looking at it every student as an individual IEP, or you're looking at students with actual IEPs, 504s, those types of things, or you're looking at ... Like in the case of our school district here, a few years ago, when I became principal here, the fourth grade that was coming up was twentieth from the bottom in fourth grade math statewide.

One of the big interventions when you talk about programs, one of the big programs that I advocated for and really push for was building a Double Math Program, longer blocks of instructional time for teachers to be able to do practice, not necessarily homework but to be able to do practice and to do a lot of those things that would be left to students doing outside without having the guidance of teachers.

Principal Steve also began to discuss some of the difficulties that he had with implementing interventions within his building. Some of these roadblocks were staffing, curriculum materials, organizational structure, and budgetary issues. The open nature of this interview process allowed Principal Steve to explore how and why he made some of his decisions without the confines of a strict interview protocol. He was able to share that his district bought into the Engage New York curriculum, and that he had been able to implement what he called a Double Block Math Program that was aimed at improving student performance in mathematics.

Principal Steve also shared some of the problems, or roadblocks that he faced while implementing this educational intervention. He sited problems with a lack of control over the special education budget and frustration that he did not feel that he was awarded the autonomy
over his budget that he felt the Education Reform Act of 1993 afforded him. Mr. Steve also expressed concern with how Title I funds were dispersed and how the principal had limited control over them.

When asked if there was any more information that he would like to share, he continued to share his frustrations around trying to implement this specific strategy. He also shared additional information about his perception of the impact of the intervention overall on student performance. While Principal Steve’s accounts of his experiences begins to blur the line between the retrospection characteristic and enactment, this researcher felt that this interview excerpt could be coded under retrospection. The rationale behind this coding was that Principal Steve used this lived experience as a backdrop for all of the decisions that he made, and the impact of these events were persuasive in his sensemaking process.

Principal Jack

In Principal Jack’s extensive experience, he had been a part of implementing many interventions at multiple grade levels. He used these experiences to share his understanding of educational interventions and their impact on student achievement. He also focused on one specific intervention as he began to tell his story:

It's almost always about money and it's also almost always about what skills do the interventionists have and whether they're willing to step up. When I was at the elementary school, we created a tiered intervention before it became the big to-do at the state level. We just said, "No, we're going to do what we do." I literally took my reading teachers, they were all Title 1 reading, and they taught kids Title I reading.
Then we had a certain number of special education teachers that taught math or English, but not necessarily science or history. I said, "Okay. You know what, here's what we're going to do. We're going to take everybody in those two categories and they're now a team. Now we need to anticipate the special education teachers are going to say, 'No, I teach reading.' No. Why wouldn't I have someone who's certified in reading, highly qualified in reading, take that piece of your load off of you. There isn't a parent in the world that's going to argue with the fact that you're not only providing my kid the number of minutes, but it's now with a fully-certified reading teacher."

We used the Wilson program. I had the reading teachers teach all my special education teachers about the Wilson Program, and they worked off of each other, and they became teaPrincipal Then using data points from the MCAS or reading fluency, we created a check-in model twice a month. When you walked into my assistant principal's office, there was a board like that, we called the bookie board. The bookie board had the teacher's name, and all the children she was in charge of, and the child's name was ... You could put a pin through it. But if you took that kid off the board, they would be tested.

After speaking about his past experience where he worked to implement some specific interventions, he began to share some of the struggles associated with keeping an intervention up and running. He also spoke on the surface level about some of the strategies that they were using to monitor progress.
Principal Jean shared that she had limited experience when it came to the use of interventions from a leadership perspective. However, she felt as if she had extensive background knowledge from a classroom teacher’s perspective. She was able to share some of this experience as well as ideas that she had for implementing some of these strategies from a whole school perspective. Although Principal Jean had limited interactions as an administrator with implementing interventions, this interviewer asked a probing question about how her background with interventions impacts her role as an administrator. She responded to this probing question as follows:

Let me think about how to answer that. In my experience, schools tend to do a lot of whole class re-teaching when it seems like some students don't get the information. When we get the PARCC scores or the MCAS scores, there's a tendency to sort kids based on those scores, and then assume they all need the same intervention. If you failed the MCAS, you're in a study skills program. Doesn't seem to matter why you failed the MCAS; just that you failed it.

I've always been really focused on using the standardized test and using the other data to figure out why, and then what we're going to do specific to them versus always making sure that we do the same thing to the same kids. This is a whole group of kids. Does that make sense? To me, this whole process, the screener part who needs services obviously is important, but the real key is why do they need services, and breaking it down. If it's a reading issue, is it a comprehension issue,
is it a vocabulary issue, is it fluency. Really figuring out what the issue is, and making sure the intervention is targeted specifically to that issue.

I think that's where we have fallen down because we've used interventions, but it hasn't worked. I don't think we've targeted the real problem to solve.

At the conclusion of this line of questioning, Principal Jean was to give her perspective on the future of her role as an educator. This was done in the context of the interview and was intended to have her reflect on the line of questioning and how the process of dealing with educational interventions has impacted her role as a school principal. She shared that the educational world’s pendulum was always swinging and that she currently felt that it had swung to an area of accountability with a deep emphasis on data. She felt as if data was important and that its use was critical as it relates to educational interventions.

Principal Bill

Principal Bill also admitted to having limited understanding of and knowledge about implementing educational interventions. When asked about whether the scope of his knowledge around interventions was limited, her responded, “Yes. I think that's fair to say.” Even though the scope of his knowledge base was limited he was able to reflect on the background story for how he came to the point he was at during this interview process:

Well, for a long time being at the high school, I was sort on my own island. Being in the department in my own classroom, I didn't do a lot of collaborating or sort of building-wide work with interventions. Really it was a special education teacher often who would team-teach with me in delivering the curriculum. That person
would sort of work on accommodations, IEP accommodations, things like that.

Prior to this, past experience here, I didn't have a lot as far as interventions went. Now, at the middle school I understand a little bit more about the middle school mindset, how teams work, how they all have their own personalities, and here they use the skills period, a daily hour where they kind of work on targeting kids' needs. If they need a pull out, or things that more specifically target skills of the kids. Recently, I've been learning more and more about tiering, differentiation, things like that. I have had professional development, which I think we're trying some things here, even right now and into next year, that I think will really help kind of do what needs to be done to make sure we're bringing every student along.

After explaining his background knowledge around what educational interventions were and how they are used, Principal Bill was asked about whether or not educational interventions impacted his role as a principal. He responded by saying that all students needed support and that educational interventions were now a responsibility that he must embrace.

**Conclusion: Retrospection**

The characteristic of retrospection allowed individuals to reflect on the problem of practice using their lived experiences to try and make sense of the process. While this was the intention, an unforeseen theme developed in the participants’ responses. While reflecting on the process, the principals spent a great deal of time focusing on the difficulties or road blocks that occurred while trying to implement their interventions. Later in the interview process, the participants were asked specifically about challenges to the process, but during this line of questioning they interjected these concerns without any prompting from this researcher. Some of
these challenges included, outside mandates, organizational difficulties, financial limitations, and the sheer feeling of being overwhelmed with the amount of work involved in the process. This theme will be further explored in Chapter Five.

**Characteristic Three: Enactment**

The enactive (or enactment) characteristic of sensemaking allows an individual to come to terms with the process that takes place in making sense of implementing an educational initiative. By talking through a scenario and explaining the rationale behind different steps that were taken, an individual can begin to develop an action plan for moving forward. This simplification of dealing with a specific scenario allows people to break complex processes down into manageable tasks. This section will use the participant’s words to lay out the process of enactment in dealing with their specific educational interventions.

**Principal Steve**

During this line of questioning Principal Steve was asked to pick a specific intervention that he was responsible for implementing. He was asked to walk the researcher through the process and to talk globally about the intervention and the process. Principal Steve was also asked to elaborate on any roadblocks that he faced while trying to implement this intervention in his school. Below is his response to these questions:

[I faced roadblocks with] Double Math. In my readings from my doctorate and in other research that I was doing, one of the things was longer blocks of instructional time that 45 to 60 minutes is not enough time to get it done. The Double Math actually came out of the Common Core for Reading and Writing.
What that looks at is it looks at teachers getting to know kids as readers and writers so the expectation under Common Core Reading and Writing is 50 minutes of reading a day and 50 minutes of writing a day. That's exceptionally difficult to do if you have individual teachers teaching those subjects.

The first thing we did was we switched to a Humanities model. All of our teachers in fifth grade through eighth grade, had to either get the Humanities certification or find another job. What it does is instead of having 120 or 140 students for History, we now cut that number in half. It should be less correcting but you should be able to get to know those students better. You should be able to be getting deeper into the assignments. It's not worried about completing the 130 assignments. It's worried about completing the 65.

By doing that, what we did is we took the 50 minutes and 50 minutes and it now comes out to be about an hour and 35 minutes with passing time and different stuff and one teacher teaches both English and History together. What that did was it also opened up a flip side, Double Math opportunity. When we were examining the Double Math, it was something that we thought about coming out of Humanities, the time that was needed and there was actually huge resistance from teachers about Double Math. They were initially saying when we started this three years ago, "What are we going to do with all that time? How are we going to have the time to do what we're going to do?" Over the three years, teachers now say to me like, "We wouldn't know what to do without the time."
Principal Steve was also able to discuss teacher buy-in during this process. He gave his opinions on the importance of buy-in and how he navigated the role-out to teachers. Principal Steve also elaborated on the importance of financial buy-in to an intervention program by the superintendent. He shared that he followed a process where he first went through all of the research to determine what approach he should take. Principal Steve put minimal emphasis on the importance of buy in. He stated “I'll be honest. I know at times people talk about buy-in but I'm a firm believer in that you get buy-in when you can get buy-in and, if not, as an academic leader, you got to press forward.” He firmly believed that it was his responsibility to determine the direction that the school should be going in and that he needed to move things forward.

During this portion of the discussion Principal Jack talked extensively about his research and the importance of collecting data to the sensemaking process. Throughout this portion of the interview it is also important to note that there was no identified clear vision with support from district leadership. Principal Jack identified that there was disconnect between how he would have approached implementation and how it was actually done.

Principal Jack

Principal Jack was also asked to speak globally about how he chose, implemented, and evaluated a specific intervention in his school. At first he discussed roadblocks to implementation, including, financial restrictions and teacher specialization. He also elaborated on staffing issues and how they impacted the implementation of his chosen intervention. His responses can be found below:

The funding was the biggest roadblock, and title by position, and people had a sense that one was more important than the other, and why would I want to be
associated with the Special Education department? In many schools, the Special Education department is the one that most people look fondly upon, but not here. I said, "Well, we're going to break that culture, and we're making a commitment."

We went around and around on it. We just said, we're going to have you sign that you're working together for the betterment of the kids, because it's not about who you are personally, it's what do we deliver daily? So we stuck to it until we got hit with the $800,000 crusher.

The first thing we did was we identified who the players were and what their backgrounds were, where they went to college, what their major and minor was, and how long they'd been in the system, and what had they been doing as part of their career. As an example, we have a reading teacher who's a very fine reading teacher. She's really quite gifted. She's an adjunct professor at a local state university, but she never wanted to do anything with reading or Special Education which was her primary backgrounds. She always wanted to be a classroom teacher, and she had no control. If she has a failing, it's she can't handle a class of 18 to 22 kids.

If you put her in a small core group working with other colleagues to help prop her up and vice versa, her skills were actually quite formidable in the sense that she knew all the proper testing. She knew the protocol. She could teach the faculty. She could take data and identify it, and she was working against herself, because she had this issue of, "Well, this is what I want to do," and I would say to her, "Which is all well and good, but this is what you're excellent at, and I have to
place people based upon what's best for the kids. Frankly, if you stay in this mode, there's no way they'd ever cut you in this district simply because of the depth and breadth of your experience and what you wrought out of this."

Principal Jack also discussed the importance of collecting data to the process of implementing an educational intervention. Not only did he discuss the necessity to collect this data, but he went into detail on how his school stored and used that data for the decision-making process. The impact of this data collection and the process by which this data can be stored and used impacted how his school moved forward with the intervention.

Principal Jean

Principal Jean also shared her global perspectives on a specific intervention that she was responsible for in her school. Her experience with the intervention that she discussed was somewhat limited in comparison to that of some of the other participants. However, she also referred to the budgetary process and how it would impact the implementation of her intervention. This is what she had to say:

Yeah. Like I said, this year is really the planning year for this whole process. We have an instruction leadership team that I put together, just in the way for instruction, but one of our focuses this year has been looking at this process. We have determined what screeners we're going to use, we have determined what diagnostic tools we're going to use, and we have determined what interventions we are going to purchase.
Right now, we are in the process of putting it in the budget, and hoping we get the budget. We're trying to beg, borrow, and steal copies of some of those interventions from other places, so we can pilot them this spring, to have a better understanding of how they work, and we are in the process of collecting data and putting it in a form to really allow us to better decide who's going to be in what group and why.

Principal Jean was also asked more specifically to discuss the roadblocks that she faced when implementing this strategy. Like other participants, she did cite difficulties within her organizational structure. She appeared to be particularly concerned in sharing her thoughts concerning this topic and asked several times to make this part confidential. She was clear in saying that there was limited institutional knowledge within her district on how to implement educational interventions. After being given some time to reflect on the process, Principal Jean was asked to expand on the process that she followed to initiate this particular intervention. She was able to outline the entire process and how she was able to get it all implemented including arranging an instructional team that was responsible for putting the programming together.

Principal Bill

Principal Bill appeared to have far less experience with education interventions than some of the other participants. He was able to share some of the professional development that his school had done around intervention strategies. While his experience in this area was limited, he gave this perspective on a specific intervention that he implemented:
Well, we had a half day professional development with MTSS [Massachusetts or Multi-Tiered Systems of Support], who's delivered by DSAC [District and School Assistance Centers], and we spent a few hours talking about how interventions could be designed in the building. They showed some examples and videos of schools that did it well. My challenge to the teachers was, how do we try things that could work? We could try in the building that would really be more in line with the model that we were provided.

The sixth grade team really sort of stepped up incredibly well, and half of that PD came up with a plan for the second half of the year, which just started. With the help of one of our reading specialists, our Title I teacher, basically look up the data of reading skills, performance, for all of the sixth graders. They decided they would try to, after they assess all students, to break them into groups based on ability, and have each teacher - math teacher, science teacher, ELA, history - would be teaching reading with the help of that reading specialist. They've broken up the students and during skills period they're now using content and reading skills together to just bring every student along based on their ability, with the hope of, well, it varies by individual student. If they help to improve the reading skills for a student, then they can work with the child to improve their content acquisition.

Right now, we're maybe a week in it. They just started it, so I'm curious to see where they'll end up. If it works well in the sixth grade it could be modeled for the other grades. I think they're very enthusiastic. They are very invested. I love the idea of a math teacher teaching reading, and with the help of a reading specialist.
That's the model that we're experimenting with at the sixth grade. It's great. I love it when teachers work together as a team to come up with an idea to try out. By the end of the year if we realize that it's not working then we can change it, but if it works we can try it elsewhere.

When asked about the roadblocks, Principal Bill did refer to some of the same concerns as the others. He spoke about his teachers who were feeling overwhelmed with the sheer number of initiatives that they were responsible for. While nobody formally resisted the implementation of this educational intervention, there was still a feeling by many that this “is yet another thing that teachers have to try to understand, assess, and work with.”

**Conclusion: Enactment**

The enactment characteristic allows individuals to make a complex process manageable by prioritizing and chunking different aspects of that process. While reviewing the narratives coded as enactive/enactment, a theme emerged regarding the importance of data. For all four of the participants, data impacted every aspect of the sensemaking process, from the identification of the intervention, to the determination of its effectiveness. The use of data was a critical component of making the process manageable for the principals and they referred to it often throughout their responses. The various forms of data collected by the individual schools and how the data was used will be expanded upon in the next chapter.

**Characteristic Four: Social Activity**

The social activity characteristic of sensemaking bridges the gap between the practice and thoughts of the individual and the collective thoughts of the organization. Sensemaking is
inherently a social process and individuals make sense of the world around them through their interactions with others. In the case with organizations, many of these individuals have a vested interest in the decision-making process and are often referred to as stakeholders. In this section, we will explore how social interactions impacted the process of developing, implementing, and evaluating educational interventions for the participants.

Principal Steve

The line of questioning associated with the following narrative was centered on the impact of others on the sensemaking process. This social interaction helps individuals to make sense of their surroundings, but it impacts each leader differently. In the case of Principal Steve, he had a unique perspective on how to get individual stakeholders involved and the varied importance of their input. He believed that it was unnecessary to get everyone on board, but the superintendent was a critical person to gain the support of. He also shared that he felt it was important to try and gain support from the school committee. Next, he referred to parents as critical to the process because they could be used to garner support with the superintendent. When asked how these various constituent groups added to the process, he stated:

I think the biggest piece that they helped modify for me was I did this very fast. I mean, this whole process to implement probably was about four months. I guess I would like to have actually had a more well-articulated plan actually written down. This has never been written anywhere, so to have something written down, have something well-articulated rather than what we have to do. Oftentimes we have to shoot from the hip. Like with the funding; all of a sudden the money
appears, so we have to run and spend it but there's no long-term strategic planning.

What I did with it is backwards design. Once it was in play, as soon as it was in play was I wanted it to be a long-term strategic plan of this is how the middle school needs to function. And, budget be damned, this is what our kids need. I guess the thing that has really come out of this is my science teachers, my four science teachers, are now screaming to have Double Science. They want it, but the problem is that we don't have enough time in the day for that now. When you think about it, you get an hour and a half for Humanities. Boom! You get an hour and a half for Math. That's three hours right there. And that does not even factor in passing time.

Principal Jack

Principal Jack was also asked to reflect on the process of getting different stakeholders involved in the implementing of an educational intervention. He was able to articulate the methods that he used to bring members to the table and how they were selected to be a part of that process. He talked about how they contacted parents and how they actively requested their support in the process.

Once different stakeholders were brought into the picture, they began to get involved in the process. Principal Jack was asked how these team members added to the process, and whether or not their involvement was impactful. He responded by saying:
They added to the process because they made a commitment to keep in contact with the team, and they knew that they could come in at any time and get an update. That worked regularly and often. Parents then became supporters in other things. When we wanted to do fundraising, suddenly we had a plethora of people willing to get involved in the process. It was good. There were times when we would have parents who didn't get it, then you would find out that sometimes children are from where they come from, and if mom quit high school or quit school in the eighth grade, that's a lot to overcome.

From that, we created a homework club after school, which the kids were expected to go to, and that was partly because if you look at the last 10 years of Massachusetts, math, the new math, is so different from what we learned as kids. So the parents would say, "If you gave it to me the way I learned it I could help my child." So we would make crib sheets for them and say, "This is what we're shooting for." Parents would sometimes be upset because the kids were only required to guesstimate. That's one of the things the state board wants us to do. It's not necessarily anything we whole-heartedly or definitively agree with, but it's the norm, and it's what's out there, and that's what they're going to encounter in testing and so forth.

Principal Jack also spoke to concerns that stakeholders shared during the planning stages of the intervention development. It is important to note these concerns as they are the shared experiences of the participants and they had an impact on their decision making. The leaders
acknowledging and understanding of these lived experiences is critical to the sensemaking process and, more specifically, to the characteristic of social activity.

Principal Jean

Principal Jean explained in detail the members that were chosen for the team and how they were selected to participate. Unlike some of the other participants in this study, Principal Jean did not have a plan in place when selecting the team. She had a problem of practice and was looking to develop a team that could help her with the solution:

It was the instructional leadership team people. They were specifically chosen both because of their role, but also because of their strength on a team. There were other folks whose role may have been appropriate, but they weren't necessarily the right match for our particular team. There were three guidance counselors. I wanted somebody in guidance, but only one really had that educational background that I needed and also the ability to kind of say, "Wait. You guys are using education speak. That makes no sense to me." The other two were a little too nice. They weren't going to step up and they weren't going to say those kinds of things. They were going to agree with everything. Really getting the right people around the table was the key. I reached out to our head of literacy in the district. Typically she wouldn't be involved in that kind of a program, but she had a lot of expertise. I invited her to come to some of those meetings and she was incredibly helpful with that. Again, it's both the expertise, but also balancing who has what skills in a team.
I think everybody had a very different point-of-view. I brought the experience of having worked in a successful program, but no expertise in how to create it. The literacy person brought the expertise of knowing the actual literacy curriculum and having familiarity with the programs that already existed in the district. The company that we were using through DESE [Department of Elementary and Secondary Education] was ... I forget. Hill, I think is the name. Hill Literacy. They obviously brought the expertise of how to create the system from the beginning. Our special education coordinator brought the expertise of how to create something from the beginning. Everybody kind of had a different understanding. We had all identified that this has to be the number one thing we have to do in order to make progress, so there was 100% buy in.

In the case of Principal Jean, the members of her team had a significant impact on the sensemaking process. This was primarily because she did not have a preconceived notion of how to address her problem of practice. She shared that as she entered the process, she did not really know what to expect. She did not have any preconceived notions about what would happen throughout.

Principal Bill

During the process of identifying and planning for appropriate interventions, Principal Bill also took this opportunity as a chance to identify key stakeholders that would help to ensure the success of the implementation. When Principal Bill was asked who he would identify as the stakeholders he gave this response:
I think, certainly, the teachers. We discussed these issues and changes with the school council, and the parents there have been great about offering ideas. I met with the academic excellence subcommittee for the school who reported even last night about the process. One member was excited about the ideas that we are going to be trying or the ideas that we may be able to try eventually. I think, really, everyone I've mentioned is excited to move forward. I haven't talked much about Title I at this point, but we're sending home letters for the parents. They are compacts basically; an agreement that the parents are expected to support and sign off on that they will do their part; that their students will do their part, and for the school to do its part. I think the goal is to have everybody understand that it's not just us. It's not just the students or the teachers, but that we all have to contribute.

**Conclusion: Social Activity**

The interaction between individuals is critical to the sensemaking process. Leaders are responsible for interpreting the needs, wants, and interests of individual stakeholders when attempting to make decisions. Principal Bill discussed the process of bringing stakeholders into the implementation process and shared that he “Met with the academic excellence subcommittee for the school who reported even last night about the process ... One member called it excitement about the ideas that we may be trying or may be able to try.” While some individuals are productive, and even excited about the process, others are less effective in moving the process forward. Principal Jack shared that when including parents as stakeholders “There were times when we would have parents who didn't get it, then you would find out that sometimes children are from where they come from, and if mom quit high school or quit school in the eighth grade, that's a lot to overcome.”
One of the major themes that emerged from all the participant interviews was the difficulty of maintaining a balance between the interests of the individuals with the value that they bring to the process of implementing an educational intervention. Stakeholders played a dual role in the intervention implementation process, at times providing helpful insight while on other occasions acting as a hindrance. Finding a way to striking this balance with stakeholders will be covered in greater detail in Chapter Five.

**Characteristic Five: Ongoing**

Weick’s characteristic of sensemaking known as “ongoing” refers to how leaders are engaged in the constant process of assessing and reassessing the landscape around them. Leaders, particularly people in the position of a school principal, are consistently facing ever-changing variables that can have an impact on how they make sense of their role. The ongoing characteristic was used as a lens for determining how these changing variables impacted the sensemaking process of the school principal. The following section includes excerpts from the narratives of study participants in response to specific questions designed to have the principals reflect on how their mindset changed over time in response to the changing variables.

**Principal Steve**

Once an intervention is implemented, there is a significant amount of data that is collected. This data, while providing valuable insight into the efficacy of certain programmatic changes, also allows the individual principal to reflect on their process of implementation. The ongoing interpretation of this data and adjustment of thinking and practice is all part of the sensemaking process. Below, Principal Steve, talks about the process of implementing his intervention, and how it was eventually evaluated:
It's looking at the Galileo tests; it's looking at individual student data; it's talking to teachers, getting structured feedback from teachers on what's working, using the observations and evaluation system. I'm not talking about the big observation evaluation system from the state, although that's a part of it, but it's getting in the classrooms and making sure that students are engaged. It's not 50 minutes of instruction, drill and kill, and then you can have the rest of the time for homework. That's not going to work and that's actually going to cost a person their job because I saw too much of that the first year that we implemented it.

It's really being in the classroom, it's seeing what's going on. It's being present at the vertical team meetings. I have a huge problem with our Curriculum Director in the district because the Curriculum Director, he's supposed to be at those meetings, as well, and the bottom line is, the bottom line is that he never shows up at any of those meetings.

Principal Jack

While Principal Jack was routinely thorough in most of his responses, in the section aimed at identifying how he had adjusted to practice his answers were uncharacteristically brief. His response to this line of questioning was succinct in regards to how they evaluated the process and how they monitored the progress of individual students:

We tracked them on the MCAS to see improvement. We tracked them on progress or reading fluency, and we tracked them on attendance and referrals, because if the kid is succeeding, the behaviors tend to disappear, too. We monitored all that,
and all of that stuff improved in a sense. There were kids who didn't quite get it or
who were moving at a different pace, but we could identify them and then we put
a little bit more extra into them. We actually had a number of kids come off of
special education plans because they progressed significantly. Some students
made enough to be moved to a 504 plan; others progressed to no plan at all - just
frequent check-ins with the teachers.

Principal Jean

Principal Jean shared a great deal about the variables that were impactful on how she
made sense of the implementation process. These variables led to additional discussion and the
inclusion of other constituent groups in the process:

We had looked at a variety of different reading tests to get Lexile levels, one
measure of a student’s current reading level. Then, frankly, for financial reasons,
we ended up going to Teacher's College to get reading levels because it was free.
It had a decent reputation, but most importantly it was free. We ended up using
that. The biggest challenge we faced, because I don't know if you ever used it, but
it's like a running record so it takes somewhere between fifteen and thirty minutes
per child for testing. You need a large number of folks that are trained in how to
do it and it's pretty subjective. Not only did our people have to know how to
administer the test, they needed to be able to compare with one another to get a
reasonably balanced outcome. We had the test. We were able to train ten of our
parents to do it. The data that we got was helpful, but I wouldn't have made any
long-term decisions on that child's fate based on the data, because I didn't trust it that much. What it did give us was a real good place to start.

From that data we were able to present that to teachers and it really opened up a conversation about using leveled text, which is not something that had been really in people's thinking at all. We were able to show the evidence, that in this class of twenty-five eighth graders, you have students reading at a fourth grade reading level and you have students who are tenth grade readers. We were then able to give teachers the data to show that, plus then use our Title I folks to help them look for additional text. They have to have their own. Those two things combined convinced a large number of teachers that leveled text was the way to go. I don't have the specific details on the scores off the top of my head, but I can tell from our internal numbers that we did see significant success in terms of the kids' reading. We did the test at the end of the year as well and I don't have those specific numbers, but keeping in mind that the test is not great, and the numbers were not fair so to speak, we still saw significant growth.

The additional data that was gathered through this process even led to the school-wide changes aimed at improving student achievement:

Our experience with the reading test and the data we'd gotten back was what convinced us that we needed to do the RtI. As part of the planning process, one of the things that we needed to do was identify who was going to be in charge of it, because, in theory, it would be me, but in reality I just couldn't do that. We needed to have one person who was going to be able to train teachers, evaluate
teachers, look at the data, make sure it was consistent and make sure it was followed through and done. That person ended up being our Humanities curriculum coach. He volunteered to do it. He was very, very genuinely interested in it. He was going to then be part of the evaluation of the process. Without having that point person, we couldn't do any kind of check-in or evaluation on it. The goal for year one, obviously it's going to change because it's somebody else in place, but my goal for year one was to just get a system in place. I didn't care if it was perfect. I just wanted people to start thinking about data, intervention, retesting. I just wanted that pattern to be established.

Principal Bill

Principal Bill spoke about the variables associated with his intervention, and how evaluation of the programming would be used to adjust practice. This clearly outlined the ongoing characteristic of sensemaking as he viewed the process as constantly evolving:

Our reading teacher is working very closely with the intervention team. I think the plan is to assess the students periodically and then, certainly at the end, look for growth. That right there is additional evidence that the intervention method is working. So that's our plan. We also have MAP testing which is another thing that we can use as well, within reason, for whoever enters math and ELA. That's another sort of thing we could use to look at growth. I suspect that we'll see some positive results. I certainly hope we won't see any decrease in skill development.
Then there is also the Title I [grant money], which overlaps. We didn't have Title I support last year, and this year we have quite a bit. We have a Title I teacher. We have a Title I paraprofessional. We have the funds to possibly support the hiring of another paraprofessional. We just were able to purchase sixty Chrome Book computers, so that was some support we received from the technological dimension. That, I think, is going to be a boost. We also talked with the administration about some more team and department leadership roles so we can have that coordination and support. I think the things that have been absent in recent years have been added or there are plans to add even more. I think between what teachers are trying in terms of interventions and the scheduling adjustments we are making thank to the additional support, I think we'll have significant improvements in what we've seen over recent years.

**Conclusion: Ongoing**

The theme of ongoing once again referenced the heavy use of data in the sensemaking process. By working through the data and evaluating it, the principals were able to make what they thought were sound decisions. The specific theme for the characteristic of ongoing was that the participants routinely used data to evaluate and adjust their practice. The data used was both quantitative and qualitative, with some of it being anecdotal in nature. This constant use of data to help leaders be reflective about the process of implementing an educational intervention will be expanded upon in Chapter Five of this research study.
Characteristic Six: Extracting Cues

The characteristic of extracting cues refers to the process of absorbing information from a specific environment or event, and using that information to develop a wider understanding of that event. In the role of a principal, individuals continuously evaluate what is happening around them to develop a context for understanding the world around them. When these leaders are implementing and evaluating programming, these cues help them to hone in on the areas that they feel need the most attention, offer the most impact, or areas that need improvement. By exploring the cues used by school principals in the process of implementing and evaluating educational interventions, this researcher was able to gain insight into the steps that they used to make sense of the process.

Principal Steve

In the case of Principal Steve, there was a great deal of focus on budgetary issues and constraints during the process of implementing interventions. He expressed concern over many issues that were outside of his sphere of influence or control in regards to maintaining momentum with the established interventions:

When thinking about educational interventions in today's educational landscape, I guess the big thing I see is that our landscape as being really cash-strapped. When you are talking about charter schools and other things, especially in Massachusetts, and this is a Massachusetts specific answer, I don't know how we're going to be able to continue to fund interventions in the current financial climate. If you're talking about instructional aides, if you're talking about, like, last time, I talked a lot about Double Math, well, that's hiring another teacher. But
if we have kids going elsewhere and our budgets are being cut, or the budgets are not able to be increased in line with increasing healthcare costs and increasing teacher salaries and other things like that, and we're losing teachers, then I think we're going to be substantially limited in our ability to actually make any of these desired interventions happen. It’s just not sustainable.

I think my experience has really shown that interventions and programmatic changes to interventions can really help the student population. As I mentioned last time, we had some really great double-digit growth for some of our kids and we've done some really good things. I think that those types of interventions that are successful and are monitored to be successful and those types of things can really benefit the school as it moves forward.

Principal Jack

Principal Jack also spoke about the impact of funding on the process of implementing and evaluating interventions. While he did include funding as a variable in the implementation of his educational intervention, Principal Jack expanded on several additional variables that may have had an effect on how he reacted. Some of these variable included state mandates, test scores, communication, and staffing. He also spoke in detail about the fact that outcomes were a culmination of years of education. He stated “We often lose sight of the fact that kids are a byproduct of a thirteen-year process, pre-school through graduation.” According to Principal Jack, this lack of global perspective negatively impacts how his district moves forward. He also reiterated the impact of budget on the process of implementing educational interventions and how a lack of funding can stall growth.
The process of extracting cues can be complex, and the following narrative by Principal Jack shows how he grappled with those cues. It is also important to note in this section that the characteristic of retrospection is intertwined with extracting cues. Principal Jack transitions between his past experiences and the cues that he received throughout the development and implementation process of the intervention. This complex process of working through the information that he was exposed to can be seen throughout his narrative in this section of the interview materials:

Part of that's informal in the sense that she and I are close friends. She was my assistant principal, and I trained her because when I went down to the elementary school, it was like the one thing I didn’t’ really know about was reading because I had always been at the secondary level. You know, my kids in my history classes wouldn't read novels and they'd have to do Truman, and a couple of selected readings across the year. Not extensive stuff, but it was just assumed, depending on the low-level 100 versus 400-level student; but I'm showing my age now.

The point being that different literature bases were available for different levels that the kids all read, but we did it from a different perspective, and I said to her, "You know, one of the reasons I'm hiring you is that you love to do statistics. And the other thing is that you have a reading background, so that when the teachers aren't pulling their weight on the literacy end, you can challenge them based on experience and they have no fallback position because they're talking to an expert who's been doing it for 25 years. That's win-win."
At this point in the conversation, Principal Jack reflected on past experience to extract cues from his current situation. This fluctuation between the identity construction characteristic and that of extracting cues proved difficult for coding purposes, but the researcher decided that in this context it supported the characteristic of extracting cues. After this reflection, Principal Jack again began to speak about his interactions with students. He used these student interactions as cues for how he made sense of the process. This again bridged into another characteristic as this could be considered social activity. However, for the purpose of coding this section this researcher determined that it had more impact on the sensemaking process from an extracting cues perspective.

Principal Jean

Principal Jean did not refer to the financial factors involved in the process. She focused on the use of the data that was collected during her interview as the primary factor that influenced the process of implementing an educational initiative. The data gave her cues that she used to make sense of the process as a whole:

I can't imagine how we can even consider moving forward without data. I'm working at a district now where I work with eight different high schools. The difference in the scores between those eight different schools is unbelievable. You have several level-one schools; you have some level-four schools. Even at your level-one schools, you have something like 94% of your students scoring in the proficient or advanced range, but there's still six percent who are not. Without that kind of intervention in place, what do you do about that? I'm a total convert to the
idea of the intervention and the use of the data in creating that block to really do that.

Yeah. This was my third, well, really my second, full-time principal position, because I'd been an interim principal before that. We hadn't done a ton of intervention. We'd done some, but it hadn't been targeted in the same way. My previous experience involved knowing that there was a problem with the reading. But, now, having the data to know what’s going on and really seeing it… that working through the process logically, step-by-step, and seeing how to get there has really changed my whole idea about how to use these programs and how to think about it.

Principal Bill

As stated previously, Principal Bill had limited exposure to the use of interventions prior to implementation. He expanded on his need to gain a deeper understanding about what educational interventions are and how they can be used most effectively. His interpretation of the variables was done with less background knowledge and with less history about the process:

The role of interventions? The sense I'm getting is that almost every student needs some sort of intervention. It seems to be that it's either in the classroom or pull out or it is small group. In essence, it seems that we need to know specifically what every kid needs and then we need to figure out a way to deliver that instruction and engage that child in learning in a manner that is most effective for that child. Whereas in the past, everyone got taught the same material in the same way, and
then some people got it and some didn't. We need to find a way to make sure everybody gets it and know who and what and how. That's the challenge and it is pretty complicated. I think that it’s a challenge, certainly for me and for the teachers. But it's really both – a challenge and an opportunity. It's an opportunity but it's also an enormous challenge in figuring out how we meet it.

Well, I think I am not sure that we're doing it well enough here yet, but I think we are trying some things and that we are on the right track. I'd like to know more myself about where interventions are done in the ideal just so we can learn to do things differently here. I sort of feel like I'm in a way like a teacher who is managing to stay just one step ahead of the kids because I don't know a great deal about intervention. I'm trying to learn as much as I can, and I am try to get our ideals implemented, but it's sort of, I'm not an expert at it and I’m just trying to keep up on it. I think I'll get there eventually, but the whole tiered instruction is relatively new as far as my understanding, but a lot happens fast and I have a lot to learn.

**Conclusion: Extracting Cues**

The principals involved in this study have clearly identified that there was a significant need for interventions in today’s educational landscape. This theme was consistent across all participants and identified explicitly. This can be seen in Principal Jean’s response when she was asked about her view on the importance of educational interventions: “I can't imagine how we can even consider moving forward without it.” This point of view was also supported by Principal Steve in his response to the same question. He stated that “I think my experience has
really shown that interventions and programmatic interventions can really help.” While the participants, in general, felt positive about the use of interventions in their schools, an additional theme surfaced surrounding interventions and the difficulties associated with implementing them in practice.

One thematic thread that was revealed in all of the responses was the participants’ deep-seated concern about the difficulty in balancing the need for interventions with the financial limitations that are put on them in their roles. Several of the participants directly identified financial limitations as a predominant factor in whether an intervention would meet with success or not. Principal Steve shared, when talking about the importance of educational interventions, that when “I think educational interventions in today's educational landscape, I guess the big thing is I see our landscape as being really cash-strapped, and when you're talking about charter schools and other things, especially in Massachusetts, and this is a Massachusetts specific answer, I don't know how we're going to be able to fund interventions.” This response clearly conveys the concern associated with funding the needed educational intervention in schools.

**Characteristic Seven: Plausibility Rather Than Accuracy**

Because the life of an organization is ever-changing, Weick believes that it is necessary for leaders to put an emphasis on plausibility as opposed to accuracy. Leaders are constantly being inundated with data from multiple sources and they must make sense of that data in order to complete the process of implementing an educational initiative. Due to the fast-paced nature of decision making in the role of a school principal, it is critical that the best decision is made in a quick fashion, allowing the individual to move onto the next problem they are posed with. This emphasis on moving forward means that it is not possible to consistently develop a view
point that is one-hundred percent accurate. The following section covers portions of the interview that were centered on how participants felt about evaluation and what they did to evaluate the programming that they had put into place in their schools.

Principal Steve

Principal Steve spoke about the balance of trying to do what was right by all constituent groups. He talked about trying to balance out what he as the principal believed to be right with what the constituent groups believed. In this case, ensuring accuracy is extremely difficult due to the different values and beliefs of the individuals involved:

I think it's fundamental. I think it's absolutely important because you can put a program in and think it's working great but if you're not evaluating it, if you're not making sure that it's meeting its goals and doing what it needs to do, then you're not being successful and the program won't maintain success. I think constant program evaluation, and then evaluating, making that tough choice as to whether this is a program we want to continue to have, is critical to the success of an intervention.

The Massachusetts Educational Reform Act of 1993 says that the principal has the final say in the building. But, today, the way everybody wants schools to work is to be these collaborative, 'come to Jesus' moments where everybody has buy-in. I guess when it comes to an intervention, at the end of the day there's got to be a 'buck stops here' kind of moment where the principal makes a decision. And even if people disagree with it, it might be the best decision because if it's research-
based, and if it's got the resources it needs to be successful. I think as a principal we are battling a new reality, where everybody wants this and that, and they want the principal to be the one who makes the decision, but then everybody wants a say. I think it's battling those things around interventions, and then do we go with Lucy Caulkins [for reading instruction], or do we go with whatever other reading initiative you can think of?

At some point with those interventions, whatever you choose to do, the people have to be onboard, whether they buy in or not. They've almost got to fake it until they make it.

**Principal Jack**

Part of the characteristic of plausibility over accuracy relates to the practice of determining the impact of a variable and attempting to make decisions based on these variables. Because many of these situations do not have a clear-cut right or wrong answer, it is up to the individual to digest those variables and to make a decision that appears to be appropriate. In this section, Principal Jack expands on how data is used in an attempt to make the best decision for students in his school:

I think it's critically important to be able to follow a kid over time and whatever level you're in you got them in the process with the hope that they will exit out at some point. Let's say you're in the third grade and there's 95 kids in the group, and you have 22 kids or 25 kids that need remediation of some sort. Different levels. All right, you form your group, you put them in contact with the people who are
going to deliver the service, and you track them from that moment until they're either on task, grade-level wise, or exceed it, and they may exit out, and you do it regularly.

At my school it's literally at least once a month that there's some kind of tracking mechanism that goes on the bookie board, so that if a parent comes in we can literally say, "Well, in September here's where the child was; here's the progression." There are 14 indicators across time in the last eight months and here he showed growth to here. He took this one time on this day, there was a glitch, and he didn't meet the standard. When we tested him two weeks later, which is what we always did, we'd go back and do a follow-up. If they weren't on task and what we came to find is that they would have momentary lapses or not have the same rate of progress because it's like being a hydrant. One month you clear five extra inches, then the next month or four months; it takes you four months just to get you over to the next inch, you know. It's all about technique and distribution and follow-through.

All of the kids, I mean the teacher has it, my assistant has it, this longitudinal stuff as a core group in the aggregate, and then we have longitudinal studies on every kid. We can tell you in the third grade he was here and he moved to here, and that's all part of their file. It's critically important because we can see where the successes are, or if you lose a staff member and there's a slight dip, you say, "Okay, that's a production problem because we don't have enough workers to throw at the production problem."
Principal Jack also explained about the difficulty in pleasing different constituent groups, and working with outside pressures. He discussed that he attempts to focus on the student as the critical component as he attempts to do what he thinks is best for his school. The majority of Principal Jack’s decisions were made with the student in mind.

**Principal Jean**

Principal Jean spoke explicitly about her struggle to develop an intervention that was as effective as possible. However, she referred to the qualitative component of justifying the time and resources necessary to put the intervention into place:

Well, you need the data to start and if you don't look at the data at the end you don't really know whether or not you've made any growth. It may feel good and you may have some evidence that says, "Wow, kids are really reading," but if you don't really have the hard data to back that up and if you're not taking the time to step back and say, "Okay. The data shows this much growth. Is this much growth really worth the time we put into it, the money we put into it, the staff effort we put into it?" If the answer's yes then that's great. If it's not, then we need to step back and say, "I do need to do this in a different way." Without that evaluation piece I don't know how you do that.

The reading data by itself wasn't valuable enough. We could not invest the right amount of staffing in it to do it well enough. It was a great start but it wasn't going to do enough. Doing leveled text in class is great, but when you have students who are reading at the fourth grade level in an eighth grade class, leveled text isn't
going to help. I mean, it's going to help them get the content, but it's never really
going to get them up to par if you don't have an intervention then in place.

Collecting the data is great, but only if you're actually going to do something with it. The intervention piece really was essential. If you're just stuck with the tests, we'd make a little progress, sure, but we weren't going to make the kind of progress we needed to make.

Principal Bill

Principal Bill was in a bit of a different place in the implementation process. His intervention was in place, but the evaluation of the programming was in the beginning stages. He was using anecdotal information rather than quantitative data to determine the efficacy of his intervention. He was also using this information to determine the plausibility of the success of the programming:

Well, I think it's certainly critical to have things evaluated that you try and then figure out what's working and what's not and how to address it. From a program I spoke last time about, the sixth grade team here that was trying some intervention with reading during skills period and they're basically looked at data, assessed kids for reading skill levels. Each teacher took a group based on sort of their abilities and there's weaker readers and up from there the higher.

I spoke to one of the teachers yesterday about the progress and the assessment and how things are going and I think she's confident that it’s working. But I think more time needs to be spent to kind of assess and get some more data to see if in
fact every kid, which kids, are learning and to what degree from based on where they started. That will take, I think, it will take probably a few more months at least and I'm not familiar even with the assessments that the people involved used exactly. How do you compare growth or would have been without it? I guess it's because you can't really know because you can't have a group that doesn't and sort of the control group.

**Conclusion: Plausibility Rather Than Accuracy**

The nature of the characteristic of plausibility rather than accuracy is that in order to implement interventions that move students forward, a principal must work in an environment where circumstances are not always definitive. In reviewing the data associated with this section, the complexity of sensemaking arose as a theme. While Weick has given us a framework for how people make sense of the world around them, there is no way to simplify the process completely. In this section, the participants referred to the importance of evaluation, but consistently offered their struggles including student ability level, constituent involvement, financial limitations, and the significantly varied set of needs in their buildings. The complexity of the sensemaking process will be further summarized in the next chapter.

**Summary of Findings:**

This research was conducted in an effort to answer the question of how school principals make sense of an intervention program that they have launched in the last five years. The answer to this question is incredibly complex. As themes and conclusions emerged through coding and data analysis this researcher was left with additional questions. These additional questions may
be answered through additional research. Recommendations for future research are made in the
text next chapter.

Participants in this study offered rich narratives of their lived experiences dealing with the
process of how school principals make sense of recently launched educational interventions. By using a three-step interviewing process, participants were given the opportunity to reflect between interviews. This process, coupled with the crafting of interview questions using Weick’s seven characteristics of sensemaking, yielded useful narratives that were robust in content and complexity. Through the review of the participants’ narratives we gain insight into the full process of how school principals make sense of the process of implementing and evaluating educational initiatives. By using Weick’s characteristics as a framework, participants were guided into providing a comprehensive account of the events surrounding their intervention implementation efforts. By using the full accounts of their experiences in their own words, it is possible to gain insight into the complexity of the sensemaking process that each of the participants went through. In Chapter Five, we will explore common themes that were identified through this research and present a final analysis of the findings associated with it.

Through analysis of the data collected in this study, there were common themes identified by this researcher. Each of these themes was identified through the lens of Weick’s Seven Characteristics of Sensemaking. The themes were presented in this chapter and will be expanded upon in Chapter Five of the study. The table below includes the themes and their associated characteristic.
### Table 4.1
Sensemaking Characteristics and Associated Themes With Quotes

<table>
<thead>
<tr>
<th>Weick’s Characteristics of Sensemaking</th>
<th>Identified Themes With Quotes</th>
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<tr>
<td><strong>Identity Construction</strong></td>
<td><strong>Theme One:</strong> Participants did not plan to follow a path into school administration.</td>
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<td></td>
<td>“I came to the whole education thing, I think, by a different route than a lot of other people. I didn't decide to get my own classroom until I was in my early thirties. I was certified, but I decided I wasn't ready to teach until I had done traveling. I spent most of my twenties traveling, waiting tables, bartending, substitute teaching, until I finally decided it was time. I never followed the typical route.” ~Ms. Jean</td>
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<td><strong>Theme Two:</strong> Participants received guidance from someone significant in their lives regarding involvement in educational leadership.</td>
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<td>“I went in, I started subbing and then the principal there liked what I was doing and then really took me under his wing. The conversations that I was having with him, he really guided me towards, not only teaching, but towards being an educational leader…”~Mr. Steve</td>
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|                                       | “Here, it's problematic when you think about interventions because our Special Education Department and our Central Office hasn't been as connected to building principals as they should be.”
|                                       | ~Mr. Steve |
| **Enactment**                          | **Theme Four:** The collection of data was an integral part of helping the school principals to deal with the pressures and complexity of putting the intervention into place. |
|                                       | “She [assistant principal] has a database that's enormous, and if kids move up and out, we will move to the next group, because there are levels.”
|                                       | ~Mr. Jack |
| Social Activity | Theme Five: Social interaction is a critical component of the sensemaking process regardless of how positive or negative the stakeholders are to the process.  
“I don't think my mindset changed so much, because I went into it saying, ‘We need to do this, but I don't know how.’ I didn't have a plan or anything, so it was less about I wanted to do A, B and C and more this is the outcome.”  
~Ms. Jean |
|---|---|
| Ongoing | Theme Six: Data is a necessary component of evaluating and adjusting practice as it relates to interventions.  
“It's looking at the Galileo tests, it's looking at individual student data; it's talking to teachers, getting structured feedback from teachers on what's working, using the observations and evaluation system.”  
~Mr. Steve |
| Extracting Cues | Theme Seven: Interventions are a necessary part of the educational landscape today.  
“The sense I'm getting is that almost everyone needs some sort of intervention. It seems to be that it's either in the classroom or pull out or it is small group.”  
~Mr. Bill  
Theme Eight: It is difficult to balance the need for interventions with the financial limitations placed on schools.  
“I think educational interventions in today's educational landscape, I guess the big thing is I see our landscape as being really cash-strapped, and when you're talking about charter schools and other things, especially in Massachusetts, and this is a Massachusetts specific answer, I don't know how we're going to be able to fund interventions.”  
~Mr. Steve |
| Plausibility Rather Than Accuracy | Theme Nine: The process of sensemaking is complex.  
We chase the kids based on their individual scores and their student group. And I said, "So we can tell you a kid and follow that group because you know every year, if you're in the seventh grade you take an exam the state gives." The next year it’s a different exam, but it may not be the same core group so we've always pulled out the kids that are constants.
The findings will be summarized in Chapter Five and the identified themes will be discussed. There will also be further discussion regarding future implications for theory, research, and practice.
CHAPTER FIVE: COMMON THEMES

Overview

The purpose of this study was to investigate how leaders make sense of a recently launched educational intervention. This exploration was completed in the public school environment within Massachusetts where school principals are attempting to balance multiple initiatives and mandates within a constantly-changing dynamic. The study was completed using Weick’s sensemaking as a theoretical framework and extensive literature to help this researcher understand the findings. The data collected for the study was completed using Seidman’s (2006) interviewing strategies and included four principals from Massachusetts. This chapter outlines the themes that were identified through the research as seen through framework of sensemaking, as well as implications of this research on theory and practice, along with suggestions for future research. The conclusion of the chapter includes final thoughts about the study.

Themes

Over the course of this study, several themes emerged during the data collection and coding process. These themes have been organized using Weick’s seven characteristics of sensemaking. Some of the characteristics were associated with a single theme, while other characteristics were found to reveal multiple themes that became apparent through analysis of the data. The following sections include the characteristics of sensemaking and the themes associated with them, followed by conclusions drawn from each of the themes.

Identity Construction

Theme One: Participants did not plan to follow a path into school administration.
In order to gain insight into the decision-making process of the individual participants in this study, it was first critical to understand their background as it pertained to the field of education. Weick’s characteristic of identity construction allowed this researcher a framework for questioning participants regarding their path to educational leadership. Through this line of questioning, it was discovered that the participants did not get into the field with educational leadership in mind. In talking about his path to education in general Principal Steve offered that members of his family were “…all heavily involved in education. Special education teachers, librarian, former librarian who was a former elementary school teacher at all different levels. My mother was an ESL teacher, ESL department head, and then my cousin … My cousin is an educator in the city, as well, so it was the thing that I never wanted to do.” This reluctance to join the field of education was impactful on Principal Steve and also had an influence on his transition to educational leadership. When asked why he first decided to get into educational leadership he stated that “The reason why I left teaching was the amount of paperwork and grading. I believed in having students write. It was becoming too burdensome. I was up until 3:00 in the morning at 24-hour Dunkin Donuts in [town] trying to grade students' papers.” This reluctance changed, however, when he entered his master’s degree program and found a direction in the educational leadership program.

Like Principal Steve, Principal Jack journey into education was non-traditional. After working temporarily in the construction field, he was given a job as an archivist at a local university. This university required him to go back to college and was willing to pay the bill for him to attend. Principal Jack was working in education during a financially tumultuous time and received many letters stating that he may not have a job in the fall. Through this process, he learned the importance of having several certifications in the field of education, and he began to
work on earning multiple credentials to aid in job retention. He stated that “…during that process as I took all the extra courses, I ended up when I graduated from [school name] having 13 teaching certificates because of course work.” By virtue of his work to obtain these degrees, he became qualified to take on many different jobs in the education field. When asked specifically about the move to educational leadership he answered “When I came out, I was already carrying an administrative certificate, so getting a principalship and an assistant principalship position was quite easy after that.” Like the others, Principal Jack never entered the field of education with the thought of being an educational leader.

Principal Jean also followed a non-traditional path into the field of education. When asked about her decision to select education as a career path, she commented that “I came to the whole education thing, I think, by a different route than a lot of other people. I didn't decide to get my own classroom until I was in my early thirties. I was certified, but I decided I wasn't ready to teach until I had done traveling. I spent most of my twenties traveling, waiting tables, bartending, substitute teaching, until I finally decided it was time. I never followed the typical route.” This pathway certainly had an impact on her views of education as a whole, but her response was even stronger when asked about educational leadership specifically. She responded by stating “I wasn't necessarily thrilled about going into administration, but after 13 years as a history teacher it was either go up or change occupations. I wasn't going to get a teaching job in a public district school after 13 years. I was too expensive.”

Principal Bill actually came to the field of education through a more traditional pathway than the other participants in the study. He did enter the field as a teacher and continued on that path for over twenty years. His move into the world of educational leadership was also
somewhat traditional. He was asked by his principal to apply for a job as his assistant principal and Principal Bill took him up on that offer. While his path was a bit more traditional, from an educational perspective, he did not start teaching with the intention of moving into educational leadership.

The lived stories of these individuals helped to give this researcher insight into their decision-making process and how they make sense of the environment around them. While some entered the field intentionally and without reservations, others did so with reluctance. It is difficult to gauge exactly how the participants’ attitude toward the field of education informed their sensemaking processes, but it is clear that it was impactful.

Theme Two: Participants received guidance from someone significant in their lives regarding involvement in educational leadership.

Another theme that emerged during the identity construction questioning was that the participants entered the world of educational leadership due to the influence of others. As addressed in the aforementioned theme, each of the participants established that none of them entered the field of education with the intent to become school administrators. It was clear through their responses that the single most influential factor in the participants selecting the path into educational leadership was that someone in their professional life suggested that it would be a good decision for them. This section will explore the impact of others on the career path of the study’s participants.

As mentioned in a previous excerpt, Principal Bill noted that he did not have any real intentions of getting into administration. However, he did become certified and joined the administrative ranks at the request of another administrator. When asked about the transition to
administration, he stated “I became a department chair, and about ten years after that I had the opportunity to get certified in administration at the high school level. Basically, the principal asked me if I'd be willing to be his assistant to help him out, and since I had been certified I thought I'd give it a try.” This move to administration was influenced by the support of a mentor in his school building and is consistent with the lived stories of other participants in the study.

Principal Steve was introduced to administration early on in his educational career. After making the transition from the business world to education, he had discussions with the principal of the building in which he was working. Principal Steve stated that “I went in, I started subbing and then the principal there liked what I was doing and then really took me under his wing. The conversations that I was having with him, he really guided me towards, not only teaching, but towards being an educational leader…” Principal Steve’s recollection of the conversation impacted him significantly. He stated that the principal had told him that “You are the type of person with ideas. You should be a vice principal, or a curriculum coordinator.” These participants decided to become involved in the field of educational leadership as a career path at the insistence of key mentors in the profession.

The impact of others on the sensemaking process provides insight into how the participants make sense of their role as principals. The impact of their mentors was critical to their development as leaders.

**Retrospection**

*Theme Three: Questions regarding the characteristic of retrospection caused participants to focus on difficulties associated with their problem of practice.*
As this researcher began to ask questions that were intended to illicit responses associated with retrospection, it became clear that the process of retrospection caused the participants to reflect on the difficulties associated with their work. Even before participants were asked about any roadblocks they faced during the process of adopting and implementing educational interventions, they began to offer feedback regarding the variables that impacted their ability to complete their missions. This section examines some of these difficulties and how they ultimately impacted the decision-making process for the participants in this study. This theme of focusing on difficulties will also permeate into other themes that are identified in this chapter.

As Principal Jack reflected upon the process of implementing his intervention, he began to talk significantly about the impact of the budget process on his work. He stated that “The next year, the same thing occurred (significant student growth), so two years in a row it was functioning, we were doing well. Then budget cuts came, and the superintendent allowed them to reach into the schools and we had to cut $800,000.” According to Principal Jack this reduction in funding had a major impact on the progress of their intervention. His frustration was summed up when he said “In a system this size, that's just a profound number. It's like you're going to interrupt something that's just kicking into gear and it's going to move forward positively.” The frustration that Principal Jack felt with these budget cuts was not a feeling that occurred in isolation. Other participants were open about the frustration that they felt with the budget process as it relates to their ability to implement programming they felt was necessary in their schools.

Principal Steve shared the same concerns on how the budget impacted his ability to implement the intervention being discussed. When thinking about the process of implementing his intervention he said, “We had to budgetarily look at how we're going to pay for an extra
teacher at the sixth, seventh, and eighth-grade level, what resources are we going to use for a curriculum because our curriculum was based off of 1998 and 1999 textbooks that were way pre-Common Core and it was 2012 at that time, so how are we going to pay for those things?” The question of how to fund what is thought to be best will be revisited throughout this chapter. Principal Steve also included human resources as a frustration with allocating resources. He stated “We, as building principals, have very limited control over where paraprofessionals go, how resources are deployed. When I'm looking into doing other types of interventions, those resources are not available to me to deploy.”

The concerns around budget were also shared by Principal Jean. She seemed to be more concerned about where the funding would come from for implementing her intervention. She stated “Right now, we are in the process of putting it in the budget, and hoping we get the budget. We're trying to beg, borrow, and steal copies of some of those interventions from other places, so we can pilot them this spring, to have a better understanding of how they work, and we are in the process of collecting data and putting it in a form to really allow us to better decide who's going to be in what group and why.” The development of a budget that supports a specific intervention is difficult and is not always within the control of the school principal. This lack of control over this critical aspect of intervention implementation was a stressor for several participants, and certainly impacted their decision-making process.

Another significant area of frustration that participants identified throughout the process was that of organizational difficulties that impacted their ability to be effective throughout the implementation process. Principal Jean shared that “I think, one of the biggest road blocks, this is the confidential part, is that nobody in this district seems to know how to do this work, and I've never done it from this perspective.” The lack of understanding about her mission was difficult
for her to overcome throughout the implementation process. Principal Steve also spoke about frustrations with organizational structure that impacted his ability to implement his intervention. He stated that “Here, it's problematic when you think about interventions because our Special Education Department and our Central Office hasn't been as connected to building principals as they should be.” In his view, a lack of control on his part was one of the most impactful concerns related to implementation of interventions in his school. He even believed that it violated the intent behind laws that governed his role as a school principal. He stated “Whereas, under the Massachusetts Education Reform Act and Mass Law, those are the things that I should have control over to be able to make sure that I'm able to make the changes need to made. But it feels like, at times, my hands are really tied when I'm trying to make decisions that are for the greater good of the school, not just making sure the kids' IEPs are fulfilled but how can we make sure that all students are learning better.”

Principal Jack shared Principal Steve’s concerns around organizational concerns as they pertain to the special education department. In his district there was discontent with the special education department as can be seen in his statement “In many schools, the Special Education department is the one that most people look fondly upon, but not here.” This discontentment with the special education department was impactful in the implementation process and caused difficulty as he tried to get programming into place.

It was telling that the act of retrospection caused participants to reflect on the difficulties with intervention implementation. This theme begins to outline the complexity of the sensemaking process as it relates to the implementation of educational interventions. By outlining concerns about a lack of funding, control, and organizational support, we begin to see
the impact of variable factors on the sensemaking process of school principals. This impact will be explored further in the summary of theme analysis later in this chapter.

**Enactment**

*Theme Four: The collection of data was an integral part of helping the school principals to deal with the pressures and complexity of putting the intervention into place.*

Throughout the discussions around putting the interventions into place, data continuously appeared as a critical factor. The use of data appeared to be an integral part of how the participants made sense of the process. From the start, Principal Steve used data to inform his decisions when working through the implementation process. He stated that “In my readings from my doctorate and in other research that I was doing, one of the things was longer blocks of instructional time that 45 to 60 minutes is not enough time to get it done.” While his research regarding the data was a precipitating factor for starting his intervention, it was also used to convince stakeholders of its importance. He shared that “I had to convince our superintendent and our superintendent gave me a verbal agreement of funding this for three years because I believe that anything less, we wouldn't be able to really get good data and we wouldn't be able to make a data-informed decision and that's the key term ... Not data-driven but data-informed. We wouldn't be able to make a data-informed decision about this program working.”

Principal Bill also referred to the use of data through the enactive process. In his school, they used data to identify the students in need and to group them for intervention delivery. This process was also referred to by Principal Jean. Principal Jean talked about the adoption of universal screeners that were used to identify the students that were in need. However, in the
In the case of Principal Jean, the participants in her group did not have a great deal of experience working with this type of data. This fact caused her group to build a knowledge base from the ground up in terms of data collection and analysis.

In the case of Principal Jack, he referenced the use of data across schools. As he met with his team and more specifically, his assistant principal, and they used data in multiple ways. When talking about the collection of data, he said “She has a database that's enormous, and if kids move up and out, we will move to the next group, because there are levels.” This reference was couched in the use of data to not only identify students in need, but to identify their progress. The use of data was so entrenched in Principal Jack’s intervention process that it was a part of all meetings.

The participants used data in multiple ways to come to terms with the complicated process of implementing their educational intervention. In some cases, they used data to garner support for their initiatives, and in other instances, they used data to identify student needs. Data was used to monitor progress of students through the intervention process and to evaluate programming. Regardless of how data was specifically used, it was clear through analyzing conversations that data was an integral part of the sensemaking process.

**Social Activity**

*Theme Five: Social interaction is a critical component of the sensemaking process regardless of how positive or negative the stakeholders are to the process.*

Sensemaking is a social process, and other stakeholders have an undeniable impact on how principals make sense of their situations. The principals in this study indicated that balancing the views of individual stakeholders with their own personal beliefs is difficult. In the
case of implementing educational interventions, the stakeholders included parents, staff members, fellow school leaders, and students. In each case participants were able to identify stakeholders and the role that they played in the process. However, the impact of these individuals and their benefit to the planning process differed in each story. In some circumstances, the stakeholders were active and positive members of the process, while in other stories the stakeholders caused the process to be more complicated. The value of the stakeholders was also viewed differently by each of the principals that participated.

Overall, Principal Bill had a positive experience working with the stakeholders identified in his planning process. The participants included teachers, parents, and district leaders. This group worked together to identify strategic goals for the district and individual schools. These goals were the jumping off point for intervention planning. In his case, the participants were fully involved and positive about the process. One participant even shared that they were excited about the possibilities of affecting change in their school. His participants were so invested in the process that they wanted regular updates on how it was going. While Principal Bill had an overall positive experience working with his stakeholders, some of the other participants in the study had to negotiate a different social landscape in their schools.

Principal Steve had a different view when it came to participant involvement. He stated that “The thing that I've always felt is there are various constituents. You don't need to have everyone on board, you just need to have enough people on board.” One of the key stakeholders for Principal Steve was his superintendent because of his role in the budgetary process. He also believed that it was necessary to get parents, teachers, and fellow administrators on board. According to Principal Steve, the parents and teachers were instrumental in both getting the program of the ground and into action. One difficulty that he had was that some of the local
school board had views on how the school should run that impacted how business was done in his school.

Both Principal Jack and Principal Jean had similar experiences while working with their stakeholders. When asked specifically about how the stakeholders added to the process he said “They added to the process because they made a commitment to keep in contact with the team, and they knew that they could come in at any time and get an update.” In this situation the stakeholders committed to the process and seeing it through. This commitment showed that they were invested in the implementation, and perhaps more importantly, in how it impacted students. Principal Jean also spoke extensively about the different skills that stakeholders brought to the process and how that helped with decision making. Principal Jean also shared a unique perspective by stating “I don't think my mindset changed so much, because I went into it saying, ‘We need to do this, but I don't know how.’ I didn't have a plan or anything, so it was less about I wanted to do A, B and C and more this is the outcome.” The fact that she entered the process with an open mind and no predetermined view of how things should be was worth noting.

In each story, social activity affected the process differently. Even though the effect was different in each scenario, the impact of others on the sensemaking process was clear. It was also clear that the mindset of the leader prior to entering the process was significant. While some participants entered discussion with an open mind and no clear roadmap for completion, others clearly knew what they wanted to accomplish and how they were going to get there. Whether viewed as useful, positive, negative, or ineffective, in all cases the social activity of involving stakeholders in the decision-making process was considered to be essential.
Ongoing

Theme Six: Data is a necessary component of evaluating and adjusting practice as it relates to interventions.

As previously alluded to when discussing the enactment characteristic of sensemaking, data also played a major role in the process of evaluating and adjusting throughout the implementation process. Regardless of whether the data was formal assessment data or anecdotal data collected by the principal, it was viewed as critical to the process of determining the effectiveness of the intervention. This view was shared holistically by all of the participants in the study.

When asked about the evaluation process Principal Steve stated “It's looking at the Galileo tests, it's looking at individual student data; it's talking to teachers, getting structured feedback from teachers on what's working, using the observations and evaluation system.” Principal Jack also collected both formal and anecdotal feedback. He said that “We tracked them on the MCAS to see improvement. We tracked them on progress or reading fluency, and we tracked them on attendance and referrals, because if the kid is succeeding, the behaviors tend to disappear, too. We monitored all that, and all of that stuff improved in a sense. There were kids who didn't quite get it or who were moving at a different pace, but we could identify them and then we put a little bit more extra into them.” Similarly, Principal Bill talked about their proposed use of MAP testing to monitor student progress and to make decisions about the effectiveness about the intervention. Principal Jean also talked about various formalized reading assessments that they used.
The use of data was clearly a significant part of evaluating and adjusting practice as it relates to the chosen interventions. By formalizing the use of data, the school principals were able to use concrete evidence to inform their sensemaking process. The use of this data also was critical with the ongoing process of sensemaking.

**Extracting Cues**

*Theme Seven: Interventions are a necessary part of the educational landscape today.*

As principals attempt to make sense of their role they will begin to extract cues from the process to inform their decision making. One cue that was shared amongst the participants was that educational interventions were an unavoidable part of their world today. Whether the use of interventions was pushed on them by outside mandates, from within their district, or through evaluation of the research, they need to be completed. Some of the participants had varied levels of experience in dealing with interventions, but they all acknowledged their relevance.

As one of the newest principals to the use of interventions in schools, Principal Bill admitted that his knowledge base was not extensive as it relates to their use and implementation. He said, “The sense I'm getting is that almost everyone needs some sort of intervention. It seems to be that it's either in the classroom or pull out or it is small group.” Principal Jean went even further in her view of interventions by saying that, “I can't imagine how we can even consider moving forward without it.” She also elaborated that the interventions that she was a part of have become more targeted over time. When reviewing the responses from participants, it also became apparent that there was a positive view on the impact of interventions on student achievement.
Theme Eight: It is difficult to balance the need for interventions with the financial limitations placed on schools.

Even though participants viewed interventions as necessary and valuable, there was still frustration around the financial limitations associated with implementation. These frustrations manifested differently for the participants, however, it was clearly a factor in the implementation process for each of the educational interventions that were discussed. These frustrations were shared freely and are important to note when summarizing this research.

Principal Steve was clearly supportive of educational interventions as a whole, and he believed that they had on student achievement. In his responses, he identified a significant amount of stress around the funding that was necessary to put them into place. He stated “I think educational interventions in today's educational landscape, I guess the big thing is I see our landscape as being really cash-strapped, and when you're talking about charter schools and other things, especially in Massachusetts, and this is a Massachusetts specific answer, I don't know how we're going to be able to fund interventions.” This level of concern regarding funding was pervasive throughout his responses and appeared to have a significant impact on how he made sense of the whole process. Principal Steve was not alone in this frustration as it was shared by other participants throughout their responses.

In Principal Jack’s responses, he identified financial limitations as a major road block, as well. After identifying the significant amount of work that went into researching and implementing his intervention, and the growth that students exhibited due to their involvement in it, his school was faced with substantial cuts. These cuts called for the elimination of key personnel that were responsible for carrying out the interventions. From Principal Jack’s
perspective, the reduction of these staff members was directly responsible for the demise of his intervention and the limited growth that students exhibited. The loss of this intervention had almost a traumatic effect on Principal Jack’s view of this situation. Principal Jack ultimately had to come to terms with the fact that student performance was completely outside of his control.

Whether real or perceived, the impact of the budget and finance on the sensemaking process were huge for these principals. The frustration that they felt in connection with financial limitations was real and had an impact on their views regarding their educational interventions and how they made sense of the process. This theme was certainly a significant factor in the entire process, and its implications will be discussed further in the summary of theme analysis.

**Plausibility Rather Than Accuracy**

*Theme Nine: The process of sensemaking is complex.*

The theme identified through the plausibility rather than accuracy questioning was that this process is complex by nature and at times even overwhelming. The significant amount of data that the participants were exposed to was immense and complicated. While there was a great deal of formalized data collected, the vast majority of the data was circumstantial evidence that they were exposed to from multiple sources. There were also many barriers to the process that were outside of the control of the participants. In this section, the variables that complicated the process will be presented.

Each participant had a different reason for embarking on the mission to develop and implement their individual educational intervention. Some were being required to make changes by district leadership or state mandates, while others were developing interventions based on identified student needs. In all cases, the process was an additional piece of work that was added
on to an already full workload. The impact of this on the individual participants was undeniable and it influenced on how they made sense of the process. These leaders were also working within a fluid environment with constantly changing variables, making it difficult to come to definitive decisions. These circumstances require principals to make sense based on plausibility.

The sheer volume of information that was associated with this process was difficult for the participants to wade through. The amount of data was only compounded by the different variables that had influence on the sensemaking process. As discussed in the last section, funding problems were a significant variable with which each administrator had to face. The impact of funding even eliminated the possibility of two interventions being able to continue. Another significant variable was the impact of district leadership on the process. In some cases, leadership was incredibly supportive, while in others the leadership was detrimental to the process. In both scenarios, leadership was a major factor in whether an intervention would be successful or not. Another huge variable was the personnel available to the school principal. The personnel were primarily responsible for carrying out the intervention and therefore were critical to its success. The combination of ever changing variables and overwhelming amounts of data make the sensemaking process a very complex one.

Summary of Themes

Each theme was developed using Weick’s seven characteristics of sensemaking as the framework for the coding process. The identification of these nine themes lays the groundwork for this chapter. After their identification, the nine themes were analyzed and are the basis for the conclusions drawn from this research. These concluding thoughts will be found later in this chapter.
Conclusions

Through analysis of the themes identified through this study, this researcher was able to draw several conclusions. This section includes those conclusions along with a brief description of how those conclusions were drawn. Below you will find the first conclusion and description that was determined through this research:

- **Conclusion One: Administrator preparation programs need to be evaluated to determine effectiveness as it relates to implementing educational initiatives.**

It is important to note that this research was conducted with an intentionally small sample group and that the limited scope of this research may impact the findings. However, it was clear through analysis of the participants’ stories that school leaders are not fully prepared for their role. The pathways taken to school leadership varied, and there were definitely different experiences amongst the participants, but all struggled through making sense of the process of implementing interventions. Some struggled due to outside forces and others with financial limitations, but all of them had difficulties in the implementation process. Principal Bill put it in perspective when, in regards to his understanding of interventions, he said that “…for a long time being at the high school, I was sort on my own island. Being in the department in my own classroom, I didn't do a lot of collaborating or sort of building-wide work with interventions.” While struggles with implementation are expected and are not an indication of a lack of preparedness, the research suggests that a comprehensive look at administration preparation programming would be beneficial. An expanded view of this belief can be found later in the chapter.
• **Conclusion Two: There is a preoccupation with pitfalls and roadblocks amongst administrators that impacts the sensemaking process.**

Throughout an examination of the lived stories of the participants, it became clear that they all seemed to possess a preoccupation with barriers to the implementation of the school leaders’ educational interventions. This preoccupation was evidenced throughout the interview process, but was most apparent early on in the narratives. On several occasions the participants shared these barriers without being asked. This hyper-focused view on the barriers to success of their interventions certainly had an impact on their ability to make sense of the process. An example of this was when Principal Steve was asked questions aimed at identity construction. His response indicated that “…it's problematic when you think about interventions because our Special Education Department and our Central Office hasn't been as connected to building principals as they should be. We, as building principals, have very limited control over where paraprofessionals go, how resources are deployed. When I'm looking into doing other types of interventions, those resources are not available to me to deploy.” It was clear in his response that he had a deep-seated frustration with the process and that this influenced how he made sense of his situation.

• **Conclusion Three: School leaders need to be comfortable with the collection and analysis of data.**

The use of data was a prominent part of all discussions surrounding the implementation of educational interventions. This permeated all aspects of the implementation process, from the original selection phase through implementation and evaluation of the interventions. The use of data was so critically important to the process that all participants in the study referred to it on multiple occasions during the series of interviews. In order for a school leader to be successful
in researching, implementing, and evaluating an educational intervention that s/he needed to have a strong understanding of how to collect and analyze multiple forms of data, including both formal and anecdotal sources.

- **Conclusion Four:** A framework or roadmap for implementing interventions in public schools should be created that can help school leaders to navigate this difficult process.

With the ever-changing educational landscape and the increased emphasis on intervening when students are struggling, there is no single formula for implementing educational interventions in schools. While a significant body of research exists to outline the importance of educational interventions, there is no one single prescriptive process for implementing or evaluating educational interventions. It appears that no research to date has specifically targeted the question of how as it relates to implementing these strategies. The development of a comprehensive process for selecting, implementing, and evaluating educational interventions would be immensely impactful on the role of educational leaders.

- **Conclusion Five:** Aspiring administrators should be exposed to the theoretical framework of sensemaking prior to beginning a position as a school leader.

Throughout the journey of completing this study, this researcher became convinced that the sensemaking process could be translated to a wide-variety of problems of practice. The sensemaking framework can help administrators reflect in a scholarly way on how and why they make the decisions that they do. Therefore, it is the belief of this researcher that the theoretical framework of sensemaking should be deeply imbedded in the training process for school leaders. By developing a clearly articulated context for sensemaking, it is possible that future leaders would have a greater capacity for making decisions in a strategic manner. Repeated exposure to
this process and the mindset associated with it would help to produce school leaders that are more prepared for the complexity of the sensemaking process associated with their roles.

**Implication for Theory**

The theoretical framework of sensemaking was used to structure this research in a manner that allowed for a detailed interpretation of how individuals make sense of the world around them. This framework has been used as the overlay for a significant amount of research, but has not been used to look specifically at how school leaders make sense of the process of implementing a recently launched educational initiative. The development of this study allowed for an in-depth look at the sensemaking process and how different variables impacted their thinking. Using this theoretical framework has significant transferability that can be used across genres and fields of study.

For the purpose of this study, sensemaking was used as a lens and its validity was not tested in any way, and it allowed this researcher to identify themes and draw conclusions. As such, a deeper understanding of the complicated process of sensemaking was developed. This study also allowed for additional information to be gathered regarding the ever-expanding role of school leaders and their struggles to make sense of it all.

Sensemaking can and should be used to gain insight into the decision making of school leaders and to the potential pitfalls that they encounter within their roles. By understanding how these leaders make sense and the frustrations that they are faced with, it may be possible to better prepare future leaders for the field. If future leaders are better prepared to face the challenges of a complicated and difficult role as a school leader then they may be more likely to remain in positions for longer periods of time. Research conducted around this theoretical framework, as it
specifically relates to school leaders, could be instrumental in improving school leader
recruitment and retention. By maintaining highly qualified and prepared leaders in positions as
school leaders this researcher believes that students will be impacted in a positive manner.

**Recommendations for Future Research**

The findings of this research are limited in scope and leave questions that are worth
exploring further. This research has brought light to additional issues that could be researched
using the theory of sensemaking as a framework. Below you will find recommendations for
additional research that could be conducted in this area:

- The impact of special education on the process of implementing educational interventions
  presented some interesting dialogue throughout the research. On several occasions
  participants shared insight into how the special education system impacted the
  implementation of their interventions, but the line of questioning did not give them the
  opportunity to expand on these ideas. This impact is worth exploring in more detail as it
  may have additional implications regarding the sensemaking process. Some
  recommendations regarding this specific topic would include further exploration of the
  special education budget on the regular education practice of implementing interventions,
  the role of special education administrators and how they impact the sensemaking
  process, and the effect of special education legislation on how a school principal makes
decisions within their buildings.

- The complicated process of sensemaking emerged as a powerful theme in this research.
  While the research did identify several variables that impacted the sensemaking process,
  this is an area that would benefit from additional research. Throughout the lived
experiences of the participants it was clear that the process of sensemaking was complex. The significant number of variables and the immense amount of data that participants were inundated with had a definite impact on how they make decisions. Future research on specifically how school administrators make sense of these variables and use them in the decision-making process would be beneficial for programs that are responsible for training future administrators.

- The sample size used for this research was limited to four participants. While the restrictive size of the sample group allowed for the research to be rich in content, it did not allow for a broader interpretation of the findings. By increasing the sample size of the group and potentially expanding the borders of the research to other states, private schools, or alternative grade levels, future researchers would be able to gain a deeper understanding of how educational leaders make sense of their role and how they make decisions in their buildings.

- Throughout analyzing the interview responses, it became clear that the participants did not feel as if they were in control of all of the variables that impacted their role. This lack of control included central office support, outside mandates, and the control of other administrators over their buildings. Additional research aimed at determining how educational leaders make sense of this lack of control could yield interesting results. Data from research in this area would potentially be useful as state and federal educators develop legislation around education reform. It could also be useful for educational departments as they develop regulations and guidance as it pertains to the implementation of educational initiatives.
As this research was being conducted, it became clear that the sensemaking process and the work of school principals could be overwhelming. This study highlighted several areas that overwhelmed school administrators as they tried to make sense of a specific intervention within their schools. However, the study did not include a great deal of information about the feelings that came out of this process. Additional research in this area may be helpful in identifying risk factors for school administrators as they attempt to make sense of an increasingly difficult role. The impact of future research may help to identify strategies for improving administrator retention.

**Implications for Practice**

This research was conducted with several middle school principals as participants. These participants were interviewed using questioning that was aimed at gaining insight into how they made sense of the practice of implementing educational interventions. Through this research, several themes and conclusions emerged that should be further addressed by the educational community as a whole.

In analyzing the findings associated with this study, it became clear that many administrators are not fully prepared for the scope of their role as principals. Each of the educators described different pathways that they followed to obtain their positions, but none of them indicated how they were prepared. As each participant struggled to make sense of their role and the process that they followed to implement an educational intervention, they each began to share significant frustrations about their positions in general. This frustration manifested itself in a manner that could be construed as negativity. This apparent negativity was at the core of the sensemaking process and the research indicates that lack of sufficient administrator preparedness is a potential factor that led to their frustration.
As indicated in the problem of practice, the role of the school principal is becoming more complex. State and federal legislation and policy has placed an increasing amount of pressure on school leaders to improve teaching and learning, increase school safety, and to support the social and emotional wellbeing of their students and staff. This increased responsibility has come with little to no adjustment in the way in which high quality school leaders are recruited and retained. By focusing on administrator recruitment and retention, it may be possible to better prepare school leaders for the complex inner workings of their positions and the stress associated with those roles.

These changes would need to start at the legislative level with the federal and state governments both financially and procedurally supporting educational leaders. This could be achieved by requiring comprehensive recruitment programs that target high performing teachers to get them involved in administration. More high quality candidates may find it worthwhile to enter the field if added incentives like loan forgiveness or aid was in place. Once aspiring administrators have been recruited, it is critical that they receive high quality training prior to taking on a new position. As the findings of this research indicate, this training should include in-depth work with school budgets, using data, legislative requirements, and working with different constituents groups. This researcher also believes that instruction about school leadership should be conducted by instructors with field based experience.

Once school leaders have been recruited and trained, it is important that systems be set in place to retain them. Legislative language should include stronger requirements on mentoring programs and training for new administrators. However, mentoring is only a piece of the puzzle, and it needs to be coupled with high-quality, ongoing professional development that is geared towards keeping the administrator abreast of new legislative requirements, and research
regarding what is currently working in the field. The ongoing professional development should also include mandatory regional meetings for school administrators that are held within the school day and that is accessible by all leaders.

Another recommendation for practice is a change to the school funding model for special education. In several instances, principals shared frustration in not being able to fund specific interventions that they thought would be beneficial for their students. This frustration was coupled with the fact that a large pocket of funding that was categorized under special education was not accessible by school principals. According to the reauthorization of the Individuals with Disabilities Education Act (2004), up to 15% of funding can be used for Response to Interventions (RtI) or Early Intervening Services (EIS). Based on the research in this study, an adjustment to this verbiage is highly recommended. If schools were able to utilize 15% of their federal funding earmarked for special education services on RtI or Early Intervening Services then principals would be able provide intervention for all students in need. This researcher would even recommend that this percentage be increased to make more funding available for all students in public schools.

Lastly, the findings from this research indicate that creating a document or resource including best practices for intervention implementation would be of great benefit to educational leaders. A compilation of this data could be used to develop a comprehensive plan for implementing educational interventions. This compilation of data should include research around working with constituents, identifying resources, evaluating specific intervention tools, developing policies and procedures, practices in piloting, implementation protocols, and evaluation strategies. A comprehensive look at these different components could be used to develop a procedure that would take the implementation process from start to finish. By
developing an all-inclusive process for selecting, implementing, and evaluating educational interventions, school leaders would have an easier time navigating this incredibly complex initiative.

It is this researcher’s belief that adjustment to practice in these areas would have a positive impact on both teacher recruitment and retention. Through adoption of these changes, there would also be an additional pool of funding that would be not be tied to specific population of public school students. Improvements in these areas would help to assure that well-prepared and competent administrators are in the position to make educational decisions regarding interventions with resources that are designated for that purpose.

**Reflection on Research and Conclusion**

Through countless interactions with school administrators, this researcher was exposed to the struggle that many face in making sense of their role. This struggle became abundantly clear as administrators were observed trying to implement strategies that were aimed at improving instruction using data. As the use of interventions became more prevalent in an era of accountability this researcher determined that there would be value in gaining perspective on how administrators worked through this process. This exposure coupled with current movements to implement intervention strategies acted as the catalyst for this research study.

This researcher was exposed to the theoretical framework in this study as a roadmap for attempting to understand and digest the information that would be necessary to formulate conclusions on this problem of practice. By completing additional research on the theoretical framework, a deeper understanding of how people make sense of their surroundings was conceived. The development of an understanding of the sensemaking process had a profound
effect on this researcher and will certainly have an impact on future professional endeavors. It is
the hope of this researcher that the impact of this work will also have an impact on other
practitioners and that it can help others to gain a deeper understanding about how they make
sense of their roles as leaders.

This chapter explored the themes and conclusions that were gleaned from analyzing the
data associated with this research. Also included in this chapter were recommendations for
future research and implications of this research on practice. It is the hope of this researcher that
the findings of this study will be transferable to other studies and that they can be used as a
starting point for future research.

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**Appendix A**

Introduction Letter to Principals

Phil Saisa 780 Old Keene Rd. Athol, MA 01331 Telephone: 978-895-5247; Email: psaisa@awrsd.org
Dear Principal,

I am currently a doctoral student in the College of Professional Studies at Northeastern University. This letter is being sent to you because, as the principal of a public school you have been faced with the challenge of developing, implementing, and evaluating educational interventions within your school. Currently, I am working to complete a doctoral dissertation study on how principals make sense of this process. I am sending you this letter as a request for you participate in this study. Along with this introduction letter I have also enclosed a copy of a research summary for my work.

I will contact you directly this week in an attempt to answer any questions that you may have for me. Thank you ahead of time for your consideration of participating in this study.

Sincerely,

Phil Saisa

Enclosure: Study Overview

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APPENDIX B

Interview Outline

**Introduction: 15-20 Minutes**

My name is Phil Saisa and I am currently a doctoral candidate through Northeastern University’s College of Professional Studies. I have worked in the role of a building level
administrator since 2004, both as an assistant principal and a principal. During this time I have become increasingly interested in the principal’s role as a facilitator for the development, implementation, and evaluation of educational interventions in public schools.

I want to thank you for your cooperation in participating in this study. This interview will be recorded in order for me to be able to review your responses at a later date. I will also be taking some field notes during our conversation in an attempt to capture the whole story that you are telling me. Please remember that all parts of this interview are confidential and that after completion of this study all materials will be destroyed.

The purpose of this study is to gain insight into how school principals make sense of the process of choosing, implementing, and evaluating interventions within their schools. All questions contained within this interview will be aimed at expanding understanding around this topic. Do you have any questions about the process or content of these interviews before we begin? If you have any clarifying questions during the interview, or would like to expand on any of your responses please feel free to do so. If you are prepared to do so, I would like to begin the interview at this time.

Interview Questions

Round 1- Thank you for taking the time to talk with me about your role as an educational leader. The process that I would like to follow includes three rounds of interviews with questions that will ask you to reflect on your practice in this role. At the conclusion of the
interviews, I will be using a narrative approach to tell the story of how principals make sense of process of developing, implementing, and evaluating educational interventions.

1. Tell me about the path you took to becoming an educational leader.
   • Probe- Please feel free to include any background information that you believe will help me to gain insight into how you make decisions.

2. For the purpose of this study, educational interventions will refer to procedures, programming, or practices aimed at closing gaps in student learning. Tell me about your experience in dealing with educational interventions.
   • Probe- Please tell me more about your understanding of educational interventions and how they have impacted your role as a principal.

3. Tell me the story of your role in a specific educational intervention that you were a part of developing.
   • Probe- Please elaborate on any roadblocks that you were faced with during the implementation process.

Closing Remarks: I have no further questions at this time. Is there anything further that you would like to elaborate on? Next time we will expand upon our conversation. Please feel free to contact me if you have any questions.

Round 2- Last time we met you told me a bit about your background in education and the implementation of a specific educational intervention. Today I would like to expand our conversation about that intervention.
1. Would you expand on the process that you followed to initiate the implementation of this educational intervention?
   - Probe- Is this the whole story?

2. Who did you identify as the stakeholders in this process, and how did you get them involved in?
   - Probe- How did your stakeholders add to the process?
   - Probe- Did your mindset change as a reflection of interactions with stakeholders?

3. What alternative options did you discuss while planning to use this intervention?
   - Probe- Please tell me about how much credence was given to some of these alternatives.

4. Once the intervention was implemented, can you tell me about the process that was used to evaluate its effectiveness?
   - Probe- Is the intervention still in place?

Closing Remarks: I have no further questions at this time. Is there anything further that you would like to elaborate on? Next time we will expand upon our conversation. Please feel free to contact me if you have any questions.

Round 3- In our first two meetings you told me about your role as an educational leader and the implementation and evaluation of an educational intervention. Today I would like to talk a bit more about your thoughts moving forward.

1. What do you see as the role of educational interventions in today’s educational landscape?
• Probe- How has your experience changed your views about educational interventions?

2. How vital is the evaluation process to assuring the success of an educational intervention?

• Probe- Please explain how the evaluation process helped with the implementation of your educational intervention.

3. Please tell me more about your thoughts going forward for the field of education and how you make sense of your role in this process.

Closing Remarks: I have no further questions at this time. Is there any additional information that you would like to share with me? Do you have any final questions for me? Again, I want to thank you for taking the time to talk with me. I will be in contact with you when I complete the transcripts from these interviews and will allow time for us to discuss any questions that you may have.

APPENDIX C

Definitions

• Common Core Standards- The Common Core Standards were adopted by multiple states in 2011 as an attempt to create national standard for English Language Arts and Mathematics instruction.
- **Educational Interventions** - For the purpose of this study, educational interventions will refer to procedures, programming, or practices aimed at closing gaps in student learning.

- **Massachusetts Comprehensive Assessment System** - The Massachusetts Comprehensive Assessment System (MCAS) is designed to meet the requirements of the Education Reform Law of 1993. This law specifies that the testing program must test all public school students in Massachusetts, including students with disabilities and English Language Learner students; measure performance based on the Massachusetts Curriculum Framework learning standards; report on the performance of individual students, schools, and districts. As required by the Education Reform Law, students must pass the grade 10 tests in English Language Arts (ELA), Mathematics and one of the four high school Science and Technology Engineering tests as one condition of eligibility for a high school diploma (in addition to fulfilling local requirements). In addition, the MCAS program is used to hold schools and districts accountable, on a yearly basis.

- **Narrative** - “A specific type of qualitative design in which ‘narrative is understood as a spoken or written text giving account of an event/action or series of events/actions, chronologically connected” (Creswell, 2007, p. 54).

- **Partnership for Assessment of Readiness for College and Careers** - The Partnership for Assessment of Readiness for College and Careers (PARCC) is a consortium of states that worked to develop a commons set of standardized assessments aimed at measuring achievement based on the Common Core Standards.

- **Response to Intervention** - Schools with partial or fully implemented versions of Response to Intervention (RtI) identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity
and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities or other disabilities. (NCRTI, 2010)

- **School Administrator** - For the purpose of this study a school administrator will be defined as any school leader with a formal administrative role that is responsible for the implementation and evaluation of educational interventions (ex. principal, assistant principal, curriculum director, etc.).

- **Sensemaking** - A motivated, continuous effort to understand connections (which can be among people, places, and events) in order to anticipate their trajectories and act effectively (Klein, Moon, & Hoffman, 2006).

- **Students** - For the purpose of this study, the term students will be used to describe adolescents in grades six through eight designated for participation in educational intervention prograPrincipal

- **Student Growth Percentile** - Student Growth Percentiles (SGPs) complement the MCAS year-by-year test scores. They measure change in achievement over time rather than grade-level achievement results in any one year. Growth scores are available for schools, districts, and students taking the standard MCAS test in grades four through eight and grade ten in English Language Arts and Mathematics.

- **Supplemental Lessons** - Lessons developed and delivered by classroom teachers as an intervention for students that have not been successful in completing a specific objective.

- **Typical Sample** - “One that is considered or judged to be typical or representative of that which is being studied” (Fraenkel, Wallen, & Hyun, 2012).
### Interview Questions With Corresponding Characteristics

**Round One Interview Questions**

<table>
<thead>
<tr>
<th>Round One</th>
<th>Questions/Probes</th>
<th>Weick’s Characteristic of Sensemaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question: 1</td>
<td>Tell me about the path you took to becoming an educational leader.</td>
<td>Identity Construction</td>
</tr>
<tr>
<td>Round Two</td>
<td>Questions/Probes</td>
<td>Weick’s Characteristic of Sensemaking</td>
</tr>
<tr>
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</tr>
<tr>
<td>Question: 1</td>
<td>Would you expand on the process that you followed to initiate the implementation of this educational intervention?</td>
<td>Enact</td>
</tr>
</tbody>
</table>
### Round Three Interview Questions

<table>
<thead>
<tr>
<th>Round Three</th>
<th>Questions/Probes</th>
<th>Weick’s Characteristic of Sensemaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question: 2</td>
<td>Who did you identify as the stakeholders in this process, and how did you get them involved in?</td>
<td>Social Retrospection</td>
</tr>
<tr>
<td></td>
<td>- Probe- How did your stakeholders add to the process?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Probe- Did your mindset change as a reflection of interactions with stakeholders?</td>
<td></td>
</tr>
<tr>
<td>Question: 3</td>
<td>What alternative options did you discuss while planning to use this intervention?</td>
<td>Retrospection</td>
</tr>
<tr>
<td></td>
<td>- Probe- Please tell me about how much credence was given to some of these alternatives.</td>
<td></td>
</tr>
<tr>
<td>Question: 4</td>
<td>Once the intervention was implemented, can you tell me about the process that was used to evaluate its effectiveness?</td>
<td>Ongoing Extract Cues</td>
</tr>
<tr>
<td></td>
<td>- Probe- Is the intervention still in place?</td>
<td></td>
</tr>
</tbody>
</table>
| Question: 1 | What do you see as the role of educational interventions in today’s educational landscape?  
  
  - Probe- How has your experience changed your views about educational interventions? | Extract Cues |
| --- | --- |
| Question: 2 | How vital is the evaluation process to assuring the success of an educational intervention?  
  
  - Probe- Please explain how the evaluation process helped with the implementation of your educational intervention. | Plausibility Over Accuracy |
| Question: 3 | Please tell me more about your thoughts going forward for the field of education and how you make sense of your role in this process. | Retrospection  
  
  Extract Cues |